Service Performance Insight, LLC

2016 Professional Services Maturity™ Benchmark

February 2016

KIMBLE

2006 - 2016

Service Performance Insight
www.SPIresearch.com

Service Performance Insight

Service Performance Insight (SPI) is a global research, consulting and training organization dedicated to helping professional service organizations (PSOs) make quantum improvements in productivity and profit. In 2007, SPI developed the PS Maturity Model™ as a strategic planning and management framework. It is now the industry-leading performance improvement tool used by over 10,000 service and project-oriented organizations to chart their course to service excellence.

The core tenet of the PS Maturity Model™ is PSOs achieve success through the optimization of five Service Performance Pillars™:

- **Leadership**
- **Client Relationships**
- **Human Capital Alignment**
- **Service Execution**
- **Finance and Operations**

The SPI Advantage – Research

Service Performance Insight provides an informed and actionable third-party perspective for clients and industry audiences. Our market research and reporting forms the context in which both buyers and sellers of information technology-based solutions maximize the effectiveness of solution development, selection, deployment and use.

The SPI Advantage – Consulting

Service Performance Insight brings years of technology service leadership and experience to every consulting project. SPI Research helps clients ignite performance by objectively assessing strengths and weaknesses to develop a full-engagement improvement plan with measurable, time-bound objectives. SPI Research offers configurable programs proven to accelerate behavioral change and improve bottom line results for our clients.

To provide us with your feedback on this research, please send your comments to:

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For more information on Service Performance Insight, please visit:

www.spiresearch.com

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Greetings from Kimble

Kimble Applications has sponsored Service Performance Insight's PS Maturity™ Benchmark Report for another year. The report is widely recognized as the most comprehensive source of data upon which consulting firms can compare their performance against their peers and gain insight into the latest industry trends. So we trust you will find it useful. We are pleased that a record number of Kimble customers were able to take part in the survey and I know they are looking forward to receiving this final report.

The founders of Kimble have worked in the consulting industry for nearly 30 years. Our experience is drawn from working in senior positions in the services arm of major software vendors, global systems integrators and management consulting firms. We subsequently built two high profile independent professional services businesses from the ground up.

Having used a variety of professional services automation (PSA) tools during this period, we came to believe that we could build a solution, which was capable of disrupting this software market. Rather than provide a series of modules serving particular business areas, Kimble was architected to facilitate adoption and adherence to the best practice processes required to successfully scale a services firm. This has meant that Kimble is capable of not only supporting firms through all stages of their growth but also guiding them on this journey and acting a catalyst for this growth.

We signed up our first customer in June 2011. That customer had 20 employees. Today it has over 200 consultants and is a thriving business. Five years later that customer has been joined by nearly 200 other consulting firms in 10 countries ranging in size from tens to thousands of staff. Regardless of size what characterizes all our customers is that they are highly ambitious organizations.

Kimble has overturned the idea that PSA software is all about gathering data to help issue invoices. We believes that the real purpose of PSA is to enable people throughout the business to make better decisions, decisions that improve business performance. The Kimble application connects three critical management domains - pipeline, resourcing and delivery - but it connects them with role-specific workflows and real-time dashboards that prompt project managers, resource planners and business development people to take action on the business.

Using Kimble our customers are growing faster than their competitors and achieving tangible bottom line improvements too. The course of evolution for consulting firms may be uncertain, but it's our passionately-held belief that operational efficiency and the ability to put the right information in the hands of the people who need it, when they need it, and guide them as to how to best use it, are capabilities which will power the growth of the most successful firms.

I hope you enjoy the report.

Mark Robinson
Chief Marketing Officer, Kimble Applications

For more information, visit our website at www.kimbleapps.com
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1. Foreword

Service Performance Insight (SPI Research) is proud to introduce the ninth-annual Professional Services Maturity™ Benchmark. For a decade we have researched, benchmarked and built a maturity model to:

- Help professional services (PS) executives better understand how their organization compares to others that are both similar in size and scope of work, as well as to the broader professional services market; and,
- Provide an objective, fact-based framework for performance improvements that helps pinpoint the areas that will provide the greatest impact.

In 2007, SPI Research developed the PS Maturity Model™ as a strategic planning and management framework. It is now the industry-leading performance improvement tool used by over 10,000 service and project-oriented organizations to chart their course to service excellence.

It starts with the benchmark

Each year SPI Research collects data on approximately 200 key performance indicators across all aspects of professional services organizations. Many benchmarks focus solely on financial metrics, but do not delve deeper into the root causes impacting those metrics. SPI Research believes each component of a professional services organization can both positively and negatively impact performance, cash flow and ultimately profit. The purpose of this benchmark is to provide a holistic view of all aspects of PS performance and how subtle changes in one area, for example, revenue growth, impact all other areas.

Table 1: Five-year PS Key Performance Metrics

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Annual PS revenue growth	13.7%	11.5%	10.0%	10.0%	10.2%
Annual PS headcount growth	10.1%	8.9%	7.5%	8.1%	7.8%
Percentage of billable personnel	74.2%	75.2%	71.2%	75.1%	70.4%
Employee Attrition	7.4%	7.2%	8.3%	8.9%	12.9%
Annual revenue per consultant (k)	$197	$206	$193	$197	$198
Annual revenue per employee (k)	$167	$168	$155	$167	$157
Profit (EBITDA %)	**13.5%**	**16.8%**	**11.4%**	**13.2%**	**15.5%**

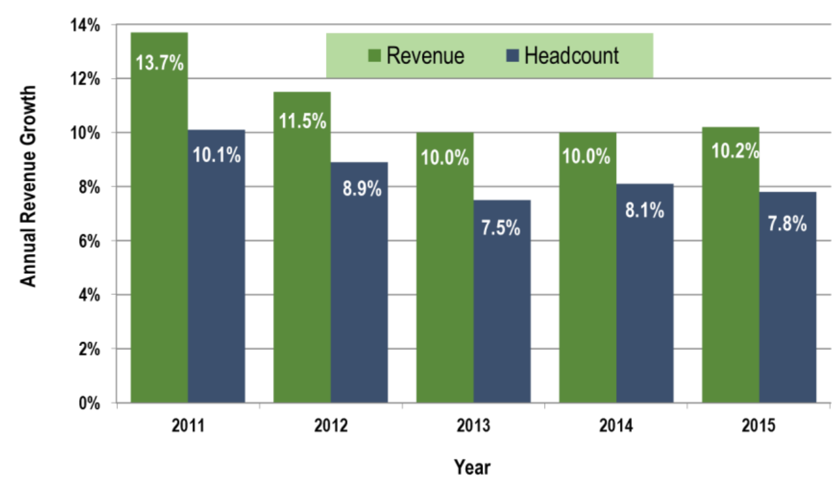
Source: Service Performance Insight, February 2016

The PS Maturity™ model helps executives compare and analyze their own performance so they can build consensus around the actions to take, and where to start, while quantifying the benefits of change. Analyzing the benchmark data by vertical market, geographic region and organization size gives PS executives an accurate comparison to their peers and the market at large. Over 2,000 firms have completed SPI's benchmarking surveys over the past nine years.

Change is constant in professional services with each year bringing new geopolitical, socioeconomic and technology disruption. After all, without disruption and change, professional services would not exist because clients would not need expert help to navigate new opportunities and landmines. Over the past nine years of benchmarking, Service Performance Insight has seen great change in the marketplace, particularly in the ever growing adoption of integrated, cloud-based business applications which have helped firms squeeze ever higher levels of productivity and profit out of this labor-based business. Ten years ago, who could have predicted the growth in social, mobile, analytics and cloud (SMAC) technologies which have transformed entire business segments and empowered individuals and line of business executives with unprecedented information access and control?

This year's survey reached more than twice as many respondents compared to all previous years. This means the depth, breadth and accuracy of the benchmark continues to expand. This edition, based on a much larger data set, includes expanded vertical market coverage including VARs (Value Added Resellers); Managed Service providers; Research and Development and Staffing. We have significantly improved the statistical depth and data validity for architects and engineers, accountancies and marketing and advertising firms. We also garnered input from a host of new PS segments such as contract research and engineering services. Every year SPI Research has worked to broaden the survey to reach more geographic regions so that it truly represents a worldwide performance survey. While we have not achieved all of our goals, we still feel as though this benchmark is the gold industry standard. It is used by well over 10,000 billable professional services organizations to benchmark their operations and gain insight into ways they can improve.

Figure 1: Annual PS Revenue Growth vs. Headcount Growth



Source: Service Performance Insight, February 2016

Productivity improvements are critical in professional services. As the global economy sluggishly grows at less than 2%, organizations in every industry are having to work harder to achieve higher productivity, without adding substantial cost. Every year, PS revenue growth exceeds headcount growth, meaning the industry as a whole is continually ratcheting up output. This year, although top-line revenue growth was still strong, headcount growth slowed significantly in large part due to a growing talent shortage. To combat the lack of skilled consultants, firms are using a host of creative recruiting and skill-building strategies to wring ever higher levels of efficiency from their workforces.

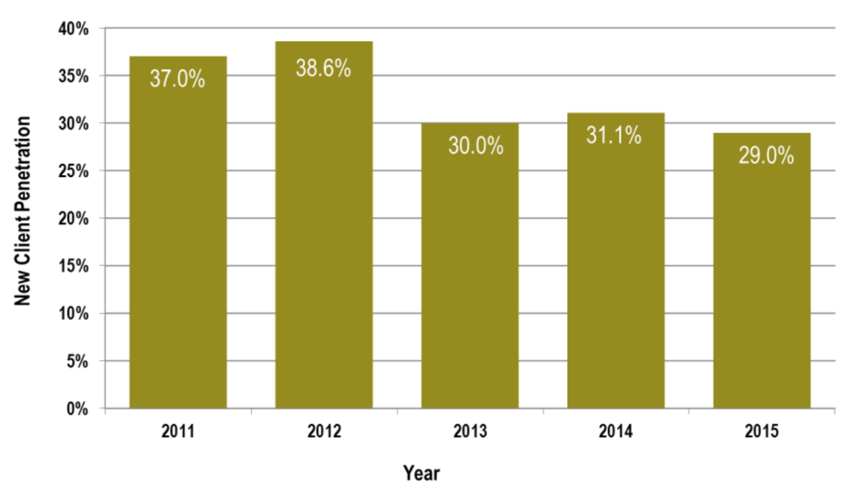
2015 Wrap-up

In last year's benchmark, we characterized 2014 as a Goldilocks year – "not too hot, not too cold, just right". In 2015 the positive trend continued with greater than 10% revenue growth and higher net profits but cracks in the foundation started to appear. Based on a much larger global sample survey size, we saw declines in most of the major leading indicators – revenue from new clients, size of the sales pipeline, backlog, bid-to-win ratios and significantly higher attrition. PSOs have increased the mix of non-billable to billable headcount, perhaps adding in unaffordable overhead. By geography, the Americas outperformed all other regions but with a big stock market correction and a major presidential election, 2016 growth could be tepid. The PS market in Asia Pacific continues to expand but this region is starting to feel the effects of a growing talent shortage accompanied by a slowdown in China's voracious growth. EMEA reported the worst performance, plagued by Eurozone uncertainty, refugees and terrorism, it was a relatively tough year across all European markets including PS. 2016 appears to be fraught with growing geopolitical and socioeconomic issues which will slow PS growth, however, the sector as a whole will continue to outperform most industries. Fasten your seat belts, lock your doors and double-down scrutiny of sales forecasts and discretionary spending. With these precautions, your PS business should continue to thrive.

Where did the new clients go?

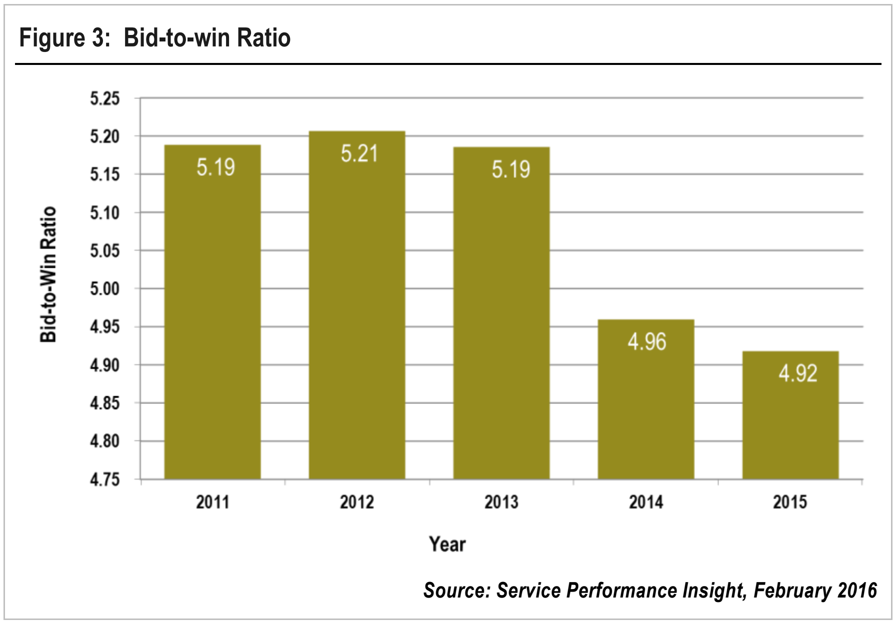
A key indicator of the strength and vitality of the professional services market is the percentage of revenue from new clients. Unfortunately, new client revenue has declined to the lowest level we have seen in the past nine years. Without an injection of new client revenue, PS growth is limited to mining the installed base. Overtime, the potential at even the largest accounts diminishes. Without new market growth, firms and consultant skills languish while existing clients may become complacent. The percentage of revenue from new clients is a very important forward-looking measurement. In 2016 as market uncertainty increases, PS organizations should carefully watch this metric. PSOs should act now to expand their markets, clients and service portfolio to preempt revenue erosion.

Figure 2: New Client Penetration



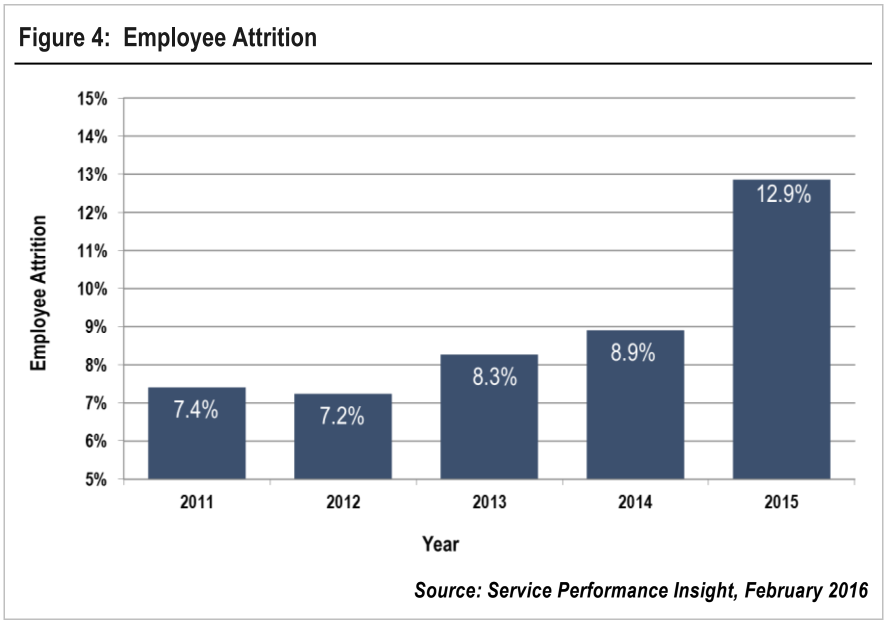
Source: Service Performance Insight, February 2016

Competition intensifies



A powerful indication of increasing competition is the bid-to-win ratio. This metric measures the number of winning bids or proposals out of every 10 submitted. It is certainly correlated with the size of the sales pipeline and sales effectiveness. Lower bid-to-win ratios portray heightened competition but may also be a symptom of underlying sales and marketing issues. Strategies to improve bid-to-win ratios should start with a reexamination of market positioning and service packaging. Do target buyers know about your firm? Do current clients provide a rich source of referrals and repeat business or are they lukewarm on the value you provide? What is the common element in the deals you win? Lose? How can you improve your hit ratio? Should you more carefully scrub your sales pipeline to remove unreliable long shots?

Employee attrition is rising



In 2015 SPI Research asked firms to report both voluntary and involuntary attrition rates which were as follows:

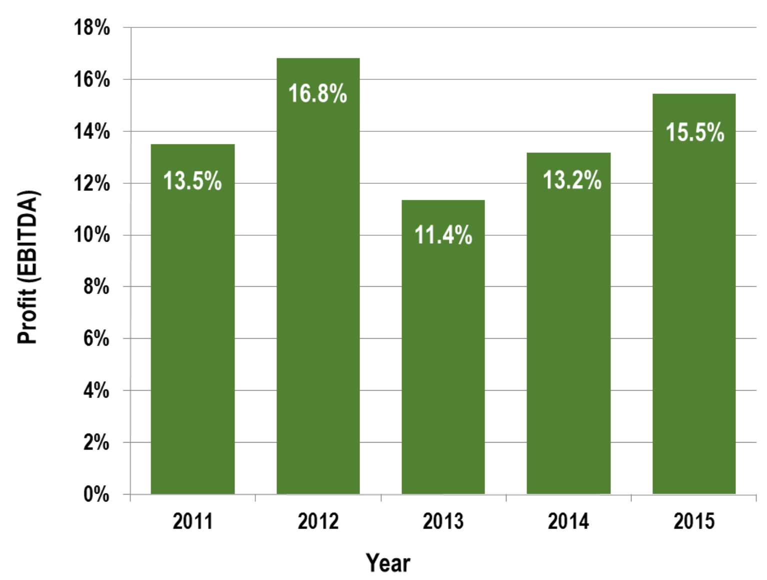
- ∆ Voluntary: 7.8%
- ∆ Involuntary: 5.1%

It is likely answers for previous years were only for voluntary attrition. Regardless, we know that attrition is rising dramatically. This is undoubtedly one of the most important metrics, as the cost to replace a valuable employee is in excess of $150,000.

Profits creep up

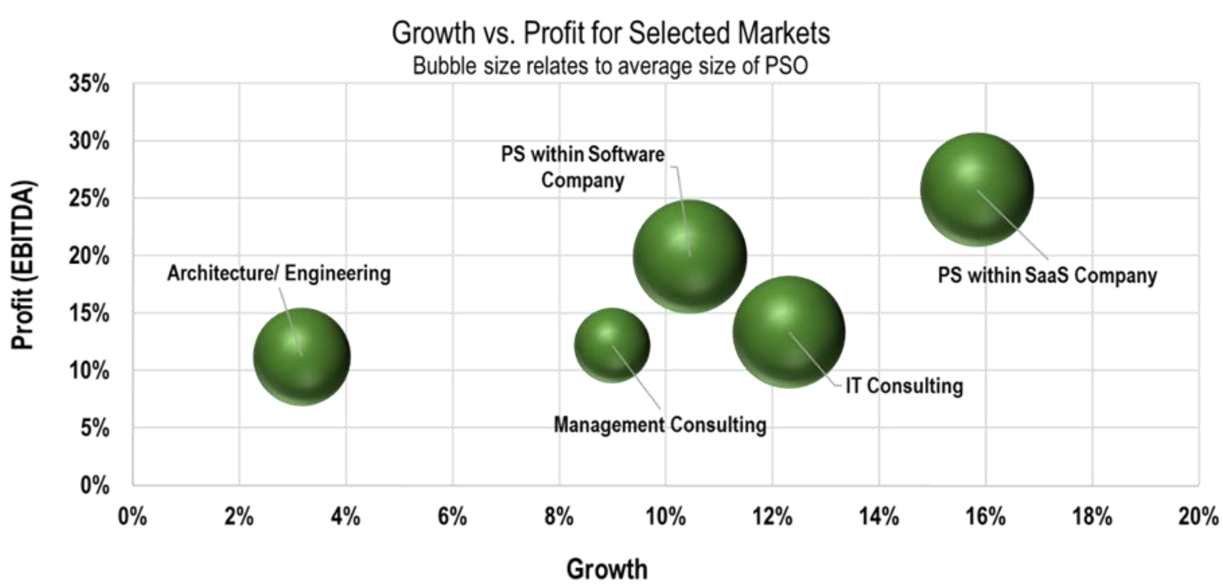
Despite declines in forward-looking metrics, profit results for 2015 were very strong, averaging 15.5%, up from 13.2% in 2014. Profit (Earnings before Interest, Taxes, Depreciation and Amortization) improvement can be attributed to higher levels of billable utilization combined with moderate rate increases. Embedded PS organizations increased net profit from 19% to 20.9% primarily based on a surge from SaaS providers who saw their net profits increase from 7.8% to 25.7%. For the past five years we have seen wild swings in embedded SaaS PSO profitability based on charter changes from profit center – to customer adoption catalyst and now back again to profit center. The stock market is putting pressure on hot cloud providers to grow up.

Figure 5: Annual Profit (EBITDA)



Source: Service Performance Insight, February 2016

Figure 6: Growth vs. Annual Profit for Selected Markets

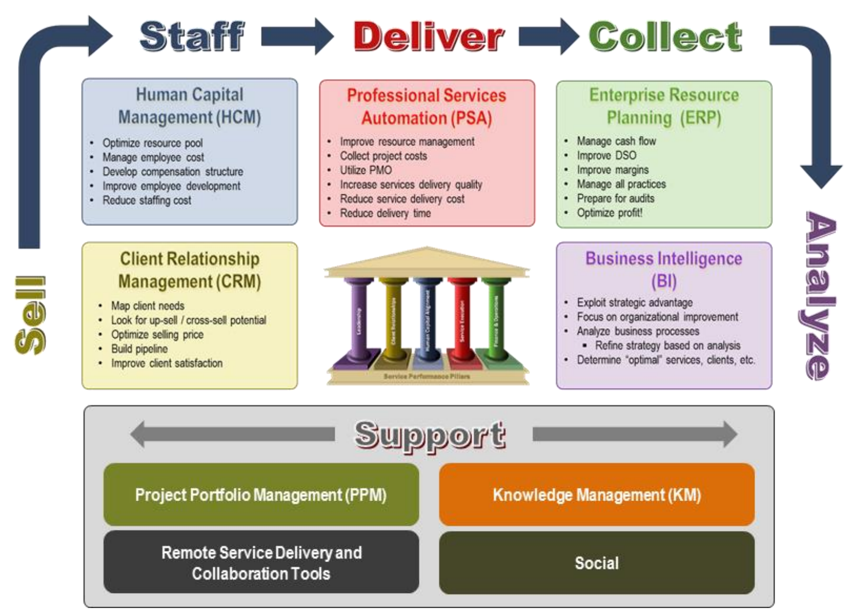


Source: Service Performance Insight, February 2016

Building market-share is all well and good but it is time to turn all those seats, clicks and eyeballs into a sustainable, profitable business. Independents experienced a moderate increase in profitability, moving from 10.8% to 13.6%. For independents, the profit surge came from improvements in most sub verticals except management consultancies who reported a profit decline from 14% to 12.2%. By geography, Asia Pacific (based primarily on firms headquartered in Australia and New Zealand) led the way with average net profit improving from 13.1% to 17.2%. The Americas saw profit increase from 12.5% to 16.3% while EMEA languished with average profit declining from 15.5% to 11.9%. **It is worth noting that these are not apples to apples comparisons as the survey dataset in 2014 was based on 220 firms while the 2015 survey was completed by 549 firms.**

Information – more valuable than ever!

Figure 7: Integrated Information Drives Performance Higher!



Source: Service Performance Insight, February 2016

As the professional services space has grown more competitive, and volatility within the market intensifies, information has become a competitive weapon to increase performance and profit. Lack of an effective information infrastructure within professional services organizations is no longer an option! In each of the nine years of surveying, SPI Research has seen a gradual increase in the use of information technology to run finance and accounting, sales and marketing, human resources, service delivery, and business analysis. These solutions are core to the success of each department, but better serve the entire PSO when they are integrated throughout. Integrated business solutions enable all team members to have access to one source of the truth, expediting fact-based decisions and real-time response to opportunities and challenges. Being able to visualize changes and trends by client, service line and market brings into focus problems and facilitates investment in the most-promising growth avenues.

While these core solutions help PSOs run the business, the number and variety of ancillary applications has grown exponentially particularly in the areas of social, remote service delivery, collaboration and knowledge management. These solutions help make employees at all levels more productive, which ultimately impacts project margins and organizational profitability. On the downside, the pace of technology change, overlap and interdependence has become significantly more complex, with shorter and shorter produce release cycles. The abundance of overlapping solutions has made the job of technology consultants and IT professionals ever harder as the breadth and depth of knowledge they must possess has become almost overwhelming.

Look Forward to 2016

The beginning of 2016 has been difficult for the economy, increasing the pressure on professional services organizations to streamline operations and cut cost. While there are always performance pressures in PSOs, an uncertain economy will make them more acute. In the U.S., still the world's largest economy, presidential elections will add to this uncertainty. There is obviously frustration with government spending and the role of government, but the winner of the 2016 elections will certainly have an impact on the global economy.

Despite the doom-and-gloom at the start of 2016, the professional services market remains upbeat. The demand for professional services continues to increase and employees, whose salaries and bill rates have risen, will no doubt be excited to face the new challenges this year will bring. Achieving financial targets, talent and sales effectiveness will most likely be at the top of the list of priorities. But don't forget about efficiently delivering high-quality services, because that is where money is made!

The pace and magnitude of technology change at times seem insurmountable but somehow millions of consultants find a way to stay abreast of this mounting complexity to make sense of it all for their clients. New technologies continue to transform the professional services market, and nowhere is this more evident than in the social, mobile, analytics and collaboration (SMAC) space. These solutions, many of which are embedded in core business suites such as Enterprise Resource Planning (ERP), Client Relationship Management (CRM), Professional Services Automation (PSA), and Human Capital Management (HCM), are becoming increasingly critical to the success and growth in professional services. Professional Services is an employee driven market, and providing the best tools that provide the best insight underlies all performance improvements.

2. The Professional Services Maturity™ Model

SPI Research has spent the past nine years benchmarking varying levels of operational control or process "maturity" to determine the characteristics and appropriate behaviors for PSOs based on their organizational lifecycle stage. The primary questions SPI Research was seeking to answer when the PS Maturity™ Benchmark was first conceived remain our primary focus today:

- What are the most important focus areas for professional service organizations (PSOs) as their businesses mature?
- What is the optimum level of maturity or control at each phase of an organization's lifecycle?
- Can diagnostic tools be built for assessing and determining the health of key business processes?
- Are there key business characteristics and behaviors that spell the difference between success and failure?

The original concept behind the SPI Research's PS Maturity Model™ was to investigate whether increasing levels of standardization in operating processes and management controls improve financial performance. ***The 2016 PS Maturity™ Benchmark demonstrates that increasing levels of business process maturity do indeed result in significant performance improvements (Table 2).***

In fact, SPI Research found that high levels of performance have far more to do with leadership focus, organizational alignment, effective business processes and disciplined execution than "time in grade." Relatively young and fast-growing organizations can and do demonstrate surprisingly high levels of maturity and performance excellence if their charters are clear.

Table 2: Maturity Matters!

Key Performance Measurement	Maturity Level 1-2	Maturity Level 3	Maturity Level 4-5
Percentage of respondents	55%	25%	20%
Year-over-year change in PS revenue	2.1%	8.5%	23.5%
Deal pipeline relative to qtr. bookings forecast	140%	186%	229%
Employee billable utilization	66.1%	72.7%	78.0%
Projects delivered on-time	69.7%	79.6%	85.0%
Annual rev. per billable consultant (k)	$144	$231	$251
Annual revenue per employee (k)	$112	$185	$202
PS EBITDA	**2.1%**	**8.5%**	**23.5%**

Source: Service Performance Insight, February 2016

Further improvements accrue when their goals and measurements are aligned with their mission, and they make the investments they need in talent and systems to provide visibility and appropriate levels of business control. Of course, it certainly helps if they are also well-positioned within a fast-growing market.

The core tenet of the PS Maturity Model™ is service and project-oriented organizations achieve success through the optimization of five Service Performance Pillars™:

1. **Leadership** – Vision, Strategy and Culture
2. **Client Relationships**
3. **Human Capital Alignment**
4. **Service Execution**
5. **Finance and Operations**

Within each of the Service Performance Pillars™, SPI Research developed guidelines and key performance maturity measurements. These guidelines cut across the five service dimensions (pillars) to illustrate examples of business process maturity. This study measures the correlation between process maturity, key performance measurements and service performance excellence.

Service Performance Pillars™

SPI Research developed a model that segments and analyzes a PSO into five distinct areas of performance that are both logical and functional. We call the five underpinning elements Service Performance Pillars™ because they form the foundation for all professional services organizations (Figure 8):

Figure 8: Service Performance Pillars™

Source: Service Performance Insight, February 2016

1. **LEADERSHIP - VISION, STRATEGY AND CULTURE**: (*CEO*) a unique view of the future and the role the service organization will play in shaping it. A clear and compelling strategy provides a focus for the organization and galvanizes action. Effective strategies bring together target customers, their business problems, and how a solution solves those problems differently, uniquely, or better than its competitors. For a service strategy to be effective, the role and charter of the service organization must be defined, embraced, communicated and supported throughout the company. Depending on whether the service strategy is to primarily support the sale of products, or to drive service revenue and profit; service organization goals and measurements will vary. Leadership skills and competencies must mature as the organization matures. Culture is the unwritten customs, behaviors and beliefs that determine the “rules of the game” for decision making, structure and power.

2. **CLIENT RELATIONSHIPS**: (*Marketing and Sales*) the ability to communicate effectively with employees, partners and customers to generate and close business and win deals. Effective client management involves improving relationships to better understand client needs, while ensuring clients will continue to buy and provide references and testimonials.

3. **HUMAN CAPITAL ALIGNMENT**: (*Human Resources*) the ability to attract, hire, retain and motivate a high quality consulting staff. With changing workforce demographics, talent management has increased in importance. High-caliber employees represent the essence, brand and reputation of the firm. PSOs are starting to adopt hybrid on and off-site staffing models which put increased pressure on customer-facing staff to develop client relationships and more carefully define client requirements. Demands for career planning, skill development and flexible work options have intensified.

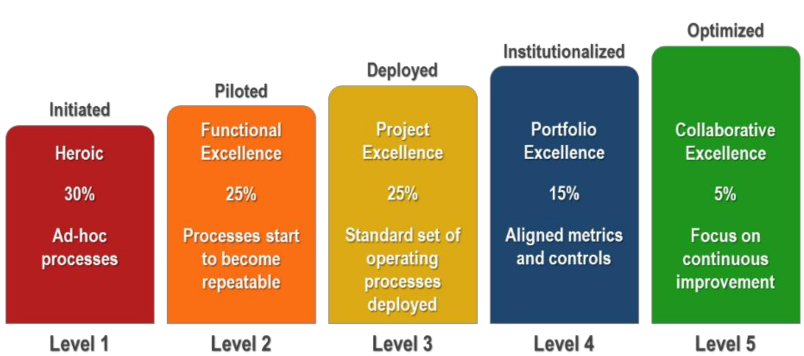
4. **SERVICE EXECUTION**: (*Engagement/Delivery*) the methodologies, processes and tools to effectively schedule, deploy and measure the quality of the service delivery process. Service execution involves a number of factors: from resource management, to delivering projects in a predictable and acceptable time frame, to reducing cost while improving project quality and harvesting knowledge. Processes include resource management, project planning and quality control, knowledge management and methodology and tool development.

5. **FINANCE AND OPERATIONS**: (*CFO*) the ability to manage services profit and loss — to generate revenue and profit while developing repeatable operating processes. The finance and operations pillar focuses on revenue, margin and cost and the financial, contractual and IT operating processes and controls required to run a profitable and predictable business.

Professional Services Maturity™ Model Benchmark Levels

The model is built on the same foundation as the Capability Maturity Model (CMM), which has been adopted for software development; but is specifically targeted toward billable PSOs, that either exclusively sell and execute professional services or complement the sale of products with services. Figure 9 depicts maturity level progression and outlines primary characteristics for each maturity level:

Figure 9: Services Maturity™ Model Levels



Source: Service Performance Insight, February 2016

- ***LEVEL 1* — *INITIATED "HEROIC"*: (APPROXIMATELY 30% OF PSOS)** at maturity Level 1, *processes are ad hoc and fluid*. The business environment is chaotic and opportunistic, and the focus for a PSO is primarily on new client acquisition and reference building. Often professional service employees at this level are chameleons — able to provide presales support one day and develop interfaces and product workarounds the next. Success depends on the competence and heroics of people in the organization, and not on the use of proven processes, methods or tools.

Practices and procedures are informal and quality is based on individual experience and aptitude. ***Level 1 organizations are often characterized as "informal" and "heroic".***

- ∆ ***LEVEL 2*** ***— PILOTED "FUNCTIONAL EXCELLENCE"*:** **(APPROXIMATELY 25% OF PSOS)** at maturity level 2, *processes have started to become repeatable*. Best practices may be demonstrated in discrete functional areas or geographies but they are not yet documented and codified for the entire organization. Basic processes have been established for the five Professional Services Performance Pillars, but they are not yet universally embraced. Operational excellence and best practices may be discerned within functions but not across functions. ***By Level 2 individual Functional Excellence should have emerged in key areas.***

- ∆ ***LEVEL 3*** ***— DEPLOYED "PROJECT EXCELLENCE"*:** **(APPROXIMATELY 25% OF PSOS)** at maturity level 3, *the PSO has created a set of standard processes* and operating principles for all major service performance pillars but renegades and "hold-outs" may still exist. Management has established and started to enforce financial and quality objectives on a global basis. Processes have been established to focus on effective execution and there is spotlight on alignment between and across functions. By level 3 project delivery methodologies and quality measurements are in place and enforced across the organization. ***Level 3 organizations should exhibit "Project Excellence" with a consistent, repeatable project delivery methodology.***

- ∆ ***LEVEL 4*** ***— INSTITUTIONALIZED "PORTFOLIO EXCELLENCE"*:** **(APPROXIMATELY 15% OF PSOS)** at maturity level 4, *management uses precise measurements, metrics and controls, to effectively manage the PSO*. Each service performance pillar contains a detailed set of operating principles, tools and measurements. Organizations at this level set quantitative and qualitative goals for customer acquisition, retention and penetration, in addition to a complete set of financial and quality operating controls and measurements. Processes are aligned to achieve leverage. The portfolio is balanced with a focus on project selection and execution. ***Level 4 organizations should exhibit "Portfolio Excellence".***

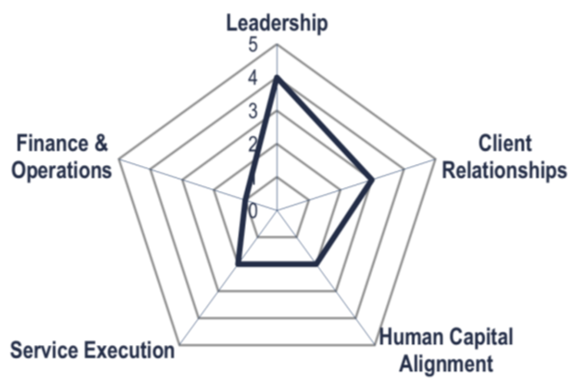
- ∆ ***LEVEL 5*** ***— OPTIMIZED "COLLABORATIVE"*:** **(APPROXIMATELY 5% OF PSOS)** at maturity level 5 *executives focus on continual improvement of all elements of the five performance pillars*. A disciplined, controlled process is in place to measure and optimize performance through both incremental and innovative technological improvements. Quantitative process-improvement objectives for the organization are established. They are continually revised to reflect changing business objectives, and used as criteria in managing process improvement. Initiatives are in place to ensure quality, cost control and client acquisition. The rough edges between disciplines, functions, and specialties have been smoothed to ensure unique problems can be addressed quickly without excessive bureaucracy or functional silos. ***Level 5 organizations are visionary and collaborative both internally and with clients and external business partners.***

Over the past nine years, over 10,000 PSOs have studied the PS Maturity Model ™ and now use the concepts and key performance measurements to pinpoint their organization's current maturity and develop improvement plans to advance lagging areas.

SPI Research summarizes individual PSO performance in a SPIder chart (Figure 10). The maturity scorecard provides a measurement for each organization in comparison to the benchmark maturity definitions. It provides an invaluable tool to analyze current performance and prioritize future improvement initiatives.

This graphical depiction of the Service Performance Pillars™ by maturity level enables PS executives to quickly scorecard their organization's performance, and diagnose areas of relative strength and weakness.

Figure 10: Service Performance Pillar Maturity™



Source: Service Performance Insight, February 2016

Building the Professional Services Maturity™ Model

With core benchmark information gleaned on all primary business functions, SPI Research was able to construct a Professional Services Maturity™ Model that determines organizational maturity — by pillar — and provides guidance to advance to the next level (Table 3).

Table 3: Performance Pillars Mapped Against Service

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Leadership	Initial strategy is to support product sales and provide reference customers while providing workarounds to complete immature products. Leaders are "doers".	PS has become a profit center but is subordinate to product sales. Strategy is to drive customer adoption and references profitably. Leaders focus on P&L and client relationships.	PS is important revenue and margin source but channel conflict still exists. Services differentiate products. Leadership development plans are in place. Leaders have strong background & skills in all pillars.	Service leads products. PS is a vital part of the company. Solution selling is a way of life. PS is included in all strategy decisions. Succession plans are in place for critical leadership roles	PS is critical to the company. Service strategy is clear. Complimentary goals and measurements are in place for all functions. Leaders have global vision and continually focus on renewal & expansion.

2016 Professional Services Maturity™ Benchmark

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Client Relationships	Opportunistic. No defined solution sets or Go to Market plan. Focus is on new customers and reference building. Individual heroics, no consistent sales, marketing or partnering plan or methodology. Ad hoc, one-off projects.	Start to use marketing to drive leads. Multiple sales models. Start investing in sales training, CRM & sales method-ology. Start measuring sales effectiveness & client satisfaction. Start developing partners and partner programs. Some level of proposal reviews and pricing control.	Marketing, inside sales, solution sales with defined solution sets. CRM integrated with financials and PSA. Deal, pricing and contract reviews. Partner plan and scorecard. Tight pricing and contract mgmt. controls. High levels of customer satisfaction.	CRM, PSA, ERP integration provides 360-degree view of client relationships. Business process, vertical and horizontal solutions. Vertical client centers of excellence. Top client and partner programs. Global contract and pricing management. Key partner relationships. Strong customer reference programs.	Executive relationships. Thought leadership. Brand building and awareness. High customer satisfaction. Integrated sales, marketing and partnering programs. High quality references.
Human Capital Alignment	Hire as needed. Generalist skills. Chameleons, Jack of all Trades. Individual heroics. May perform presales as well as consulting delivery.	Begin forecasting workload. Start developing job and skill descriptions & compensation plans. Rudimentary career paths. Start measuring employee Satisfaction	Resource, skill and career management. Employee satisfaction surveys. Training plans. Goals and measurements aligned with compensation. Attrition <15%	Business process and vertical skills in addition to technical and project skills. Career ladder and mentoring programs. Training investments to support career. Low attrition, high satisfaction	Continually staff and train to meet future needs. Highly skilled, motivated workforce. Outsource commodity skills or peak demand. Sophisticated variable on and off-shore workforce model.
Service Execution	No scheduling. Reactive. Ad hoc. Heroic. Scheduling by spreadsheet. No consistent project delivery methods. No project quality controls or knowledge management.	Skeleton methodology in place. Centralized resource mgmt. Initiating project mgmt. and technical skills. Starting to measure project satisfaction and harvest knowledge.	PSA deployed for resource and project management. Collaborative portal. Earned Value Analysis. Project dashboard. Global Project Management Office, project quality reviews and measurements. Effective change management.	Integrated project and resource management. Effective scheduling. Using portfolio management. Global PMO. Global project dashboard. Global Knowledge Management. Global resource management.	Integrated solutions. Continual checks and balances to assure superior utilization and bill rates. Complete visibility to global project quality. Multi-disciplinary resource management.
Finance and Operations	The PSO has been created but is not yet profitable. Rudimentary time & expense capture. Limited financial visibility and control. Unpredictable financial performance. Rudimentary contract management.	5 to 15% margin. PS becoming a profit center but still immature finance and operating processes. Investment in ERP and PSA to provide financial visibility. May not have real-time visibility or BI. Standard Library of Contracts and Statements of Work.	15 to 25% margin. PS operates as a tightly managed P&L. Standard methods for resource mgmt., time & expense mgmt., cost control & billing. In depth knowledge of all costs at the employee, sub-contractor & project level. Processes in place for contract management, legal and pricing decisions.	PS generates > 20% of overall company revenue & contributes > 30% margin. Well-developed finance and operations processes and controls. Systems have been implemented for CRM, PSA, ERP and BI. IT integration and real-time visibility. Systems have been implemented for contract management, legal and pricing decisions.	> 30% margin. Continuous improvement and enhancement. High profit. Integrated systems. Global with disciplined process controls and optimization. Completely integrated financial, CRM, resource management, contracts and pricing systems, processes and controls.

Source: Service Performance Insight, February 2016

Why Maturity Matters

SPI Research believes wide support for the PS Maturity™ model is due to its holistic approach to measuring performance. ***Maturity is determined through alignment and focus both within <u>and</u> across functions.*** For example, although financial measurements are of primary importance they are equally weighted and correlated with leadership and sales and quality measurements to ensure organizations improve across all dimensions, not just in terms of financial performance. However, if the organization is profit-motivated (which most are), increasing maturity levels do show up in significant bottom-line profit. Figure 11 highlights major key performance measurements by maturity level, and should alone be an important reason why PS executives should look deeper into using it to increase profits.

Figure 11: Professional Services Maturity™ Progression

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institution.	Level 5 Optimized
Confidence in PS leadership (5 pt. scale)	3.03	3.79	4.22	4.54	4.83
Year-over-year change in PS revenue	4.5%	6.2%	12.2%	18.7%	24.9%
Bid-to-win ratio (per 10 bids)	4.07	4.43	5.55	5.73	6.41
Deal pipeline relative to qtr. bookings forecast	122%	161%	186%	221%	254%
Employee billable utilization	62.8%	70.0%	72.7%	78.0%	77.9%
Projects delivered on-time	64.3%	76.1%	79.6%	83.7%	88.8%
Annual revenue per billable consultant (k)	$110	$184	$231	$244	$269
Annual revenue per employee (k)	$91	$137	$185	$197	$215
Profit (EBITDA)	**0.7%**	**3.8%**	**8.5%**	**19.1%**	**36.0%**

Source: Service Performance Insight, February 2016

Pillar Importance and Organizational Maturity

The results and insights gained in the past seven years have confirmed SPI Research's original hypothesis that ***service organizations must develop a balanced and holistic approach to improving all aspects of their business as they mature***. SPI Research has discovered that the emphasis on individual service pillar performance shifts as organizations mature. Excellence in only one particular service performance pillar does not create overall organizational success – rather it is the ***appropriate balance and alignment within and across performance pillars***, which ultimately leads to sustainable success.

549 firms are represented in this year's survey, however, not every firm answered every question. Therefore, if a firm did not answer a specific question no analysis will be conducted on its impact. The following table shows the correlation of EBITDA (profit) and Annual revenue growth. This table compares all of the surveys with those that answered this specific question. SPI Research will eliminate the 23 firms that did not complete this questions and therefore the EBITDA is 15.1%, vs. the actual survey average of 15.5%. We do this because showing blank answers does not really provide value to the reader (unless there is a high percentage of blanks).

Annual Revenue Growth	Surveys	Comp. %	EBITDA (w/blanks)	EBITDA (w/o blanks)
Blank	23	4.2%	35.4%	
Under -10%	32	5.8%	6.3%	6.3%
-10%- 0%	21	3.8%	12.0%	12.0%
0%- 5%	115	20.9%	13.3%	13.3%
5%- 10%	117	21.3%	14.6%	14.6%
10%- 15%	88	16.0%	16.9%	16.9%
15%- 25%	72	13.1%	17.2%	17.2%
Over 25%	81	14.8%	18.6%	18.6%
Total/Avg.	549	100.0%	15.5%	15.1%

Table 4 depicts the relative service performance pillar importance by organizational maturity level. Many professional service organizations are established without a particular initial focus toward optimizing performance.

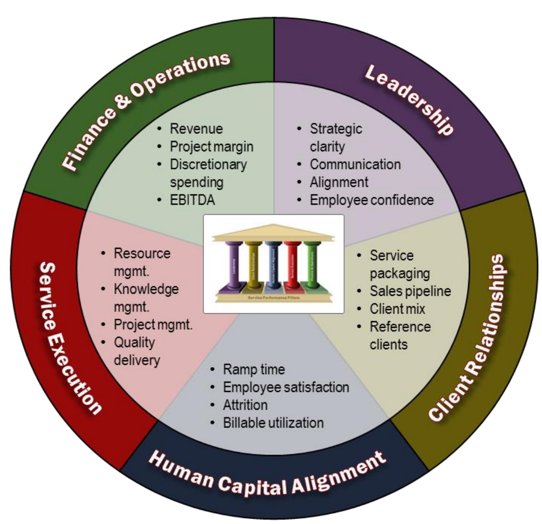
Table 4: Service Pillar Importance by Organizational Maturity Level

Pillar	Initiated	Piloted	Deploy.	Inst.	Opt.
Leadership	◔	◑	◑	●	●
Client Relationships	●	◕	◕	◕	●
Human Capital Align.	◔	◑	◕	●	●
Service Execution	◔	◑	◕	●	●
Finance and Operations	◔	◔	◕	●	●

Source: Service Performance Insight, February 2016

PSOs begin with the goal of establishing a client and reference base. They may be operated as a cost center or as an adjunct to the product function to establish alpha and beta customers and to provide early product feedback. Initially they often perform presales, training, quality assurance and service delivery tasks. They hope to deliver services that are both profitable to them as well as valued by their clients, but in reality, they take the position that "just about any deal is a good deal." The emphasis at Level 1 maturity is on building client references and recruiting highly skilled generalist consultants who are experienced enough and flexible enough to perform heroic feats to ensure early customer success.

Figure 12: PS Performance Pillars – Core KPIs



Source: Service Performance Insight, February 2016

By Level 2, although primary focus is still to create reference customers, more emphasis is placed on human capital alignment for recruiting and ramping skilled employees, partners and contractors. Service execution focus is on developing repeatable project delivery methods and quality processes. At these early stages, many embedded professional service organizations have a strong product-driven focus and the role of the service organization is subordinate to products. Conflicts between service profit, client success and driving product revenue are often characteristic of Level 2 embedded service organizations.

By Level 3 the organization must move toward a more balanced focus on all elements of the business by investing in systems, operating processes and repeatable methods to sustain growth and ensure quality. Level 3 maturity should be the aspirational target of all PS organizations because it is at level 3 that an on-going, profitable and sustainable business has emerged. At level 3 the charter of the PS organization is clear. If the organization is an embedded PS organization within a product company, PS has a seat at the executive table and is seen as adding value that transcends product implementation, integration and customization. Increasingly, embedded PS has become a critical component of ensuring customer adoption and may play a leading role in driving product management direction and strategy. Independent level 3 PSOs are financially and operationally strong with a clear focus on targets markets and sustainable, repeatable business processes and quality controls. They have built a compelling, differentiated portfolio which is brought to life by specialized, knowledgeable consultants. At level 3, heroics and firefighting are <u>no longer</u> the standard way of doing business as disciplined management systems, controls and integrated systems ensure predictability and repeatability.

At Level 4 the organization has implemented structured business processes and utilizes integrated information systems to assure there is "one view of the business". Level 4 organizations are seen as true industry leaders in their target markets. They have developed a unique and differentiated culture which attracts industry-leading consultants and clients. More than average firms, level 4 organizations are extremely transparent. They typically have strong management controls and visibility into all facets of the business by providing dynamic, real-time access to empowered team members. Level 4 organizations continually expand their horizons and boundaries – whether it is through geographic, vertical market or technology platform expansion.

Finally, at **Level 5** the organization is running very efficiently and the focus is on continual improvement and innovation. Level 5 firms are the Best-of-the-Best. They are excellent in all functional areas but have transcended functional excellence with a collaborative, knowledge and intellectual property centric focus. Very few firms achieve sustained Level 5 performance.

3. Survey Demographics

For this benchmark, SPI Research surveyed 549 billable Professional Services Organizations (PSOs) from September through December, 2015. The following sections outline the key markets which comprise the global professional services industry and breakdown the 2015 survey demographics in a number of key areas (market, organization size, and geographic region) to help PS firms compare their individual results to the benchmark.

Vertical PS Markets — the North American Industry Classification System

SPI Research uses the North American Industry Classification System (NAICS) to analyze the services market. The primary Professional Services designation is NAICS 54xx which defines PS sub-verticals as ***"Those in this subsector engage in business processes where human capital is the major input. These establishments provide the knowledge and skills of their employees, often on an assignment basis, where an individual or team is responsible for the delivery of high value services to the client. The individual industries of this subsector are defined on the basis of the particular expertise, training and credentials of the services provider (Table 5)".***

Additional industry segments which generate substantial professional service revenue include software (NAICS 5112); Data Services (NAICS 518) and Employment Services (NAICS 5613). Including these segments, the US professional service industry generated approximately $2 trillion in revenue and employed 12.5 million US-based workers. The US market represents roughly 60% of global professional services revenue which leads to a global revenue estimate of $3.4 trillion, providing employment for 20.8 million professional service workers. These figures exclude revenues and PS employees in telecommunications, financial services and healthcare services.

According to the 2015 US Census, professional, scientific, and technical services (NAICS 54xx) revenue was $1.56 trillion, up 4.7 percent from 2014. Across the service industries, the fastest growing segments in 2015 were employment services (recruiting and staffing) 11.4%; management consulting 11.3% and accounting 10.4%. Two segments experienced market contraction from 2014 to 2015. Specialized design service revenue declined -2.3% and architectural, engineering and related services declined -.7%.

Within professional services, the fastest growing and most vibrant segment is software and IT services. There are more than 100,000 software and IT services companies in the United States, and more than 99 percent are small and medium-sized firms (i.e., under 500 employees). This total includes software publishers, suppliers of custom computer programming services, computer systems design firms, and facilities management companies. This segment of the PS industry draws on a highly educated and skilled US-based workforce of nearly two million people.

Table 5: Vertical PS Markets — the North American Industry Classification System

Code	Market	Description	US Census 2015 Revenue	Employees (1,000s)	CAGR 2014-2015
5112	Software	Software publishing, both public and private software companies. Total revenue is reported. PS typically represents ~ 20% of revenues.	$190.7B	386	3.6%
518	Data Services	Data processing, hosting and related services	$104.5B	392	5.1%
5411	Legal	This industry is comprised of legal practitioners known as lawyers or attorneys (i.e., counselors-at-law) primarily engaged in the practice of law. Firms in this industry may provide a range of expertise or specialize in specific areas of law, such as criminal law, corporate law, family and estate planning, patent law, real estate law, or tax law.	$261.0B	1,114	4.8%
5412	Accounting/ Tax Prep/ Bookkeeping / Payroll	This industry comprises establishments primarily engaged in providing services, such as auditing and accounting, designing accounting systems, preparing financial statements, developing budgets, preparing tax returns, processing payrolls, bookkeeping, and billing. Accountants are certified to ensure they have and maintain competency in their field.	$163.4B	888	10.4%
5413	Architectural, Engineering and Related Services	This industry comprises establishments primarily engaged in planning and designing residential, institutional, leisure, commercial, and industrial buildings and structures by applying knowledge of design, construction procedures, zoning regulations, building codes, and building materials.	$223.5B	1,277	-0.7%
5414	Specialized Design Services	This industry group comprises establishments providing specialized design services (except architectural, engineering, and computer systems design).	$20.98B	111	-2.3%
5415	Computer Systems Design Services Related Services	(IT Consulting) – This industry comprises establishments primarily engaged in providing expertise in the field of information technologies through one or more of the following activities: (1) writing, modifying, testing, and supporting software to meet the needs of a particular customer; (2) planning and designing computer systems that integrate computer hardware, software, and communication technologies; (3) on-site management and operation of clients' computer systems and/or data processing facilities; and (4) other professional and technical computer-related advice and services.	$351.58B	1,442	4.4%
5416	Management Science and Technical Consulting Services	(Management Consulting) – This industry comprises establishments primarily engaged in providing advice and assistance to businesses and other organizations on management issues, such as strategy and organizational planning; financial planning and budgeting; marketing objectives and policies; human resource policies, practices, and planning; production scheduling; and control planning.	$207.34B	991	11.3%
5417	Scientific Research and Develop. Services	This industry group comprises establishments engaged in conducting original investigation on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). The industries within this industry group are defined on the basis of the domain of research; that is, on the scientific expertise of the establishment.	$149.09B	620	0.3%

Code	Market	Description	US Census 2015 Revenue	Employees (1,000s)	CAGR 2014-2015
5418	Advertising and Related Services	(Marketing and Communications) – This industry comprises establishments primarily engaged in creating advertising or public relations campaigns and placing advertising in periodicals, newspapers, radio and television, or other media. These firms are organized to provide a full range of services (i.e., through in-house capabilities or subcontracting), including advice, creative services, account management, production of advertising material, media planning, and buying (i.e., placing advertising).	$112.76B	408	2.1%
5419	Other Professional, Scientific, Technical Services	(Other PS) – This industry group comprises establishments engaged in professional, scientific, and technical services not listed above.	$76.2B	573	7.8%
5613	Employment Services	Staffing, temporary employment, placement and employment search services	$324.7B	4,277	11.4%
	2015 Total	**US Estimated Professional, Scientific and Technical Services**	**$2.015 Trillion**	**12.479 Million**	

Source:* *US Census* *and Service Performance Insight, February 2016

Many of the concepts and uses of professional services described in this report also exist within product-driven organizations. As a result, Service Performance Insight uses the term “services-driven organization”, or embedded service organization (ESO) to describe the rapidly expanding market for service organizations within product companies.

Global IT Spending

According to Gartner’s **2015 IT Spending** report, IT and Telecom services represent almost 70 percent of all IT spending with global revenues in excess of $2.9 trillion. Although the pace of service revenue growth has slowed, unlike most other industries, year-over-year IT service revenue has only declined once in the past ten years (2008-2009).

Table 6: Worldwide IT Spending by Category (2014 to 2019) in Constant Currency

	2014	2015	2016	2017	2018	2019	CAGR 2014-2019
Data Center Systems	$171	$185	$187	$190	$192	$193	2.5%
Software	319	339	360	383	407	434	6.4%
Devices	709	722	724	732	741	750	1.1%
IT Services	970	1,006	1,046	1,089	1,137	1,189	4.2%
Communications Services	1,647	1,662	1,668	1,698	1,723	1,745	1.2%
All IT	**$3,816**	**$3,912**	**$3,984**	**$4,091**	**$4,200**	**$ 4,311**	**2.7%**

Source: Gartner, 2015

According to Gartner, 2015 IT services spending in constant currency will be $1 trillion, with 2015 and 2016 growth expected to be 3.7% and 4.0%, respectively (Table 6). Outsourcing will contribute more than half of market growth. "In the data center outsourcing market, increased adoption of cloud services and infrastructure utility services in Western Europe will cannibalize spending on data center outsourcing, as the region shifts toward cloud-oriented providers and offshore-based vendors. As a result, the forecast in Western Europe has been reduced from a constant-dollar CAGR of negative 4.3% in the 2Q15 forecast to negative 4.9% in the 3Q15 forecast."

PS Maturity™ Benchmark Vertical Market Demographics

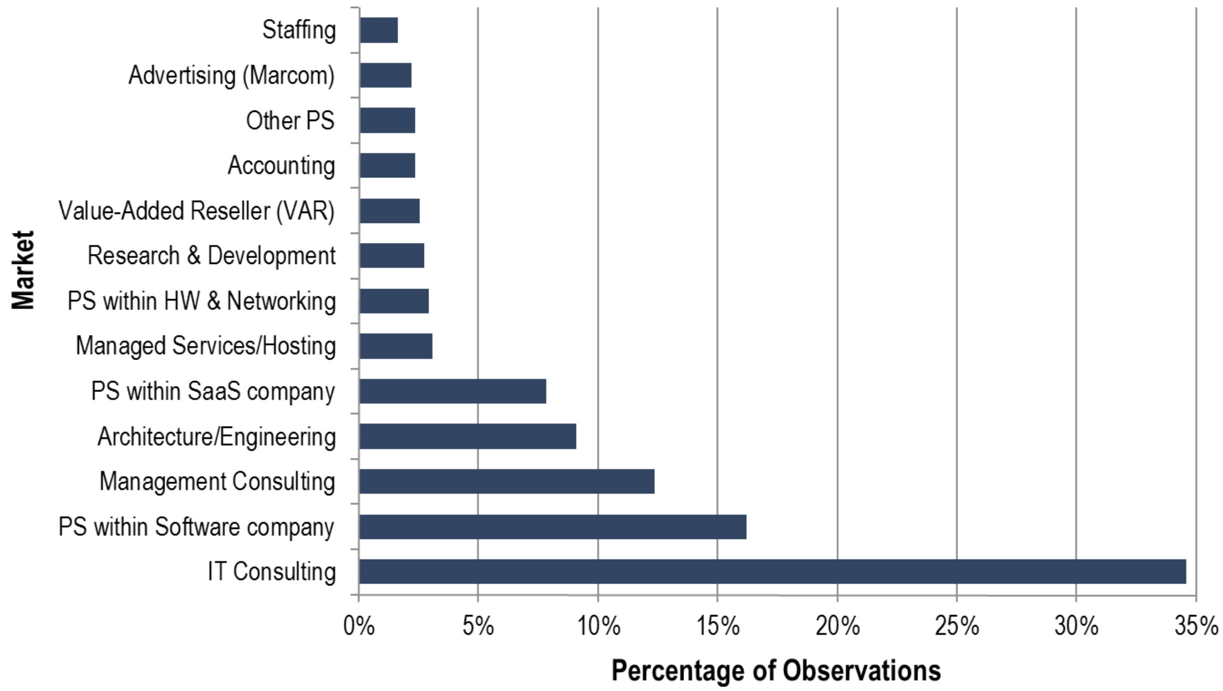
The 2016 PS Maturity™ benchmark is the most comprehensive global study of the professional services industry as it is based on 549 participating organizations representing over 350,000 consultants. The percentage of completed surveys representing the top thirteen vertical market segments is as follows:

- ∆ ***IT Consulting***: Systems Integrators and developers – 34.6%, 190 firms representing ~ 108,800 consultants;
- ∆ ***Software PS***: Service divisions within software companies – 16.2%, representing 89 firms and ~ 52,485 consultants;
- ∆ ***Management Consulting***: Management consultancies – 12.4% representing 68 firms and ~ 17,315 consultants;
- ∆ ***Architects and Engineers***: Architects and engineers – 9.1% representing 50 firms with ~ 21,425 architects and engineers;
- ∆ ***SaaS PS***: Service divisions within software-as-a-service providers – 7.8% representing 43 firms and ~ 25,020 consultants;
- ∆ ***Managed Services:*** Provide hosting and managed and outsourced services – 1.4% representing 17 firms with ~7,785 consultants;
- ∆ ***Hardware (and Networking) PS***: Service divisions within hardware and networking manufacturers – 2.9% representing 16 firms with ~ 23,500 consultants;
- ∆ ***Research and development:*** provide research and development services – 2.7% representing 15 firms with ~ 38,660 consultants
- ∆ ***Value-Added Resellers:*** resell hardware, software and provide technology services, training and support – 2.6% representing 14 firms with ~ 9,425 consultants;
- ∆ ***Accountancies:*** Accounting firms – 2.4% representing 12 firms with ~ 1,970 accountants and auditors;
- ∆ ***Marketing and Advertising***: Advertising, marketing, communication firms – 2.4% representing 12 firms and ~ 2,475 consultants;
- ∆ ***Staffing***: Recruiting, provide temporary resources and consultants – 1.6% representing 9 firms and ~ 21,660 consultants.

- *Other PS*: Research and Development; business optimization, training – 2.2% representing 13 firms and ~ 19,000 consultants; "Other PS" includes other types of PSOs such as legal, healthcare and organizations that did not squarely fit into other specific professional services verticals.

Figure 13 highlights the vertical markets included in this year's report.

Figure 13: Vertical Market Distribution



Source: Service Performance Insight, February 2016

Table 7 shows participant demographics for the past eight years. For the past four years, IT consultancies have been the largest participating market, closely followed by PS within software firms.

Table 7: Number of Participating Firms by Vertical Market (2007 through 2015)

Market	Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
IT Consulting	PSO	13	24	50	67	61	69	115	86	190	**675**
PS within Software	ESO	34	66	89	57	56	45	45	47	89	**528**
Management Consulting	PSO	2	12	22	22	31	34	24	27	68	**242**
Other PS	PSO	2	13	30	22	13	31	21	24	13	**169**
PS within SaaS	ESO	0	0	18	19	26	23	16	13	43	**158**
Architecture/Engineering	PSO	0	0	4	6	7	8	6	10	50	**91**
PS within Hard./Network.	ESO	1	3	12	9	10	9	4	4	16	**68**
Advertising (Marcom)	PSO	0	0	0	6	10	11	6	4	12	**49**
Accounting	PSO	0	0	0	6	2	4	1	5	13	**31**
Managed Services/ Host.	ESO	0	0	0	0	0	0	0	0	17	**17**

Market	Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Research & Develop.	PSO	0	0	0	0	0	0	0	0	15	**15**
Value-Added Reseller	ESO	0	0	0	0	0	0	0	0	14	**14**
Staffing	PSO	0	0	0	0	0	0	0	0	9	**9**
Total		**52**	**118**	**225**	**214**	**216**	**234**	**238**	**220**	**549**	**2,066**

Source: Service Performance Insight, February 2016

Tables 8 and 9 further analyze the survey demographics by vertical market, highlighting the markets surveyed. According to this year's survey, VARs experienced the greatest year over year PS revenue growth at 16%, closely followed by SaaS PS organizations at 15.8% and IT consultancies at 12.3%. Overall PS revenue grew at 10.2%, up slightly from last year's growth of 10%. Based on completed surveys from 2,066 PS organizations, PS revenue growth for the past five years has averaged 10.9%. Over the same five-year period, these firms have increased PS headcount by 8.3%. Across the PS industry, annual revenue growth is always higher than PS headcount growth which means firms become more productive as they scale while the overall PS industry continues to ratchet up productivity.

Table 8: Demographics by Vertical Market

Demographic	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.
Number of firms reporting	190	89	68	50	43	17
Average Size of PSO (employees)	573	590	255	429	582	458
Annual company revenue ($mm)	$151.6	$339.1	$107.8	$101.5	$261.0	$204.8
Professional service revenue ($mm)	$72.2	$74.4	$55.8	$92.2	$78.0	$86.7
PS percentage of total revenue	47.6%	21.9%	51.8%	**90.8%**	29.9%	42.3%
Year-over-year change in PS revenue	12.3%	10.5%	9.0%	3.2%	15.8%	10.0%
Year-over-year change in PS headcount	9.6%	6.8%	5.0%	4.0%	13.1%	6.7%
% of employees billable or chargeable	73.7%	75.5%	69.6%	71.0%	65.6%	57.8%
% of PS revenue delivered by 3rd-parties	11.9%	9.2%	11.0%	11.4%	8.5%	5.5%
M&A over the past 3 years	1.04	1.70	0.73	0.86	**1.85**	1.26

Source: Service Performance Insight, February 2016

Hardware and networking represented the largest organizations with PS headcount of 1,469. Accounting firms reported the smallest average PS headcount at 152 accountants with PS revenues averaging $24M. Architect and engineering firms reported the highest percentage of total revenue from PS at 90.8%. For other PS and VARs, professional services are a small component of the business. They reported the lowest percentage of total revenue from PS at 6.8% and 11% respectively.

SaaS organizations experienced the most mergers and acquisitions (1.85) while staffing firms experienced the least (0.56). According to Equiteq, (consulting industry merger and acquisition specialists) the consulting market experienced a strong uptick in merger and acquisition activity with overall deal volume increasing 13% from 2013 to 2014. 35% of the over 2,000 consulting acquisitions reported were under $5 million and 70% were under $40M, reflecting the fact that the vast majority of consulting firms are small with revenues below $100 million.

Table 9: Demographics by Vertical Market

Demographic	Hardware /Network.	R&D	VAR	Acct.	Advert. (Marcom)	Staff.
Number of firms reporting	16	15	14	13	12	9
Average Size of PSO (employees)	1,469	2,577	673	152	206	2,407
Annual company revenue ($mm)	$974.2	$471.5	$247.1	$97.3	$59.2	$537.5
Professional service revenue ($mm)	$208.0	$312.5	$27.3	$24.4	$21.9	$186.4
PS percentage of total revenue	21.4%	66.3%	11.0%	25.1%	37.0%	34.7%
Year-over-year change in PS revenue	7.2%	10.2%	16.0%	-0.2%	1.7%	10.3%
Year-over-year change in PS headcount	6.7%	8.8%	14.4%	0.4%	5.7%	6.4%
% of employees billable or chargeable	58.7%	64.3%	74.2%	57.5%	67.1%	57.8%
% of PS revenue delivered by 3rd-parties	14.1%	11.3%	9.8%	6.7%	9.0%	14.7%
M&A over the past 3 years	1.53	1.77	1.46	1.31	0.71	0.56

Source: Service Performance Insight, February 2016

Table 10 compares demographic information for embedded (ESO) versus independent PSOs and by geography. The size of the embedded (ESO) and independents (PSO) is roughly the same although the survey was dominated by independents (370 out of 549 firms). ESOs experienced higher revenue and headcount growth. By geography, the Americas experienced the greatest growth followed by APAC. EMEA had the smallest firms with the lowest revenue and headcount growth. The Asia-Pacific region showed the highest percentage of billable employees, which means lower management and non-billable overhead. APAC relied the most heavily on third parties for additional revenue (11.8%).

Table 10: Demographics by Organization Type and Geographic Region

Key Performance Indicator (KPI)	2015	ESO	PSO	Americas	EMEA	APac
Number of firms reporting	549	179	370	371	141	37
Size of PS organization (employees)	637	660	625	666	522	776
Annual company revenue (mm)	$221.2	$358.1	$158.0	$249.5	$163.2	$164.7
Total professional services revenue (mm)	$80.9	$85.4	$78.7	$93.6	$49.4	$75.1
Year-over-year change in PS revenue	10.2%	11.9%	9.5%	11.7%	6.5%	10.1%
Year-over-year change in PS headcount	7.8%	8.9%	7.3%	9.0%	5.0%	6.8%
% of employees billable or chargeable	70.4%	69.9%	70.7%	70.9%	68.9%	71.2%
% of PS revenue delivered by 3rd-parties	10.9%	9.2%	11.7%	10.6%	11.4%	11.8%
No. of firms acquired over past 3 years	1.19	1.66	0.96	1.28	1.08	0.73

Source: Service Performance Insight, February 2016

By organization size, the smallest organizations grew the least while the largest organization grew the fastest and added the most PS headcount. The smallest organizations experienced the fewest mergers and acquisitions while the largest experienced the most; they also relied the most heavily on subcontractors to generate revenue.

Table 11: Demographics by Organization Size

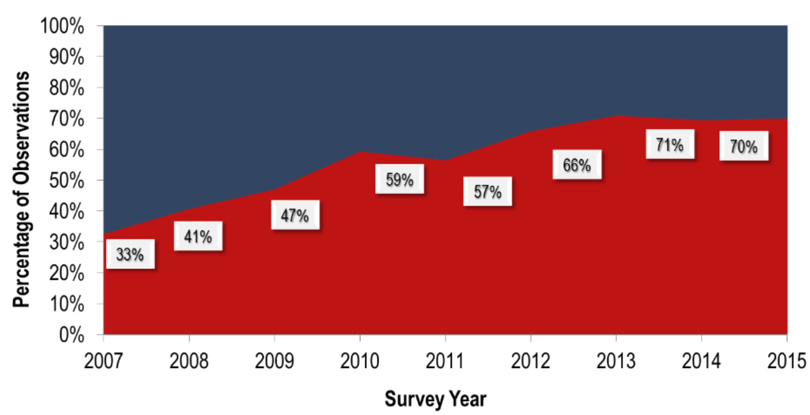
Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Number of firms reporting	55	90	147	123	55	79
Size of PS organization (employees)	5	20	65	200	500	3,618
Annual company revenue (mm)	$47.9	$59.2	$71.5	$173.6	$360.5	$768.3
Total PS revenue (mm)	$2.6	$4.4	$17.2	$45.7	$77.7	$395.3
Year-over-year change in PS revenue	6.2%	9.7%	11.3%	9.9%	9.0%	13.1%
Year-over-year change in PS headcount	0.0%	8.5%	8.0%	8.9%	6.8%	11.3%
% of employees billable or chargeable	62.5%	70.4%	73.3%	69.3%	72.1%	71.2%
% of PS revenue delivered by 3rd-parties	8.0%	11.7%	9.9%	10.9%	10.4%	14.1%
No. of firms acquired over past 3 years	0.40	0.51	0.69	1.27	2.03	2.73

Source: Service Performance Insight, February 2016

PSO Type

SPI Research analyzes billable PSOs in a number of ways with a focus on two macro segments – independents and embedded PS organizations:

Figure 14: Independent vs. Embedded Survey Orgs Surveyed (2007 – 2015)



Source: Service Performance Insight, February 2016

- ∆ ***Independent Professional Services Organizations (PSOs)***: Independent PSOs sell, deliver, and invoice for professional services to external clients. Clients hire systems integrators, IT consultancies (SIs) and Value-Added Resellers (VARs) to implement or integrate technology based on their strategic competence or specialized industry or product knowledge. Clients hire management consultancies to provide strategic insight, guidance, facilitation and coaching. Independent PSOs typically provide expertise, knowledge, skills and business practices that are more specialized than those found within internal organizations. In this study a majority of the independent PSOs were IT consultancies, Systems Integrators (SIs) or VARs, with the remainder representing Management Consultancies (MCs), Accountants, Marketing and Advertising and Architects and Engineers. The participating PSOs represented a broad spectrum from some of the largest independent service providers in the world to extremely small, independent regional and specialty service providers. The vast majority of responding independent PSO's were privately held.

- ***Embedded Services Organizations (ESOs)***: ESOs operate much like PSOs; however, they are part of a product-driven organization. The majority of ESO participants focus exclusively on their company's own technology but many of the largest ESOs like IBM and HP services provide global IT consulting, managed services and outsourcing not associated with their company's products. For the small to mid-size ESOs, their primary charter is to successfully implement their company's products. Increasingly the charter of embedded PS has expanded to include client adoption with a focus on reducing time to value. While they are focused on professional service revenue and profit, they are often asked to perform non-billable presales, proof of concept and customer satisfaction services at little to no charge. They enable external clients but must also support internal sales, support and engineering constituencies. At maturity levels 1 and 2, their primary focus is on project delivery and building a reference base. For ESOs, lead generation, marketing and sales are primarily provided by the product sales organization. In this survey a majority of the ESOs were part of independent software vendors (ISVs) who primarily provide on-premise software however the percentage of respondents representing SaaS (cloud) providers is rapidly expanding. Almost all legacy on-premise software providers are moving to the cloud. SPI Research shows both on-premise and SaaS results.

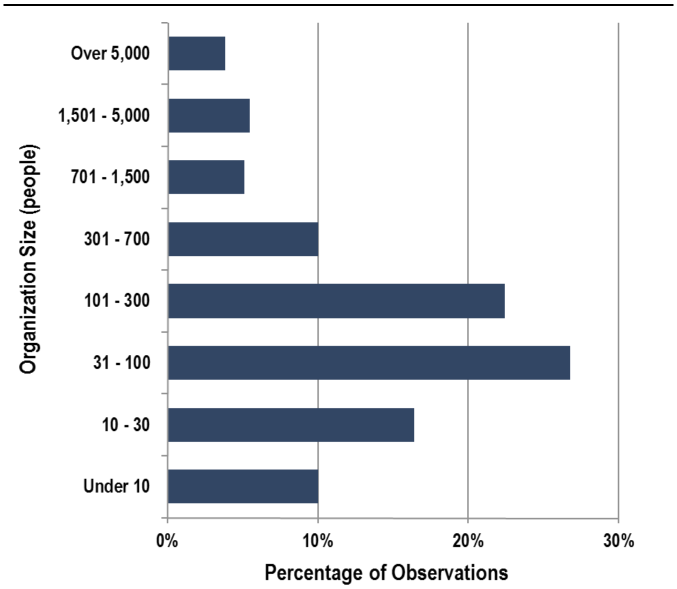
SPI Research uses this segmentation because independent consultancies must fund sales and marketing and back-office operations for finance, operations, facilities, IT and recruiting in a way that embedded organizations generally do not. Independents incur a higher cost of operation than captive (embedded) organizations do. However, the following chapters will demonstrate independent PSOs generally outperform their embedded counterparts because their sole focus is on delivering high-quality services at a profit. Independents generally are focused on client delight and service revenue and profit growth, versus embedded where successful and profitable projects are often subordinate to customer product adoption and incremental product sales.

Organization Size

The average size organization in the Professional Services Maturity™ Benchmark has grown, from 211 employees in 2012, to 637 in this year's survey. This year's survey is based on firms who employee more than 350,000 consultants worldwide making it the most comprehensive study of the Professional Service industry.

Figure 15 highlights survey distribution by PS headcount. The largest percentage of firms have between 31 and 100 employees, which has been the case for several years now. Embedded services organizations average 660 PS employees whereas

Figure 15: Organization Size



Source: Service Performance Insight, February 2016

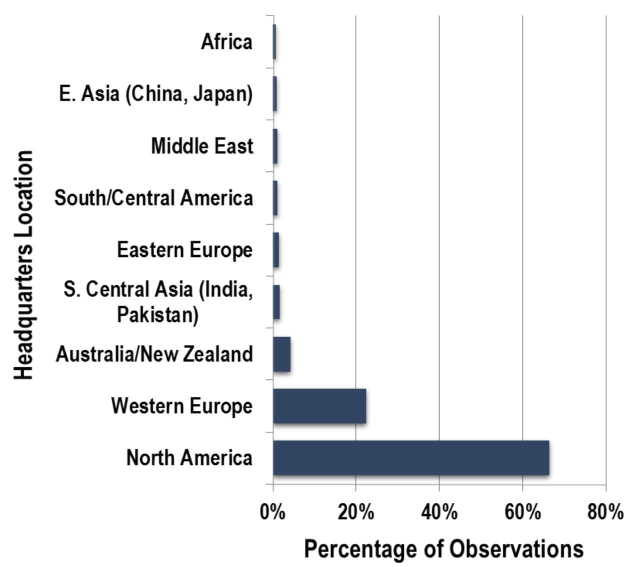
independents averaged 625. Firms headquartered in EMEA averaged 522 PS employees; the Americas averaged 666 and APac averaged 776 PS employees per firm. The headcount numbers are skewed in APac because two of the thirty-seven participating firms reported PS headcount of more than 5,000. Excluding these very large PSOs, APAC average PS organization size was 391 employees.

Both Software and SaaS PS organizations averaged more than 580 PS employees, highlighting the importance of embedded PS within these organizations. IT consultancies (573) and Management consultancies (255) also had a substantial PS workforce.

Headquarters Location

Service Performance Insight works with professional service organizations from around the world, and encourages them to participate in the benchmark survey. Survey participation from firms headquartered outside of North America, (Europe, Middle East, Africa (*EMEA*) and Asia Pacific (*APac*)) is now over 30%, as the Professional Services Maturity™ Benchmark continues to gain global popularity (Figure 16).

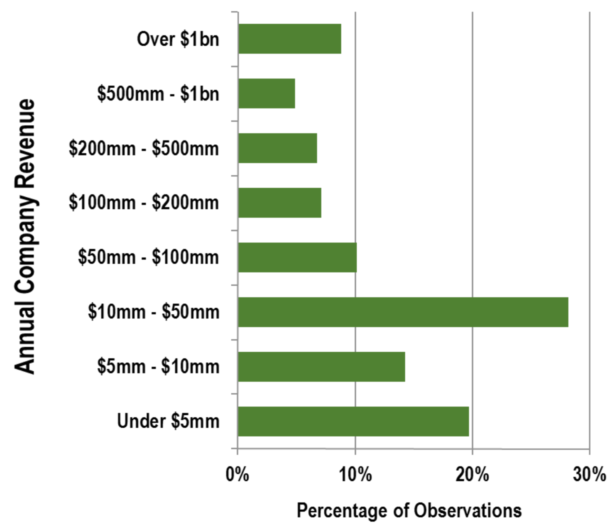
Figure 16: Headquarters Location – Region



Source: Service Performance Insight, February 2016

It is important to note that regardless of where the organization has its headquarters, a significant number of employees may reside outside of the country. This is especially true for larger organizations. Therefore, the benchmark truly reflects global organizations with a worldwide PS workforce.

Figure 17: Total Company Revenue



Source: Service Performance Insight, February 2016

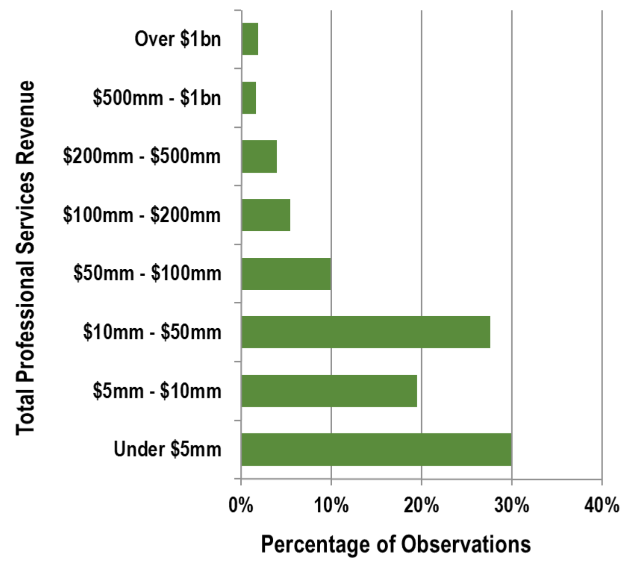
Total Company Revenue

In this survey many of the PS organizations are part of a larger enterprise that also sells a variety of other products and services. Many of the independent professional service providers also sell products or the responding group is an individual practice within a larger firm. Many technology service organizations have multiple lines of business which may include managed services, outsourcing and staffing. Therefore, it is important to note total annual company revenue. In this year's survey the average organization generated $221 million in total revenue including $80.9 million in PS revenue.

Total PS Revenue

Figure 18 shows 75% of the organizations surveyed have professional services revenue of less than $50 million. The global PS market is primarily comprised of firms with less than $50 million in revenue, but SPI Research works especially hard to survey larger professional services providers to better understand the dynamics impacting their business and how they can improve organizational performance.

Figure 18: Total Professional Services Revenue



Source: Service Performance Insight, February 2016

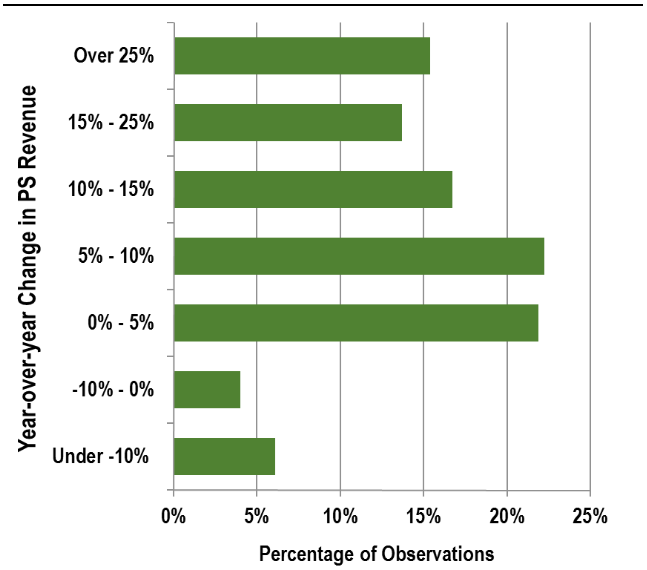
Embedded PSOs averaged $85.4 million in PS revenue and the independents averaged $78.7 million. The average across all 549 participants was $81 million compared to $55 million last year.

In this year's survey firms headquartered in the Americas ($93.6 million) were larger than those located in EMEA averaging $49.4 million and APac averaging $75.1 million.

Year over year change in PS Revenue

For the past three years, professional services revenue growth across the benchmark, has averaged slightly more than 10%. 30% of the firms grew revenues by over 15% (Figure 19). Another 15% of the firms grew revenues by over 25% in 2015.

Figure 19: Year-over-Year Change in PS Revenue



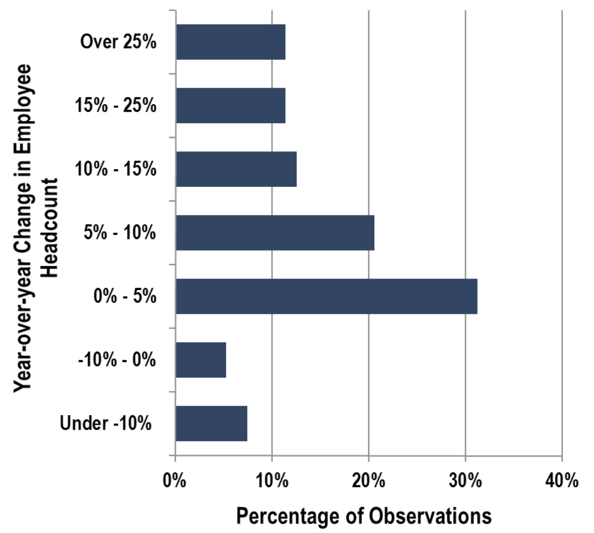
Source: Service Performance Insight, February 2016

Independent providers averaged 9.5% revenue growth whereas embedded service providers grew at 11.9%. The largest firms (with more than 700 PS employees) grew the fastest at 13.1% closely followed by firms with 31 to 100 PS employees who grew at 11.3%. All other size PSOs grew at less than 10%. By geography the Americas grew the fastest at 11.7% followed by APAC at 10.1% with EMEA experiencing the least revenue growth at 6.5%. EMEA has been plagued by the on-going sovereign debt crisis; unending waves of refugees and terrorist threats all of which have dampened market growth. The professional services market can absorb growth rates of 5% to 10% through efficiency gains and better management of external subcontractors without significant increases in hiring. However, when growth rates rise above 10%, professional services organizations must add full-time employees.

Year-over-year change in PS Headcount

Figure 20 shows that the year-over-year change in headcount mirrors that of professional services revenue growth rates, with embedded organizations and larger firms leading the way. Typically, revenue growth is higher than employee headcount growth, as professional services organizations are very attuned to operational efficiency. However, employee growth is a strong indicator that the professional services market continues to make great strides. PS market momentum and consulting demand continue to build and represent a bright spot in an overall lackluster economic picture. For the past five years, the PS industry has averaged 8.3% per year headcount growth. This year the average was 7.8%, down slightly from 8.1% the prior year.

Figure 20: Year-over-Year Change in PS Headcount



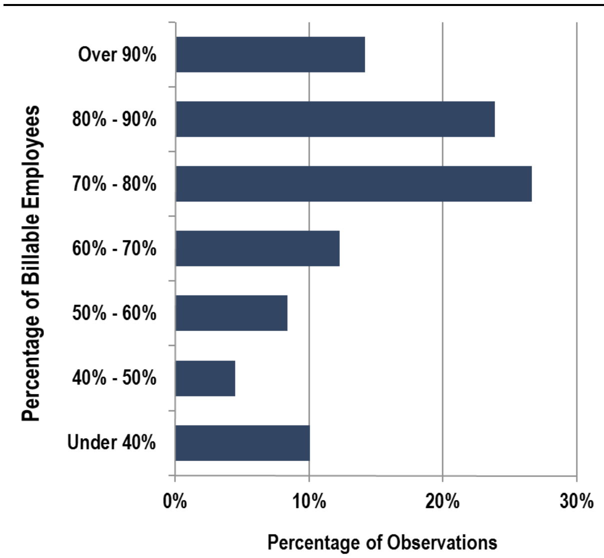
Source: Service Performance Insight, February 2016

Similar to revenue growth, the Americas experienced 9% PS headcount growth; APAC reported 10.1% with EMEA experiencing the least PS employment growth at 5%.

Percentage of Employees Billable or Chargeable

In this year's survey SPI Research found the percentage of billable employees (70.4%) declined significantly from the high water mark of 75.1% achieved last year. Figure 21 highlights the majority of organizations now have over 70% of their employees billable. Obviously, this has a direct correlation with increased profitability. However, professional services organizations should not try to drive this number over 80%, as the lost overhead serves valuable functions from

Figure 21: Percentage of Employees Billable/Chargeable



Source: Service Performance Insight, February 2016

sales and marketing, through operations and IT. Keeping the organization balanced, which SPI Research believes is approximately 75% billable headcount, should yield solid results.

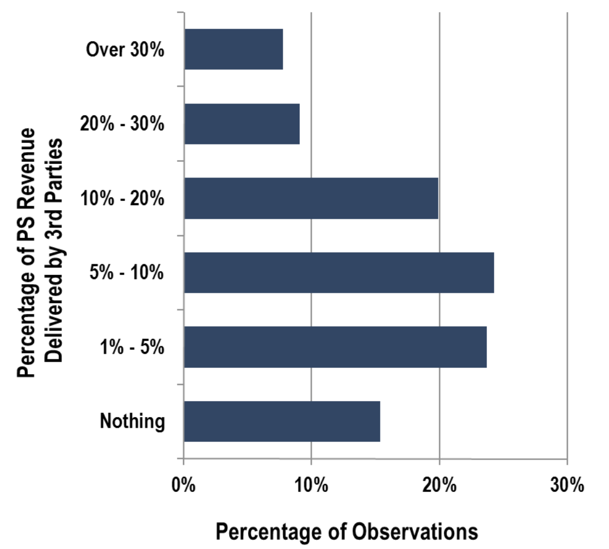
Excessive non-billable headcount creates a top-heavy organization or is a symptom of poor sales and marketing effectiveness and/or poor systems. But as in all things PS, there is a delicate balance that must be maintained. Non-billable headcount and time is a necessary component of developing infrastructure, systems and tools which support growth, consistency and quality.

Independents averaged 70.7% billable, whereas the embedded service providers averaged 69.9%. These figures were fairly consistent across all sizes of organizations. The APac region led the way with 71.2% of their employees billable compared to 70.9% in the Americas and 68.9% in EMEA.

Percentage of PS Revenue Delivered by Third Parties

Figure 22 shows the distribution of survey responses in terms of the amount of revenue generated by third-party resources. The average percent of PS revenue generated by subcontractors was 10.9% down from 12.3% in 2014. This figure has remained fairly constant between 11% and 13% for several years. This year ESO revenue delivered by third parties declined to 9.2% down from 12.2% the prior year. Independents generated 11.7% of revenue from subcontractors. Also, since the largest organizations grew the fastest, the greater potential was there for third-party resources. Organizations with over 700 PS employees derived 14.1% of revenue from third-party resources. By geography, APAC generated the most third-party revenue at 11.8%; EMEA generated 11.4% and the Americas generated the least at 10.6%. Subcontractors are a valuable tool to help manage variability in supply and demand for services.

Figure 22: Percentage of PS Rev. Delivered by 3rd-parties



Source: Service Performance Insight, February 2016

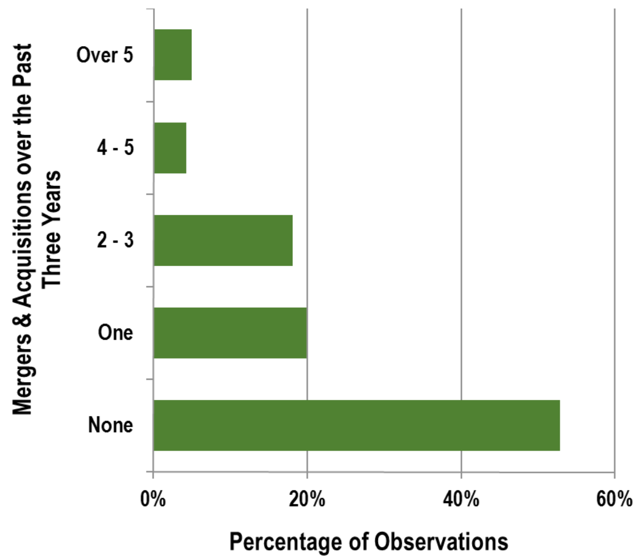
Their bench cost is minimal, if anything, when they are not working. And they provide a valuable incremental workforce to augment the employee work base when work picks up.

Mergers and Acquisitions over the Past Three Years

Four years ago SPI Research began tracking the number of mergers and acquisitions organizations have been involved in (either as the acquirer or acquired). Software and SaaS firms lead the way in acquisitions. Traditional companies like Oracle, SAP and Microsoft, who generate the majority of technology profits, regularly buy up the highfliers in new market segments. But just as soon as today's rising stars are acquired new ones emerge with better, faster and more innovative technology…and so it goes.

The number of mergers and acquisitions increased significantly this year to 1.19 per organization versus 0.73 in last year's survey. Embedded service organizations averaged almost 2 mergers and acquisitions this year while independents reported 1. As one might expect, larger organizations reported more merger and acquisition activity. Organizations with over 700 PS employees averaged almost 3 acquisitions. The Americas averaged 1.28, EMEA averaged 1.08 and APAC .73.

Figure 23: Mergers & Acquisitions over the Past Three Years



Source: Service Performance Insight, February 2016

Please refer to [Equiteq's Global Consulting M&A report 2015] for an overview of consulting M&A activity including deal structure and revenue and EBITDA multiples. Mergers and acquisitions can provide a viable PS growth formula as they can bring new clients, ideas, skills and competencies. But deal structure is very important to ensure that the rainmakers, visionaries and subject matter experts who founded and grew the firm stay and contribute after the acquisition. A key ingredient of acquisition retention is to quickly move to a common business application platform to ensure all employees have visibility to the business and how they can contribute. Another best practice in people-based businesses is to as quickly as possible move to a single finance and operations function and infrastructure as well as a standard human resource fabric including standardized job descriptions and compensation.

4. Best-of-the-Best

For the past seven years, Service Performance Insight has conducted in-depth analysis of the top 5% of PS Maturity™ benchmark participants to uncover the reasons for their superlative performance. The leading (according to the PS Maturity™ model) organizations have been named "Best-of-the-Best" after a careful audit of their survey responses and an in-depth interview with their lead service executive.

In this year's benchmark, SPI Research names the top 20 firms, each scoring 20 or above (out of 25) on the PS Maturity™ Model. The following sections highlight some of the findings comparing the "best" preforming organizations to the rest of the survey participants.

Introducing the 2016 Best-of-the-Best Service Organizations

According to Service Performance Insight's **2016 Professional Services Maturity™ Benchmark** out of 549 participating organizations, twenty firms (5%) significantly outperformed the benchmark average by excelling in all five service performance dimensions – **Leadership, Client Relationships, Human Capital Alignment, Service Execution and Finance and Operations.** The Top 20 firms outperformed their peers and the benchmark average with significantly higher profit and more satisfied clients.

Table 12: 2016 Best-of-the-Best Performance Advantage

Measurement	Top 20 Firms	All Others	Advantage
EBITDA	**20.4%**	**14.9%**	**37%**
Size of PS Organization (employees)	776	630	23%
Year over year revenue growth	20.0%	9.8%	104%
Year over year PS headcount growth	17.2%	7.4%	132%
Average revenue per project (k)	$339	$219	55%
Annual revenue per employee (k)	$242	$153	58%
Projects delivered on-time	86.7%	75.6%	15%
Reference clients	81.0%	69.9%	16%

Source: Service Performance Insight, February 2016

The one word that best describes this year's top performers is "transparent". Transparent is defined as "visibility in context". A key element of their success is to provide open books and communication so all levels of the organization are empowered to make proactive, fact-based decisions. Transparency binds employees to the direction and strategy of the firm, propelling superlative execution. They all have created a culture of excellence by leading with honest, ethical and open communication and metrics. Integrated business applications support high levels of employee and revenue growth.

SPI Research is proud to announce the 2016 top performers:

CodeScience

CodeScience supports the unique needs of SaaS companies by providing professional services across their entire lifecycle: Design, Product Build and Test, Distribution, Sales, Marketing, and Support. CodeScience has built over 70 B2B Salesforce products for clients and bolstered hundreds more with custom solutions.

"The majority of our consultants have worked for, or founded, a SaaS startup; our shared passion. While often referred to as the fastest way to get a new product to market, we pride ourselves in bringing the right product to market. However, neither guarantee success. Our solutions, anchored in the Salesforce Clouds, enable clients to focus on customers, not process. That's the key to owning a new market."

Brian Walsh, Partner and Chief Strategy Officer, CodeScience

Wolters Kluwer Financial Services

Wolters Kluwer Financial Services helps organizations around the world proactively manage risk, compliance, finance and audit challenges, and grow safely and profitably by providing software, expertise and professional services to help them make critical business decisions.

"Wolters Kluwer Financial Services is pleased to be recognized as a 'Best-of-the-Best' organization. We take pride in what we do and this honor reaffirms our dedication to service excellence as we strive to help our customers succeed amidst the intense regulatory standards and civic responsibility inherent in the financial services industry today. The PS Maturity Model™ has become a valuable benchmark in our efforts to meet the evolving needs of our customers and a useful guide to pinpoint areas of success and those that require improvement. Being recognized as a Best-of-the-Best winner is not only an incredible honor, but also a reflection of the corporate values we try to embody daily—focus on customer success, aim high and deliver, make it better and win as a team."

Darin Byrne Senior Director of Professional Services, WKFS

Top Step Consulting

TOP Step Consulting improves business efficiency and productivity for Professional Service operations by providing consulting and implementation services for Professional Services Automation software. TOP Step Consulting is a seven-time Best-of-the-Best winner.

"We are thrilled to be recognized as a seven-time top performer. We have a simple philosophy focused on delivering exceptional service. Our customers are other professional services organizations who are looking to improve their business efficiency and profitability, so it is vital that we are seen as an expert and leader in our field. The benchmarking process and report findings validate what we are doing right and help us identify areas of improvement."

Jodi Cicci, President and CEO TOP Step Consulting

E4 Services

e4 Services, LLC is a healthcare information technology consulting firm specializing in clinical, hospital information management and revenue cycle services. e4 helps healthcare organizations simplify, manage, implement and transition clinical, health information management, and revenue cycle computer systems, applications, workflow and operations. e4 is a three-time winner.

"We are humbled to be recognized again by SPI as a top performer. We experienced a year of tremendous growth, which often creates its own set of challenges for a company. Our focus on our customers, our team members, and our metrics – many based on ones that we implemented over the years thanks to this report – helped us successfully navigate through this year. The PS Maturity™ benchmark remains very valuable to us, and to be recognized again as a top performer within it is very rewarding."

Jim Hennessy, CEO e4 Services, LLC

Bristlecone

Bristlecone, part of the $17 billion Mahindra Group, is a supply chain and business analytics advisor, serving customers across a wide range of industries. Rated by Gartner as among the top ten system integrators in the supply chain space, we are uniquely positioned to solve contemporary supply chain problems, with supply chain and analytics focus as our advantage. Based out of the Silicon Valley, our global team of 1600+ business advisors helps companies rapidly optimize the strategic value of their supply chains through enabling technologies.

"We see 'Supply Chain Analytics' and BPaaS as a promising space to grow. With our recently launched analytics platform 'Bristlecone NEO' we are helping customers in various analytics initiatives – be it prescriptive, descriptive or predictive analytics. Another growth driver is cloud based services as we see growing demand from customers transforming from on-premise to integrated cloud solutions. We are honored to be recognized as one of this year's Best-of-the-Best service organizations."

Irfan Khan, President and CEO, Bristlecone

Logical Design Solutions, Inc.

LDS is a consulting firm that envisions and designs digital solutions for global organizations. For 25 years, LDS has helped market leaders realize their most important business strategies through technological innovations. LDS is hired by global companies, in all industries, that want to build substantially better businesses through smart design for business consumers. LDS is a seven-time Best-of-the-Best winner.

"LDS is honored to be named a "Best-of-the-Best" consulting firm for the 7th year in a row. We appreciate the value this award places on paying attention to the metrics that drive our consulting firm, and we strive to align to these best practices in our financial operations. Each year we do an exhaustive review of our business and are always looking for ways to improve. The PS Maturity Model™ and five Service Performance Pillars™ provide an important roadmap in this context. We compare our results to the benchmark and identify areas that we can improve even slightly. Each year we find something to work on and the report gives us the courage to do it."

Bruce Lovenberg, CPA Chief Financial Officer, Logical Design Solutions

Pariveda Solutions, Inc.

Pariveda Solutions, Inc. is a leading management consulting firm specializing in improving our clients' performance. We focus on developing exceptional people to solve clients' most complex and valuable business problems through innovative technology solutions combined with exceptional delivery.

"It is an honor to be a "Best-of-the-Best" services organization. Being named to this list for two years in a row is remarkable and reflects our dedication to growing our people to their fullest potential and to delivering exceptional services to our clients."

Kerry Stover, Chief Operating Officer, Pariveda Solutions

Alternative

Alternative brings the best of the cloud to manufacturers through services and solutions designed to make technology faster, smarter, and easier to use. Alternative partners with leading cloud technology providers including Salesforce and NetSuite to build and deliver solutions that meet manufacturers' needs.

"Alternative will always have service at the heart of everything we do. Alternative started as a pure services company focused on enhancing and extending the use of ERP and CRM for our customers. As we all know, companies typically only implement 40 to 50% of the functionality available to them, and so our goal was--and is--to help customers realize greater ROI and extend the functionality and usability of their technology. We are thrilled to have been recognized as one of the Best-of-the-Best Professional Services organizations, we think it is a real testimony to our singular focus on helping our clients succeed."

Vivian Keena, Founder and CEO, Alternative

ConsultCRM

ConsultCRM, part of Advanced Business Solutions, is positioned in the top 5% of all Microsoft partners globally and specialises in helping organisations implement, integrate and optimise Microsoft Dynamics CRM. As a Tier One, Gold Certified, Strategic Microsoft Partner, Advanced's pedigree in Microsoft Dynamics CRM spans a decade working with Microsoft since the first version came to market in 2004. The business is professionally managed, and has shown consistent growth every year since its inception, reinforcing the trust placed in Advanced by both Microsoft and its clients.

"ConsultCRM brings together a blend of complimentary skill sets, effective technology partnerships and robust implementation methodologies to help our clients deliver results for their organisations. We have gone beyond the traditional idea of support to help clients optimise their CRM investment over the long term. We believe that our inclusion in the 'Best-of-the-Best' professional service organisations is testimony to our focus on helping clients align CRM to their goals and objectives – at the start of their CRM journey and in the long term as they grow and evolve."

Simon Fowler, Managing Director, Advanced Business Solutions

Box

Founded in 2005, Box is transforming the way people and organizations work so they can achieve their greatest ambitions. As the world's leading modern content platform, Box helps more than 54,000 businesses in every industry, including 55% of the Fortune 500, securely access and manage their critical information in the cloud. Box is headquartered in Redwood City, CA, with offices in the United States, Europe and Asia.

"Box Consulting is the professional services arm of Box, helping customers realize the value of transforming the way they work and maximize the benefits of their Box deployment. Box Consulting offers implementation packages for customers ranging from 50 employees to hundreds of thousands of employees and collaborators globally. Additionally, Box Consulting helps customers optimize existing deployments, move legacy ECM solutions to Box, and build customer business applications on Box Platform. Meeting our customer's objectives requires running an excellent professional services operation and as such we are pleased to be recognized as one of this year's Best-of-the-Best Professional Services organizations."

Tim Smith, VP Consulting, Box

Collaborative Solutions

Collaborative Solutions is a leading global Finance and HR Transformation consultancy that leverages world-class cloud solutions to help deliver successful outcomes for its customers. As one of the longest-tenured consulting partners with Workday, Collaborative Solutions has executed over 225 successful Workday HCM, Payroll, and Financials deployments for global Fortune 500 companies, medium-sized businesses, and education and government institutions. Collaborative Solutions has deployed in over 110 countries and has experience with organizations ranging from 200 to 200,000 employees. Collaborative Solutions is based in the Washington, D.C., metro area with offices in Pleasanton, Chicago, Atlanta, Tampa, New York City, Toronto and Dublin.

"At Collaborative Solutions we take pride in our unique culture and industry-leading customer satisfaction. We firmly believe that happy employees result in happy customers, and owe this achievement to our dedicated team of experts. This benchmark validates Collaborative's growing leadership position in the industry, and we are extremely proud to be recognized as a "Best-of-the-Best" Professional Services Organization by Service Performance Insight."

Bob Maller, President and Chief Culture Officer at Collaborative Solutions

Large Contract Research Organization headquartered in Australia

This contract research organization specializes in global drug development. They are instrumental in helping global pharmaceutical firms get drugs to market, specializing in phase I through IV clinical trials. Recognized for delivering high quality services throughout the drug development lifecycle.

Name withheld

Fiserv

Fiserv is a global organization with more than 13,000 clients and 21,000 associates worldwide and takes pride in its mission to enable clients to achieve best-in-class results. The company is highly regarded for its financial services technology and services innovation, including award-winning solutions for mobile and online banking, payments, risk management, data analytics and core account processing.

Fiserv is helping its clients push the boundaries of what's possible in financial services, delivering deep expertise and innovative solutions to help financial institutions, businesses and consumers move and manage money faster and with greater ease than ever before.

Helmsman International

Helmsman International is a management consultancy, thought leader and product innovator. We love turning big, ugly, complex capital asset situations into highly successful outcomes. For Helmsman, the outcome is everything. We have built a reputation for being the straight-talking, can-do and broad thinking specialists who can define what needs to be done to deliver the best results. We use a combination of art, science and expertise to determine where the technical complexity lies, and what soft skills need to be applied to deliver success. Many asset owners tend to concentrate on technical, 'hard' factors when managing complex assets. Our experience has shown that it's the people issues that determine how successful the outcome will be. This is what turns good intentions into great outcomes.

"Helmsman International is very pleased to be recognized by SPI Research as one of the top performing professional services organizations in the world. This achievement is borne of the hard work and commitment of our team to provide superb service to our clients as well as a great environment for our consultants."

Julian Mitton, Partner and CFO, Helmsman International

Stoneridge Software

Stoneridge Software draws on years of experience in the Microsoft Dynamics space to provide complex ERP implementation and support. We look for the best and most experienced team members so that our clients have a consistently good experience. Our mission at Stoneridge Software is to "Enable Your Business"; we have the highly experienced Microsoft Dynamics resources who can help you reach your goals.

"We are honored to be recognized as one of Service Performance Insight's Best-of-the-Best for 2016. We appreciate the recognition for the quality of the organization we've built in three fast-paced years. The five pillars of Service Performance (Leadership, Client Relations, Human Capital Alignment, Service Execution and Finance and Operations) are aligned with our core values as a company. From the beginning our mission has been to be the best provider of Microsoft Dynamics ERP consulting and we are thrilled to be acknowledged for our operational excellence as we continue to grow our presence in the marketplace."

Eric Newell, President and Founder of Stoneridge Software

Moorhouse Consulting, LTD

Moorhouse is a dynamic consulting firm, focused on delivering transformational change. We make sure our clients succeed in their long-term goals by helping them turn their strategy into action; by providing out of the ordinary delivery capability; and by establishing a culture of change.

"Irrespective of the size of a business, transformation is about more than strategy: it is the implementation and delivery that will determine the success of any such programme, since without these even the best-laid plans will go to waste. We are proud of the recognition of our own transformation and growth that this award represents. It is a fantastic achievement and demonstrates not only our ability to execute strategies on behalf of our clients, but that Moorhouse practices what it preaches."

Richard Goold, Partner, Moorhouse Consulting

Imperva

Imperva®, is a leading provider of cyber security solutions that protect business-critical data and applications. The company's SecureSphere, Incapsula and Skyfence product lines enable organizations to discover assets and risks, protect information wherever it lives – in the cloud and on-premises – and comply with regulations. The Imperva Application Defense Center, a research team comprised of some of the world's leading experts in data and application security, continually enhances Imperva products with up-to-the-minute threat intelligence, and publishes reports that provide insight and guidance on the latest threats and how to mitigate them. Imperva is headquartered in Redwood Shores, California.

"We are honored to be named a "Best-of-the-Best" services organization by Service Performance Insight. The worldwide services and support team at imperva understands that security, compliance and reliability are essential to our customers. We offer a comprehensive set of support, professional services, and product training programs that deliver immediate and effective results, giving our customers the confidence that their security and compliance objectives are met and exceeded."

Sunil Nagdev, SVP of Worldwide Services and Support at Imperva

Onesource Virtual

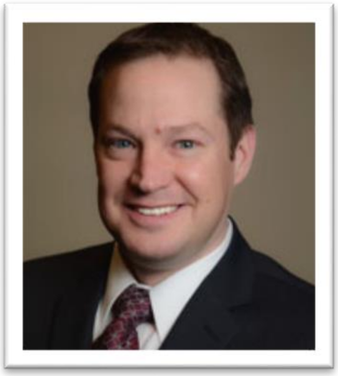
Founded in 2008, OSV started out as a disruptive force in the market offering a truly cloud-based alternative to business process outsourcing. Dedicated exclusively to Workday, OSV's services empower and encourage customers' HR to become strategic partners within their organizations, align to business growth and scale by demand.

"OneSource Virtual is honored to be recognized by Service Performance Insight as one of the Best-of-the-Best Professional Services organizations in the industry. Not only do we approach every project with a deep expertise, but strive to provide every customer with an exceptional experience. Customer satisfaction and dedication to service excellence is in the fabric of OSV and its employees, and has been since day one. Receiving this award is a testimony to our efforts and our accomplishments."

Duncan Harwood, VP of Professional Services and Strategy

Integrated Project Management Company

Integrated Project Management Company, Inc. (IPM) is a leading project management consulting firm, planning and implementing strategic and critical projects in the life sciences, healthcare, consumer products (including CPG), and industrial sectors. The IPM leadership approach combines clients' internal capabilities and legacy knowledge with IPM's proven ability to inspire stakeholder engagement and buy-in to achieve project objectives. Since its inception in 1988, IPM has served over 300 clients, ranging from Fortune 100 companies to startups, and completed over 3,500 projects.



"IPM is honored to be named a "Best-of-the-Best" Service Organization. With a passion for excellence, honest and ethical conduct, and uncompromising integrity, we focus on providing extraordinary service while advising on and executing our clients' most complex initiatives. We recognize that our values-driven, self-motivated, and highly skilled employees are our most important asset. Our mission is honored each time we exceed a client's expectations and each time an employee achieves his or her dreams."

Timothy J. Czech, Chief Financial Officer, IPM

Fruition Partners, a Division of CSC

Fruition Partners, a CSC company, is a global technology-enabled services firm focused on elevating service management to the cloud. The company combines practical experience with technology-enabled tools and services to help organizations attain success throughout the entire Service Management process. With more than 1,700 ServiceNow projects to its credit, Fruition Partners is a Master tier Solutions Partner of the leading enterprise cloud company, ServiceNow. Fruition Partners team of over 300 cloud-integration experts accelerate service management and ensure clients experience cost and performance benefits quickly and easily.

"Fruition Partners is proud to be named a 'Best-of-the-Best' firm. With our recent acquisition by CSC, we've realized that in many ways we can serve as a model and enable other organizations within the larger company. Culturally, we maintain a spirit of honesty and continuous improvement. We are very proud to celebrate our success and embrace our future potential."

Scott Klein, Director of Business Operations, Fruition Partners

Best-of-the-Best Demographics

Table 13 compares the 20 best-of-the-best performing PSOs to the other 535 in this year's survey. As we have seen for the past seven years, Best-of-the-Best organizations tend to be more specialized than the average firm in the benchmark. This year's top performers are slightly larger than average firms with 776 PS employees compared to 630 for average firms. Nine are independent IT consultancies; three are embedded PS organizations within fast-growing software companies; four are management consultancies; two are embedded PS organizations within cloud SaaS companies; one is a Value-Added Reseller and one focuses on research and development. The IT consultancies specialize in enterprise-class solutions for complex problems in government, healthcare, security and data centers or

Table 13: Best-of-the-Best Comparison – Demographics

KPI	Best-of-the-Best	Rest	▲
Number of firms	20	529	
Size of PS organization (employees)	776	630	23%
Annual company revenue (mm)	$206.5	$221.9	-7%
Total professional services revenue (mm)	$67.8	$81.5	-17%
Year-over-year change in PS revenue	20.0%	9.8%	104%
Year-over-year change in PS headcount	17.2%	7.4%	132%
% of employees billable or chargeable	82.1%	69.9%	17%
% of PS revenue delivered by 3rd-parties	10.2%	10.9%	-6%
M&A over the past three years	1.71	1.16	47%

Source: Service Performance Insight, February 2016

high-growth cloud platform implementation, migration and integration. They serve a wide variety of industries with specialized expertise and deep domain knowledge.

This year's Best-of-the-Best are characterized by high growth, profit, and high levels of client satisfaction. Every year we find the best firms are also the fastest growing; on average they grew year over year PS revenue by 20% - more than double the revenue growth of average firms (9.8%). Year over year employee headcount growth was even more impressive at 17.2% which is almost three times the headcount growth of average firms (7.4%). For these fast growing firms their top challenge is finding and growing the talent they need to sustain their dynamic growth while maintaining a culture of excellence.

The Best boasted a much higher percentage of billable employees, and depend slightly less on third-party resources, preferring to recruit and deploy their own talented resources without heavily relying on subcontractors which translated to higher levels of both employee and client satisfaction.

More than half of this year's top performers augmented their organic growth with acquisitions or were acquired by larger firms. Two firms completed over five acquisitions as they consolidated their market dominance. Top-performing firms were able to use their own transformation and change management capabilities to quickly integrate and take advantage of acquisitions as a catalyst for growth.

Pillar Performance

The following sections highlight the results of this year's Best-of-the-best professional services organizations (PSOs) and compare their results with the rest of the survey participants.

Leadership

The leading firms are highly specialized. They concentrate on specific high-growth IT segments or vertical industries. The executives of top-performing firms are seasoned professionals – often with a track record of founding and growing multiple prior consulting organizations.

A recurring theme from this year's leaders is their strong sense of community. The leaders of the top firms are seen as visionaries within the markets they serve, they see their role as one of truly helping improve the lives of their clients and employees. They select clients and projects because they share the same values, whether it is a love of transformational change or desire to make a difference through healthcare and government programs. Their sense of pride and commitment comes through in the organizations they have developed.

This year's leaders discussed the importance of building a unique, employee-centric culture which in turn becomes a source of competitive differentiation. In today's competitive talent market establishing a strong reputation as a great place to work and grow is paramount to building brand awareness and success. While each leader discussed the importance of client success, they also discussed the importance of creating engaged employees to carry on the culture and position the firm for the future. A key area of differentiation is that top firms significantly invest in employee development. On average, they provide 13.5 days of employee training compared to 8.7 days for average firms.

Table 14 compares the leadership metrics of the highest performing organizations with the remainder of the survey. The two highest differential scores are clarity of vision, mission and strategy and effective communication. Leading PSOs emphasize the importance of establishing a clear and differentiating vision which is widely communicated and shared throughout the organization; cemented by congruent goals and measurements. This clarity of purpose provides a powerful foundation for creating a unique culture which supports and accelerates market differentiation, in turn leading to strong employee confidence in the future.

Table 14: Best-of-the-Best Comparison – Leadership Pillar (1 to 5 Scale)

KPI	Best	Rest	▲
Well understood vision, mission and strategy	4.71	3.71	27%
Effectively communicates w/employees	4.54	3.60	26%
Employees have confidence in PSO's future	4.71	3.78	24%
Embraces change - nimble and flexible	4.50	3.64	24%
Ease of getting things done	4.50	3.66	23%
Goals and measurements in alignment	4.50	3.66	23%
Innovation focused	4.42	3.60	23%
Confidence in PS leadership	4.67	3.82	22%

Source: Service Performance Insight, February 2016

Client Relationships

SPI Research was surprised most of this year's Best-of-the-Best do not employ traditional solution sales people. The independent IT and management consultancies depend on their regional practice leaders to be the chief rainmakers in their region or domain. Although practice leaders are charged with developing a book of business they are also charged with personal billability goals to ensure they continue to be recognized experts in their field. Independent Best-of-the-Best firms expect their practice leaders to be consultants first… able to truly add value to executive relationships. Repeat business and referrals are the primary source of new business, a strong testimony to superlative client relationships and results.

The embedded PSOs primarily rely on the product sales force. They have forged a strong partnership with product sales and have built sales tools and service packages to guide and shape consulting engagements. These service packages enable the product sales force to position and quote services, leading to higher product and service attach rates. PS is regarded as a significant and growing source of top-line company revenue, not a necessary evil. In many cases, their lead services executive is responsible for global support, professional services and account management with the title of Chief Customer Success officer, acknowledging the important role services plays in ensuring client success. A relatively new set of metrics has emerged for PS, focused on customer adoption. The cloud PSOs measure not only the number of licenses, seats and client revenue but also the level of client adoption and engagement by building dashboards and scorecards which depict the depth of client adoption.

All but one of this year's Best-of-the-Best rely on CRM applications to improve their sales and marketing effectiveness. Twelve of the top firms use Salesforce.com as their CRM. Several firms credited the tight integration between their CRM and PSA applications as a catalyst in building collaboration between sales and service delivery. They have instituted consistent sales processes and bid reviews to ensure they are focused on the type of projects they are most likely to win and maintain pricing and contract terms within guidelines. Because they are the premium supplier in their well-defined markets, often they do not have to compete for business. They are chosen based on referrals and their demonstrated competence.

Table 15: Best-of-the-Best Comparison – Client Relationships Pillar

KPI	Best	Rest	▲
Percentage of revenue from new clients	34.7%	28%	24%
Bid-to-win ratio (per 10 bids)	6.33	4.88	30%
Deal pipeline relative to qtr. bookings forecast	198%	171%	16%
Sales cycle (days: qualified lead to contract sign.)	88	88	0%
Average service discount given clients	8.8%	7.6%	-16%
Percentage of referenceable clients	81.0%	69.9%	16%
Solution development effectiveness	4.08	3.57	14%
Service sales effectiveness	3.92	3.55	10%
Service marketing effectiveness	3.75	3.27	15%

Source: Service Performance Insight, February 2016

Survey results revealed that the percentage of revenue from new clients was 35% for Best-of-the-Best firms compare to 28% for average organizations. New client expansion is a key ingredient of their high growth and profitability. Leaders give higher marks for sales, marketing and solution development effectiveness. Interviews revealed leaders do not have the schism between sales and service delivery which is so apparent in many PSOs. This sales and delivery collaboration produced higher win to bid ratios, larger sales pipelines and more reference customers. They are well-positioned in their markets due to specialization and a focus on solution development which resulted in much higher levels of sales and marketing effectiveness as well as repeatability and institutionalized quality in their projects.

Human Capital Alignment

Talent is a primary focus and hot topic for all service firms. In an increasingly tight talent market, top performing firms intently focus on employee engagement and satisfaction by offering career-enhancing training and mentoring. Many top firms also recognize the sacrifices families make by including family members in annual retreats and conferences.

Table 16 compares Human Capital Alignment pillar key performance indicators between the Best-of-the-Best organizations and the remainder. The table shows lower levels of attrition, more employees who would recommend the firm as a great place to work and significantly higher levels of employee training investment. Top performing firms place a premium on high quality recruiting and on-boarding programs resulting in faster recruiting and ramping times and higher billable utilization. They hire "A" players. They invest a lot in them and expect a lot from them.

Each top firm emphasized the importance of culture. Culture goes way beyond establishing a mission statement – it must be unique and inspiring to attract the type of consultants and clients the firm can best serve. Interestingly, many of this year's Best-of-the-Best have also been recognized as "Best Places to Work" by Fortune and other publications. Innovative employee engagement programs include: annual company retreats which may include spouses; generous healthcare and parental leave policies; flexible work schedules; health and wellness programs; significant investments in employee training and career development and a consistent focus on fun, team-building, collaboration and communication.

Table 16: Best-of-the-Best Comparison – Human Capital Alignment Pillar

KPI	Best	Rest	▲
Employee annual attrition (voluntary & involuntary)	10.3%	13.0%	20%
Recommend company to friends/family	4.71	4.17	13%
Management to employee ratio	12.29	11.48	7%
Time to recruit and hire for standard positions (days)	56.3	60.7	7%
Time for a new hire to become productive (days)	42.5	58.7	28%
Guaranteed training per employee per year (days)	13.48	8.70	55%
Well-understood career path for all emp.	4.00	3.26	23%
Billable employee utilization	78.3%	70.2%	12%

Source: Service Performance Insight, February 2016

The leading firms use a variety of innovative recruiting strategies – from establishing strong partnerships with local universities, to attracting more senior consultants from their competitors. Just as in selling, referrals are a key source of new hires because the best and brightest invite their friends to join them. Once on board, the best firms offer new hire orientation and on-boarding programs which include shadowing and mentoring to quickly bring new hires up to speed. Leading firms have discovered they simply cannot rely on stealing top talent from their competitors – they need to grow their own. Several firms recruit from local universities (MIS and Engineering) and then invest over 90 days in teaching new hires both the industry and technology. This strategy, although initially expensive, results in qualified consultants who are able to hit the ground running after their on-boarding program has been completed. Other fascinating recruiting strategies include personality testing for cultural fit, communication and organizational skills in addition to technical knowledge.

Top firms also invest in helping consultants build their own networks and communities – they encourage their young consultants to build strong college and network ties… to serve these communities with their talents but also as a source of recruiting and business referrals. With young millennial consultants, continuous learning is a perquisite which means top firms understand employee career and knowledge aspirations and ensure top performers are assigned to the projects, clients and geographies they are most interested in.

Just finding talent is not enough. This year's Best-of-the-Best firms focused on ramping and employee training to develop a qualified workforce. Some create rotational assignments to give their employees greater exposure to other services and clients. Employees who are continually learning and expanding their knowledge base tend to stay with their employer. When the work is not challenging or interesting, morale suffers and attrition rises. Several of the smaller firms are 100% virtual – in other words, they don't invest in expensive facilities but keep morale high with in-person weekly and quarterly meetings to enhance communication and team-building.

Service Execution

Table 17 compares service execution key performance indicators between the Best-of-the-Best performing organizations and the remainder. The table points out the leaders have larger projects, more rigorous quality processes, fewer project overruns and fewer projects cancelled. Leaders focus on all aspects of service delivery, with higher marks for knowledge management, resource management and estimating and change control processes. Their focus on service delivery excellence produces superlative productivity with 83% of their employees in billable roles and 78.3% billable utilization.

Table 17: Best-of-the-Best Comparison – Service Execution Pillar

KPI	Best	Rest	▲
Employee billable utilization	78.3%	70.2%	12%
Average project staffing time (days)	9.48	10.45	9%
Concurrent projects managed by PM	6.00	5.76	4%
Average project staff (people)	5.90	4.64	27%
Average project duration (months)	6.92	6.17	12%
Projects delivered on-time	86.7%	75.6%	15%
Projects canceled	1.9%	2.6%	28%
Average project overrun	7.3%	10.1%	28%
A standardized delivery methodology is used	72.6%	64.2%	13%
Effect. of resource mgmt. processes	4.29	3.56	20%
Effect. of estimating processes and reviews	3.96	3.53	12%
Effect. of change control processes	3.96	3.42	16%
Effect. of project quality processes	4.17	3.55	17%
Effect. of knowledge management processes	3.75	3.34	12%

Source: Service Performance Insight, February 2016

Because every leader relies on a commercial PSA application they are able to build and reinforce project delivery standards which result in precision execution and high levels of quality, productivity and profitability. They credit their PSA with improving resource, project management, time and expense capture and billing, leading to higher levels of billable utilization and on-time project completion.

This year's Best-of-the-Best were uniform in their commitment to developing standardized methodologies. In addition to repeatable processes and templates, they are focused on ensuring high quality delivery. Most estimates, proposals and changes go through a rigorous evaluation in order to ensure proper risk management and margin analysis.

Finance and Operations

The Best-of-the-Best are focused on financial success and stability. They all have deployed a commercial finance and accounting solution which is partially integrated with their PSA application for billing and revenue recognition. All the leading firms have invested in both a CRM and PSA application. Twelve use Salesforce.com as their CRM. Commercial PSAs used are: NetSuite/OpenAir; Projector PSA; FinancialForce PSA; Kimble; Microsoft/Assistance PSA, Changepoint, Deltek, Clarizen, Tenrox and Workday. On the financial side of the business, they rely on QuickBooks; NetSuite; Microsoft Dynamics; Workday; SAP; Deltek; FinancialForce and Oracle.

The Professional Services Maturity Model™ scoring over-weights financial success; meaning the leaders in this survey were much more profitable than their peers.

Table 18 shows the enviable financial results from this year's Best-of-the-Best. They produced significantly more net profit (20.4% compared to 14.9%) than average firms in the benchmark. This high level of profitability is derived from more revenue per employee, project and consultant. All of the Best-of-the-Best can be characterized as running a very tight financial ship. They are frugal with non-essential expense. In particular, they don't invest in fancy offices and non-billable travel, preferring to heavily invest in the skill development of their employees.

Table 18: Best-of-the-Best Comparison – Finance and Operations Pillar

KPI	Best	Rest	▲
EBITDA	**20.4%**	**14.9%**	**37%**
Annual revenue per employee (k)	$242	$153	58%
Average revenue per project (k)	$339	$219	55%
Project margin for time & materials projects	49.6%	32.8%	51%
Annual revenue per billable consultant (k)	$279	$194	44%
Average project margin — subs, offshore	35.2%	25.6%	37%
Project margin for fixed price projects	43.5%	32.4%	34%
Revenue leakage	2.9%	4.3%	33%
Executive real-time wide visibility	4.17	3.28	27%
Quarterly revenue target in backlog	50.2%	39.9%	26%
% of billable work is written off	2.3%	3.0%	24%
Percent of annual revenue target achieved	105.8%	90.7%	17%
Percent of annual margin target achieved	102.9%	88.7%	16%
% of inv. redone due to error/client rejections	2.6%	2.6%	-1%
Days sales outstanding (DSO)	53.4	43.3	-23%
Quarterly non-billable expense per employee	$2,625	$1,869	-40%

Source: Service Performance Insight, February 2016

The Best-of-the-Best make money on every aspect of the business with high subcontractor margins (35%); high time and materials project margins (49.6%); and high fixed price project margins (46.4%). The leaders had a significantly larger amount of revenue in backlog (50.2%), which creates greater financial stability and predictability. They were much more likely to have achieved both their annual revenue and margin targets which shows they are running a predictable business.

The Best-of-the-Best PSOs Use and Integrate PS Applications

SPI is continually asked:

- ∆ At what size should a PSO start to evaluate and acquire business applications?
- ∆ What are the most prevalent business applications and what should our priority be for application acquisition?
- ∆ What is the impact of each of the primary business applications?
- ∆ Which is better – a best of breed stand-alone application or an integrated suite?
- ∆ What is the benefit of application integration?

To answer these questions, an evaluation of business application usage comparing this year's Best-of-the-Best PSOs to average organizations provides a compelling picture of the power and impact of integrated business applications. Table 19 shows application usage, satisfaction and integration of each of the core PS business applications for the top performing (top 5%) survey participants compared to the remainder. The table provides a powerful illustration of the benefits of PS application usage and integration. Across all application categories, top performing firms are more likely to have implemented a commercial business application and much more likely to have integrated it with the core financial application. Likewise, top performing organizations are much more likely to have integrated their CRM and PSA applications to provide real-time visibility and collaboration between sales and service delivery. This visibility gives them much greater insight into customer information and promotes sharing of customer information which enhances both sales and service delivery effectiveness.

Table 19: Best-of-the-Best Business App. Adoption, Integration, Satisfaction

Solution	Best	Rest	Delta
Financial solution used	100.0%	95.0%	5%
Satisfaction with financial solution	3.95	3.69	7%
Commercial CRM solution	91.7%	86.1%	7%
Satisfaction with CRM solution	4.17	4.00	4%
CRM is integrated with ERP	47.6%	42.9%	11%
Commercial PSA	95.8%	79.1%	21%
Satisfaction with PSA solution	4.17	3.77	11%
PSA is integrated with ERP	71.4%	55.5%	29%
Level of CRM and PSA Integration	58.3%	35.4%	65%
Commercial HCM solution	83.3%	55.5%	50%
Satisfaction with HCM solution	4.05	3.67	10%
HCM is integrated with ERP	52.8%	39.9%	32%
KM solution	88.9%	60.7%	46%
Satisfaction with KM solution	4.13	3.66	13%
Remote service delivery tool	91.7%	76.7%	20%
Satisfaction with RSD solution	4.33	3.86	12%
Social networking tool	91.3%	81.3%	12%
Satisfaction with social networking tool	4.00	3.68	9%

Source: Service Performance Insight, February 2016

Best-of-the-Best Conclusions

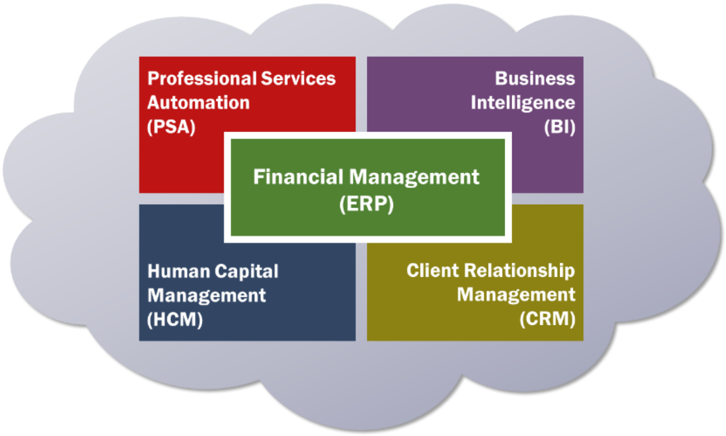
Each year it is inspiring to meet with leaders of the Best-of-the-Best organizations. They are justifiably proud of the unique Professional Services organizations they have built, but their pride is focused on their employees and client results, not on themselves. An area that sets the leaders apart is their in-depth knowledge of their markets and solutions. They understand and have visibility to all aspects of the business, despite the fact that many of them run very large organizations.

More than average firms, they are truly passionate about building an exceptional organization, not just for today, but for decades to come. They are willing to honestly look at themselves and the business and make changes to ensure they continue to be the premium firm. Their sterling reputation for delivering high quality results is a key ingredient in their success as most often new business comes from referrals. One executive spoke of a CIO client that had brought them into four different organizations as he made career moves.

Many of this year's Best-of-the-Best have been winners year-after-year both throughout the great recession and now again when the consulting market is hot. The independents have aligned themselves with the latest and greatest technologies. They are constantly reinventing themselves to ensure they are on the cutting edge of the best technology solutions for their markets. The leaders of the embedded PSOs have a seat at the executive table – PS is seen as a critical element of the business and a major source of revenue, profit and client product adoption.

Excellence is within the grasp of all PS organizations – but it takes hard work, determination and constant vigilance. Service Performance Insight finds it gratifying that leading organizations rely on the PS Maturity™ benchmark to guide their investments and performance. "You get what you measure" so reference the superlative results of this year's Best-of-the-Best to build your own organizations for the future!

5. Professional Services Business Applications



The growth engine of the world's economy has shifted from manufacturing to project-based, people-centric services businesses. These businesses rely on project-based Enterprise Resource Planning (ERP), also known as Services Resource Planning (SRP), applications to manage the financial aspects of the firm. These solutions automate core business processes such as quote-to-cash, resource and talent management, time capture and billing, and provide the real-time visibility necessary to improve organizational efficiency and effectiveness.

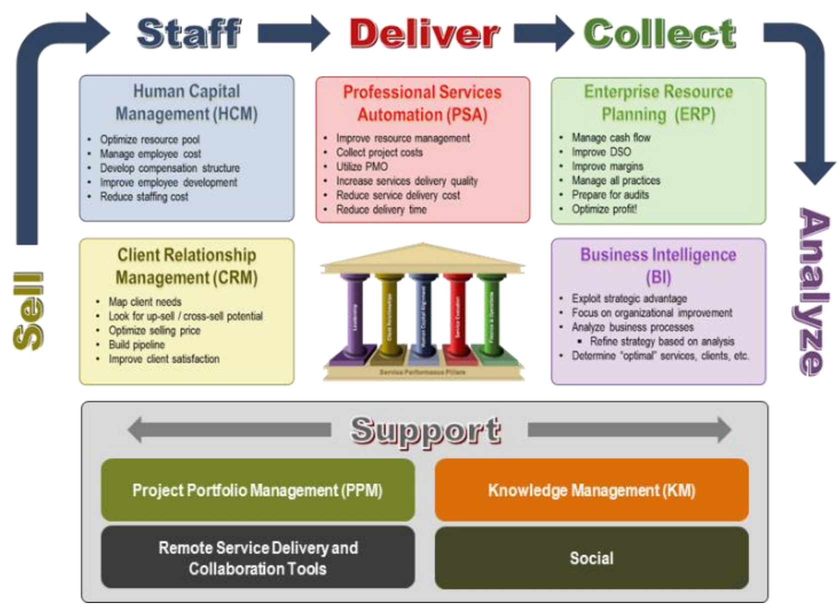
Services firms are uniquely people-driven organizations. They depend on the knowledge and skills of a talented workforce to sell, staff and deliver a range of services typically on a project or contract basis. The fundamental financial requirements of service-based businesses are very different from classic manufacturing and supply-chain focused ERP applications as they must include functionality for managing resources (people) and projects (tasks). Increasingly, project-based ERP application providers also add rich talent management capabilities to support recruiting, on-boarding, compensating and rewarding the employees who are the core asset of service-based businesses.

Project- and service-based extensions to enterprise ERP applications started to appear in the late 1990's at the same time stand-alone Professional Service Automation (PSA) solutions supporting resource scheduling and time capture and billing became available. Over the past fifteen years, project accounting, resource management and time capture and billing modules have been added to many ERP applications. Now most project-based ERP providers also add Human Capital Management (HCM) or talent management extensions to accentuate the important role that recruitment and engagement of a talented workforce has in today's economy. Support for specialized billing methods and complex revenue recognition rules for time and materials, work-in-process, deliverables-based or percentage completion are also important project-based ERP extensions.

This chapter provides PS executives and software application providers insight into the level of market adoption, integration and satisfaction with core Professional Services business applications from *this year's* benchmark survey. ***It is not intended to be an overall application market adoption survey***. The solutions highlighted in this chapter help PSOs optimize operational effectiveness through increased visibility, streamlined business processes and cost management.

Primary Professional Services Business Applications

Figure 24: Core Professional Services Business Applications



Source: Service Performance Insight, February 2016

A project-based ERP system is an integrated information management system that manages the capture and flow of information across departments and functions. It includes a common enterprise-wide database and various application modules to support fundamental business activities, such as accounting, finance, sales, marketing, resource and project management and human resources. An ERP system is used to standardize business processes and provide reports, insight and control for both revenue and costs.

The value of such a system is to enable critical information to be analyzed and shared across the organization for more insightful and timely decision-making. For purposes of this report, SPI Research considers Project-Based ERP solutions to have several modules that include:

- ∆ ***Financial Management or Enterprise Resource Planning (ERP)***: The fundamental solution required to accurately collect and report financial transactions.
- ∆ ***Client Relationship Management (CRM)***: The automation of client relationship processes to improve sales and marketing efficiency and effectiveness.
- ∆ ***Professional Services Automation (PSA)***: The initiation, planning, execution, close and control of projects and services through the management and scheduling of resources that include people (both internal and partners), materials and equipment.
- ∆ ***Human Capital Management (HCM)***: Talent management solutions for recruiting, hiring, compensation, goal-setting and career and performance management which rely on integration with and extracts from the employee database.
- ∆ ***Business Intelligence (BI)***: The assembly and use of information to improve decision-making.

Both embedded and independent professional service organizations require similar functionality. The service industry's use of technology has typically lagged the manufacturing sector but the global size, complexity and growth of today's service businesses has increased the need for specialized applications along with the demand for real-time information. Table 20 shows the various departments within a typical professional services organization (with more than 30 people), and depicts departmental requirements and core business applications.

Table 20: PSO Departments and Information Needs

Department	Core Requirements	Core Applications
Executive & Administrative	Strategic planning, budgeting, management reporting, decision support	Business Intelligence, Budgeting, Planning and Reporting
Human Resources	Payroll, Benefits, Recruiting, Hiring, Training, Compensation, Performance and Career Management	Human Capital Management. Payroll, Benefits
Legal	Patents, law suits, contract management and approvals	Contract or Case Management
Finance & Accounting	Financial management, operations, planning, forecasting, budgeting. Time & expense capture, billing, collections.	Financials, Budgeting & Planning, BI
Marketing & Sales	Marketing automation, sales force automation, account, contact and territory management, pricing & proposals.	Marketing Automation Client Relationship Management, Contract Management
Purchasing	Material, equipment and external service procurement.	Procurement
Service Delivery	Estimating, Project Management, Resource management and staffing, Knowledge Management and Collaboration, Quality Management. Social networking tools and web and video conferencing and remote service delivery tools.	Professional Services Automation: (Project Management, Resource Management, Knowledge Management, Collaboration, Remote Service Delivery)
Information Technology	Project scheduling, technology evaluation, systems development and implementation	Application Lifecycle Mgmt., Project Portfolio Management
Research & Development	New service development; knowledge sharing; template, tool and methodology development	Product Lifecycle Management (PLM), Knowledge Management, Code Repository

Source: Service Performance Insight, February 2016

PS Solution Adoption

According to this year's survey, reported commercial adoption declined in all categories except ERP, Human Capital Management and Business Intelligence. As this survey represented a much larger number of participants (549 compared to 220 last year) it is a more accurate representation of global PS business application adoption. The abundance of high quality, affordable cloud-based solutions has enabled greater numbers of PSOs to adopt commercial business solutions yet a surprisingly high number of firms still rely on antiquated homegrown applications and spreadsheets. SPI's discussions with the leading application providers shows that cloud is outselling non-cloud by a factor of greater than five-to-one. Cloud solutions are especially important in the professional services sector, as today's virtual consulting organizations may have skilled employees located across the globe, not collocated in physical offices. The cloud has enabled PS executives and workers at all levels greater mobile access to the information they need to improve visibility and management control of resources and projects.

Figure 21 compares the adoption of commercial solutions versus home grown, and organizations that still rely on spreadsheets. The table shows less than 5% of the organizations surveyed do not have a formal ERP solution, meaning they probably use Excel and email to run the business.

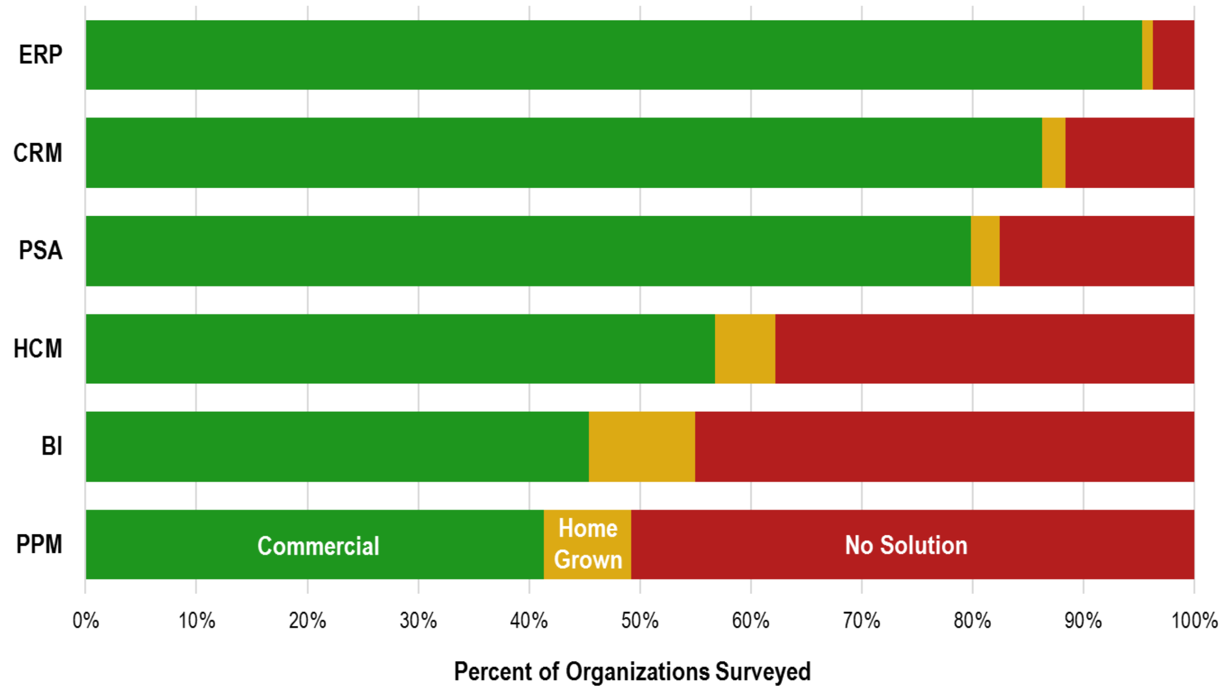
Table 21: Commercial Solution Adoption

Solution	2013	2014	2015
Enterprise Resource Planning (ERP)	89.5%	92.2%	95.3%
Client Relationship Management (CRM)	88.5%	87.4%	86.3%
Social Media (SM)	87.9%	88.8%	81.7%
Professional Services Automation (PSA)	77.6%	81.5%	79.8%
Remote Service Delivery (RSD)	82.0%	84.1%	77.4%
Knowledge Management (KM)	56.5%	63.6%	61.8%
Human Capital Management (HCM)	42.6%	46.4%	56.8%
Project Portfolio Management (PPM)	N/A	N/A	49.2%
Business Intelligence (BI)	33.7%	35.1%	45.4%

Source: Service Performance Insight, February 2016

CRM is the number two solution in terms of adoption, with approximately 86% using a commercial solution. CRM adoption surpassed PSA adoption five years ago when cloud-based CRM applications, primarily from Salesforce.com, became the standard. CRM usage is often misleading as many firms may only purchase a limited number of sales seats whereas they require PSA functionality (and licenses) for all billable members of the organization. More and more firms are also investing in Marketing Automation to generate leads, track prospects and build the brand.

Figure 25: Commercial Solution Adoption



Source: Service Performance Insight, February 2016

SPI Research continues to see increased adoption of PSA business solutions (80%). Increasingly legacy on-premise applications are being replaced by cloud-based PSA applications. Many standalone PSA solutions are not yet integrated with the core financial (ERP) solution. SPI's research continually points to application integration as a key enabler of superlative business performance.

Human Capital Management (HCM) applications have experienced the greatest growth in PS adoption. As new cloud-based, powerful HCM applications have come to market expect to see adoption continue to rise to equal or even surpass PSA. It only makes sense that people, the crown jewels of the consulting profession, will benefit from applications which empower employees to manage their own skill and career development. Further, the HCM financial benefits in improved recruiting are significant as the average PSO spends more than 2% of total revenue on recruiting and another 1 to 2% on training.

Table 22 compares business solution adoption and satisfaction along with the level of ERP integration. As the Professional Service industry is larger and more established in North America, business application adoption for the major applications (ERP, CRM and PSA) leads both EMEA and APAC. However, as cloud applications have become more pervasive, PS application usage in Asia Pacific has significantly surpassed EMEA in all categories. Now Asia Pacific adoption of PPM (Project Portfolio Management), KM (Knowledge Management), Remote Service Delivery and Social Networking have even surpassed North America. Application satisfaction is highest in Asia Pacific and lowest in EMEA.

Table 22: Business Application Use by Organization Type and Geographic Region

Key Performance Indicator (KPI)	2015	ESO	PSO	Americas	EMEA	APac
Commercial ERP solution used	95.3%	96.9%	94.5%	96.9%	91.4%	94.1%
Satisfaction with ERP solution	3.70	3.55	3.78	3.70	3.64	3.93
Commercial CRM solution	86.3%	96.5%	81.4%	89.2%	79.3%	83.3%
Satisfaction with CRM solution	4.01	4.05	3.98	4.04	3.89	4.03
CRM is integrated with ERP	43.2%	50.0%	39.2%	43.9%	40.3%	45.2%
Commercial PSA solution	79.8%	82.1%	78.8%	81.1%	76.3%	80.6%
Satisfaction with PSA solution	3.79	3.65	3.86	3.76	3.87	3.80
PSA is integrated with ERP	56.4%	54.0%	57.6%	56.8%	54.5%	58.3%
Commercial HCM solution	56.8%	66.9%	52.0%	63.1%	41.1%	51.4%
Satisfaction with HCM solution	3.70	3.56	3.78	3.72	3.54	3.86
HCM is integrated with ERP	40.7%	39.7%	41.4%	43.1%	31.8%	40.9%
Commercial BI solution	45.4%	50.6%	42.9%	45.9%	46.2%	37.1%
Satisfaction with BI solution	3.70	3.74	3.68	3.70	3.70	3.74
BI is integrated with ERP	50.8%	60.2%	45.3%	54.9%	40.8%	44.7%
Commercial PPM solution	49.2%	51.0%	48.4%	50.0%	45.3%	55.9%
Satisfaction with PPM solution	3.67	3.80	3.59	3.74	3.49	3.58
PPM is integrated with ERP	28.1%	26.8%	28.8%	31.1%	24.0%	16.7%
Commercial KM solution	61.8%	70.3%	57.5%	62.4%	55.2%	79.4%

Key Performance Indicator (KPI)	2015	ESO	PSO	Americas	EMEA	APac
Satisfaction with KM solution	3.69	3.70	3.68	3.70	3.56	3.89
Comm. Remote service delivery tool	77.4%	88.2%	72.0%	80.8%	66.7%	83.3%
Satisfaction with RSD solution	3.88	3.95	3.84	3.90	3.72	4.14
Commercial Social networking tool	81.7%	73.8%	85.5%	80.1%	83.3%	91.4%
Sat. with social networking tool	3.70	3.70	3.70	3.73	3.62	3.73
CRM / PSA integration	36.4%	41.2%	34.1%	35.3%	37.5%	43.2%

Source: Service Performance Insight, February 2016

The level of solution adoption is generally higher within embedded PS organizations. Table 22 shows CRM is significantly more prevalent in embedded service organizations than in independents (PSOs), but this is to be expected because embedded service organizations (ESOs) tend to be larger and have a strong product-oriented sales force who are responsible for bringing services into deals. Generally, these organizations are part of a larger product organization; larger organizations must rely more heavily on business applications to improve performance.

As one might expect, Table 23 shows higher levels of solution adoption as organizations grow in size. And for the most part, greater solution integration with core financials also increases as organizations grow. Even with the proliferation of affordable and easy-to-use cloud solutions, the smallest organizations will always lag in their adoption rates. SPI Research has seen adoption increase in both large and small organizations. This figure highlights the importance professional services organizations have placed on building a strong financial application infrastructure to enhance visibility and management control resulting in higher productivity and profit.

Table 23: Business Application Use by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 - 100	101 - 300	301 - 700	Over 700
Commercial ERP solution used	66.7%	98.7%	97.0%	100.0%	100.0%	100.0%
Satisfaction with ERP solution	4.03	3.57	3.64	3.66	3.46	4.04
Commercial CRM solution	70.4%	81.8%	90.3%	84.0%	98.1%	92.3%
Satisfaction with CRM solution	3.97	4.08	3.96	4.00	3.94	4.08
CRM is integrated	36.1%	34.5%	36.5%	44.1%	48.0%	61.4%
Commercial PSA solution	58.2%	83.9%	82.6%	75.8%	82.7%	88.5%
Satisfaction with PSA solution	3.91	3.83	3.85	3.62	3.59	4.00
PSA is integrated	46.6%	50.7%	55.4%	61.0%	55.8%	61.9%
Commercial HCM solution	21.2%	40.7%	56.6%	65.0%	67.3%	84.6%
Satisfaction with HCM solution	3.73	3.75	3.73	3.62	3.43	3.86
HCM is integrated	45.5%	24.2%	40.8%	35.0%	44.4%	54.8%

Key Performance Indicator (KPI)	Under 10	10 - 30	31 - 100	101 - 300	301 - 700	Over 700
Commercial BI solution	22.2%	34.5%	46.4%	48.7%	44.9%	76.9%
Satisfaction with BI solution	3.50	3.74	3.63	3.73	3.60	3.60
BI is integrated	30.8%	31.3%	52.3%	53.4%	53.4%	55.6%
Commercial PPM solution	34.0%	40.5%	51.7%	47.7%	56.8%	54.2%
Satisfaction with PPM solution	3.76	3.27	3.74	3.74	3.33	3.85
PPM is integrated	15.6%	19.0%	13.9%	37.8%	21.4%	45.5%
Commercial KM solution	45.8%	52.6%	61.1%	58.3%	71.7%	87.0%
Satisfaction with KM solution	3.57	3.75	3.63	3.55	3.63	4.00
Comm. Remote service delivery tool	52.8%	77.0%	80.0%	75.7%	84.3%	84.6%
Satisfaction with RSD solution	3.74	3.75	3.97	3.71	4.05	3.81
Commercial Social networking tool	83.0%	81.4%	86.9%	80.7%	73.5%	72.0%
Satisfaction with social networking tool	3.67	3.77	3.73	3.49	3.56	3.93
CRM / PSA integration	26.4%	41.7%	38.0%	28.9%	31.5%	53.6%

Source: Service Performance Insight, February 2016

Table 24 shows embedded services organizations (Software/SaaS/Hardware PS) have somewhat higher adoption rates than independents. Generally, these organizations are part of a larger product organization, larger organizations tend to rely more heavily on business applications to improve performance. Architects and Engineers reported the lowest level of application usage across all categories. This is clearly an area for improvement across the construction industries.

Table 24: Business Application Use by Vertical Service Market

Key Performance Indicator (KPI)	IT Consult	Software PS	Mgmt. Consult	Arch./ Engr.	SaaS	Mgd. Services	Hardware
Commercial ERP solution used	97.0%	96.3%	93.3%	86.7%	97.3%	93.3%	100.0%
Satisfaction with ERP solution	3.80	3.41	4.00	3.76	3.46	3.85	3.62
Commercial CRM solution	86.6%	95.3%	75.8%	69.6%	97.6%	93.8%	100.0%
Satisfaction with CRM solution	4.09	3.95	4.14	3.50	4.22	4.07	3.80
CRM is integrated	36.3%	50.6%	30.4%	53.1%	44.7%	50.0%	53.3%
Commercial PSA solution	86.5%	84.9%	65.2%	77.1%	85.7%	56.3%	93.3%
Satisfaction with PSA solution	3.89	3.59	3.96	3.84	3.58	3.91	3.71
PSA is integrated	57.0%	53.7%	43.2%	72.4%	45.9%	59.1%	57.1%
Commercial HCM solution	56.3%	65.4%	42.9%	43.5%	68.3%	73.3%	66.7%
Satisfaction with HCM solution	3.79	3.46	3.70	3.90	3.77	3.55	3.36

Key Performance Indicator (KPI)	IT Consult	Software PS	Mgmt. Consult	Arch./ Engr.	SaaS	Mgd. Services	Hardware
HCM is integrated	38.9%	35.2%	33.3%	54.8%	40.4%	33.3%	54.5%
Commercial BI solution	47.2%	48.1%	39.7%	38.3%	46.3%	56.3%	60.0%
Satisfaction with BI solution	3.77	3.67	3.39	3.75	3.96	3.80	3.27
BI is integrated	44.3%	52.4%	35.7%	50.0%	64.3%	65.0%	63.6%
Commercial PPM solution	48.4%	42.0%	52.6%	45.2%	57.5%	68.8%	66.7%
Satisfaction with PPM solution	3.71	3.72	3.50	3.50	4.05	3.90	3.70
PPM is integrated	34.3%	25.0%	14.0%	13.3%	25.0%	35.0%	38.9%
Commercial KM solution	64.2%	76.1%	56.1%	40.0%	70.0%	81.3%	66.7%
Satisfaction with KM solution	3.80	3.57	3.61	3.33	3.78	3.82	3.90
Comm. Remote service delivery	81.0%	91.6%	69.2%	53.2%	90.5%	68.8%	86.7%
Satisfaction with RSD solution	3.85	4.04	3.74	4.04	4.00	3.50	3.62
Comm. Social networking tool	88.7%	71.3%	90.8%	76.6%	76.9%	68.8%	73.3%
Sat. with social networking tool	3.77	3.70	3.72	3.40	3.75	3.44	3.40
CRM / PSA integration	38.1%	37.4%	30.9%	30.0%	41.7%	41.2%	50.0%

Source: Service Performance Insight, February 2016

Table 25 shows VARs and Marketing and Communication firms rely on ERP and CRM applications with 100% adoption reported. Across the board, application adoption for Accountancies lags other industry segments. This clearly needs to change as accountancies are experiencing more price pressure and commoditization than most other market segments. A key impediment is that many accountancies still rely on complex, homegrown legacy applications. They should strongly consider moving more of their applications to the new breed of cost-effective cloud-based solutions to modernize their operations.

Table 25: Business Application Use by Vertical Service Market

Key Performance Indicator (KPI)	R&D	VAR	Account	MarCom	Staff	Other PS
Commercial ERP solution used	93.3%	100.0%	100.0%	100.0%	87.5%	100.0%
Satisfaction with ERP solution	3.43	4.14	3.78	3.09	2.80	4.30
Commercial CRM solution	66.7%	100.0%	83.3%	100.0%	77.8%	75.0%
Satisfaction with CRM solution	3.60	4.36	3.60	3.83	3.43	4.33
CRM is integrated	70.0%	57.1%	55.0%	33.3%	35.7%	50.0%
Commercial PSA solution	86.7%	71.4%	50.0%	75.0%	66.7%	70.0%
Satisfaction with PSA solution	3.62	4.00	3.33	3.89	3.67	3.50
PSA is integrated	77.3%	75.0%	50.0%	44.4%	50.0%	83.3%

Key Performance Indicator (KPI)	R&D	VAR	Account	MarCom	Staff	Other PS
Commercial HCM solution	53.3%	64.3%	50.0%	45.5%	55.6%	80.0%
Satisfaction with HCM solution	3.88	3.67	3.67	3.83	3.40	3.88
HCM is integrated	78.6%	55.6%	41.7%	25.0%	30.0%	50.0%
Commercial BI solution	35.7%	61.5%	50.0%	20.0%	55.6%	22.2%
Satisfaction with BI solution	3.60	4.00	3.33	4.00	3.33	4.00
BI is integrated	90.0%	77.8%	60.0%	25.0%	58.3%	33.3%
Commercial PPM solution	42.9%	38.5%	25.0%	66.7%	55.6%	55.6%
Satisfaction with PPM solution	3.50	3.20	3.00	3.50	3.20	3.80
PPM is integrated	70.0%	0.0%	16.7%	20.0%	30.0%	50.0%
Commercial KM solution	71.4%	30.8%	41.7%	50.0%	33.3%	66.7%
Satisfaction with KM solution	3.30	4.25	3.00	4.75	4.33	3.17
Comm. Remote service delivery	78.6%	85.7%	50.0%	80.0%	55.6%	50.0%
Satisfaction with RSD solution	3.73	4.00	4.00	3.63	4.20	3.40
Comm. Social networking tool	71.4%	85.7%	66.7%	90.0%	100.0%	60.0%
Sat. with social networking tool	3.56	4.00	3.63	4.00	3.56	3.40
CRM / PSA integration	36.7%	53.6%	15.4%	29.2%	44.4%	16.7%

Source: Service Performance Insight, February 2016

Solution Satisfaction

Table 26 shows application satisfaction (1: very dissatisfied to 5: very satisfied). Satisfaction with CRM tops the list followed by Remote Service Delivery and PSA. Satisfaction levels are the same for ERP, Social Media, Human Capital Management

Table 26: Solution Satisfaction

Solution	2012	2013	2014	2015
Client Relationship Management (CRM)	3.92	4.04	3.93	4.01
Remote Service Delivery and Collaboration	4.25	4.05	3.86	3.88
Professional Services Automation (PSA)	3.84	3.85	4.07	3.79
Enterprise Resource Planning (ERP)	3.67	3.74	3.68	3.70
Social Media	4.02	3.91	3.89	3.70
Human Capital Management (HCM)	3.66	3.55	3.61	3.70
Project Portfolio Management (PPM)	NA	NA	NA	3.67
Business Intelligence (BI)	3.68	3.65	3.76	3.70
Knowledge Management (KM)	3.67	3.56	3.74	3.69

Source: Service Performance Insight, February 2016

and Business Intelligence (BI) satisfaction. Knowledge Management garnered the lowest satisfaction ratings.

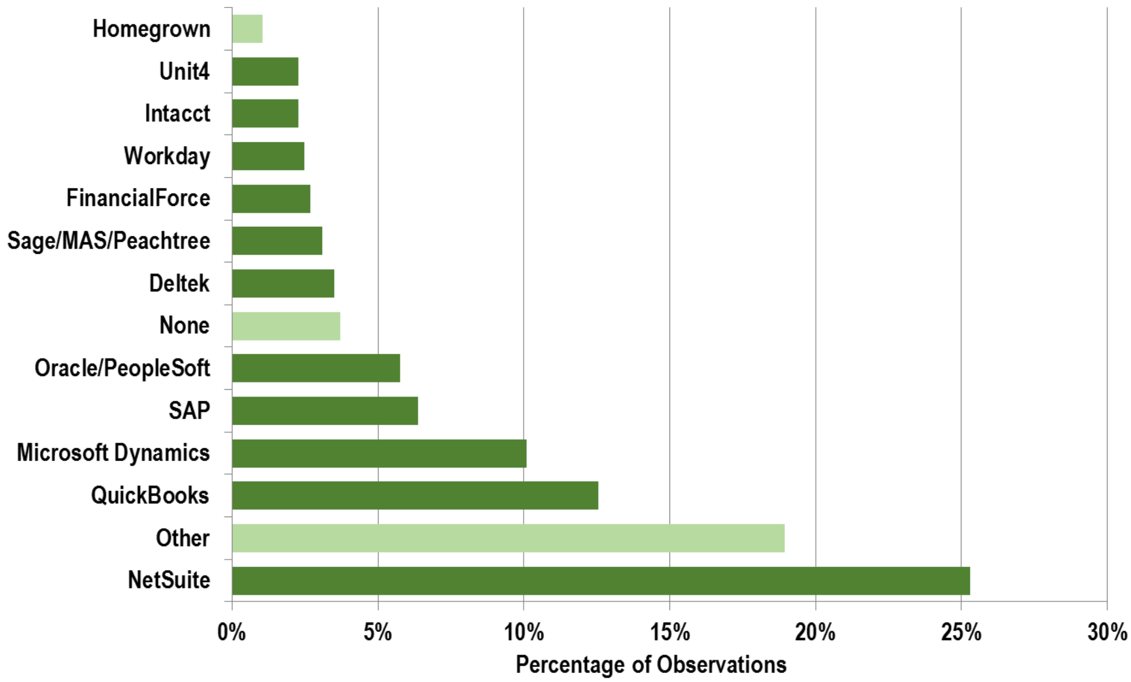
Financial Management Applications (Enterprise or Service Resource Planning)

Finance and Accounting, (ERP or SRP), is the primary application required to accurately collect, bill and report financial transactions. ERP collects and manages all financial information (expenses, invoices, etc.) to provide management reporting and visibility into total service revenue, cost and profitability. Project-driven, human capital intense businesses like professional services have unique financial management requirements including support for complex contract types and billing arrangements. Revenue recognition is also complex and must conform to local accounting and taxation rules while providing support for multicurrency, multilingual transactions for global firms. Seamless integration between the system of record (PSA) for managing resources and projects and the financial management solution for payroll, expense management, invoicing, revenue recognition and project accounting is critical.

Enterprise Resource Planning (ERP)

- Activity Based Management
- Asset Management
- Cash Management
- Collection Management
- Contract Management
- Financial Analytics
- General Ledger
- Internal Controls
- Lease Management
- Payables
- Planning and Budgeting
- Property Management
- Receivables
- Revenue Management
- Risk Management
- Treasury

Figure 26: Financial Management Solution Used



Source: Service Performance Insight, February 2016

Figure 26 shows NetSuite is the leading financial solution in this year's benchmark with over 26% of survey respondents using it. QuickBooks from Intuit, typically number one, declined to the number two position. QuickBooks market-share is expected to continue to decline as more cost effective low end solutions come to market with the project accounting and resource management functionality required by PS firms. Microsoft Dynamics, SAP and Oracle are also strong competitors in this market. SAP and Oracle financials still dominate with the largest organizations but they are increasingly feeling pressure from Workday as Workday's people-centric ERP is more appropriate for PS organizations. Many of the smaller organizations (less than 10 employees) do not use a financial management solution. Also, a few of the larger organizations said they did not have an ERP solution, as their financial information is managed by the corporate solution, which they did not list.

The figure highlights (light green) that a number of firms use either homegrown solutions, other commercial solutions not included on the list, or no official financial solution at all. The financial management solution is critical for managing PS finance and accounting, regulatory reporting and profit analysis.

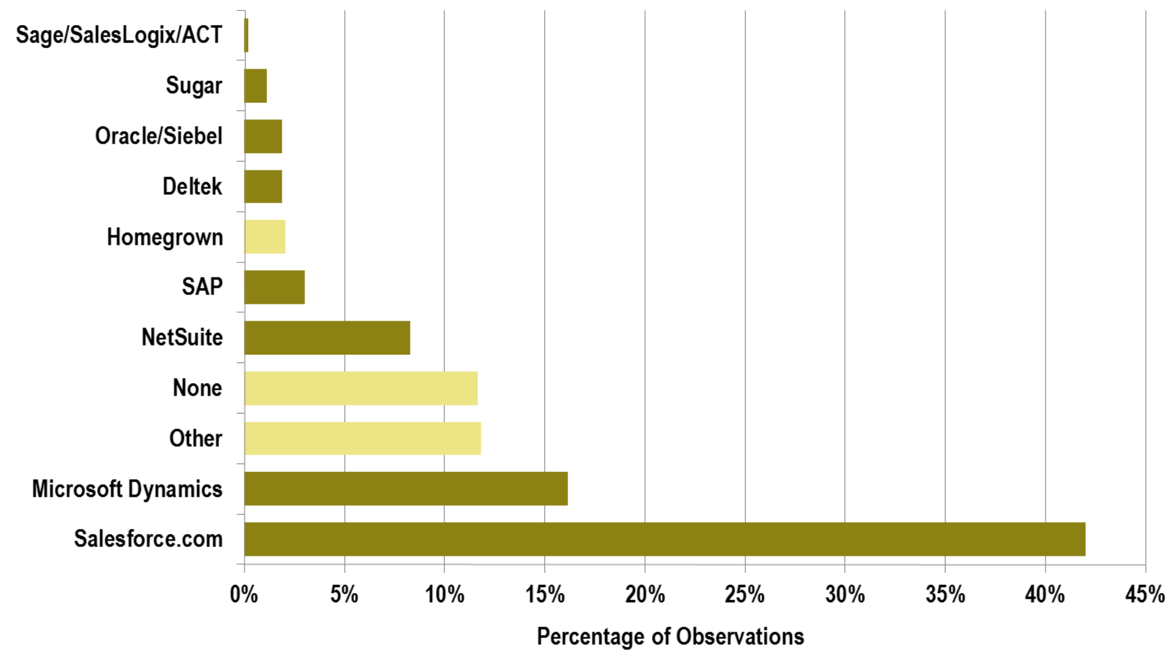
Client Relationship Management (CRM)

CRM supports the management of client relationships and is designed to improve sales and marketing effectiveness. CRM automates lead, contact and campaign management, sales pipeline forecasting and territory management. Many CRM applications also provide powerful call center functionality for issue management; call handling; trouble ticketing and problem resolution. CRM allows PSOs to track clients through the engagement (bid to bill) lifecycle, and to specifically target customer segments and offers by understanding details of the relationship. CRM supports analysis by client, geography and portfolio.

Client Relationship Management (CRM)

- Client Analytics
- Marketing
- Partner Relationship Management
- Proposals
- Sales
- Service

Figure 27: Client Relationship Management (CRM) Solution Used



Source: Service Performance Insight, February 2016

Figure 27 shows Salesforce.com dominance once again with use by 42% of the organizations surveyed. Microsoft Dynamics CRM, is again number two, with slightly over 15%. Its cloud offering is rapidly growing in market share.

NetSuite is the third leading CRM provider in this year's benchmark. Because of the dominance of Salesforce.com, there are very few independent CRM providers found in the benchmark. Most of the others are part of an ERP suite, which support SPI's research that shows approximately 50% of organizations prefer independent best-of-breed solutions, while the other 50% prefer comprehensive integrated solutions provided by the ERP vendors.

Table 27: Impact – Client Relationship Management (CRM) Use

KPI	CRM Used	CRM Not Used	▲
Survey responses (commercial CRM)	460	73	
PSO size (employees)	674	330	105%
Year-over-year change in PS revenue	10.7%	7.1%	51%
Year-over-year change in PS headcount	8.2%	5.4%	52%
Deal pipeline relative to qtr. bookings forecast	178%	129%	38%
New Clients	28.9%	19.8%	46%
Annual revenue per billable consultant (k)	$200	$179	12%
Annual revenue per employee (k)	$160	$137	17%
EBITDA	**15.5%**	**13.7%**	**14%**

Source: Service Performance Insight, February 2016

Table 27 compares organizations using CRM to those who do not. 13% of the organizations surveyed do not use any type of CRM solution. The table shows organizations using CRM are larger than those who do not use it. As the table shows, CRM definitely benefits organizations in terms of growth. CRM users have larger sales pipelines, more revenue from new clients and substantially more revenue per consultant and employee. It also has a positive impact on the profitability of the work delivered, as improved sales effectiveness leads to a more efficient use of resources down the line. Profitability is clearly enhanced when CRM is integrated with PSA and the ERP application.

Table 28 further depicts CRM impact, comparing those organizations not using CRM at all to those organizations using non-integrated CRM, and comparing them to organizations using CRM integrated to the core financial solution. This table highlights the benefits organizations receive as they move from nonintegrated CRM to integrated CRM. While these benefits might not be revolutionary, they do underscore greater visibility and improved alignment between sales and service delivery. These benefits are amplified as organizations grow.

Table 28: Impact – Commercial CRM Integration

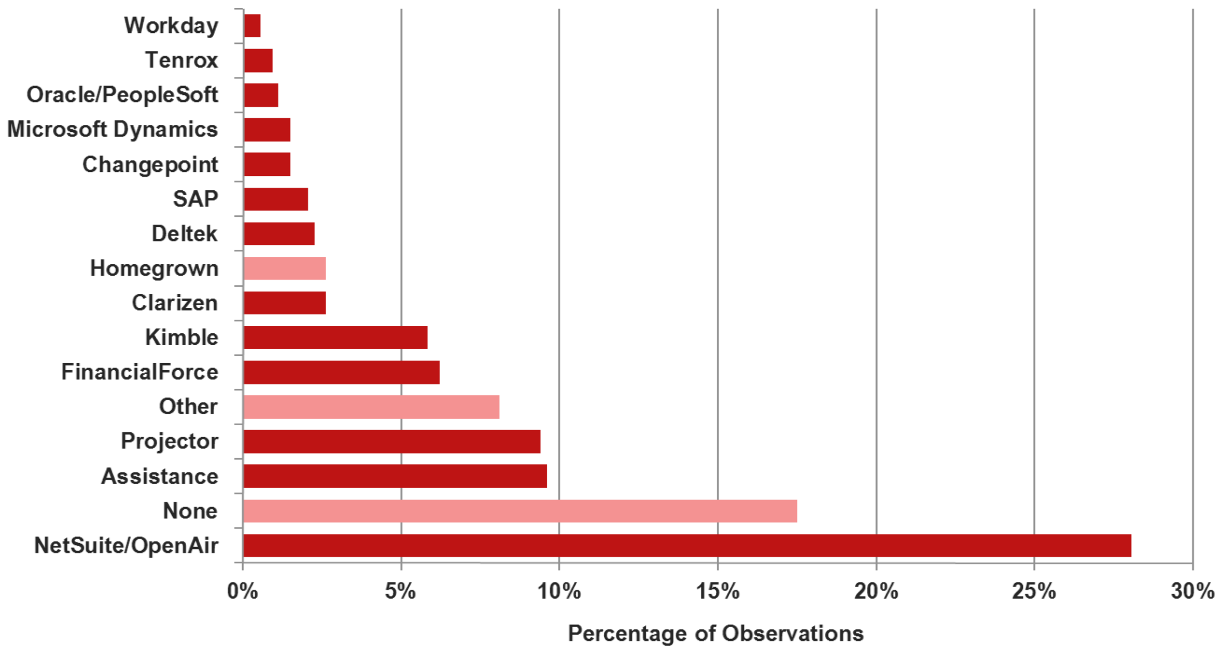
KPI	CRM Not Used	Used, Not Integrated	Used, Integrated
Survey responses	73	167	262
Revenue from new clients	19.8%	29.5%	29.0%
Year-over-year change in PS headcount	5.4%	7.4%	8.9%
Deal pipeline relative to qtr. bookings forecast	129%	181%	175%
EBITDA	**13.7%**	**13.9%**	**17.5%**

Source: Service Performance Insight, February 2016

Professional Service Automation (PSA)

PSA provides the systems basis for initiation, planning, execution, close and control of projects and service delivery. It helps manage key service execution processes including resource management and staffing, project management and collaboration, along with time and expense capture and billing. As management and control of service execution has become more important, and the applications have matured to become easy to use and implement, PSA solutions have become increasingly popular. Some software vendors use the term "Services Resource Planning (SRP)" to distinguish their solutions from PSA. SRP solutions typically include both CRM and invoicing capabilities, as those are generally handled by the core CRM and ERP modules. Larger PSOs rely more heavily on their core ERP solutions to manage any external transactions which means PSA integration is imperative as billing, collection, expense management and payroll are all managed in the ERP solution.

Figure 28: Professional Services Automation (PSA) Solution Used



Source: Service Performance Insight, February 2016

Figure 28 shows NetSuite/OpenAir as the most adopted PSA solution in this year's survey with approximately 28% (149 firms) of the survey. None is the second-most prevalent solution with 20% (93 firms) of survey respondents not using a PSA. Interestingly, the average size of the organizations who do not use a PSA is quite large at 329 PS employees. Assistance PSA, a newcomer to this benchmark, came in third with 10% (51 firms) primarily based in EMEA. Projector came in fourth with 9% (50 firms). FinancialForce, based on the Salesforce 1 platform and jointly funded by UNIT4 and Salesforce, moved into fifth place with 6% (33 firms.). Kimble, a PSA provider built on the Salesforce 1 platform, has gained considerable market momentum particularly in Europe with 6% (31 firms) of benchmark participants using it. Clarizen gained ground with a strong showing of 3% (14 firms). A host of additional PSA providers – Deltek, SAP, Changepoint, Microsoft Dynamics, Oracle, Tenrox and Workday all provide PS-centric PSA and/or financial applications.

Table 29 compares PSOs using PSA solutions to those that do not. The results in this table are very powerful. Professional Services Automation solutions continue to drive significant operational performance benefits, which ultimately yield higher revenue and profit for professional services organizations. The use of PSA is on the rise due to the need to better manage projects and resources, especially in more technical disciplines, as it has become increasingly difficult to find, hire, retain and deploy talent. PSA solutions help match the right resources, with the right skills at the right time to the right projects. PSA solutions yield a number of core benefits to PSOs, but most executives only need to look to the 4% increase in billable utilization, as the reason to select PSA. Almost all key metrics improve with PSA adoption. As shown in the table these systems pay for themselves with a 25% improvement in net profit.

Table 29: Impact – Professional Services Automation (PSA) Use

KPI	PSA Used	Not Used	▲
Survey responses	424	107	
Year-over-year change in PS revenue	11.2%	6.3%	78%
Year-over-year change in PS headcount	8.4%	5.4%	57%
% of employees billable or chargeable	72.1%	63.7%	13%
Concurrent projects managed by PM	5.94	5.23	14%
Employee billable utilization	71.3%	67.3%	6%
Annual revenue per billable consultant (k)	$199	$191	4%
Project Margin	33.4%	32.9%	2%
EBITDA	**15.9%**	**12.8%**	**25%**

Source: Service Performance Insight, February 2016

Table 30: Impact – Commercial PSA Integration

KPI	PSA Not Used	Used, Not Integrated	Used, Integrated
Survey responses	107	96	153
% of employees billable	63.7%	70.8%	72.1%
Year-over-year change in PS headcount	5.4%	8.4%	8.6%
Deal pipeline relative to qtr. bookings forecast	144%	169%	182%
Billable utilization	67.3%	68.7%	72.1%
Use a std. delivery methodology	61.5%	66.7%	67.7%
Revenue / employee (k)	$147	$153	$158
EBITDA	**12.8%**	**13.4%**	**14.6%**

Source: Service Performance Insight, February 2016

Table 30 highlights the benefit of integrated PSA versus standalone PSA. Again, the results demonstrate integrated PSA enables organizations to operate at higher levels of efficiency. Perhaps most notable in this table is the increase in billable utilization well as overall profitability, as PSOS move to integrated PSA versus standalone.

Because the delivery of services is where PSOs make their money, and because PSA is the primary application utilized by project managers and others responsible for services delivery, it is easy to understand why the operational and financial benefits are so significant. SPI Research has always recommended organizations with more than 20 employees utilize PSA. With the cloud-based solutions now available, PSA should also be considered by smaller organizations.

Human Capital Management (HCM)

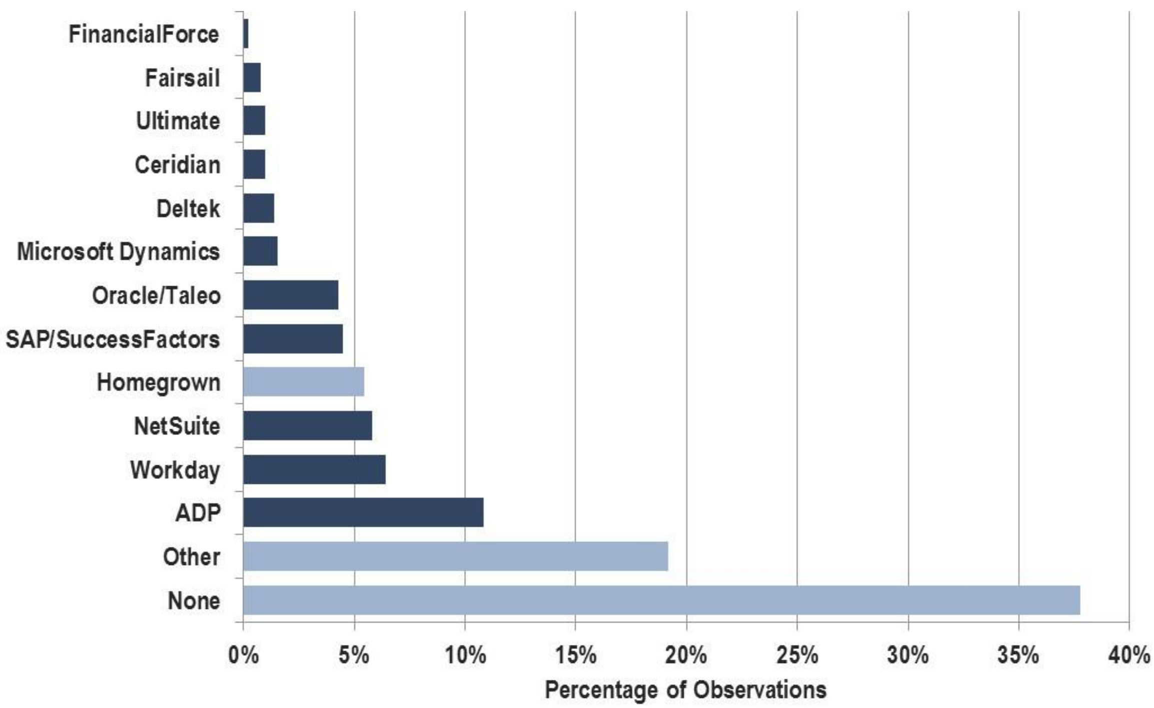
Human Capital Management (HCM) solutions (also known as talent management solutions) give employers the tools to effectively recruit, manage, evaluate and compensate employees. By tracking performance, skills and career progression, HCM helps companies create and maintain a high-performance workforce. Key software modules include recruiting, employee learning, skills tracking, compensation, performance management, policy compliance, and succession planning — each of which help organizations manage personnel growth and development.

HCM benefits the PSO by maintaining a database of skills, benefits and pay rate information that is used for resource scheduling, recruiting and performance and career management. Effective HCM solutions provide rich applications that allow consultants to manage their own careers and skill development (training) and bid on the projects of greatest interest for them.

Human Capital Management (HCM)

- Benefits
- Payroll
- Recruitment
- Time and Labor
- Training Administration
- Workforce Analytics

Figure 29: Human Capital Management (HCM) Solution Used



Source: Service Performance Insight, February 2016

Figure 29 shows the majority of professional services organizations do not yet use HCM solutions. However, their prevalence among the largest PSOs is significant. With new cloud-based solutions coming to market that specifically target the management of human capital, coupled with the need to better manage employees from recruitment and hiring through training and retention, HCM use will undoubtedly increase significantly in the coming years. Of the solutions highlighted in this year's benchmark, ADP and Workday are the two leaders, however, NetSuite, SAP Successfactors and Oracle/Taleo are not far behind. These cloud-based solutions are beginning to gain acceptance as PSOs realize talent is their most valuable asset.

Most of the solutions found in this benchmark are provided by ERP solution providers, who generally offer some type of integration with other applications in their suites. The leading provider, ADP, with approximately 12% of survey participants, Ceridian, Ultimate and Fairsail, offer HCM solutions that are not part of an ERP suite. Even though a majority of the PSOs that utilize HCM are larger in employee headcount, it is not only for large organizations, it is for organizations focused on finding, hiring and keeping the best employees. With PSOs struggling to find, hire and retain highly qualified individuals, HCM will only gain in importance.

Table 31 highlights some of the differences between firms utilizing HCM and those who do not. In this year's survey nearly half the organizations utilize HCM, although the table also highlights they are almost four times as large. Key benefits show up in the ability to manage and sustain higher growth rates, both in revenue and headcount.

Table 31: Impact – Human Capital Management (HCM) Use

KPI	HCM Used	HCM Not Used	▲
Survey responses	293	223	
PSO size (employees)	885	282	214%
Year-over-year change in PS revenue	11.4%	8.4%	35%
Year-over-year change in PS headcount	9.4%	5.6%	67%
% of employees billable or chargeable	70.4%	70.1%	0%
Employee billable utilization	71.3%	69.2%	3%
Management-to-employee ratio	12.54	10.42	20%
Annual revenue per employee (k)	$162	$149	9%
EBITDA	**17.5%**	**12.6%**	**39%**

Source: Service Performance Insight, February 2016

Table 32: Impact – Commercial HCM Integration

KPI	HCM Not Used	Used, Not Int.	Used, Int.
Survey responses	223	113	71
Size of PS organization (employees)	282	797	1,125
Annual company revenue (mm)	$100	$215	$422
Total professional services revenue (mm)	$27.5	$85.5	$171.2
Management to employee ratio	10.42	11.91	13.43
Days for a new hire to become productive	60.1	58.6	53.7
Average project staff (people)	3.87	4.73	5.78
Annual revenue per billable consultant (k)	$187	$202	$213
Annual revenue per employee (k)	$149	$160	$166
EBITDA	**12.6%**	**15.9%**	**16.8%**

Source: Service Performance Insight, February 2016

Higher billable utilization occurs because the right people with the right skills are available to do the work. Larger management span of control reduces the cost of non-billable management and enhances the bottom-line. HCM produces impressive gains in revenue per employee and net profit. The fact is that as organizations grow, human capital management becomes increasingly important.

HCM solutions provide greater visibility into employee skills, preferences, training and career advancement. They ensure equitable compensation and are an integral component of pay for performance and reward systems.

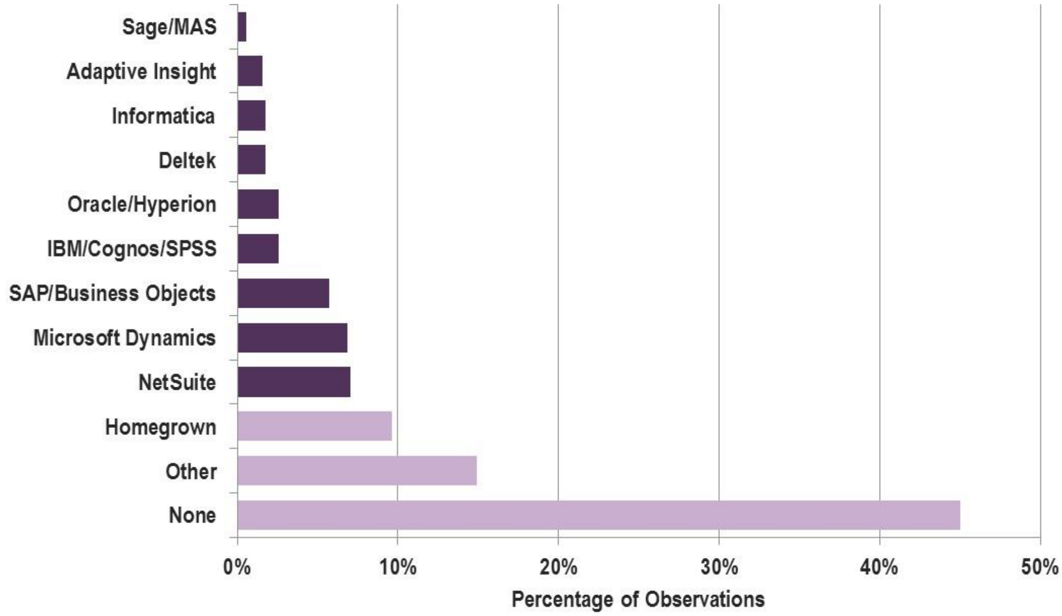
Talent management is central to PS performance as the skills and attitudes of the consulting workforce provide tangible evidence of consulting value. And with better management of personnel, PSOs can ensure talent is on staff and available when needed, which helps the organization grow faster. HCM solutions, in conjunction with PSA, drive greater billable utilization, which ultimately results in higher revenue per employee and profitability. Most of the new breed of cloud-based HCM applications offer mobile access from anywhere, making it easy for employees to keep their profiles and time-off requests up-to-date. Several HCM vendors are adding rich predictive analytics, providing visibility into levels of employee engagement and which employees are likely to quit. Their recruiting tools are very powerful with out-of-the-box integration with top job sites like Monster and LinkedIn.

Business Intelligence (BI)

Business Intelligence integrates information from core business applications to improve strategic analysis, demand and capacity planning, budgeting, forecasting and financial planning. BI solutions continue to increase their adoption in PSOs. As professional services organizations mature, BI becomes a more critical tool to provide real-time visibility to all aspects of the operation — allowing executives to spot trends and take corrective action early. It also is an important solution for annual planning, as PS executives try to uncover areas where additional growth and profit can be extracted.

Figure 30 shows relatively low adoption levels of Business Intelligence in this year's survey, similar to those in the past. However, SPI Research has seen increased adoption over the past eight years. None, other and homegrown are the most prevalent BI solutions. Of the application suite providers, NetSuite, Microsoft Dynamics, IBM/Cognos/SPSS, Oracle/Hyperion and Deltek each have a wide following. Informatica and Adaptive Insights round out the line-up with their Best-of-Breed solutions. The trend continues toward leading providers offering BI in the cloud, providing greater accessibility for executives around the world as well as ease of deployment and mobile access.

Figure 30: Business Intelligence (BI) Solution Used



Source: Service Performance Insight, February 2016

The results in this table highlight some of the core benefits organizations have achieved that use BI solutions. While each improvement is impressive, it is increased profitability that stands out the most. The fact is BI is a strategic solution that helps PSOs plan, budget and forecast the business. Its powerful "what if" analysis tools help PSOs model capacity and resource plans to achieve optimal results. Going forward BI will continue to gain in importance and penetration into the services sector.

Table 33: Impact – Business Intelligence (BI) Use

KPI	BI Used	BI Not Used	▲
Survey responses	231	278	
PSO size (employees)	822	430	91%
Total professional services revenue (mm)	$113.7	$43.5	161%
Year-over-year change in PS headcount	8.5%	7.2%	17%
Deal pipeline relative to qtr. bookings forecast	178%	166%	7%
EBITDA	**17.4%**	**14.2%**	**22%**

Source: Service Performance Insight, February 2016

Project Portfolio Management (PPM)

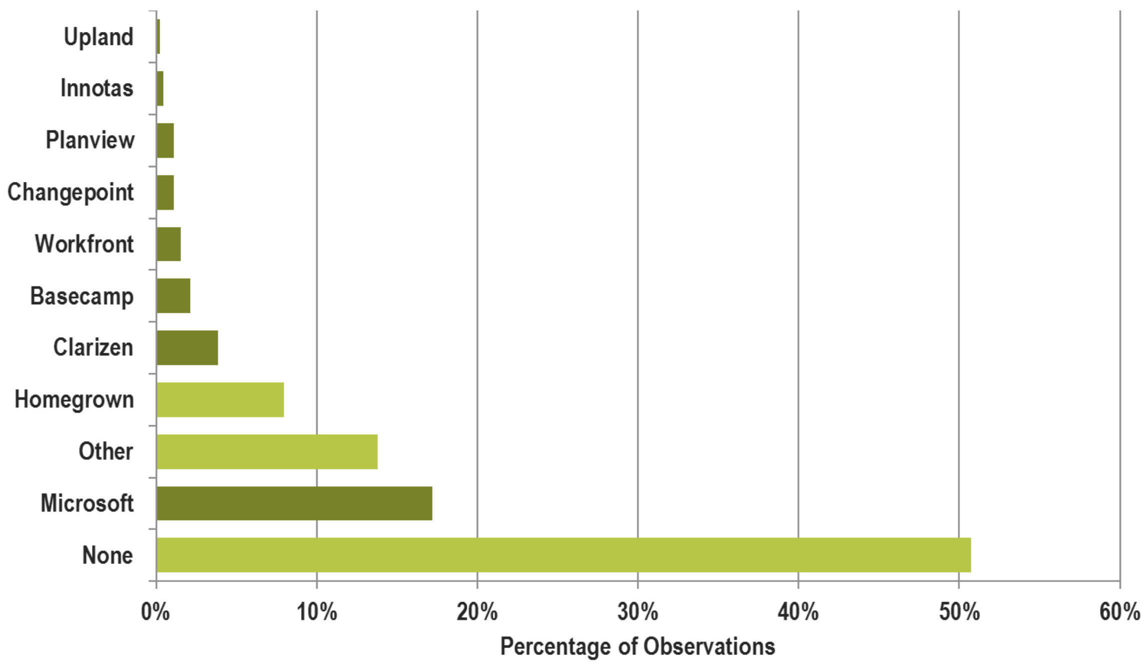
Project portfolio management (PPM) solutions enable PSOs to plan and align project-based work with corporate strategy, as well as to monitor and measure performance. PPM provides visibility into operational data to better control project costs and to support audit requirements as part of the corporate governance infrastructure. It also enables companies to efficiently depict and manage a portfolio of projects to make priority decisions. It also helps model and manage business processes.

PPM is used to plan, prioritize, manage, assess value and provide insight into the people, processes and capital used throughout a project's lifecycle. PPM provides integration with project opportunities, resources, time and cost, and is built upon a robust reporting engine that gives executives greater visibility and decision-making to link enterprise strategy with operational activities. These solutions are most often found in IT and internal services organizations.

PPM is both critical and necessary given the complexity of many project-based initiatives. In many cases one group sponsors a project and another group delivers the work, while a third group is responsible for managing performance. Complexities arise as executives require visibility into how budgeted funds are actually spent on a particular project, by what organization, and the value realized at the end of the project. However, all PPM solutions are not alike. An ideal solution should provide for financial management capabilities that deliver both top-down guidance coupled with bottom-up execution.

In professional services organizations, PPM is used to help develop new services, as well as manage projects in internal IT and other departments. Less than 30% of the organizations surveyed utilize PPM solutions. Billable consulting organizations prefer to use Professional Services Automation (PSA) to accurately capture and bill for time as making project portfolio decisions is not as important.

Figure 31: Project Portfolio Management (PPM) Solution Used

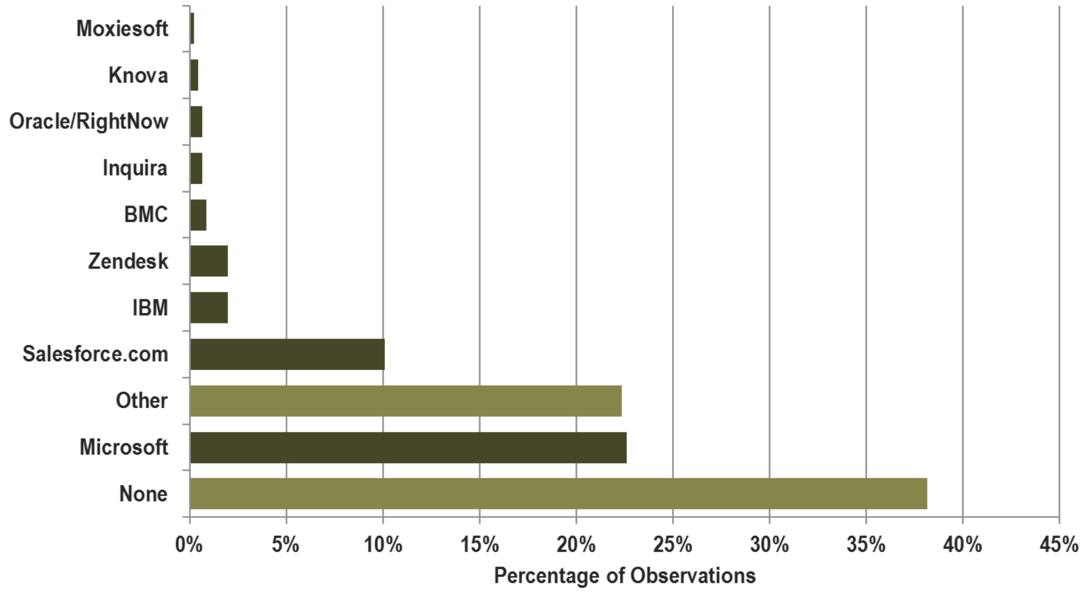


Source: Service Performance Insight, February 2016

Knowledge Management (KM)

Knowledge Management should be a core application for all PSOs as knowledge, unique intellectual property, methods and tools are the primary source of service provider differentiation. Approximately 35% of the organizations surveyed reported they do not use a knowledge management application. As the workforce becomes more global and intellectual property more valuable, it becomes increasingly important to have shared processes, procedures and templates. SPI Research sees Knowledge Management as a key source of differentiation, consistency and quality. With the advent of inexpensive cloud-based knowledge management applications we expect significant investment in this area.

Figure 32: Knowledge Management (KM) Solution Used



Source: Service Performance Insight, February 2016

Figure 32 shows once again Microsoft's SharePoint is the market leader with 22% of the firms in this survey. SharePoint's continued dominance has led to a rich after-market for add-ons, which make the product easier to use and more powerful. While these are not official market penetration numbers, they are fairly representative of the market in general. There are a variety of solutions available, but SPI Research found Microsoft's SharePoint to be the industry leader by a wide margin. Salesforce.com is the second most prevalent KM application, with 10% of the market.

Table 34: Impact – Knowledge Management (KM) Use

KPI	KM Used	KM Not Used	▲
Survey responses	282	174	
PSO size (employees)	836	374	123%
Year-over-year change in PS revenue	10.8%	9.8%	10%
Year-over-year change in PS headcount	8.4%	7.7%	8%
Year-over-year change in PS revenue	10.8%	9.8%	10%
Deal pipeline relative to qtr. bookings forecast	181%	147%	23%
Concurrent projects managed by PM	6.18	5.15	20%
Average project staff (people)	5.23	4.14	26%
Annual revenue per billable consultant (k)	$204	$186	10%
Annual revenue per employee (k)	$161	$151	7%
EBITDA	**19.1%**	**13.9%**	**38%**

Source: Service Performance Insight, February 2016

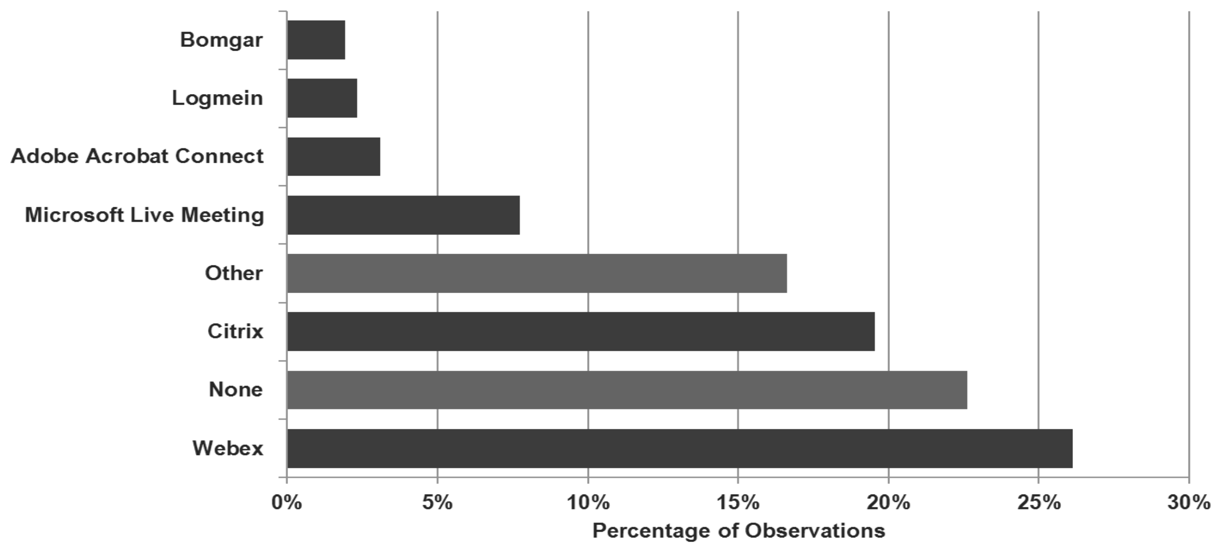
Table 34 compares organizations using knowledge management solutions to those that do not. In this year's survey the organizations using Knowledge Management were twice as large as those not using it. The table shows, organizations using KM tend to be more efficient in all aspects of their business, especially in the sale and delivery of services. The organizations also showed slightly improved financial results compared to those organizations not using KM.

Remote Service Delivery (RSD) and Collaboration Tools

Like Knowledge Management (KM), Remote Service Delivery and collaboration tools have become increasingly important for virtual project delivery, communication and collaboration. They provide a platform for consultants and clients to work together, regardless of physical location. Professional services consultants utilize these technologies to serve several clients daily. In the past consultants could only serve one client at a time, with expensive and time-consuming travel the norm. Advances over the past years have added video, recording, editing, polling and white-boarding functionality, meaning team members can now see each other (if desired) along with sharing information and computer screens.

Figure 33 shows results similar to past years. WebEx, Citrix and Microsoft lead in adoption. Microsoft, in particular, has purchased and integrated tools to make Live Meeting more prevalent in professional services. Given their relatively low cost and ease of deployment, remote service delivery tools should be on the "must have" list for PSOs of any size.

Figure 33: Remote Service Delivery and Collaboration Tool Used

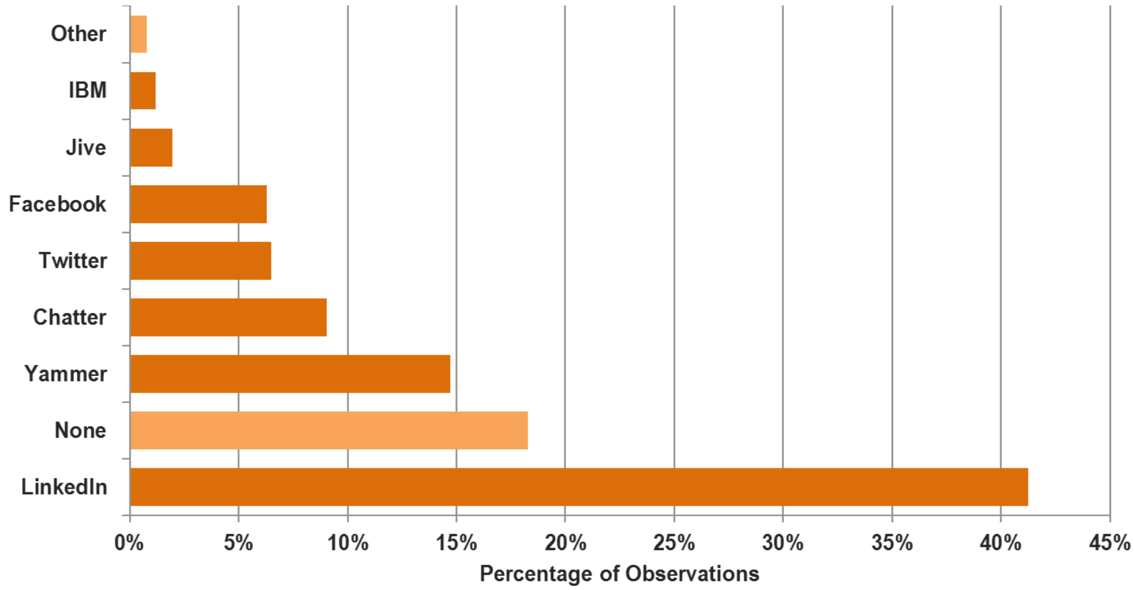


Source: Service Performance Insight, February 2016

Social Media

Three years ago SPI Research began to include social media as part of our application analysis. These tools are being relied on, now more than ever, as organizations work both internally and externally to find, hire and communicate and market to the best people. Social media has become essential to help professional services organizations build their brand through thought leadership and market outreach. Collaboration tools like Yammer, Chatter and Jive have replaced email as the preferred method of communication for millennials.

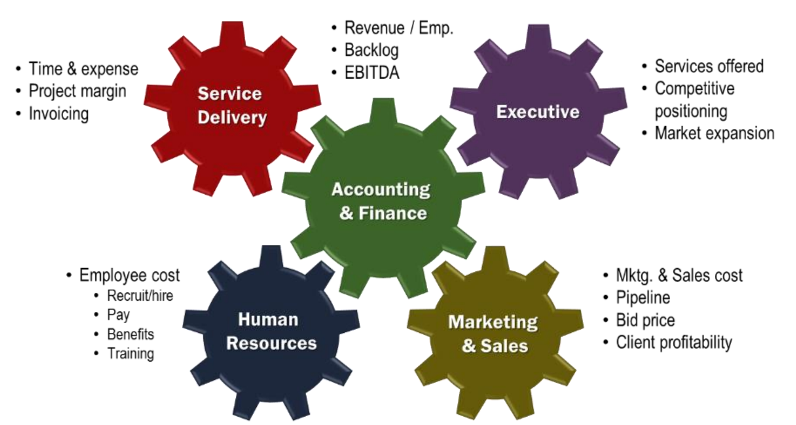
Figure 34: Social Media (SM) Solution Used



Source: Service Performance Insight, February 2016

Even the most controlling organizations must recognize and support the trend toward personal devices and social media if they wish to attract and retain young, connected workers. The downside of the social media explosion is that it can easily become a time-sink and source of unproductive web-surfing hours so the trick is to exploit collaboration, knowledge-sharing and crowd-sourcing without lost productive time. Figure 34 shows LinkedIn continues to be the dominant social media platform, with more than 40% of the organizations surveyed using it. Yammer at 15% and Chatter at 9% are second and third.

Figure 35: Success depends on inter-departmental cooperation



Source: Service Performance Insight, February 2016

Application Integration

While the core business solutions support individual departments in their efforts to become more productive and profitable, as these solutions are integrated with the core financial management solution (ERP) they create additional insight and value. For instance, CRM integrated with ERP provides sales executives with the insight necessary to develop a pricing strategy, supporting the highest probability of winning the bid with maximum profitability. Without this integration it would be much more difficult to conduct this type of analysis. Today's PSOs simply cannot operate with functional silos as the lines between sales, delivery and finance become blurred.

It is also important that applications communicate with each other. PSA, integrated with CRM, enables PSOs to better schedule resources and projects to insure they begin and end on time. With integrated HCM, human resources, recruiting and resource management all benefit from visibility into in-demand skills, consultant preferences and career aspirations.

Table 35 shows slightly higher levels of integration in this year's benchmark for CRM and HCM and lower levels of integration for PSA and BI.

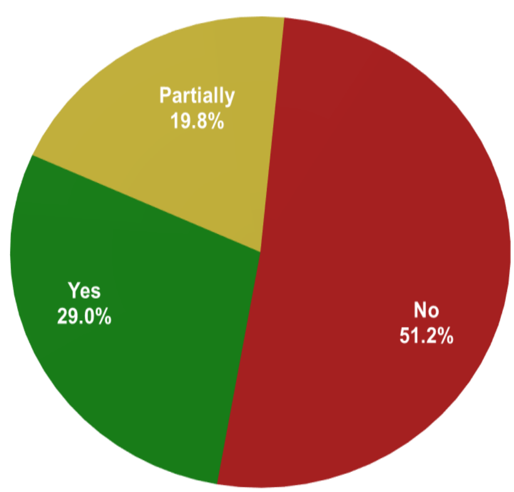
Table 35: Integration with Core Financials

Solution	2013	2014	2015
Client Relationship Management (CRM)	34.1%	33.5%	42.3%
Professional Services Automation (PSA)	61.2%	59.1%	56.4%
Business Intelligence (BI)	65.7%	57.9%	50.8%
Human Capital Management (HCM)	37.7%	39.8%	40.7%

Source: Service Performance Insight, February 2016

SPI Research believes integration between CRM, PSA and core financials is an essential ingredient in superlative performance. Integration provides visibility to all parts of the organization and helps break down organizational silos. Achieving client delight and profit in professional services requires tight coordination between demand and supply which can only be achieved through integrated business applications. Many firms that have worked with SPI Research over the past several years have concentrated on application integration as they have learned its benefits and worked with their vendors to ensure the integration happens.

Figure 36: Is CRM Integrated with PSA?



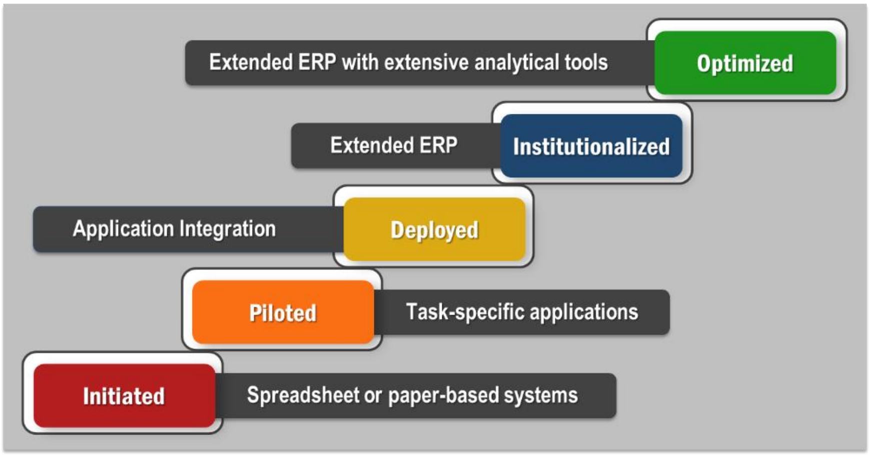
Source: Service Performance Insight, February 2016

Participants were also asked if CRM and PSA were directly integrated, highlighting the importance of connecting sales and service delivery for a more complete view of clients (Figure 36). This year's survey showed for the third year in a row that only 23% of the PSOs surveyed integrated CRM with PSA. Not surprisingly, the organizations without this integration reported lower performance than those who partially or fully integrate CRM and PSA. Obviously, cost and complexity come into play when the solutions are developed by different providers. Typically, application suites, such as Deltek, FinancialForce.com, Microsoft, NetSuite and SAP offer out-of-the-box integration between their core business solutions making a 360-degree view of clients and projects possible.

The Professional Service IT Maturity™ Model

While every PSO uses technology somewhat differently — with different applications and varying levels of integration — SPI Research believes one of the best ways to improve organizational performance is to deploy integrated applications to provide a 360-degree view of clients and projects to facilitate decision-making. Figure 38 highlights the PS IT Maturity™ Model. As PSOs move from "manual" solutions (spreadsheet or paper-based) toward integrated and single user-interface solutions, performance improves. SPI Research's PS IT Maturity™ Model levels are:

Figure 37: Professional Service IT Maturity™ Level



Source: Service Performance Insight, February 2016

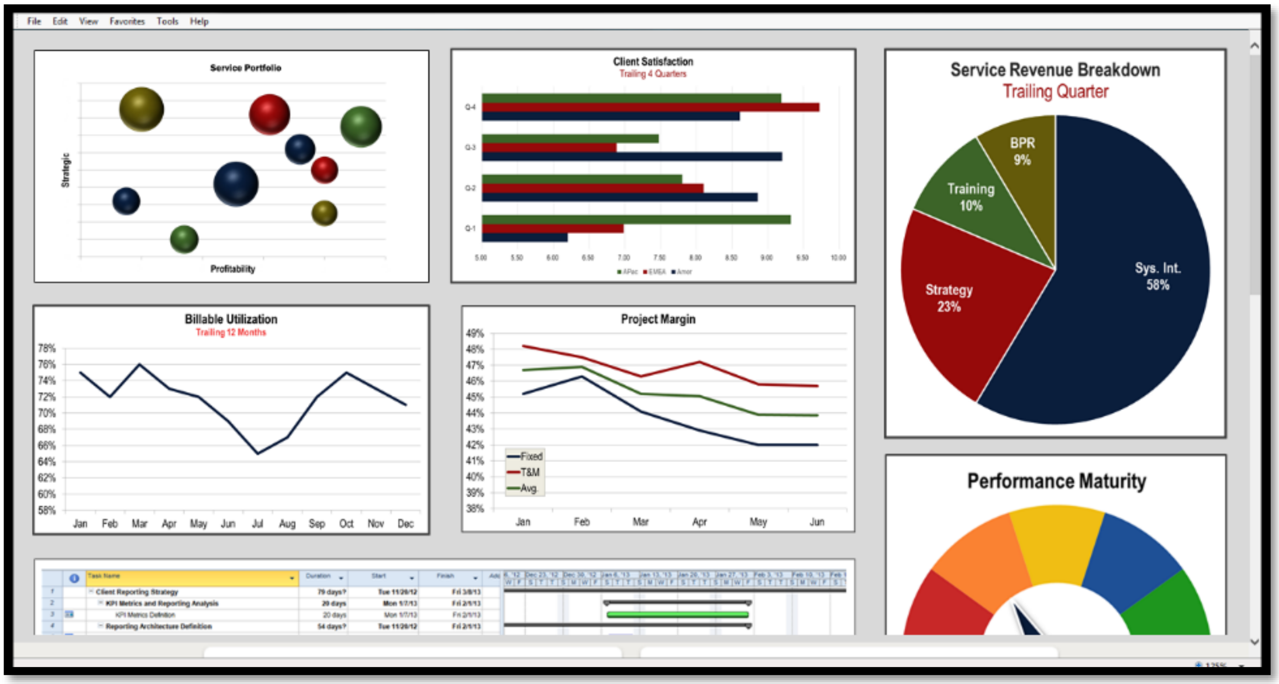
- ∆ **Level 1: Initiated** – ***Ad Hoc***: Most PSOs begin with manual or spreadsheet-based tools to run the business. Time and expense capture is manual, sporadic and ad hoc. Billing is performed manually or through the backend financial application.
- ∆ **Level 2: Piloted – *Application Specific***: As they grow and engage in more structured processes, organizations deploy task specific applications (time and expense), project management (PM) and Knowledge Management (KM), Client Relationship Management (CRM), etc. to better manage work and to create an audit trail, albeit rudimentary, for tracking work. Many of these task specific applications provide a database to improve reporting.
- ∆ **Level 3: Deployed – *Integrated Applications***: As organizations mature they deploy greater integration of business applications with the core financial (Enterprise Resource Planning (ERP)) solution. At this Level they begin to evaluate the time and cost factors associated with integration of various point releases. Emphasis at this level is on creating effective management reports to provide visibility into all facets of the business.
- ∆ **Level 4: Institutionalized – *Extended ERP***: An increasing number of PSOs at this level of maturity begin to add various components of ERP applications rather than continually integrate disparate

applications. SPI Research uses the term extended ERP or SRP (Service Resource Planning). Now professional services organizations are purchasing both core financials as well as other pre-integrated application suites from the same ERP solution provider. Currently CRM is the most popular application that is purchased pre-integrated with financials, closely followed by Professional Services Automation (PSA). Other applications that are being acquired from the same ERP vendor include human capital management, business intelligence, and procurement.

∆ **Level 5: Optimized – *Extended ERP and Analytics***: Finally, as the PSO has significant integration in its application infrastructure it turns the solution loose to efficiently surface and report data to optimally measure and transform the organization. Most, if not all, core applications are integrated to provide visibility into the work being sold, executed, and closed.

While not every PSO is run with a completely integrated set of business applications, SPI Research has seen the level of integration increase significantly over the past eight years. This development will continue regardless of the economy as many PS firms see IT as a way to not only cut costs, but also as a means to improve operational efficiency and effectiveness.

Figure 38: PS Dashboard



Source: Service Performance Insight, February 2016

6. Leadership Pillar

Growth, growth and more growth. Each year SPI Research finds a direct correlation between growth and success in Professional services. Given that the PS industry is built on the application of unique knowledge and domain expertise it is sometimes hard to understand why the growth dynamic is so important. But… it is. In the professional services and technology industry, leading firms create dominant market positions. There is a compounding effect of how customers make decisions, the networks and ecosystems that are created, and the ability to scale as a firm that mean that there is a significant advantage for the companies that grow the fastest and are able to establish market-leading positions. The premium PS firms create unique competitive advantage and are able to command significantly higher bill rates. They become known as the innovators in their markets, industries, technologies and business processes. They produce tangible results and are able to harvest the knowledge gained to do an even better job the next time. They build a culture which embodies their brand and values which further attracts prospective consultants and clients who identify with those attributes.

Table 36: Leadership Pillar 5-year trend

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Well understood vision, mission and strategy	3.81	N/A	3.85	3.81	3.75
Confidence in PS leadership	4.03	N/A	4.05	4.01	3.86
Ease of getting things done	3.72	N/A	3.75	3.68	3.69
Goals and measurement alignment	3.60	N/A	3.73	3.62	3.70
Employees have confidence in PSO's future	3.83	N/A	4.01	3.87	3.82
Effectively communicates w/employees	3.58	N/A	3.74	3.67	3.64
Embraces change - nimble and flexible	3.79	N/A	3.90	3.76	3.68
Innovation focused	3.65	N/A	3.69	3.66	3.64

Source: Service Performance Insight, February 2016

But growth comes with a price. The unique knowledge, vision and passion that a consulting leader brings to founding a hot new firm must be nurtured and continuously kindled within new employees. The leader must simultaneously learn to let go and grow at the same time. Micro managing does not work in PS, cultivating a reputation and repeatable skills, competencies and processes does. Most independent consulting firms can easily grow from 20 to 50 consultants, but after that things get more interesting. This is when firms must move from heroic to repeatable and founders must move from doers and fire fighters who wear all the hats to leaders and visionaries. The leaders who can't make this transition must have the courage to bring in new talent who can take the firm to the next level.

As professional services organizations grow in size, leadership challenges intensify. Service Performance Insight's research into this topic over the past nine years has shown a powerful correlation between financial success and confidence in leadership. Obviously, in small organizations the firm's leadership can do a much better job of personally communicating vision and strategy. As the organization grows in size and geographic dispersion, communication and alignment become issues. PSOs must implement additional policies to ensure communication, collaboration and alignment do not suffer with expansion. Systems and processes must be implemented to provide visibility and management control.

Leadership development, succession planning and funding growth are big challenges for independent PSOs. Many consider mergers and acquisitions to augment organic growth. Employee ownership is a viable option as the founder nears retirement. A central concern is "How best to monetize value while building a firm for the future?"

Table 37 shows the Leadership Maturity model and the best leadership style for each level of maturity:

Table 37: The Leadership Maturity Model

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Leadership	Initial strategy is to support product sales and provide reference customers while providing workarounds to complete immature products. Leaders are "doers".	PS has become a profit center but is subordinate to product sales. Strategy is to drive customer adoption and references profitably. Leaders focus on P&L and client relationships.	PS is an important revenue and margin source but channel conflict still exists. Services differentiate products. Leadership development plans are in place. Leaders have strong background & skills in all pillars.	Service leads products. PS is a vital part of the company. Solution selling is a way of life. PS is included in all strategy decisions. Succession plans are in place for critical leadership roles	PS is critical to the company. Service strategy is clear. Complimentary goals and measurements are in place for all functions. Leaders have global vision and continually focus on renewal & expansion.
Leadership Styles by Maturity Stage	The Entrepreneur. Leaders are "doers". In small companies, PS leaders are technically competent and directly perform engagement activities in addition to recruiting and ramping new consultants. Typically, they possess stronger technical than business or leadership skills.	The Generalist. The emerging PS leader must start to focus on HR, Finance and Operations while nurturing close relationships with clients and partners. At this stage, setting strategic vision and strategy are less important than strong operational management skills.	The General Manager. By the deployed stage, the PS leader must start to focus on setting vision and strategy and forging strong partnerships with clients and the cross-functional leadership team. The PS leader must exhibit strong operational and process management skills. He must have a strong background in sales, finance and operations. Focus at this stage is on recruiting strong functional leaders to scale the organization.	The Strategist. By the institutionalized phase, the PS leader has developed a strong leadership team and institutionalized operating processes in all five service performance pillars. His primary focus is strategy, business planning and establishing strategic partnerships and alliances. At this stage, he must "lead", "inspire" and "communicate". He must be able to attract and retain high quality functional leaders.	The Leadership Team. As the PS organization matures, the leader becomes more strategic and able to effectively communicate and inspire. All functional areas have strong, sustainable operating processes. His focus is on ensuring alignment within the organization while continually forging new business partnerships. The leadership team constantly focuses on innovation and operational excellence.

Source: Service Performance Insight, February 2016

The leadership challenges are much the same but also very different in embedded PSOs. These organizations exist to ensure the successful implementation and adoption of the company's products. They are not given the latitude to develop services for services sake, but rather must serve the best interests of the company's products, even if those interests undermine PS productivity and profitability. In embedded PSOs the primary leadership challenge is one of charter conflict and forging cross-functional relationships. Embedded PS executives are tasked with developing high quality consulting businesses but consulting is most often subordinate to product proliferation. A new, more strategic role is emerging to drive client adoption and optimization. This role requires significantly greater alignment with sales, support and product development so collaboration and team-building skills are paramount.

Establishing the Leadership Index

In the benchmark survey, SPI Research asks a series of questions regarding various aspects of professional services vision, strategy and leadership including confidence, clarity and alignment. Strategic decisions set the direction and tone for the PSO and affect all functions because vision and strategy dictate the goals and objectives for the organization, the types of clients to pursue, the types of services to offer and the interrelationship between functions.

The leadership questions have evolved into eight core questions that examine how various dimensions of leadership impact performance. The questions ask, "please rate the following aspects of your organization in terms of how well it operates (1: not well - 5: very well)":

1. The vision, mission and strategy of the PSO is well understood and clearly communicated
2. Employees have confidence in PS leadership
3. It is easy to get things done within the PS organization
4. Goals and measurements are in alignment for the service organization
5. Employees have confidence in the future of the PS organization
6. The organization effectively communicates with employees
7. The organization embraces change, it is nimble and flexible
8. The organization focuses on innovation and is able to rapidly take advantage of changing market conditions

SPI Research has created a "***Leadership Index***" by ranking the aggregate leadership scores for all eight questions by survey participant. The minimum score for the leadership index would be eight, if the survey participant stated "1 - not well" for each of the eight questions. The maximum would be 40, if the participant stated "5 - very well", for each question.

As statisticians, a perfect day is when a key performance measurement clearly correlates with most measures of performance. Well, the dimensions of leadership are one of those perfect statistics. As the leadership dimensions improve, so do all major key performance metrics. One might expect "Confidence in Leadership" and "Confidence in the Future" to improve along with clarity of vision and strategy but the truly remarkable finding around leadership is that all the major operational metrics – revenue per person, utilization, project margin and on-time project completion improve as well. It is amazing how strategic clarity permeates all aspects of operational performance. If the strategy is clear and compelling, people-based organizations will find a way to accomplish it.

With strong leadership, employees understand what's required of them, and can go about conducting their daily business with the confidence their work supports corporate objectives. Strong leadership helps employees get on the same page, working toward a common goal. With this knowledge, employees are more productive, ultimately delivering higher levels of client satisfaction and profitability to the organization.

Table 38 depicts the percentage of survey respondents by overall leadership index rating compared to key operational measurements. As shown in the table, effective leadership has a powerful impact on all aspects of performance.

Table 38: Leadership Impact

Key Performance Indicator (KPI)	8 - 25	26 - 30	31 - 35	36 - 40
Percentage of respondents	22.2%	27.8%	35.4%	14.6%
Year-over-year change in PS revenue	7.2%	8.2%	11.0%	16.3%
% of employees billable or chargeable	65.3%	69.4%	72.2%	75.5%
Revenue from new clients	25.0%	27.1%	29.0%	29.7%
Bid-to-win ratio (per 10 bids)	4.31	4.70	5.22	5.69
Percentage of referenceable clients	66.6%	66.8%	72.4%	78.8%
Ramp time (days)	131	121	114	107
Recommend company to friends/family	3.46	4.06	4.52	4.80
Well-understood career path for all employees	2.69	3.14	3.44	4.04
Employee billable utilization	68.6%	69.3%	71.4%	73.8%
Projects delivered on-time	67.3%	73.3%	79.2%	86.2%
Use a standardized delivery methodology	57.2%	63.2%	66.4%	72.8%
Annual revenue per billable consultant (k)	$174	$188	$210	$228
Annual revenue per employee (k)	$141	$149	$164	$181

Source: Service Performance Insight, February 2016

More than any other factor, good, or poor leadership impacts all facets of the business delivering stronger growth, higher billable utilization, better on-time project delivery, more winning proposals and higher levels of customer satisfaction. The reverse is also true. Poor leaders can sabotage cross-functional alignment, leading to organizational alienation and functional silos. Leaders who are not able to transition to more strategic roles can create heroic, reactive organizations characterized by fire-fighting, in-fighting and burnout. Many top-performing organizations have reported adding SPI's leadership questions to their employee surveys to help them measure and quantify employee confidence in leadership.

Survey Results

Organizational Challenges

Each year SPI Research asks participants to rank the key challenges facing them. This year "achieving revenue and margin targets" overtook "talent management" as the number one challenge. Interestingly, the importance of these challenges has increased year over year indicating growth, expansion and competitive pressures are more significantly impacting all PS organizations. In 2015 it was a lot tougher to achieve revenue and margin targets with an influx of new competitors and market consolidation in legacy markets. Going forward the ever-growing technical talent shortage will continue to be a top challenge as attracting the best and brightest talent is becoming more and more difficult without enough workers with requisite Science, Technology, Math and Engineering (STEM) skills.

Table 39: Year-over-year Change in Top Challenges

Challenge	2013	2014	2015
Achieve revenue and margin targets	4.18	4.07	4.19
Talent management	3.94	4.11	4.18
Improve quality and consistency	4.12	3.85	4.13
Communication across PSO	3.93	3.90	4.12
Support rapid growth and expansion	4.06	4.01	4.12
Improve sales and marketing	4.21	4.10	4.06
Vision and strategy	3.79	3.90	4.03
Improve / expand portfolio and markets	3.83	3.83	3.92
Alignment between functions or groups	3.59	3.45	3.81

Source: Service Performance Insight, February 2016

After two years of torrid growth and expansion, many firms are now struggling to keep up with the tremendous growth they have experienced. In interviews, several firms reported they plan to slow growth and acquisitions because their infrastructure and culture cannot keep up. For the fastest growing firms, 2016 will be an investment year – they plan to update or replace systems; enhance training and invest in their culture to ensure they will be able to recruit and retain a high quality workforce.

Organizational Challenges by Organization Type

When comparing the key challenges of embedded versus independent service providers (Table 40), the number one challenge for independent PSO's is "talent management". For embedded ESOs the number one challenge is "achieving revenue and margin targets". "Improving quality and consistency" has now risen to become a top 3 challenge. With more choices than ever before, PS buyers are demanding higher levels of quality and consistency from their PS providers.

In the geographies with the greatest growth, the Americas and Asia Pacific (APac), talent is by far the greatest challenge as there simply are not enough qualified candidates to meet demand.

Table 40: Leadership Demographics

Organizational Challenge	Survey	ESO	PSO	Americas	EMEA	APac
Achieve revenue and margin targets	4.19	4.17	4.19	4.19	4.17	4.25
Talent management	4.18	4.15	4.20	4.21	4.07	4.39
Improve quality and consistency	4.13	4.11	4.14	4.10	4.14	4.39
Communication across PSO	4.12	4.12	4.12	4.12	4.07	4.28
Support rapid growth and expansion	4.12	4.23	4.07	4.17	3.99	4.11
Improve sales and marketing	4.06	4.08	4.06	4.07	4.01	4.19
Vision and strategy	4.03	4.06	4.01	4.04	3.99	4.03
Improve / expand portfolio and markets	3.92	3.97	3.90	3.91	3.90	4.14
Alignment between functions or groups	3.81	3.91	3.76	3.84	3.68	3.92

Source: Service Performance Insight, February 2016

Improvement Priorities

Table 41 compares improvement priorities for the past three years. The priority of improvement initiatives has changed. In 2015 increasing rates and improving hiring and ramping have eclipsed improving sales effectiveness which has perennially topped the list. The steps firms are taking to overcome these challenges include better pricing discipline and management oversight for estimates and proposals. To improve the time it takes to recruit and on-board new employees, firms are investing in dedicated recruiters and Human Capital Management systems to automate and streamline the recruiting process. More and more firms are also investing in on-boarding and mentorship programs to accelerate the time it takes for new consultants to become productive. This year, almost all top performing firms discussed their emphasis on service packaging as a catalyst for improving their repeatability and sales effectiveness.

Table 41: Steps Taken to Improve Profitability Comparison

Key Performance Indicator (KPI)	2013	2014	2015
Increases rates	2.83	2.9	3.85
Improve hiring and ramping	3.51	3.48	3.85
Improve methods and tools	3.69	3.6	3.85
Reduce non-billable time	3.34	3.26	3.83
Improve solution portfolio	3.59	3.59	3.78
Improve sales effectiveness	3.92	3.94	3.78
Improve utilization	3.71	3.85	3.78
Improve marketing effectiveness	3.68	3.65	3.52

Source: Service Performance Insight, February 2016

Table 42 depicts changes in Leadership scores over the past five years. By most measures, leadership scores have declined since 2013 when the economy stabilized, signaling growing dissatisfaction with leadership as employees have become over-whelmed by the intensity of the work and pressure to continually produce more. At the same time, with economic recovery, employees have more job opportunities… many are starting to make unreasonable demands for instantaneous career advances, money and more time off.

Table 42: Year-over-year Leadership Comparison

Leadership Dimension	2011	2012	2013	2014	2015
Confidence in PS leadership	4.03	N/A	4.05	4.01	3.86
Employees have confidence in PSO's future	3.83	N/A	4.01	3.87	3.82
Well understood vision, mission and strategy	3.81	N/A	3.85	3.81	3.75
Goals and measurement in alignment	3.60	N/A	3.73	3.62	3.70
Ease of getting things done	3.72	N/A	3.75	3.68	3.69
Embraces change - nimble and flexible	3.79	N/A	3.90	3.76	3.68
Effectively communicates w/employees	3.58	N/A	3.74	3.67	3.64
Innovation focused	3.65	N/A	3.69	3.66	3.64

Source: Service Performance Insight, February 2016

In 2016 PS organizations must be cognizant of diminishing confidence in leadership. The executive team needs to come together to reestablish the vision, strategies and culture of the firm. Then a succinct set of improvement priorities must be established and cascaded throughout the organization. More than ever before, communication, alignment and innovation focus must be accentuated. Today's millennial generation thrives on feedback, coaching and mentoring.

Well Understood Vision, Mission and Strategy

Clear leadership direction and effective bi-directional communication are critical success factors. Employees who lack an understanding of the service vision, mission and strategy have no ability to work toward achieving it whereas those who comprehend, espouse and support the vision of the organization will work tirelessly to achieve it. In this year's survey, clarity of vision, mission and strategy directly correlated with revenue growth, employee attrition and billable utilization. But the correlation with net profit is not apparent.

Table 43: Impact – Well understood vision, mission and strategy

Well understood vision, mission and strategy	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Not very well	1.9%	7.0%	22.9%	61.1%	33.3%
2	8.4%	6.2%	19.1%	67.2%	15.7%
3	20.5%	6.6%	13.0%	70.1%	13.7%
4	51.4%	10.8%	11.9%	70.9%	16.9%
5 – Very well	17.9%	15.2%	11.6%	72.7%	13.3%
Total/Average	**100.0%**	**10.3%**	**12.9%**	**70.6%**	**15.8%**

Source: Service Performance Insight, February 2016

Confidence in PS Leadership

The tools for effective leadership, clarity of purpose and alignment exist within all service organizations. By investing in these critical aspects, service organizations can create their own economic stimulus plan. SPI Research continues to discover most critical key performance measurements improve as confidence in leadership increases.

According to survey results, few other factors have the same impact on the overall health and well-being of the service organization. Poor leadership creates a negative spiral effect — poor human capital results (high attrition, low morale, poor employee engagement) — which in turn lead to low levels of client satisfaction and poor financial results.

Table 44: Confidence in PS leadership

Confidence in PS Leadership	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – No Confidence	1.9%	6.0%	18.9%	64.0%	15.9%
2	5.8%	6.1%	20.6%	65.7%	17.7%
3	19.4%	8.0%	15.3%	68.5%	9.6%
4	50.1%	10.0%	11.6%	71.5%	17.4%
5 – High Confidence	22.8%	14.2%	11.2%	72.0%	14.9%
Total/Average	**100.0%**	**10.3%**	**12.9%**	**70.6%**	**15.3%**

Source: Service Performance Insight, February 2016

Because PSOs rely on the quality and commitment of the consulting staff, poor leadership produces an immediate and long-lasting negative effect. Fortunately, positive changes in leadership can also produce immediate improvements because PSOs exhibit amazing resiliency and are able to heal and regenerate themselves rapidly. Unlike product-based organizations, extremely rapid turnarounds are possible in people-based PS organizations.

Ease of Getting Things Done

SPI Research asked participants whether it was easy to get things done within their organization, meaning minimal red tape, able to quickly and easily assign qualified resources with limited bureaucracy.

Organizations that provide an infrastructure that allows people to be productive enhance both employee satisfaction and financial success.

Table 45: Ease of getting things done

Ease of getting things done	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Very hard	1.7%	1.4%	16.4%	62.8%	2.5%
2	7.7%	8.4%	17.2%	65.4%	18.8%
3	27.9%	8.4%	13.9%	69.1%	12.3%
4	45.2%	10.9%	11.9%	71.9%	17.6%
5 – Very easy	17.6%	13.3%	11.3%	72.5%	14.4%
Total/Average	**100.0%**	**10.3%**	**12.8%**	**70.6%**	**15.4%**

Source: Service Performance Insight, February 2016

Table 45 shows the majority of firms believe it is relatively easy to get things done. As ease of getting things done improves, so do other metrics including billable utilization, revenue per employee and revenue target attainment. Interestingly, the fastest growing firms reported the greatest ease of getting things done while contracting organizations reported difficulty in getting things done.

Goals and Measurements in Alignment

Another survey question asked, "Are goals and measurements in alignment for the service organization?" Alignment speaks to a clearly articulated strategy with goals and measurements reinforcing the organization's purpose and stimulating action.

Table 46: Goals and measurement in alignment

Goal and measurements in alignment	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Not aligned	1.7%	8.6%	16.2%	66.1%	20.4%
2	7.9%	10.2%	19.1%	68.6%	12.9%
3	25.4%	8.6%	13.1%	69.0%	11.6%
4	49.2%	10.2%	11.8%	71.0%	16.6%
5 – Very aligned	15.9%	13.5%	12.1%	73.3%	18.4%
Total/Average	**100.0%**	**10.3%**	**12.8%**	**70.6%**	**15.4%**

Source: Service Performance Insight, February 2016

Alignment or lack of alignment has a significant impact on bottom-line performance. Lack of alignment emanates from a lack of clarity and conflicting or too many priorities. It is characterized by low levels of employee engagement and functional silos or factions. The highest performing service organizations exhibit clarity of purpose and alignment around a succinct set of core values and initiatives. Effective measurements and compensation reinforce those values, linking strategy to execution. As shown in Table 46 goals and measurements in alignment had a profound impact on service execution. Revenue growth, billable utilization and net profit improved with better alignment.

Employees Have Confidence in the PSO's Future

The level of employee confidence in the future of the PS organization has a profound impact on almost all key performance measurements. Firms with the highest levels of employee confidence experienced the highest levels of billable utilization and revenue and margin target attainment. In fact, almost every key performance measurement, from project margins to

Table 47: Impact – Employees Have Confidence in the PSO's Future

Confidence in the PSO's Future	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Not confident	1.7%	-1.9%	18.3%	61.7%	0.0%
2	5.2%	5.0%	21.3%	68.3%	20.0%
3	22.6%	6.9%	13.8%	68.2%	11.6%
4	49.9%	10.9%	12.1%	71.7%	15.7%
5 – Very confident	20.6%	14.5%	11.3%	71.9%	17.6%
Total/Average	**100.0%**	**10.2%**	**12.9%**	**70.6%**	**15.1%**

Source: Service Performance Insight, February 2016

attrition to annual revenue target attainment had a positive correlation with employee confidence in the future of the PS organization.

"The world loves a winner" seems to be an appropriate description for the positive results of the organizations with the highest level of employee confidence. A key "chicken or egg question" always arises around "confidence in the future" as typically the highest performing and fastest growing organizations propel employees to have confidence in the future, while low confidence is indicative of organizations in turmoil or going through massive change as they reposition themselves to take better advantage of the future.

Effective Employee Communication

Respondents were asked to rate "our organization effectively communicates with employees". Independents reported better communication than ESOs. The level of effective communication declined directly in proportion to the size of the organization. In other words, the smallest organizations exhibited the best communication while the largest showed the worst.

Table 48: Impact – Effective communication with employees

Effective Communication	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Poor communication	1.9%	5.8%	22.7%	62.5%	35.0%
2	9.4%	8.2%	17.3%	68.8%	11.7%
3	27.0%	8.2%	13.6%	70.4%	13.7%
4	46.3%	10.3%	11.6%	70.7%	16.6%
5 – Great communication	15.5%	15.2%	11.8%	72.5%	17.3%
Total/Average	**100.0%**	**10.2%**	**12.9%**	**70.6%**	**15.8%**

Source: Service Performance Insight, February 2016

Talk may be cheap but without bidirectional communication, employees quickly become disenfranchised. Creating an effective communication plan should make the short list for any improvement plan.

Organization Embraces Change, is Nimble and Flexible

Change is a way of life for 21st century professional service organizations. One of the primary reasons why more and more companies out-task IT, accounting, law, strategy and marketing to specialized PS organizations is that the

Table 49: Impact – Organization Embraces Change, is Nimble and Flexible

Organization Embraces Change	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Does not embrace	2.4%	7.7%	16.5%	64.2%	9.2%
2	10.2%	6.0%	16.4%	70.5%	16.5%
3	24.4%	8.6%	13.5%	68.9%	19.4%
4	43.0%	10.8%	11.8%	70.9%	13.2%
5 – Very much embrace	19.9%	13.5%	12.0%	72.9%	16.7%
Total/Average	**100.0%**	**10.2%**	**12.8%**	**70.6%**	**15.6%**

Source: Service Performance Insight, February 2016

pace and amount of change and complexity is impossible to keep up with so they must reply on consultants and specialists.

Each leadership dimension impacts all other leadership dimensions. Nimble organizations that are able to easily adapt to change have higher levels of strategic clarity, confidence in leadership, lower levels of attrition and higher revenue growth.

Innovation Focused

Innovation is a hot topic these days as technology innovators like Apple have created new markets and destroyed leaders like Research in Motion who were not able to see and respond to a "consumer-based" future. Research into the science of innovation shows innovators are more likely to take risks and have a high tolerance for failure.

Table 50: Impact – PS Innovation Focus

Innovation Focused	Survey %	Rev. Growth	Emp. Attrition	Billable Util.	EBITDA
1 – Not innovative	3.0%	7.0%	19.6%	60.6%	14.5%
2	8.8%	4.1%	15.5%	68.8%	15.4%
3	28.7%	10.2%	13.2%	70.3%	18.9%
4	40.6%	9.7%	12.0%	70.9%	14.1%
5 – Very innovative	18.9%	14.5%	12.3%	72.7%	13.8%
Total/Average	**100.0%**	**10.2%**	**12.9%**	**70.6%**	**15.5%**

Source: Service Performance Insight, February 2016

In professional services, innovation comes from exploring and embracing new business models, processes and technologies to improve productivity and quality. To the extent thought leadership can be considered a component of innovation, PSOs excel at innovation. The benchmark results depict the importance of striving for new and innovative solutions to problems. Innovative organizations provide employees with the confidence to know the organization will be around for years to come, and they will be continually challenged and personally grow as the organization expands. Innovation focus is not organization size dependent. One of this year's Best-of-the-Best PSOs said their belief is "great ideas come from anywhere". This organization has built a culture or empowerment, embracing innovation. Any employee with a great idea, at any level, can build a business case and receive funding and support to tackle internal problems or create new solutions.

7. Client Relationships Pillar

The Client Relationships pillar focuses on the activities associated with business development and client management. Finding and retaining customers is a primary means of growing a business, and is always one of the top challenges for PS firms.

In this chapter SPI Research provides the PS Sales and Marketing Maturity Model™, along with statistics showing the benefits of sales and marketing investments. This report examines service sales roles, compensation, client mix and a host of sales and marketing effectiveness metrics. Since referrals are a primary driver of repeat business SPI Research also explores the correlation between client satisfaction and business success.

Cultivating new and repeat clients is the lifeblood of the service industry. Professional services organizations are in business to provide knowledge, expertise and guidance. Their sales and marketing organizations must define target markets and clients by understanding their key challenges. The job of service sales and marketing is to generate awareness and identify and close opportunities. Services are intangible so the job of service sales and marketing has the added difficulty of creating concrete proof of the firm's knowledge, experience and differentiation.

The effectiveness of the organization's sales and marketing efforts determines the quality and size of the pipeline; bid-to-win ratios; discounts; client satisfaction and the length of the sales cycle. Effective sales and marketing organizations continually uncover new opportunities while ensuring existing customers continue to buy and refer. Today's successful PSO, whether embedded or independent, is increasingly taking charge of its own destiny by investing in sales, marketing and service packaging.

Table 51: PS Sales and Marketing Maturity Model™

	Level 1	Level 2	Level 3	Level 4	Level 5
Client Relationships	Opportunistic. No defined solution sets or go to market plan. Focus is on new customers and reference building. Individual heroics, no consistent sales, marketing or partnering plan or methodology. Ad hoc, one-off projects.	Start to use marketing to drive leads. Multiple sales models. Start investing in sales training, CRM & sales methodology. Manual integration with PSA. Start measuring sales effectiveness & customer satisfaction. Start developing partners and partner programs. Some level of proposal reviews and pricing control.	Marketing, inside sales, solution sales with defined solution sets. CRM integrated with PSA. Deal, pricing and contract reviews. Partner plan and scorecard. Tight pricing and contract mgmt. controls. High levels of customer satisfaction.	CRM, PSA, ERP integration provides 360-degree view of client relationships. Business process, vertical and horizontal solutions. Vertical centers of excellence. Top client and partner programs. Global contract and pricing management. Key partner relationships. Strong customer reference programs.	Executive relationships and client advisory board. Thought leadership. Brand building and awareness. High customer satisfaction. Integrated sales, marketing and partnering programs. High quality references.

Source: Service Performance Insight, February 2016

Table 51 highlights the five levels of maturity in the Client Relationships pillar. As sales and service delivery processes mature, organizations move from selling anything and everything to anyone, to a more careful and selective approach to client selection; solution creation; deal capture; contract and pricing management, reference building and partnering.

Table 52: Client Relationships Pillar 5-year trend

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Bid-to-win ratio (per 10 bids)	5.21	5.19	4.96	4.92	4.95
Deal pipeline relative to qtr. bookings forecast	203%	193%	190%	199%	172%
Sales cycle (days: qualified lead to contract signing)	100	96	95	91	88
Average service discount given	N/A	N/A	N/A	7.3%	7.7%
Solution development effectiveness	3.07	3.02	2.99	3.00	3.59
Service sales effectiveness	3.25	3.20	3.24	3.14	3.57
Service marketing effectiveness	2.39	2.61	2.70	2.72	3.29
Percentage of referenceable clients	71.4%	75.4%	74.5%	73.7%	70.4%
Time & materials % of work sold	52.8%	54.7%	51.7%	58.8%	46.7%
Fixed time / fixed fee % of work sold	45.5%	42.8%	44.0%	36.3%	39.7%
Shared risk / performance-based % of work sold	1.3%	1.4%	2.8%	2.1%	6.4%
Other	0.4%	1.1%	1.5%	2.9%	7.2%

Source: Service Performance Insight, February 2016

PS Sales Maturity

As part of the PS Sales and Marketing Maturity Model™, Service Performance Insight focuses on key success criteria and processes associated with PS sales, marketing and partnering. SPI Research charts its definitions of sales maturity levels and shows how they progress as the organization enhances the knowledge and practice of solution selling resulting in superior client value (Table 53).

Table 53: PS Sales Maturity Model™

	Level 1	Level 2	Level 3	Level 4	Level 5
	Ad Hoc, Opportunistic, Heroic	**Piloted, Experimental, Pockets of Excellence**	**Deployed, Basics in Place for All Key Elements**	**Institutionalized, in the Company DNA / Fabric**	**Visionary, Agile, Innovative, Continuous Renewal and Improvement**
Client Value	Handcrafted projects, unique, highly dependent on individual team member skills.	Limited replication or codification of service solutions. Point product solutions primarily focused on rapid implementation. Starting to focus on adoption.	Clear, value-based sales and marketing messages developed for product / vertical /geographic audiences. Some level of client value and ROI measurement.	Client-centric, high value services developed and packaged. Demonstrated, measurable business value.	Partnerships exist with most strategic, forward-thinking clients to develop and enhance leading edge services. Solutions deliver clear and significant value.

	Level 1	Level 2	Level 3	Level 4	Level 5
Sales Process	Opportunistic and instinctive with ad hoc service offerings. No consistent sales methodology. Variation in pricing methods. Inconsistent proposals, quotes, contracts. Limited to no investment in sales training, methods or tools.	Dedicated solution selling teams. Repeatable process for point solutions. Implementing sales methodology, reinforced in CRM. Reusable proposal boilerplate. Informal proposal roles and self-governing proposal teams. Standard price list and discount authority. Developing standard estimating tools.	Consistent solution selling methods & tools reinforced and supported in CRM. Solution-oriented best practices. Consistent estimating and risk evaluations. Bid qualification criteria. Standard contracts and statements of work. Clear roles, responsibilities and timelines. Sales organization trained to effectively sell solutions.	Solution and value selling is a way of life with appropriate measurements and controls with fully integrated supporting systems and tools. Sophisticated selling strategies including quantified client value with improved KPIs and positive ROI.	Established thought leadership and trusted advisor at highest levels. Continual investment in improving and expanding service portfolio as a means of market expansion. Effective proposal center delivers timely, high-quality estimates, proposals, contract and risk reviews.
Partners	Ad hoc and opportunistic without clearly defined roles.	Partner plan in place, but conflicts still exist. Defined partner programs to extend market reach.	Solution sets designed with partners in mind (defined roles and deliverables for prime, hybrid, sub). Top partner program.	Co-development with partners. Partners are integral part of service packaging and rollout.	Co-opetition. Partners contribute to company's overall service innovation by providing SME feedback and insights.
Client Sat Programs	Ad hoc reference requests. No formal program. Heroic.	Client reference programs established to extend market reach.	Proof, testimonials and references to support solution client value. Consistent, ongoing satisfaction measures.	Client advisory board influences roadmap, participates in beta programs.	Strategic clients are company and service evangelists.

Source: Service Performance Insight, February 2016

Table 54 depicts PS sales maturity progression. As organizations enhance their solution selling capabilities, methods, systems and tools, overall sales effectiveness improves dramatically. These efforts pay for themselves in higher percentages of sales quota achievement; better sales forecasting accuracy; improved pricing and estimating accuracy resulting in fewer project overruns; faster sales cycles due to better deal qualification; larger deals; more PS revenue by account; larger pipelines and significantly better reference clients.

Table 54: PS Sales Maturity Progression

	Initiated Level 1	Piloted Level 2	Deployed Level 3	Institution. Level 4	Optimized Level 5
Percent in each level	**29.4%**	**24.6%**	**25.1%**	**15.0%**	**5.9%**
Service selling spend as a % of service revenue	10.0%	7.5%	10.3%	6.0%	4.6%
FTEs dedicated to service sales	7.19	9.60	8.11	9.18	2.86
Annual service sales revenue quota / person (mm)	$1.13	$1.47	$1.86	$1.95	$1.92
% of service sales people achieving annual quota	63.0%	63.9%	68.1%	72.2%	75.0%
Average quarterly sales bookings forecast variance (Forecast/Actual)	21.2%	19.3%	16.9%	14.3%	7.5%
Service pricing accuracy (proposed price to actual delivery cost)	80.5%	83.5%	82.9%	83.6%	84.2%
Sales cycle from qual. lead to contract sign. (days)	109	97	94	89	125

	Initiated Level 1	Piloted Level 2	Deployed Level 3	Institution. Level 4	Optimized Level 5
Average closed deal size (k)	$77	$111	$124	$121	$171
Average annual service revenue by account (k)	$148	$142	$157	$345	$271
Percentage of revenue from new clients	25.0%	26.3%	25.9%	29.8%	31.4%
Bid-to-win ratio (per 10 bids)	4.30	5.05	5.58	5.93	6.20
Deal pipeline relative to qtr. bookings forecast	147%	203%	187%	209%	200%
Annual days of sales training taken / sales rep.	2.17	3.54	5.11	3.95	4.30
Service sales effectiveness (1 to 5 scale)	2.76	3.04	3.02	3.18	3.91
% of "Referenceable" Clients	71.1%	67.9%	71.6%	76.5%	84.1%

Source: Service Performance Insight, PS Sales and Marketing Benchmark October 2013

PS Sales Effectiveness Metrics

Service sales effectiveness is a subjective question but typically refers to the percentage of sales people who achieve quota and the probability that the sales organization will achieve its targets. SPI Research asked respondents to rank the effectiveness of the service sales organization on a scale from 1 to 5 with 5 representing perfection (Table 55). Sales effectiveness has a profound impact on all aspects of PS but unfortunately more than 10% give sales effectiveness a failing grade of 1 or 2; 32% give sales effectiveness an "OK" score of 3; 60% give sales effectiveness high marks. These sales effectiveness scores are substantially higher than in past surveys. This year's rating of sales effectiveness scored 3.57 out of 5 (71%) which is substantially higher than last year's score of 3.14 (62.8%) but there is still room for improvement. With economic recovery, the age old schism between sales and PS delivery is not as apparent. Another significant sales effectiveness catalyst has been the changing role of PS within product-driven organizations. No longer the ugly stepchild; PS is now seen as the primary customer usage and adoption engine, fueling product expansion and incremental product and service sales.

Table 55: Impact – Service Sales Effectiveness Impact on Performance

Sales Effectiveness	Survey	Annual Revenue Growth	Bid-Win Ratio	Size of Sales Pipeline	Revenue per consultant	Revenue per employee	Backlog	EBITDA
1 - Low	1.3%	8.9%	4.57	179%	$154	$121	21.4%	12.5%
2	9.4%	6.6%	4.38	154%	185	147	40.0%	15.9%
3	32.1%	9.1%	4.75	158%	195	151	40.9%	13.0%
4	45.2%	10.8%	5.11	179%	201	160	41.2%	16.2%
5 - High	11.9%	13.6%	5.53	191%	205	172	38.7%	23.0%
Total/Avg.	**100.0%**	**10.1%**	**4.97**	**172%**	**$197**	**$157**	**40.4%**	**15.9%**

Source: Service Performance Insight, February 2016

PS Marketing Maturity

The global economy has evolved into a services economy with services like health care, technology and consulting representing the hottest areas of growth. Marketing services is an important skill, and a tough one, for businesses to develop. Without a tangible product to show and tell customers about, service marketers must be adept at pulling together all the pieces of the marketing mix to demonstrate value for their target clients. Services are inherently intangible, are consumed simultaneously at the time of their production, and cannot be stored, saved or resold once they have been used. Service offerings are unique and cannot be exactly repeated even by the same service provider. Service marketing has become a big business with a focus on establishing the services brand, generating awareness and leads while providing powerful tools and collateral to support service sales and delivery.

Relationships Are Key

In service marketing, because there is no tangible product, relationships are key – both with the services sales force and clients. Service marketers must listen to and understand the needs of customers and prospects to identify the compelling reasons they buy and what attributes they most care about to build differentiation for the firm. The role of service marketing is to identify target markets and clients and to position the firm and its solutions while supporting the sales force with lead generation and reference building activities. In many organizations, service marketing is also responsible for developing customer references, testimonials, case studies and client advisory boards.

Services Marketing versus Service Lifecycle Management

A key finding from this benchmark is most PS organizations are confusing service marketing with service lifecycle management. Service marketing is clearly an aspect of service lifecycle management but most often does not encompass the truly transformational elements of building repeatable service delivery methods and tools, which we include in the larger scope of service lifecycle management.

Table 56: PS Marketing Maturity™ Levels

	Level 1	Level 2	Level 3	Level 4	Level 5
	Ad Hoc, Opportunistic, Heroic	**Piloted, Experimental, Pockets of Excellence**	**Deployed, Basics in Place for All Key Elements**	**Institutionalized, in the Company DNA / Fabric**	**Visionary, Agile, Innovative, Continuous Renewal and Improvement**
Client Value	Handcrafted projects, unique, highly dependent on individual team member skills.	Limited replication or codification of service solutions. Point product solutions primarily focused on rapid implementation.	Clear, value-based sales and marketing messages for product, vertical, geographic audiences. Some level of client value and ROI measurement.	Client-centric, high value services developed and packaged. Demonstrated, measurable business value.	Partnerships exist with most strategic, forward-thinking clients to develop and enhance leading edge services.

	Level 1	Level 2	Level 3	Level 4	Level 5
Marketing	Tactical. Limited to no investment in service marketing.	Campaign-driven, focused initiatives. Service marketing includes collateral, web and in-person seminars, and other promotions with voice of the customer for specific service offers.	Programmatic and comprehensive. Service marketing - target-market and segment focus to establish differentiation.	Strategic and global, service portfolio reflects and supports brand and industries. Service portfolio management and strategic marketing efforts aligned.	Brand, thought leadership, and innovation are established and supported through all marketing activities. High brand value.
Team Definition and Composition	None. Lack of service marketing organizational definition.	Organizational structure includes borrowed or rotational roles to support service marketing efforts.	Permanent service marketing roles defined, staffed and funded.	Effective service marketing leadership and management.	Service marketing organization is strategic and continually impacts company's success.
Marketing Budget Plan / Business Plan	No budgeting for service marketing. Business planning does not incorporate service marketing. Ad hoc, one off, impact not measurable.	Budgeting includes service marketing costs and projected results. Business planning capabilities are based on individuals' experiences.	Budgeting process fully incorporates service marketing investments, revenue, profit planning. Mature business planning capabilities.	Service marketing and portfolio planning is a strategic component of annual budgeting process.	Decisions to fund service marketing are based on complex, reliable business modeling levers as part of budget plan. Service marketing business plan justification is mature - comprehensive, fact-based, insightful.

Source: Service Performance Insight, February 2016

SPI Research recommends organizations start with service marketing – creating sales tools, service descriptions and value-based presentations. All of these activities will add value to the organization and will start to build brand-awareness and generate leads. After the organization gains success and traction with service marketing it will be in a better position to tackle true service lifecycle management, which not only involves sales and marketing but also extends to product management and service execution with repeatable tools, methods and systems.

Service Marketing Effectiveness

Having a service marketing focus is not enough. Marketing must develop effective thought leadership, marketing campaigns, sales tools and sales enablement to increase the firm's brand awareness, showcase thought leadership and bring in qualified leads. The most successful PS marketing efforts require a strategic focus to ensure they augment and enhance the firm's strategy. Marketing should be charged with bringing the firm's vision and strategy to light through effective positioning. Without a seat at the executive table, marketing will be relegated to tactical lead generation activities. Effective marketing requires dedicated, skilled personnel along with sustained funding.

SPI Research asked how effective service marketing was on a scale of 1 to 5, with 5 representing excellent. Marketing effectiveness has consistently been given an even worse score than sales effectiveness. This year marketing effectiveness improved significantly from an abysmal rating of 2.72 (54%) last year to a somewhat more respectable rating of 3.29 (65%) this year. More than 20% of organizations give marketing effectiveness a failing grade of 1 or 2. For the 43.7% of firms who gave their marketing efforts a strong score of 4 or 5, marketing has a significant positive impact on most client relationship metrics. Organizations with high service marketing effectiveness showed higher revenue growth, shorter sales cycles, a higher percentage of revenue from new clients, more reference clients and a lower level of discounting. Marketing is certainly worth the expense if it is well-staffed, fully funded and positioned strategically.

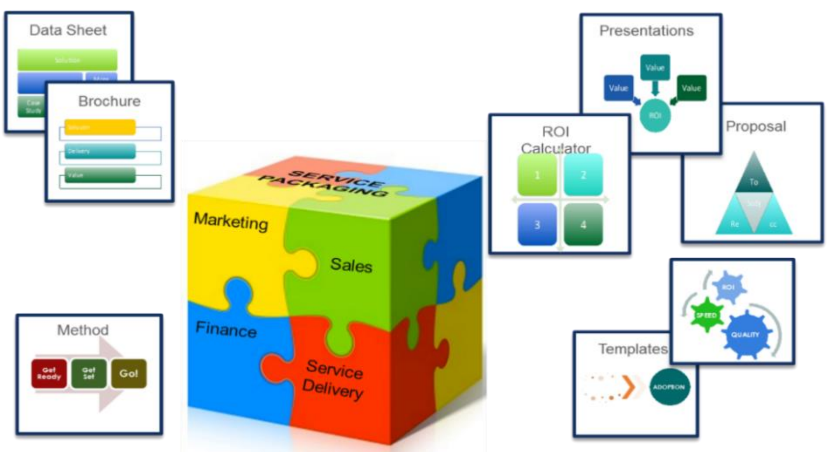
Table 57: Impact – Marketing Effectiveness Impact on Performance

Marketing Effectiveness	Survey	Revenue Growth	Length of Sales Cycle (days)	New Client Revenue	Reference Clients	Discounts
1 - Low	2.7%	9.6%	107.1	28.9%	65.4%	10.5%
2	18.2%	10.1%	95.1	32.7%	68.1%	9.3%
3	35.3%	9.6%	89.7	25.4%	69.8%	6.9%
4	34.5%	9.5%	83.7	26.4%	71.3%	7.0%
5 - High	9.2%	15.1%	79.9	28.2%	75.0%	9.0%
Total/Average	**100.0%**	**10.1%**	**88.2**	**27.4%**	**70.4%**	**7.7%**

Source: Service Performance Insight, February 2016

Service Packaging

Most professional service organizations have a service delivery methodology or blueprint. Many already have some type of service packaging initiative. Typically, when PSOs define service products they limit the scope and therefore the impact of a comprehensive service product portfolio.



Service packaging or productizing is: ***"The process of delineating, building, deploying and improving a clearly defined, tested, packaged service product to achieve operational improvements in support of an organization's strategic objectives"***

Simply defined, "productization" means creating a tangible product based on the services provided with the following core attributes:

- ∆ Defined service offering with supporting marketing materials detailing client value and benefits;
- ∆ Comprehensive sales playbook with supporting sales collateral and materials;
- ∆ Clearly defined and bounded service delivery scope, assumptions, processes, tasks, roles, staffing requirements, duration, pricing structure and outcomes;

- Δ Standardized delivery methods, templates and tools;
- Δ Embedded quality controls and project governance; and
- Δ Enforced feedback and continuous improvement.

Productized services can be stand-alone, “fast start” offerings, or they can be components of an overall service portfolio. An organization can offer productized services in one or hundreds of locations. Regardless of its reach, the service must possess the core attributes that make the training, sales and delivery processes clear, consistent and repeatable.

Moreover, a productized service demonstrates the PSO has a consistent knowledge base and unique intellectual property. This approach shows the PSO has the skills to deliver the service within a pre-defined time and cost. Without productizing, professional services are less tangible and the benefits harder to define.

Service Performance Insight believes that systematic development of service packages is becoming increasingly important for companies seeking market differentiation and improved competitiveness. Service packaging is more successful when an organization uses a framework to choreograph roles and responsibilities and define clear outcomes by phase. This approach leverages client knowledge from existing project plans. The speed and quality of service packaging improve with experience.

The five phases of SPI Research’s SLM3™ service packaging methodology are shown below. Each step outlines key decision points and deliverables that break the service packaging effort into its measurable and actionable components:

1. ***Innovate*** – Identify service packaging candidates; conduct research; analyze the market; fund the effort.
2. ***Define*** – Plan the overall effort; define requirements and content; design service packaging methods, tools, and processes.
3. ***Develop*** – Build service products based on best practices, consistent methodology, and tools; test assumptions.
4. ***Launch*** – Conduct beta test; assemble sales, marketing, and delivery documents; train sales and service professionals; execute sales and marketing campaigns; deliver with quality.
5. ***Optimize*** – Develop measurements and rewards; garner sales, PS organization, and client feedback; identify areas for improvement. Propose significant changes and add-on services back through the “Innovate” stage.

Table 58 presents the benefits organizations will derive by following a robust methodology such as SLM3™.

Table 58: Service Packaging Benefits

Phase	Benefits
Innovate	• Easier to sell and position complete service portfolio • Clients understand business value – shortened sales cycle • Faster, more iterative projects produce superior client business value • Able to clobber the competition
Define	• Well documented and understood service portfolio • Faster time to value, more projects delivered on-time, on-budget • Clear policies, roles, blueprints, templates and tools facilitate new-hire ramping • Reuse, consistency and quality are the norm
Develop	• Consistent global service portfolio • Repeatable blueprints, methods, tools and IP • Lower project delivery costs, higher utilization, better margins
Launch	• Clear Sales and Marketing plan improves Sales and Marketing effectiveness • Better Bid-to-Win Ratio • Larger pipelines • Satisfied, reference clients
Optimize	• More extension and upgrade opportunities for add-on revenue • Higher client retention and repurchase • Improved visibility to future client needs

Source: Service Performance Insight, February 2016

Solution Development Effectiveness

Solution development effectiveness requires consistent PS and Sales executive funding and support. Ad hoc teams of benched consultants cannot be effective in developing a compelling and meaningful solution development strategy and program. Based on the Service Lifecycle Management Maturity Model™ benchmark, very few organizations are effective at service productization. Creating an effective and efficient solution development process is, in itself, a difficult undertaking. Most firms are struggling to do this because solution development crosses over traditional functional boundaries and requires both collaboration and change. Getting all of the constituent groups - professional services, sales, marketing, product management and channel partners - on the same page to create compelling solutions for the targeted markets is a daunting task.

Solution development requires significant leadership, organizational commitment and change management. Service Performance Insight believes that the following are critical success factors for instantiating and sustaining a successful solution development program:

- Δ Articulated and understood services strategy;
- Δ Service productization program vision;
- Δ Active executive sponsorship;
- Δ Market-driven focus;

- Global company adoption of program;
- Resource commitment;
- Cross-functional participation; and
- Common sales and delivery method, tools, and templates.

Service Performance Insight's recommended SLM3™ organizational structure, foundation, and methodology are architected to enable the committed organization to be successful.

SPI Research asked how effective solution development was on a scale of 1 to 5, with 5 representing excellent. Solution Development effectiveness has consistently been given a lower score than sales effectiveness but higher than marketing effectiveness. This year solution development effectiveness (3.59 or 72%) surpassed sales effectiveness (3.57 or 71%) for the first time. The highest solution development scores were posted by SaaS organizations (3.83 or 77%) who rely on packaged solutions to help them sell and drive customer adoption (Table 59). For the 58.5% of firms who gave their solution development efforts a passing score of 4 or 5, solution development had a significant positive impact on most client relationship metrics. Organizations with high solution development effectiveness showed higher revenue growth, better bid-win ratios and significantly higher revenues per consultant and employee. Solution development should be a strategic priority for all PS organizations.

Table 59: Impact – Solution Development Effectiveness Impact on Performance

Sales Effectiveness	Survey	Annual Revenue Growth	Bid-Win Ratio	Size of Sales Pipeline	Revenue per consultant	Revenue per employee	Backlog	EBITDA
1 - Low	2.5%	9.4%	3.96	192%	$144	$104	23.6%	10.1%
2	9.6%	6.9%	4.11	173%	194	149	40.9%	17.2%
3	29.4%	9.5%	4.93	164%	194	156	46.2%	13.5%
4	43.1%	10.5%	4.87	175%	198	160	38.5%	15.4%
5 - High	15.4%	12.6%	5.83	171%	213	160	36.4%	20.3%
Total/Avg.	**100.0%**	**10.1%**	**4.97**	**172%**	**$197**	**$157**	**40.4%**	**15.9%**

Source: Service Performance Insight, February 2016

Survey Results

The following section reviews and analyzes 2016 PS Maturity™ benchmark results from 549 participating Professional services organizations. In this section SPI Research analyzes 35 Client Relationship key performance measurements that are critical for measuring sales, marketing and solution development effectiveness.

The size of the deal pipeline is an important predictor of future revenue. ***The size of the deal pipeline has declined precipitously from last year (172% this year compared to 199% last year). This significant decline is a powerful predictor of future declines in PS revenues. Caution must be paid!***

Table 60 shows the size of the deal pipeline compared to the quarterly bookings forecast is stronger for embedded ESOs however both ESO and PSO pipelines have declined dramatically from last year. ESO pipelines declined from 215% to 178% **(-37%)** while independent pipelines declined from 192% to 160% **(-32%).** By geography the deal pipeline is strongest for APac followed by the Americas with EMEA last. These figures are down significantly from last year's results. The deal pipeline in APAC has declined from 213% to 184%; Americas from 196% to 178% and EMEA from 204% to 153%. This metric portends stormy seas ahead across the PS industry. Firms should take heed to reexamine 2016 revenue forecasts.

Just as we have seen the size of the deal pipeline decline year over year, so too has the percentage of revenue from new clients. Across the benchmark, new client revenue declined from 29% last year to 27.5% (-1.5%) this year. Both of these declines are significant and portend trouble ahead. PS organizations should carefully review leading sales indicators before they make significant investments in expansion as the PS market may be softening, particularly in EMEA. Revenue from new clients declined from 29.7% to 29.5% in the Americas; 27% to 22.9% in EMEA and 27.8% to 25.5% in APAC.

Table 60: Client Relationships KPIs by Organization Type and Geographic Region

Key Performance Indicator (KPI)	2015	ESO	PSO	Americas	EMEA	APac
Revenue from new clients	27.5%	34.9%	23.9%	29.5%	22.9%	25.5%
Bid-to-win ratio (per 10 bids)	4.95	4.98	4.94	5.08	4.49	5.43
Deal pipeline relative to qtr. bookings forecast	172%	196%	160%	178%	153%	184%
Sales cycle (days: qualified lead to contract signing)	88	98	83	90	83	86
Average service discount given clients	7.7%	10.8%	6.2%	8.2%	6.6%	6.8%
Percentage of referenceable clients	70.4%	65.4%	72.8%	71.2%	68.8%	69.6%
Service sales effectiveness	3.59	3.63	3.57	3.60	3.50	3.81
Service marketing effectiveness	3.57	3.56	3.57	3.60	3.49	3.53
Solution development effectiveness	3.29	3.20	3.34	3.29	3.26	3.44

Source: Service Performance Insight, February 2016

Another indicator of softening demand is the level of discounting. Average discounts edged up from 7.3% last year to 7.7% this year. Embedded PSOs reported significantly higher levels of discounting, longer sales cycles and fewer client references than independents. The highest average discounts were reported by embedded SaaS and Software PSOs at 11.8%. They also gave poorer ratings for sales, marketing and solution development effectiveness. Larger embedded PSOs should invest in their own solution architects and service marketing and packaging. These efforts pay dividends in reduced discounting and higher levels of client referenceability and satisfaction.

By organization size, the deal pipeline is strongest for the largest organizations and weakest for the smallest. The smallest firms tend to live deal to deal with limited future visibility. Interestingly, client referenceability declines with organization size as larger PSOs cannot afford to provide a personalized touch and approach to each client. For small firms, making every client a success is a business imperative. The largest organizations reported the best bid-win ratios, strongest pipelines and highest effectiveness scores but they also produced the fewest reference clients and gave the highest discounts.

Of particular note is the decline in the size of the sales pipeline. It has dropped precipitously, in most cases by more than 20%. This should signal caution and scrutiny. Firms of all sizes are well-advised to carefully scrub their sales pipeline before they make significant growth investments.

Table 61: Client Relationships KPIs by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Revenue from new clients	27.7%	28.7%	29.0%	26.0%	23.9%	28.4%
Bid-to-win ratio (per 10 bids)	4.96	4.89	5.14	4.63	4.74	**5.31**
Deal pipeline relative to qtr. bookings forecast	143%	159%	171%	175%	184%	**196%**
Sales cycle (days: qualified lead to contract signing)	73	88	91	96	86	83
Average service discount given clients	6.3%	7.5%	6.9%	7.5%	8.8%	**9.8%**
Percentage of referenceable clients	73.0%	70.2%	73.6%	68.5%	72.0%	**64.9%**
Service sales effectiveness	3.58	3.51	3.49	3.66	3.52	3.86
Service marketing effectiveness	3.47	3.50	3.45	3.64	3.65	3.77
Solution development effectiveness	3.06	3.15	3.24	3.39	3.27	3.60

Source: Service Performance Insight, February 2016

By vertical, embedded software PSOs reported the strongest deal pipeline while architects and engineers reported the weakest. Architects reported the highest levels of client referenceability, software PSOs reported the poorest. Service discounting is prevalent in embedded PSOs, particularly if they work on a time and materials basis with known rate cards. SaaS PSOs reported the best sales, marketing and solution development effectiveness; hardware PSOs reported the worst.

Tables 62 and 63 show key client relationships metrics by vertical market. Best performing verticals are highlighted in green, worst are highlighted in red. Accountancies had the worst scores.

Table 62: Client Relationships KPIs by Vertical Service Market

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Network
Revenue from new clients	25.9%	31.8%	23.2%	21.7%	**44.2%**	19.7%	37.9%
Bid-to-win ratio (per 10 bids)	4.79	5.04	5.39	4.62	**5.18**	4.32	4.93
Deal pipeline relative to qtr. bookings forecast	172%	**212%**	151%	**142%**	190%	167%	157%
Sales cycle (days: qualified lead to contract signing)	88	104	78	93	93	84	**75**
Average service discount given clients	7.6%	**11.8%**	4.9%	**4.0%**	**11.8%**	8.3%	8.6%

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Network
Percentage of referenceable clients	72.5%	64.1%	74.2%	74.5%	65.9%	68.6%	64.6%
Service sales effectiveness	3.56	3.63	3.68	3.52	3.83	3.64	3.27
Service marketing effectiveness	3.56	3.49	3.55	3.48	3.70	3.64	3.29
Solution development effectiveness	3.33	2.98	3.29	3.31	3.53	3.43	3.20

Source: Service Performance Insight, February 2016

Table 63: Client Relationships KPIs by Vertical Service Market

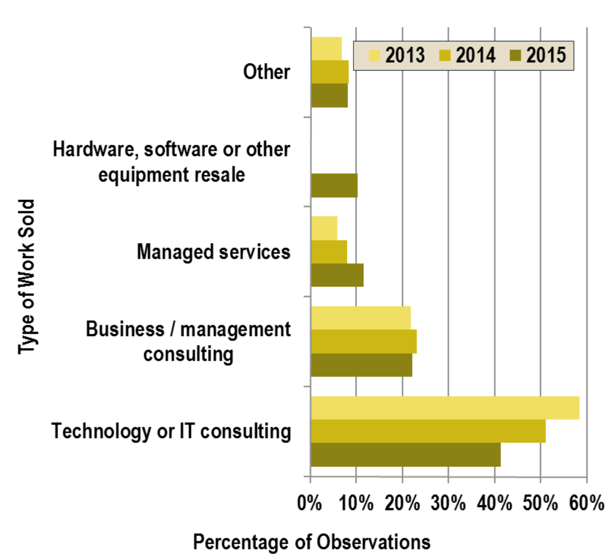
Key Performance Indicator (KPI)	R&D	VAR	Acct.	Advert./ Marcom	Staffing	Other PS
Revenue from new clients	25.4%	39.2%	18.3%	19.0%	17.6%	21.2%
Bid-to-win ratio (per 10 bids)	4.75	4.73	5.29	4.55	5.88	5.46
Deal pipeline relative to qtr. bookings forecast	139%	196%	133%	164%	167%	163%
Sales cycle (days: qualified lead to contract signing)	64	115	50	67	58	103
Average service discount given clients	7.1%	7.1%	4.0%	7.0%	2.8%	3.1%
Percentage of referenceable clients	67.9%	69.3%	70.8%	76.8%	65.6%	71.3%
Service sales effectiveness	3.64	3.50	3.23	3.67	3.56	3.64
Service marketing effectiveness	3.71	3.85	3.54	3.83	3.78	3.73
Solution development effectiveness	3.71	3.29	3.46	3.25	3.33	3.45

Source: Service Performance Insight, February 2016

Type of Work Sold

IT consultancies dominated this year's benchmark with 35% of the participants, favoring IT consulting as the most prevalent type of work sold (Figure 39). Both embedded and independent PSOs are delivering more business and management consulting – encroaching on the pure play management consultancies. Today many IT consultancies have equal numbers of business analysts and technical consultants – they focus on business process improvement and streamlining cumbersome business processes. Increasingly technology-focused PS providers are adding industry and domain experts to ensure

Figure 39: Type of Work Sold



Source: Service Performance Insight, February 2016

horizontal technologies can be adopted and modified to reflect the unique needs of vertical industry clients.

Underlying technologies no longer require customization and integration; they have become easier to install and integrate with standard data loaders and connectors. Ensuring user adoption has become the primary concern of embedded PSOs. This means today's consultants need to understand business processes and what business users want and need to drive user adoption. Technology consulting now includes workflow mapping, business process modelling, rollout plans and administrator and end-user training with a focus on user adoption.

This year we saw a spike in managed services revenue, growing from 8.0% to 11.6% of all work sold. Embedded SaaS organizations are responsible for this spike as they saw their managed service revenues grow from 2.4% last year to 21.9% this year. Most SaaS embedded PSOs have started adding managed service offers as they out task all elements of running their applications for their clients. For many independents, the promise of managed services as a source of annuity revenue has not been fully realized because technology vendors have grabbed these opportunities from independents by offering better economies of scale. In this benchmark, staff augmentation has declined to only 6.5% of work sold. Staffing providers have been squeezed by vendor service agreements and have moved upstream to offer business and IT consulting. Pure play staffing and managed services are drifting toward commoditization – with too many competitors chasing too few opportunities. The margins in this low end of the market have become razor thin as large buyers demand vendor service agreements with low rates for common skills. Mergers and acquisitions in both staff augmentation and managed services are common as suppliers seek to improve their own economies of scale.

Table 64 depicts the types of work sold by embedded and independent service providers and by major geographic regions. This year embedded PSOs delivered 15.2% of their work as management consulting, showing the shift towards business process consulting, away from technical consulting. They also grew their managed service revenues from 5.5% last year to 15.1% this year.

Table 64: Type of Work Sold by Organization Type and Geographic Region

Type of Work Sold	Survey	ESO	PSO	Americas	EMEA	APac
Business/Management Consulting	22.2%	15.2%	25.5%	20.9%	24.0%	27.7%
Technology or IT Consulting	41.3%	45.7%	39.2%	41.3%	42.0%	39.7%
Managed Services	11.6%	15.1%	10.0%	12.6%	9.3%	10.8%
Staff Augmentation	6.5%	4.8%	7.3%	7.3%	4.7%	4.7%
Hardware, software, equipment	10.3%	7.0%	11.8%	9.3%	13.8%	6.9%
Other	8.1%	12.2%	6.2%	8.7%	6.2%	10.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

New Client Penetration

Table 65 shows the powerful effect of adding new clients. 52% of the benchmark participants produced less than 30% of their revenue from new clients which may inhibit future growth and profitability. SPI Research believes at least 30% of annual revenue should come from new clients for PS organizations to remain vibrant and viable. Throughout this study we have demonstrated the strong correlation between growth and profitability. The bottom-line is PS organizations must constantly expand their markets, clients and solution repertoire to stay in touch with market changes and ahead of the competition. New clients allow PSOs to reap the benefits of previous client experiences and knowledge without the baggage of long-term relationships in which both provider and client may have become complacent. New clients provide the opportunity to expand knowledge, skills and services.

Table 65: Impact – Percentage of Business from New Clients

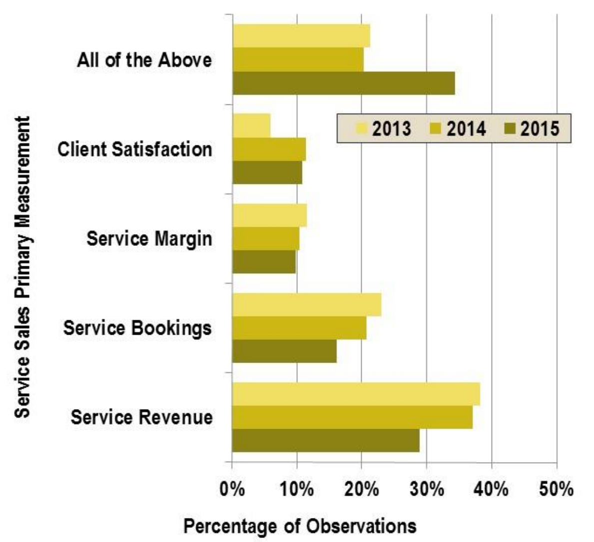
% of revenue from new clients	Survey	Annual Revenue Growth	Employee Growth	Size of Pipeline	Billable Utilization	Project Margin	EBITDA
Under 10%	23.9%	6.9%	5.7%	149%	71.6%	31.1%	14.7%
10% - 20%	11.3%	5.0%	4.1%	164%	71.2%	33.1%	15.4%
20% - 30%	16.7%	9.5%	8.3%	181%	69.4%	36.0%	15.1%
30% - 40%	25.0%	11.5%	7.9%	180%	70.2%	35.1%	15.3%
40% - 50%	12.0%	15.0%	11.4%	199%	70.2%	33.6%	20.7%
Over 50%	11.1%	14.9%	11.6%	175%	70.9%	35.8%	13.6%
Total/Average	**100.0%**	**10.1%**	**7.8%**	**173%**	**70.6%**	**33.9%**	**15.6%**

Source: Service Performance Insight, February 2016

Primary Service Sales Measurement

SPI Research asked about the primary measurement for service sales people. Surprisingly, the leading answer was "All of the above" meaning 34.3% of service reps are measured on service revenue, service bookings, margin and client satisfaction (Figure 40). The second-most prevalent sales measurement is "service revenue" with 28.9% followed by "service bookings" at 16.1%. 10.9% of the organizations measure their service sales people on client satisfaction; 9.8%% on margin.

Figure 40: Primary Service Sales Measurement



Source: Service Performance Insight, February 2016

SPI Research frequently receives questions regarding how the service sales force should be measured. Table 66 provides a fascinating view of the cause and effect of service sales measurements. This is the first year "all of above" has been the primary sales measurement. With so many variables in this type of compensation, accurate measurements are difficult and time consuming but appear to be worth the effort as it produces superior bid-win ratios, reference clients, utilization, on-time project delivery and most importantly, net profit. A big drawback to incenting sales with too many metrics is that they become hard to measure and enforce. Although service revenue measurements are common (28.9%), they appear to produce mediocre performance particularly in net margin.

Table 66: Impact – The Effect of Sales Measurements on Performance

Primary Service Sales Measurement	Survey	Annual Revenue Growth	Bid-Win Ratio	Size of Pipeline	Refer. Clients	Util.	On-time project delivery	Rev. per billable consult.	EBITDA
Service Revenue	28.9%	10.7%	4.81	176%	69.5%	69.9%	76.8%	$197	13.4%
Service Bookings	16.1%	10.9%	4.90	198%	69.1%	68.7%	74.0%	213	15.2%
Service Margin	9.8%	9.2%	4.59	172%	68.6%	69.4%	71.5%	219	15.8%
Client Satisfaction	10.9%	8.7%	5.03	154%	71.3%	70.4%	74.4%	166	16.7%
All of the Above	34.3%	10.5%	5.16	160%	72.0%	72.2%	78.6%	197	17.9%
Total / Average	**100.0%**	**10.3%**	**4.95**	**171%**	**70.4%**	**70.5%**	**76.2%**	**$198**	**15.8%**

Source: Service Performance Insight, February 2016

This year service bookings measurements produced the most revenue growth and largest pipelines. Service margin targets are harder to measure and calculate plus they can only be measured after the project has been completed. Many firms are switching to "Service Margin" as a primary metric but they use "average cost" figures to calculate deal margin to simplify sales compensation. Interestingly, service margin as the primary sales measurement produced the poorest results in bid-win ratios, reference clients and on-time project delivery.

Surprisingly, the worst service sales measurement is "client satisfaction" reported by 10.9% of the benchmark respondents. With client satisfaction as the primary measurement, service sales people have a vested interest in the quality and timeliness of project delivery. In this year's survey, for sales teams based on client satisfaction, their firms delivered mediocre on-time project delivery and the poorest revenue and pipeline growth and lowest consultant revenue yield. The pursuit of client satisfaction at any cost may incent the sales force to drive service delivery "to do whatever it takes" without regard to margin or future growth.

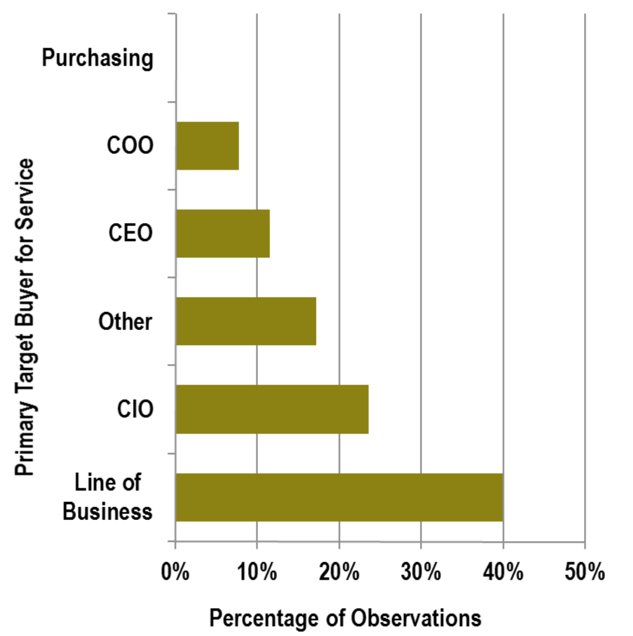
Regardless of primary sales measurement, clarity and fairness drive the best results. SPI recommends an open book approach to allow sales people to measure and improve their own performance.

Primary Service Target Buyer

SPI Research asked "who is the primary buyer for your services"? For the 549 benchmark respondents, the primary target buyer is most likely to be a line of business executive (40%); CIO (23.6%); other

(17.3%); CEO (11.5%); COO (7.8%); no firms primarily sell to purchasing (Figure 41). Compared to the 2014 survey, more firms identified the CEO as the target buyer and fewer firms identified the CIO as the target buyer. It is getting tougher and tougher to sell to CIOs as they are seeking to reduce the number of vendor relationships while squeezing vendor profits.

Figure 41: Primary Service Target Buyer



Source: Service Performance Insight, February 2016

Table 67 correlates primary buyer type with other key metrics. Without knowing other aspects, it is hard to come up with definitive best practices but this analysis does reveal some interesting comparisons. Although "calling at the top" is a favored strategy, it appears firms who primarily sell to the CEO have the worst bid-win ratios, smallest sales pipelines and lowest revenue per consultant. It is hard to get to the CEO and if the CEO is really the decision-maker the project is either very strategic or the organization is very small. This year selling to the CIO produced advantages in terms of the highest revenue growth, largest sales pipelines, highest revenue per consultant and best project margins. Best performing firms report following CIOs from company to company, becoming a preferred supplier as top CIOs change employers. Firms that sell to the Chief Information Officer reported the highest levels of growth and largest pipeline, indicating a resurgence in IT spending.

Table 67: Impact – The Effect of Primary Buyer Type on Performance

Primary Target Buyer	Survey	Annual Rev. Growth	Bid-to-Win Ratio	Size of Pipeline	Reference Clients	Util.	On-time project delivery	Rev. per billable consultant	Project Margin
CEO	11.5%	10.6%	4.80	158%	73.7%	70.3%	79.4%	$170	33.8%
COO	7.8%	8.2%	4.99	187%	68.9%	72.1%	71.4%	205	32.9%
CIO	23.6%	11.8%	4.94	189%	71.8%	71.6%	75.7%	227	35.8%
Line of Business	39.9%	10.2%	5.03	168%	69.4%	70.4%	77.0%	190	33.8%
Purchasing	0.0%	NA	NA	NA	NA	NA	NA	NA	NA
Other	17.3%	8.8%	4.86	159%	69.3%	68.8%	74.7%	193	32.2%
Total/Avg.	**100.0%**	**10.3%**	**4.95**	**172%**	**70.4%**	**70.6%**	**76.1%**	**$198**	**33.9%**

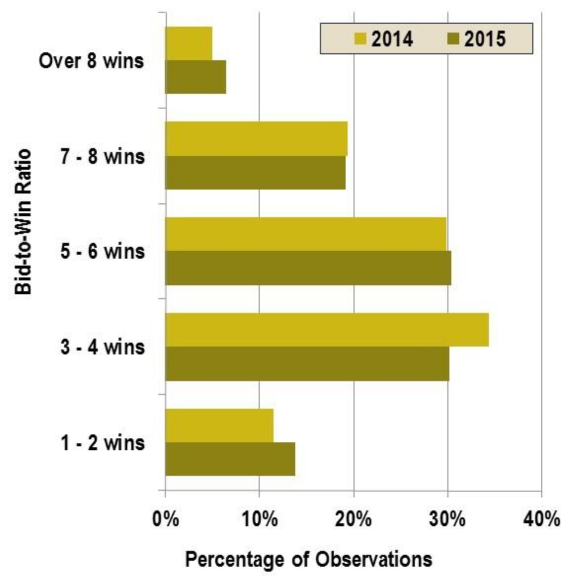
Source: Service Performance Insight, February 2016

The majority of firms sell to a line of business executive. Selling to this buyer type has become a necessity as buying power for many modern, mobile, business applications has shifted to line of business buyers, away from IT. To effectively sell to line of business buyers, solution sellers must truly understand the business and the key metrics and processes that drive it.

Bid-to-Win Ratio

Another critical KPI in the Client Relationships pillar is the Bid-to-win ratio, which measures the number of wins per ten bids. The Bid-to-win ratio is a powerful metric for judging sales and marketing effectiveness, but must be analyzed in conjunction with the size of the pipeline; the length of the sales cycle and the cost to pursue the bid. If the bid-to-win ratio is too high, it may be an indication that the organization is not aggressive enough in targeting new clients and new services. If it is extremely low, it is an indication the firm is competing in a commoditized market or it is not well-positioned or is not doing a good job of qualifying deals. The best deals are those that do not require a bid (sole source) because the client has done business with the firm before and knows they will do a good job on the current project. Bid-to-win ratios were very similar year to year. 13.8% reported bid-to-win ratios of 1 to 2; 30.2% reported 3 to 4; 30.4% reported a ratio of 5 to 6 out of 10; 19.1% reported 7 to 8 and 6.4% over 8 (Figure 42).

Figure 42: Bid-to-win Ratio



Source: Service Performance Insight, February 2016

Table 68: Impact – The effect of improving the Bid-to-Win Ratio

Bid-to-win Ratio	Survey %	Pipeline	Revenue Growth	Billable Utilization	On-time Delivery	Revenue / Employee (k)
1 - 2 wins	13.8%	149%	5.6%	66.3%	72.3%	$132
3 - 4 wins	30.2%	168%	8.8%	69.0%	72.6%	144
5 - 6 wins	30.4%	170%	11.0%	71.4%	77.2%	158
7 - 8 wins	19.1%	197%	13.7%	72.1%	78.9%	182
Over 8 wins	6.4%	173%	12.3%	76.3%	83.9%	202
Total / Average	**100.0%**	**172%**	**10.2%**	**70.4%**	**75.9%**	**$157**

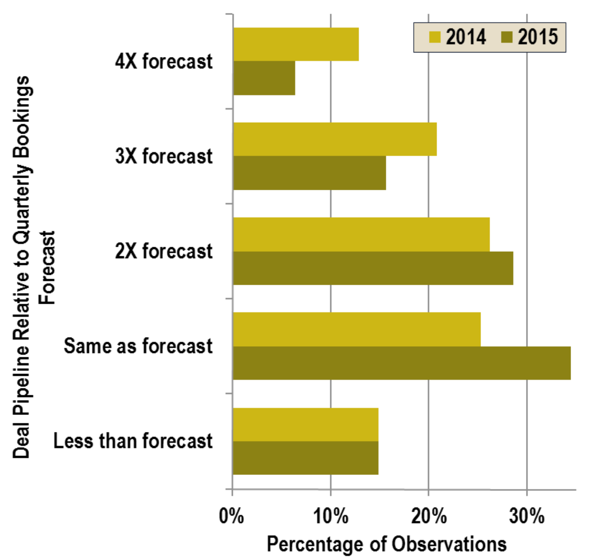
Source: Service Performance Insight, February 2016

Table 68 depicts the positive impact of improving bid to win ratios through better deal qualification; reference selling; improved positioning to target the right markets and clients; and improving overall quality and client satisfaction resulting in more and better referrals.

Deal Pipeline Relative to Quarterly Bookings Forecast

The deal pipeline as compared to the quarterly bookings forecast is an important leading indicator that provides insight into sales effectiveness and future revenue. The size of the deal pipeline shows direct correlation to all major growth indicators – revenue growth; revenue per billable employee; percentage achievement of the annual revenue plan and billable utilization. ***A sure sign of trouble ahead is that 50% of benchmark participants reported their deal pipeline was the same or less than forecast***! Only 22.2% (down from 37.7% last year) reported their deal pipelines were three times or larger than their forecasts which leads to strong growth and profitability (Figure 43). SPI Research recommends firms pay very careful attention to this metric and take corrective action if their pipelines dip below 200% of forecast.

Figure 43: Deal Pipeline Relative to Qtr. Bookings Forecast

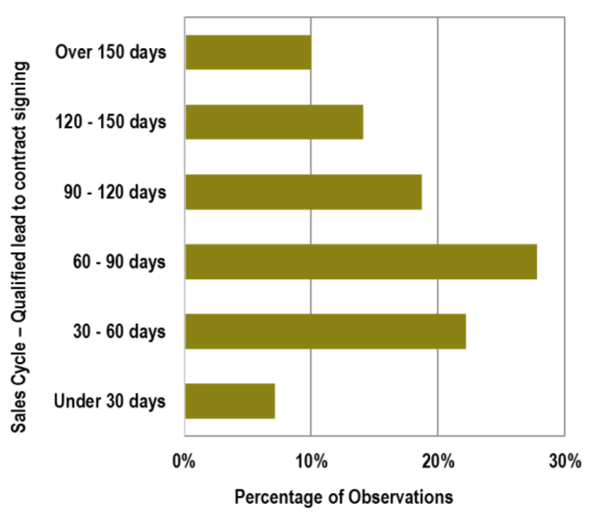


Source: Service Performance Insight, February 2016

Length of the Sales Cycle

The length of the sales cycle measures the time it takes to move a qualified lead to a signed contract. Sales cycle length is a leading indicator of demand as sales cycles elongate when the economy is contracting and shrink when the economy is expanding. The overall average length of the sales cycle dropped this year from 95 days to 91 days. Embedded PSOs reported much longer sales cycles (100 days) than independents (87 days). The length of the sales cycle increases proportionately with the size of the organization as larger organizations have more players involved and focus on larger, more complex deals.

Figure 44: Length of Sales Cycle



Source: Service Performance Insight, February 2016

Organizations from EMEA showed the most improvement in reducing the length of the sales cycle from 113 days in 2012 to 89 in 2013, 87 in 2014 and 83 in 2015. This is one of the few EMEA bright spots. Organizations with the shortest sales cycles reported the worst metrics across the board. The optimum sales cycle appears to be 90 to 120 days, producing the largest pipeline and best bid to win ratio. Longer sales cycles correlate with larger projects. Firms should strive for overall portfolio balance with a mix of easy to close fixed price assessments combined with longer and more complex custom projects.

Table 69: Impact – Length of Sales Cycle on Performance

Length of Sales Cycle	Survey %	Revenue Growth	Pipeline	Bid-to-Win Ratio	Revenue from New Clients	Project Duration (man-months)	Project Margin
Under 30 days	7.1%	5.2%	118%	5.26	21.0%	23.8	30.8%
30 - 60 days	22.2%	8.3%	154%	4.77	27.9%	23.1	32.4%
60 - 90 days	27.8%	11.6%	169%	5.01	29.0%	30.8	35.5%
90 - 120 days	18.7%	11.4%	200%	5.32	28.3%	38.5	34.8%
120 - 150 days	14.1%	12.6%	181%	4.77	28.2%	40.3	35.0%
Over 150 days	10.0%	7.8%	193%	4.43	27.9%	50.4	31.4%
Total / Average	**100.0%**	**10.1%**	**172%**	**4.94**	**27.9%**	**33.3**	**33.9%**

Source: Service Performance Insight, February 2016

Service Discounting

In professional services it is more difficult to develop a pricing strategy than in product-based organizations. It is easy to do comparative shopping at a grocery store or for products on-line. In professional services, pricing is more art than science with wider variability in terms of costing, estimating, proposing and pricing. Professional services executives cannot just look at expected project cost, sales forecasts, or some other key performance indicator to set pricing. Supply and demand definitely come into play. The more unique the offering; the more demonstrable the return on investment; the larger the reference base; the more premium pricing is warranted.

The bid-to-win ratio is critical, but must be viewed in conjunction with project margin to determine the optimal pricing strategy. Professional services executives should not mind losing bids when they hurt margin because "bargain basement" pricing rarely results in win-win partnerships. If firms are continually asked to discount pricing it is a sure sign that something is wrong. Either they have not properly positioned the value they provide or they are moving into a commodity market. There is absolutely no way service organizations can make up in volume the amount they lose per deal because margins are too thin and there is no way to recoup hours worked at cheap rates.

As shown in Table 70, the majority of firms (76.3%) offer discounts of less than 10%. Although limiting discounting does negatively impact growth, it enhances bid-win ratios, billable utilization, on-time project delivery and client referenceability.

Table 70: Impact – The effect of discounting

Level of Discounting	Survey %	New Client Revenue	Revenue Growth	Bid to Win	Sales Pipeline	Billable Utilization	On-time projects	Project Margin
None	20.0%	22.1%	8.7%	5.11	165%	72.6%	80.5%	33.9%
Under 5%	23.1%	25.2%	8.6%	4.94	166%	71.2%	76.6%	33.6%
5% - 10%	33.2%	28.1%	10.9%	4.89	167%	69.3%	75.4%	33.1%
10% - 20%	16.5%	35.7%	13.9%	5.06	190%	71.9%	74.8%	36.8%
20% - 30%	5.0%	30.5%	8.1%	4.85	192%	66.9%	70.8%	30.5%
Over 30%	2.1%	42.3%	14.8%	3.68	209%	60.0%	55.0%	33.8%
Total / Avg.	**100.0%**	**27.9%**	**10.3%**	**4.95**	**172%**	**70.5%**	**75.9%**	**33.9%**

Source: Service Performance Insight, February 2016

Profit is the fuel that drives expansion. While not every project achieves its desired profitability goal, one or two money-losing projects can quickly undermine all net profit. Critical analysis should be undertaken to review the project and client portfolio to determine the types of clients and projects that make the most money. Quite often this analysis reveals 80% of profit is coming from only 20% of clients and conversely, the firm may make no money at all on smaller transactions or certain customers.

Professional services organizations must use both their application infrastructure, as well as pricing tools to improve financial performance. This combination can help PS executives better understand the range of pricing available to them, combined with the probability of winning bids.

When creating a large bid all costs including sales costs should be measured. Very few projects are delivered precisely on time and on budget, so change control is an important element of pricing. If a client demands pricing concessions, scope must be contained, but the client must also understand and accept the risks. Best practices in pricing include creating a dedicated proposal center to ensure all proposals are of the highest quality. Bid, estimate, pricing and contract reviews are all good investments which pay dividends by improving project margins and reducing the risk of overruns and losses.

Referenceable Clients

The percentage of reference clients is considered one of the most important KPIs in the professional services sector. ***Average "client referenceability" has steadily declined from 74.5% in 2013 to 73.8% in 2014 to a new low of 70.4% in 2015.*** Table 71 shows only 33.2% of the benchmark respondent's claim over 80% of their clients are referenceable. On the other hand, 45.2%, up from 27.7% last year, report less than 70% of their clients are referenceable. This is another very concerning metric trend. ***Embedded organizations reported only 65.4% of their clients are referenceable, down from 67% last year. Independents fared a little better with 72.8% referenceable clients this year compared to 76.8% last year. Clearly these numbers must improve to sustain PS industry growth.***

Client references have a strong correlation with service sales effectiveness; the length of the sales cycle; ease of getting things done and whether employees would recommend the PSO as a great place to work. The relationship between client and employee satisfaction is irrefutable.

Table 71: Impact – Client "Referenceability"

Score	Survey %	Revenue Growth	Bid-to-win ratio	Billable Utilization
Under 50%	13.4%	8.9%	4.19	67.7%
50% - 60%	15.7%	10.0%	4.53	67.1%
60% - 70%	16.1%	10.8%	5.02	69.3%
70% - 80%	21.6%	8.8%	4.78	71.8%
80% - 90%	17.5%	11.9%	5.24	73.2%
Over 90%	15.7%	11.5%	5.99	72.4%
Total / Avg.	**100.0%**	**10.3%**	**4.97**	**70.4%**

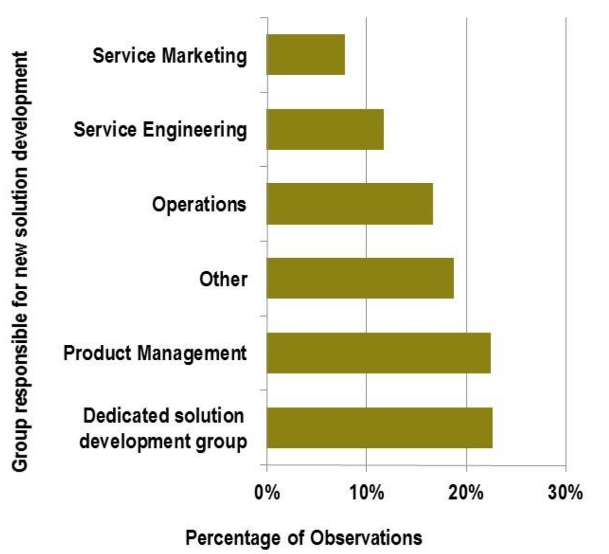
Source: Service Performance Insight, February 2016

Client references are a leading indicator of organizational success. As this percentage increases, so does the probability of high levels of growth; higher bid-to-win ratios and lower sales costs. Any maturity improvement plan must address measuring and improving client satisfaction and building references. Best practices include post-project engagement surveys; acquiring client references and testimonials as part of project close-out along with frequent and consistent project quality reviews. Executive teams should review the project dashboard at weekly meetings and immediately assign executives to troubled projects.

Primary Responsibility for New Solution Development

For the past five years SPI Research has focused intently on solution development by developing a new Service Lifecycle Management methodology, toolkit and training program. This focus has proven the impact of solution development and demonstrated how nascent the discipline of service packaging is within PS. Our research has shown the PS industry is keenly interested in moving to more repeatable service offers with the goal of making it easier to sell and deliver consistent, high quality services. Most often solution development is assigned to part-time resources that lack both the knowledge, time and funding to fully develop solutions. This benchmark shows 22.6% have created a dedicated solution development group; 22.4% rely on product management; 16.7% use service operations; and 18.8% stated "other". 11.7% rely on service engineering and only 7.9% rely on service marketing.

Figure 45: Primary Group Responsible for New Solution Development



Source: Service Performance Insight, February 2016

These percentages are similar to last year with the exception of product management which has significantly increased from 12.7% to 22.4% this year.

Pricing and Deal Structure

Every year, SPI Research has seen a shift in pricing and deal structure, as clients have become increasingly concerned about risk and cost overruns, and have pushed more accountability to the PSO through fixed fee or shared risk contracts. Until 2014 the percentage of fixed fee work steadily increased from 35.5% in 2009 to 44% in 2013. ***In 2014 we saw a resurgence in time and materials priced contracts – signaling increased demand for services. 2014 was the first time in eight years that we saw an increase in time and materials pricing from 51.7% in 2013 to 58.8% in 2014. This trend reversed in 2015 with time and materials contracts representing only 46.7% of all contracts.*** This KPI is important to watch. Time and materials based pricing puts emphasis on accurate resource management, time collection and reporting. Fixed price pricing puts an emphasis on accurate estimates, project costing and change management. Either way PSA applications are critical to support accurate time and cost capture and billing.

Table 72 compares billing models for embedded and independent PSOs. ESOs have been steadily shifting to fixed fee contracts – moving from 34% in 2009 to 46.6% in 2013. ***The trend reversed in 2014 with ESOs shifting back to time and materials contracts 56.3% of the time. Now in 2015 we see ESOs slightly favor time and materials contracts (46.7%) but have started to venture into shared risk and gain-sharing contracts.*** Independents have always preferred time and materials contracts but they too have shifted to more fixed price work, from 37% in 2009 to 42.9% in 2013. Independents decreased their reliance on fixed price contracts to 35.2% in 2014 and now in 2015 price 38.7% of their contracts as fixed price. By Geography, time and materials is the prevalent pricing structure. In this survey, only the largest organizations favored fixed fee contracts. This year the number of shared risk or performance-based contracts increased from 2.8% to 6.4% of total deals.

Table 72: Fee Structure by Organization Type and Geographic Region

Fee Structure	2014 Survey	2015 Survey	ESO	PSO	Americas	EMEA	APac
Time & Materials	58.8%	46.7%	44.7%	47.6%	47.6%	44.9%	44.6%
Fixed Time / Fixed Fee	36.3%	39.7%	41.9%	38.7%	40.0%	38.8%	40.7%
Shared Risk / Perform.-based	2.1%	6.4%	5.1%	7.0%	5.5%	8.3%	8.8%
None of the Above	2.9%	7.2%	8.2%	6.7%	6.9%	8.1%	5.9%
Total / Average	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

By vertical, architects and SaaS PSOs rely on fixed price contracts. IT consultancies favor time and materials contracts. All verticals have moved to more shared risk/performance and other types of contracts this year. As the SaaS market has become more mature a greater emphasis is being placed on customer adoption so SaaS firms focus on "time to value" with fixed price rapid implementation contracts. Net profit is not necessarily tied to pricing structure as it is possible to make good service margins with either time and materials or fixed price contracts. Accurate estimating, excellent project management, good communication and change control are the most important elements in ensuring quality services are delivered at planned margins.

Table 73: Fee Structure by Service Market Vertical

Fee Structure	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Network.
Time & Materials	57.9%	49.1%	39.8%	33.7%	37.4%	27.1%	33.4%
Fixed Time / Fixed Fee	32.4%	39.7%	40.3%	55.9%	53.4%	39.1%	45.3%
Shared Risk / Performance-based	5.9%	4.1%	9.7%	4.8%	5.2%	7.6%	8.1%
None of the Above	3.9%	7.0%	10.2%	5.6%	4.0%	26.2%	13.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

VARs rely on time and materials contracts while advertising and marketing firms depend on fixed fee contracts. Accountancies and research and development organizations favor annual retainers and intellectual property and licensing arrangements.

Table 74: Fee Structure by Service Market Vertical

Fee Structure	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Time & Materials	23.3%	73.6%	52.5%	22.2%	37.8%	46.5%
Fixed Time / Fixed Fee	47.3%	20.1%	28.7%	70.3%	24.4%	36.5%
Shared Risk / Performance-based	15.3%	4.9%	2.7%	1.3%	23.4%	7.7%
None of the Above	14.0%	1.4%	16.2%	6.3%	14.3%	9.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

Who sells services?

The survey asked respondents “Who sells professional services?” Tables in the following sections show the types of service sales representatives; their bookings targets; annual base compensation and on-target variable.

Embedded PS organizations rely primarily on the product sales force for service leads and sales; many of these organizations compensate their product sales reps equally for products and services. In other cases, the product sales force receives a lower commission on services as compared to products but achievement of the service quota is a requirement for achieving “club”.

Embedded PSOs do not carry the total cost of sales or marketing in their profit and loss statements. Top-performing embedded PS organizations have developed service packages and service estimating tools to help the product sales force articulate and sell the value of services. In many cases, the product sales organization is allowed to price and quote service packages as long as discounts are limited.

Product sales reps are backed up with PS engagement managers or solution architects based on a team selling approach. This “hunter-skinner” model is reasonably effective with “hunters” focused on new business development while skinners bring in business domain and consulting knowledge to develop requirements and proposals and upsell existing accounts.

Independents have two primary sales models: senior partner-led or dedicated solution sales. There are pluses and minuses with both approaches. In the traditional consulting pyramid, new college hires (at the bottom of the pyramid) work their way up to partner status over a period of years or even decades. The traditional consulting pyramid relies on junior consultants, fresh out of college or graduate school, to perform the majority of analysis and technical work. As they grow in domain knowledge, consulting and leadership acumen they move up the pyramid to become case team leaders, project leaders, program leaders and ultimately, if they are good enough, they are offered partnership status to share in the firm’s direction and profits. The benefit of the traditional consulting pyramid is that it provides a constant source of fresh new talent and ideas from leading universities while offering significant rewards to those who stay with the firm and make it to the top. The downside is that it is an expensive model, and the cost to recruit the top students from the top universities has become prohibitive. Further, today’s top college graduates are no longer apt to stay with the same firm for decades to repay their years of apprenticeship.

The new model for independents is to hire dedicated solution sellers – often from technology firms. This model is far less expensive – the cost to recruit and ramp a new hire is a fraction of the apprenticeship model but the downside is that very few product sales people are able to become effective solution sellers. There simply is no substitute for domain knowledge and experience gained from years of delivering consulting. In this model SPI Research sees a revolving door of sales people who don’t make the grade because they are unable to develop new opportunities without substantial support from the consulting organization.

The most effective model is a hybrid combination of the two whereby senior solution consultants are groomed to become solution sellers. This new approach ensures domain expertise and intimate consulting delivery knowledge without the overhead of partnership profit and loss management. The challenge is to convince senior consultants and solution architects to move into full-time business development roles. Selling aptitude, training and compensation are required.

Table 75 is interesting to SPI Research because it shows the average number of services sales people by organization type and geography. It also shows their target quotas, base and variable compensation. Dedicated service sales professionals carry higher service quotas but also have a higher base than product sales people who also sell services. Firm or practice managers carry the highest service quotas but also receive the highest base and variable. For both product sales and service sales quotas and compensation are higher in APac and the Americas and lower in EMEA. Service managers and partners make considerably more in the Americas than in EMEA or APac.

Table 75: Professional Services Sales KPI's by Organization Type and Geography

Key Performance Indicator (KPI)	Survey	ESO	PSO	Americas	EMEA	APac
Organization Size (people)	637	660	625	666	522	776
Product Sales number of reps selling	9.4	16.1	5.8	10.9	6.0	6.5
Prod. Sales Ann. PS Bookings Target (mm)	$1.47	$1.73	$1.29	$1.61	$1.07	$1.51
Product Sales Annual Rep. Base Pay (k)	$92	$99	$87	$93	$85	$107
Product Sales On-target Variable	16.6%	20.2%	14.0%	17.9%	12.9%	15.6%
Service Sales number of reps selling	5.7	6.7	5.1	5.8	4.8	6.8
Service Sales Ann. PS Book. Target (mm)	$1.74	$1.92	$1.65	$1.84	$1.33	$1.88
Service Sales Annual Rep. Base Pay (k)	$97	$96	$97	$97	$91	$113
Service Sales On-target Variable	16.9%	18.4%	16.2%	17.2%	15.5%	17.9%
Service Mgr. number of reps selling	7.4	9.7	6.3	8.2	5.1	7.9
Service Mgr. Ann. PS Book. Target (mm)	$1.27	$1.32	$1.25	$1.38	$0.96	$1.27
Service Managers Annual Base Pay (k)	$103	$101	$105	$108	$87	$113
Service Managers On-target Variable	12.5%	12.7%	12.4%	12.5%	12.3%	13.2%
Partner Annual number of reps selling	5.6	4.8	5.9	5.8	4.2	7.8
Partner Annual PS Booking Target (mm)	$1.52	$1.55	$1.51	$1.68	$1.14	$1.39
Partner Annual Base Pay (k)	$119	$119	$119	$125	$99	$129
Partner On-target Variable	14.8%	15.8%	14.4%	15.8%	12.5%	13.6%

Source: Service Performance Insight, February 2016

Table 76 shows that both quotas and compensation go up with the size of the organization. It also shows the largest organizations shift to a higher component of leveraged compensation; in other words, lower base salary and a higher component of commission or variable compensation.

Table 76: Professional Services Sales KPI's by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 - 100	101 - 300	301 - 700	Over 700
Organization Size (people)	5	20	65	200	500	3,618
Product Sales number of reps selling	2.9	6.5	6.9	8.9	14.9	19.1
Prod. Sales Ann. PS Bookings Target (mm)	$0.95	$0.89	$1.41	$1.63	$1.59	$2.11
Product Sales Annual Rep. Base Pay (k)	$83	$89	$89	$97	$93	$96
Product Sales On-target Variable	10.7%	16.8%	16.4%	18.6%	16.6%	16.6%
Service Sales number of reps selling	1.6	1.8	3.1	5.6	10.2	15.5
Service Sales Ann. PS Book. Target (mm)	$0.65	$1.10	$2.05	$1.75	$2.29	$1.69
Service Sales Annual Rep. Base Pay (k)	$82	$91	$94	$107	$101	$95
Service Sales On-target Variable	12.8%	16.4%	19.9%	14.5%	18.0%	16.1%

Key Performance Indicator (KPI)	Under 10	10 - 30	31 - 100	101 - 300	301 - 700	Over 700
Service Mgr. number of reps selling	2.0	2.4	4.4	8.5	13.8	17.9
Service Mgr. Ann. PS Book. Target (mm)	$0.63	$0.75	$1.03	$1.64	$1.80	$1.58
Service Managers Annual Base Pay (k)	$94	$94	$106	$106	$109	$104
Service Managers On-target Variable	9.3%	12.6%	11.8%	11.3%	16.3%	14.3%
Partner Annual number of reps selling	2.0	1.8	3.5	5.8	9.1	14.6
Partner Annual PS Booking Target (mm)	$0.46	$1.01	$1.59	$1.74	$2.40	$1.61
Partner Annual Base Pay (k)	$104	$108	$127	$120	$130	$116
Partner On-target Variable	13.0%	13.5%	15.9%	14.0%	16.8%	14.9%

Source: Service Performance Insight, February 2016

Table 77 compares the base, service bookings quota and variable by PS Market. For the most part there is consistency in base salaries, quotas and on-target variable between software, SaaS and hardware PSOs. Executives in management consultancies and marketing and advertising firms have the potential to make more money than their counterparts within technology product companies but they also incur greater risk and must be experts in their fields. It appears SaaS companies have shifted a greater burden for service sales to the product sales force as their overlay PS sales force carries lower PS quotas. SPI Research sees a proliferation of sales roles in product companies – major account sales; vertical industry sales; product specialty sales; consulting sales; engagement managers; account managers; territory managers and the list goes on and on. From an outsider's point of view the sheer array of solution sellers is overwhelming and must be confusing for clients. Product companies would be well-served to curtail the proliferation of sales people and overlay sales people in favor of real solution selling experts. Embedded hardware reps have greater earning potential based on a considerably higher variable (leveraged) compensation component.

Table 77: Sales Structure by Service Market Vertical

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Organization Size (people)	573	590	255	429	582	458	1,469
Prod. Sales number of reps selling	7.2	18.7	2.8	2.5	17.9	7.5	17.5
Prod. Sales Ann. PS Bookings Target (mm)	$1.30	$1.82	$1.20	$1.46	$1.79	$1.48	$1.58
Product Sales Annual Rep. Base Pay (k)	$86	$103	$94	$84	$101	$87	$79
Product Sales On-target Variable	15.4%	20.0%	10.5%	14.3%	24.0%	11.0%	19.4%
Service Sales number of reps selling	5.5	5.0	4.8	4.4	10.2	4.7	13.5
Service Sales Ann. PS Book. Target (mm)	$1.73	$1.90	$1.35	$1.93	$2.50	$1.57	$2.03
Service Sales Annual Rep. Base Pay (k)	$94	$100	$107	$99	$105	$82	$86

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Service Sales On-target Variable	18.9%	18.0%	12.8%	12.6%	18.4%	14.5%	18.8%
Service Mgr. number of reps selling	5.9	8.5	7.7	5.9	11.6	4.5	20.3
Service Mgr. Ann. PS Bookings Target (mm)	$1.43	$1.25	$1.03	$1.08	$1.46	$1.18	$1.75
Service Managers Annual Base Pay (k)	$103	$107	$121	$93	$106	$75	$93
Service Managers On-target Variable	12.6%	12.1%	15.2%	10.6%	15.5%	10.0%	14.4%
Partner Annual number of reps selling	6.3	3.6	5.1	4.8	5.9	3.2	11.7
Partner Annual PS Booking Target (mm)	$1.61	$1.42	$1.56	$1.48	$1.82	$1.53	$1.21
Partner Annual Base Pay (k)	$121	$130	$131	$110	$116	$91	$99
Partner On-target Variable	14.9%	16.6%	17.7%	11.3%	20.0%	12.0%	12.5%

Source: Service Performance Insight, February 2016

Table 78: Sales Structure by Service Market Vertical

Key Performance Indicator (KPI)	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Organization Size (people)	2,577	673	152	206	2,407	1,462
Product Sales number of reps selling	7.8	3.0	5.2	5.3	6.0	9.2
Prod. Sales Ann. PS Bookings Target (mm)	$1.63	$1.43	$0.55	$1.18	$1.31	$1.15
Product Sales Annual Rep. Base Pay (k)	$86	$98	$83	$94	$84	$89
Product Sales On-target Variable	5.0%	23.0%	8.5%	14.3%	20.8%	17.5%
Service Sales number of reps selling	3.8	3.2	5.2	3.3	6.5	6.0
Service Sales Ann. PS Book. Target (mm)	$1.58	$1.54	$0.45	$2.29	$1.33	$1.15
Service Sales Annual Rep. Base Pay (k)	$103	$95	$95	$113	$80	$94
Service Sales On-target Variable	10.0%	22.5%	7.5%	11.5%	23.8%	10.0%
Service Mgr. number of reps selling	8.3	5.9	2.3	3.5	14.8	4.1
Service Mgr. Ann. PS Bookings Target (mm)	$1.69	$1.23	$0.88	$0.69	$1.00	$0.58
Service Managers Annual Base Pay (k)	$105	$102	$95	$88	$94	$97
Service Managers On-target Variable	10.0%	13.3%	3.8%	5.7%	19.4%	12.5%
Partner Annual number of reps selling	12.8	3.3	4.8	3.8	7.7	2.0
Partner Annual PS Booking Target (mm)	$1.21	$1.94	$0.55	$1.21	$1.10	$1.31
Partner Annual Base Pay (k)	$110	$134	$75	$121	$120	$112
Partner On-target Variable	10.0%	16.1%	4.5%	13.8%	24.4%	10.5%

Source: Service Performance Insight, February 2016

8. Human Capital Alignment Pillar

In 2016 talent takes center stage as both a top challenge and a top improvement priority in the world of professional services. Global economic recovery, changing workforce dynamics and technology pervasiveness in both our professional and private lives have transformed the world of work. Today's consulting workforce is increasingly virtual… with almost as many consulting hours delivered off-site as on the client's site. According to the 2016 PS Maturity™ survey, 22% of consultants primarily work from home with another 6% described as contingent workers either onshore or off. The new world of consulting work depends on a multi-lingual, multi-generational, multi-cultural, technically-skilled, project-based workforce.

Service Performance Insight's "Human Capital Alignment" pillar encompasses all elements of the Professional Services workforce strategy. Human Capital Alignment focuses on both the people processes and systems required to recruit, attract, retain and motivate a high quality consulting workforce. The following table shows how PSOs mature across the Human Capital Alignment pillar:

Table 79: Human Capital Alignment Maturity Model

	Level 1 Initiated	*Level 2 Piloted*	*Level 3 Deployed*	*Level 4 Institutionalized*	*Level 5 Optimized*
Human Capital Alignment	Hire as needed. Generalist skills. Chameleons, Jack of all Trades. Individual heroics. May perform presales as well as consulting delivery.	Begin forecasting workload. Start developing job and skill descriptions & compensation plans. Rudimentary career paths. Start measuring employee satisfaction	Resource, skill and career management. Employee satisfaction surveys. Training plans. Goals and measurements aligned with compensation. Attrition <15%	Business process and vertical skills in addition to technical and project skills. Career ladder and mentoring programs. Training investments to support career. Low attrition, high satisfaction	Continually staff and train to meet future needs. Highly skilled, motivated workforce. Outsource commodity skills or peak demand. Sophisticated variable on and off-shore workforce model.

Source: Service Performance Insight, February 2016

Today's Professional Services leaders must squarely confront the realities of attracting and retaining a younger workforce against the backdrop of a technical labor shortage. Globalization has significantly impacted workforce strategies with many service providers providing hybrid on and off-site resources via regional and global competency centers. Based on technology advances, consulting emphasis is shifting toward business process and vertical industry expertise however demand for horizontal application and technical skills remains high.

SPI Research found Human Capital Alignment metrics contain the highest number of performance indicators with *extremely strong* correlation to success — meaning, employees, and how they perform once onboard ultimately determine success or failure (Table 80).

Table 80: Human Capital Alignment performance indicators tied to Maturity levels

Maturity Level	Level 1	Level 2	Level 3	Level 4	Level 5
Recommend Company to Friends/Family (1-5 scale)	3.45	4.23	4.47	4.73	4.83
Employee annual attrition - voluntary	9.4%	7.6%	7.0%	6.9%	6.9%
Employee annual attrition - involuntary	6.6%	4.6%	4.5%	4.5%	4.9%
Non-billable project hours	284	194	184	190	205
Billable Project Hours	1,411	1,415	1,464	1,490	1,470
Well-understood career path for all employees (1-5 scale)	2.60	3.23	3.53	3.75	4.41
Employee billable utilization	62.8%	70.0%	72.7%	78.0%	77.9%
PS Profit (EBITDA)	**0.7%**	**3.8%**	**8.5%**	**19.1%**	**36.0%**

Source: Service Performance Insight, February 2016

The Talent Cliff

The world's greatest economic asset is the hard work, motivation and resilience of its workers. When employees have the opportunity to master new skills, contribute their full talents, and be rewarded fairly, businesses, families and communities thrive. However, too many workers do not progress to more senior roles, despite their desire to learn new skills and earn higher-paying jobs. Increasingly developed nations are creating initiatives to realize the full potential of their workforces, by empowering workers with the education and training they need to contribute more, earn higher wages and build a fulfilling career.

In the technology professional services space, the war for talent continues unabated. In fact, the gap between the demand for technology consulting workers and the talent with the requisite critical thinking, analytic and communication skills to fill these roles is widening. The world's economy has become knowledge and project-based yet a looming talent cliff threatens to derail economic growth.

By 2018, the US will face a projected **shortfall of 223,800** workers with background in Science, Technology, Engineering and Math. By 2022, the U.S. is projected to have a deficit of at least one million college-trained workers in science- and technology-related fields. McKinsey's and Deloitte's research projects a shortage of 30 to 40 million college-educated workers by 2020, projecting future unemployment gaps in India and China where educational opportunities are limited.

Global forces have come together to produce this talent cliff tsunami:

- Baby Boomers (born between 1946 and 1964) are exiting the workforce without enough skilled gen X, gen Y and millennial workers to replace them. The first baby boomers starting turning 65 in 2011. 80 million will exit the workforce over 20 years—which yields 4 million a year, or *10,000* a day who must be replaced.
- Underfunding of education particularly in Science, Technology, Engineering and Math meaning not enough college graduates with the requisite skills for today's technology-centric roles.

Education systems are struggling to keep up with the need to arm the workers of tomorrow with active, hands-on technology-based learning. At the same time, efforts must be made to overcome the traditional gender bias which persists for learners, employees and employers in technology fields.

- A growing gender gap in which less than 25% of IT jobs in developed countries are held by women. According to HR Magazine, lack of gender diversity in IT costs the UK over $4 billion annually. Further, in a 2014 TechWeek study of the UK, only one in 20 IT job applicants is a woman. This growing gender gap starts at an early age with parental and education bias which mushrooms throughout education and employment systems to solidify IT gender bias.
- Combined with unenlightened immigration policies which have capped the number of visas for skilled knowledge workers. This year in the United States, 233,000 foreigners applied for the H-1B, the most common visa for high-skilled foreign workers. That's up significantly from 2014 (172,500 applications) and nearly double the applicants from two years ago (124,000) but only 85,000 H1B visas were granted, primarily for workers with Masters' degrees.

All of this at exactly the same time that growth in professional service revenue is surging and "buy local" has become a new mantra! Highly skilled workers are in great demand, making it critical for organizations to become a "talent magnet" to create a steady pipeline of top people.

Talent Priorities

Changing workforce dynamics are driving PS executives to create a different type of workforce that requires technical and client management competency with equal parts of flexibility, autonomy and accountability. One of the most important challenges for today's Professional Services leaders is competing for top talent in a level, global, web-enabled playing field of "digital natives" who value collaboration and "cool" new technologies more than security and remuneration. Today's Human Capital Alignment challenges include:

- Attracting, retaining and motivating top talent;
- Managing through a technical labor shortage;
- Overcoming traditional gender biases to educate, attract and retain more female and minority workers;
- Taking on the increased burden of healthcare costs which continue to rise faster than workforce productivity improvements;
- Worldwide growing income and wealth inequality which reduces the ability of low-skilled workers to climb the economic and educational ladder to become the professional services employees of the future;
- Managing a global, multi-lingual, multi-cultural, multi-generational workforce; and,
- Managing a variable and/or contingent workforce.

Figure 46: 2016 Workforce Priorities

Source: Service Performance Insight, February 2016

Talent Strategies

To fill the workforce void, more and more PSOs are developing innovative new talent strategies: close partnerships with local universities; new hire internships; job-sharing programs; flexible work – study – childcare options; on-boarding programs; on-the-job training and mentoring combined with extensive “on-shore” assignments for “off-shore” employees. Increasingly the reputation of the firm as a “great place to work” is just as important and intimately intertwined with “client referrals.” What this all boils down to is that talent is fast becoming the number one make-it or break-it element in professional services growth – or even survival.

To meet these demands, top PSOS are:

- Focusing on programs to hire and train entry-level talent with skills in science, technology, math and engineering combined with strong written and oral communication skills.
- Investing in internships and college hiring to groom the next generation of consultants.
- Cross-training current employees who have strong analytic and communication abilities.
- Sponsoring training and work visas for international workers with strong backgrounds and skills.
- Offering flexible work arrangements – work from home, job-sharing, remote service delivery and child care options along with generous time-off and sabbatical arrangements.
- Building a culture of excellence – the best and brightest are attracted by leading edge technologies, clients and projects including a culture that supports collaboration and innovation.
- Paying for performance – linking compensation to knowledge and skills growth along with contributions to the practice – not just revenue generation alone.
- Investing in employee engagement – Communication, training, recognition, equitable pay, team building events and flexible work arrangements are essential to keeping a talented workforce engaged.

Finding, attracting and engaging a talented workforce is both the top challenge and the top success factor for today's professional services organizations. The age-old tactic of stealing skilled consultants from competitors and clients is no longer effective with too many firms competing for too few experts. More than ever before, the hallmark of the Best-of-the-Best PS organizations is their focus on college hiring and developing their own young consultants from the ground up. This focus favors rapidly growing firms who are able to build and sustain recruiting relationships with top universities. Top firms are developing summer internship programs and new hire on-boarding programs. Although these programs are expensive, they are well worth the effort when they manifest in young, highly skilled and highly motivated consultants who feel they are part of a vibrant culture which promises them career and knowledge advancement.

The impact of technology on the new world of work is all-encompassing – social interconnectivity through LinkedIn, Facebook, Twitter, Glassdoor and a host of other networking sites has transformed recruiting and retention. So much so that in-demand consultants with hard-to-find skills are besieged by unsolicited job opportunities. The concepts of brand and employee engagement have never been more important. This means PS firms must not only be a great place to work but must increasingly differentiate themselves through their unique cultures, using their reputation as a primary recruiting and retention tool. At the same time, consultants are building their own brands – publishing their own opinions, thought leadership and intellectual property making it harder than ever before to safeguard the firm's knowledge assets.

The Consulting Pyramid

The traditional consulting pyramid (Figure 47) is a workforce model based on "Finders, Minders and Grinders." The Managing Partner (PS VP) is the chief client relationship manager, responsible for developing a trusted advisor relationship with key clients. The Managing Partner is responsible for developing new business and managing the profitability of the practice. The "Minders" are the regional managers, project managers, engagement managers and case team leaders responsible for translating the customer's requirements into a project plan and then managing all aspects of project delivery. In the traditional consulting pyramid, the "Grinders" are the technology and business consultants who perform the majority of the work. In the traditional model, the "Grinders" (young consultants fresh out-of-college or graduate school), deliver the majority of project billable hours and profit.

Many independent PS firms have developed a solution selling sales force, often with lackluster results. The fundamental reason why the classic consulting pyramid has lasted for hundreds of years is that PS clients do not want to be "sold" – they seek consulting firms based on their demonstrated ability in solving specific business problems. Prospective consulting clients require the senior practice leader to help them articulate and design a solution. On the other hand, embedded PSOs rely heavily on the product sales force to bring them into deals so the role of embedded PS leaders is one of forging alliances with other cross-functional executives as well as building the overall PS governance structure.

Figure 47: The Consulting Pyramid - Finders, Minders and Grinders

Source: Service Performance Insight, February 2016

Important Changes in Workforce Composition

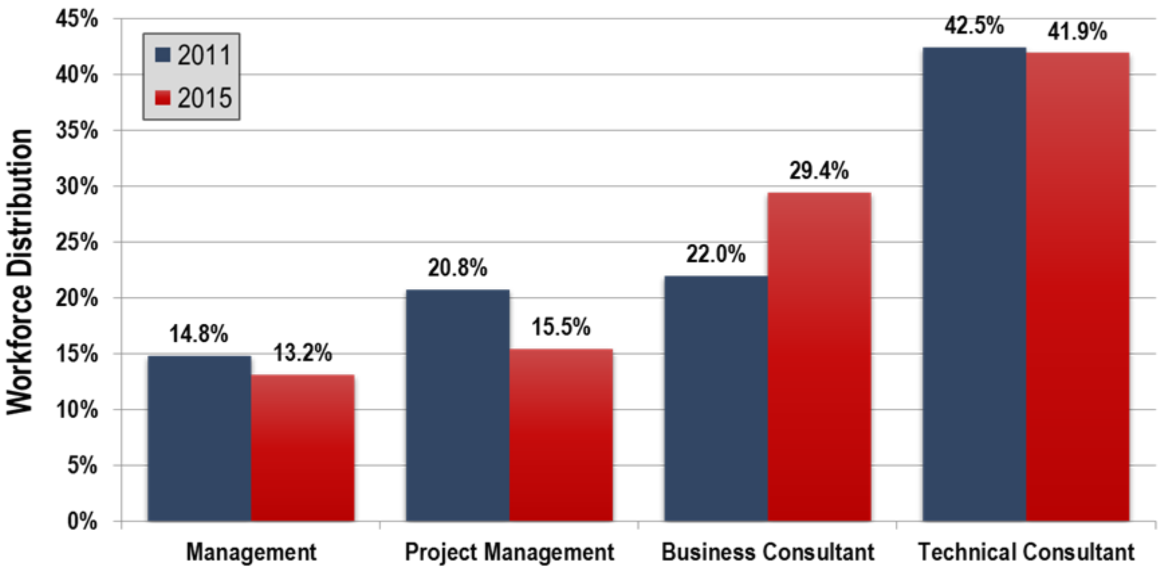
Worldwide the traditional consulting pyramid is alive and well with the percentage of resources in management (13%), project management (16%), business consulting (29%) and technical consulting (42%) reflecting the majority of work is performed by business consultants and technical resources at the base of the pyramid (Figure 48).

Since the 2011 SPI Research PS Pricing report, the business consulting job category has experienced the greatest growth; growing from 22% of the global PS workforce in 2011 to 29.4% in 2015. The percentage of PS workers in billable management roles has declined from 14.8% in 2011 to 13.2% in 2015. Project management roles have declined from 20.8% to 15.5% while technical consulting roles have declined slightly from 42.5% to 41.9% of the workforce.

This shift to more business consulting and less technical consulting roles reflects underlying technology shifts from complex and custom to social, mobile and cloud-based. These changes in workforce demographics clearly mirror overall shifts in the technology sector as software and hardware move to the cloud, requiring less customization and integration, so fewer technical consultants and project managers are required while streamlining and enhancing business processes has become a priority.

As technology buying power has shifted from IT to business buyers, significantly more industry, business process, workflow and change management skills are required. Increasingly, Professional Services firms are starting to recruit and hire consultants who not only possess strong analytic and technical skills but are also able to communicate effectively. This workforce change has significant implications for business and academic leaders as education and management systems must change to support an increasingly virtual, mobile and technology savvy workforce.

Figure 48: Comparison 2011 to 2015 Workforce Distribution by Employee Role



Source: Service Performance Insight, 2015 SPI PS Global Pricing Report

Best Talent Practices

Based on our research and discussions with top-performing PS organizations, four areas must be addressed to develop best consulting talent practices.

1. **Confidence in leadership** - Like everything else, it starts with effective leadership. Leaders who are clear about the future direction of the firm, who understand and are able to take advantage of changing market dynamics and are able to openly and honestly communicate the direction of the company and the role employees play in shaping it are crucial to success. PS is a logical, knowledge-driven business so leaders must focus on clarity and a few but impactful improvement priorities. Each of the best firms emphasize open and transparent communication based on a foundation of ethical leadership, open books and systems.

2. **Great place to work** – top performing firms find innovative ways to help over-worked consultants maintain life/work balance. From a facility point of view, firms focus on two priorities – creating open, team-centric workspaces where project teams can meet and collaborate as well as virtual work-from-anywhere environments with state-of-the-art collaboration and remote access tools. Despite the fact that most work is delivered virtually or at the client's site, top firms ensure there are opportunities throughout the year for consultants to meet to enhance their knowledge and skills while celebrating achievements. An ethical, open and recognition rich environment provides the cornerstone of great work places.

3. **Culture** – in today's fast-paced consulting environment the concept of culture is more important than ever. Meet with any top performing firm and you will instantly recognize what sets it apart. It may be a focus on only hiring the best and brightest from certain universities…building a collegial, knowledge-intense environment. It may be building a community-based culture… with a premium placed on local hiring, community relationships and driving business on a local level. Or it may be a culture based on pushing the technology envelope…always seeking the next big thing and willing to invest in innovation. Firms must deliberately focus on what sets them apart to be able to build a brand that embodies the type of clients and employees who will be a best fit.
4. **Growth opportunities** – the best firms provide rich environments for continuous learning. They offer opportunities for formal and informal growth – mentoring, coaching, lunch and learns, best practices, knowledge repositories, collaboration environments and centers of excellence. In today's turbulent talent market, career, skill and knowledge growth are an imperative.
5. **Job Fit** – today's top firms include personality fit as a recruiting essential. Best practices include in-person team interviews along with personality profile testing and scenario role plays. Verification of technical skills and know-how and real on-the-job experience is becoming standard. These subjective assessments elongate hiring times but are offset by greater clarity in job roles, job descriptions and skill profiles.

Table 81: Workforce Engagement Best Practices

Job Fit	Growth Opportunities	Culture	Great Place to Work	Confidence in Leadership
Clear Job Roles & Descriptions	On-boarding & training	Agile, performance oriented	Virtual/flexible/ remote work	Mission & Purpose
Well-defined skills	Mentoring Coaching	Collaborative Communicative	Recognition Rich	Invest in people
Personality fit	Access to knowledge	Hire the best	Ethical, open	Trust & transparency

Source: Service Performance Insight, February 2016

HRMS Business Applications come of age

On the technology front, SPI Research predicts Human Capital Management (HCM) systems will increase in importance and usage across the service industry. Traditional HCM applications for recruiting, performance, learning and compensation are moving to the cloud with exciting new social functionality combined with mobile employee access for self-managing careers, skills and preferences. The training industry has exploded with innovation, merging learning and skill-building with on-line video and gamification. In the people-based business of PS, it is only a matter of time before talent management (HCM) and resource management (PSA) functionality become intertwined. Already exciting new solutions from Workday, FinancialForce and SAP Successfactors are starting to emerge to seamlessly post job requisitions and skill profiles based on resource demand. Soon vendors and consulting firms alike will make employees central to their value proposition by designing systems that mirror and automate all facets of the employee lifecycle from recruitment to retirement. Supporting global workforce flexibility comes with a price and makes it impossible to run a PS organization by spreadsheet. Resource management and HCM applications are mandatory to accommodate global mobility, staffing and career management. No longer do employees need offices and laptops to stay abreast of business. Now, a smart phone is all they need. This tool enables them to be better connected with coworkers and clients alike, and to better understand current project dynamics, so that they can take appropriate actions readily as conditions change. Alerts help consultants better understand critical issues to be addressed. At the same time, this ubiquitous and ever-expanding flow of information has obsolesced traditional hierarchical management and communication structures, requiring a new form of leadership.

Survey Results

SPI Research analyzed 26 Human Capital Alignment key performance measurements that are critical to attaining superior employee performance. Table 82 portrays two alarming trends in human capital alignment. The chief issue facing PS employers is that of retention. Skilled employees have more career choices than ever before resulting in the high levels of voluntary attrition. Fewer employees would recommend their company as a great place to work. Many overwhelmed consultants are choosing to leave professional services altogether, preferring the stability and lower stress of corporate positions. Management span of control continues to increase potentially undermining the role of leadership in being able to support employee development. At the same time, several positive trends have emerged. Enhanced recruiting and ramping systems and practices have reduced the time it takes for find, hire and ramp new employees. A significant factor underlying this improvement is an increase in the number of guaranteed training days per employee. Another positive trend is that firms are providing more clarity around job roles and career path options.

Table 82: Human Capital Alignment Pillar 5-year trend

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Voluntary attrition	7.4%	7.2%	8.3%	8.9%	7.9%
Recommend company to friends/family (1 to 5 scale)	4.20	4.29	4.28	4.24	4.19
Management to employee ratio	9.76	9.24	10.13	10.05	11.52
Days to recruit and hire for standard positions	60.1	62.8	61.2	61.8	60.5
Days for a new hire to become productive	66.6	64.4	68.7	64.1	57.9
Guaranteed annual training days / employee	8.09	7.67	9.01	8.20	8.92
Well-understood career path for all employees (1 to 5 scale)	3.28	3.10	3.23	3.14	3.29
Employee billable utilization	69.6%	70.3%	70.1%	71.0%	70.6%

Source: Service Performance Insight, February 2016

Table 83 summarizes important talent management questions by organization type and location.

Table 83: Human Capital Alignment by Organization Type and Geographic Region

Key Performance Indicator (KPI)	2015	ESO	PSO	Americas	EMEA	APac
Employee annual attrition - voluntary	7.8%	7.0%	8.1%	8.2%	6.3%	8.9%
Employee annual attrition - involuntary	5.1%	5.5%	4.9%	5.7%	3.8%	4.4%
Recommend company to friends/family	4.19	4.10	4.24	4.20	4.18	4.22
Management to employee ratio	11.52	11.43	11.56	11.55	11.21	12.36
Days to recruit and hire for standard positions	60.5	64.2	58.7	61.9	59.2	51.3
Days for a new hire to become productive	57.9	67.7	53.2	57.6	62.0	45.9
Guaranteed annual training days / employee	8.92	9.92	8.44	9.17	7.91	10.21
Well-understood career path for all employees	3.29	3.17	3.35	3.26	3.29	3.58
Employee billable utilization	70.6%	68.6%	71.5%	70.6%	70.9%	69.4%

Source: Service Performance Insight, February 2016

Independents are more likely to refer their firm as a great place to work than their embedded counterparts. APac is more likely to recommend the firm as a great place to work than the Americas or EMEA. Management span of control has been inching up year over year, moving from 9.76 employees per manager in 2011 to today's high water mark of 11.52 employees per manager. The average time to recruit and hire and ramp a new consultant is 118 days down from 126 business days last year which translates (at $150 per hour) to a cost of $141,600. Obviously, reducing the time and cost of finding and ramping new employees has a major impact on growth and profitability. Interviews with this year's best of the best revealed innovative college hiring and ramping programs – with intense on-boarding programs of three months or more to ensure new consultants are successful and productive. The need for training has resulted in a big increase in the days of guaranteed training – moving from 3.8 days in 2008 to over 8.9 days on average in 2015. PS organizations of all types and sizes have found they simply cannot steal enough experienced consultants from their competitors to support their growth.

At the same time, PS organizations are finally starting to realize the importance of providing employee career opportunities – this has led to a slight improvement in the benchmark of "a well-understood career path," which has advanced from a score of 2.67 out of 5 (53%) in 2009 to 3.29 (66%) in 2015. In 2015 average billable utilization decreased slightly from 71% to 70.6% yet in response to another question, reported average annual billable hours edged up slightly from 1,431 to 1,440.

Table 84 shows the human capital alignment scores by organization size. Attrition tends to rise in direct proportion to organization size as employees feel less ownership and their work becomes more impersonal. As organizations grow in size, the percentage of employees who would recommend their company as a great place to work also declines. This important metric has declined across the entire PS industry every year since 2012 from 4.29 out of 5 (85.8%) in 2012 to 4.19 (83.8%) in 2015. Employee to management ratios increase with the size of the organization due to economies of scale and investments in systems and tools which improve management visibility. The time to recruit new consultants is highest for the largest firms (65.7 days) but they offset their long recruiting time with better and faster ramping programs, bringing new hires up to speed in 52.2 days. All organizations need to focus on reducing their recruiting and ramping time and costs. Billable utilization increases with organization size as the largest organization reported the highest utilization of 72.6%.

Table 84: Human Capital Alignment by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Employee annual attrition - voluntary	4.8%	6.8%	7.6%	8.9%	8.4%	9.2%
Employee annual attrition - involuntary	3.4%	4.1%	5.4%	5.2%	6.3%	6.3%
Recommend company to friends/family	4.15	4.32	4.28	4.18	3.98	4.08
Management to employee ratio	9.22	8.43	10.70	12.20	13.10	16.34
Days to recruit and hire for standard positions	56.3	63.8	59.5	58.7	59.1	65.7
Days for a new hire to become productive	62.9	64.6	58.6	57.2	48.9	52.2
Guaranteed annual training days / employee	7.36	7.59	8.76	8.49	9.47	12.43
Well-understood career path for all emp.	3.10	3.30	3.29	3.23	3.32	3.49
Employee billable utilization	68.0%	69.7%	70.7%	70.3%	72.4%	72.6%

Source: Service Performance Insight, February 2016

Tables 85 and 86 show key Human Capital Alignment metrics by market. Embedded Software PS reported the poorest human capital alignment scores across most dimensions which may contribute to the longest times to recruit and ramp new consultants. However, Software PSOs offer the most training. Billable utilization is highest for staffing firms at 76.6%, followed by Managed Service providers at 74.2%. Architects and engineers provide the fewest guaranteed training days at 5.83. Voluntary and involuntary attrition is highest for research and development organizations at 19.2% followed by IT consultancies at 14%. Accounting firms reported the lowest overall attrition at 9%.

Table 85: Human Capital Alignment by Vertical Service Market

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Employee annual attrition - voluntary	8.7%	7.5%	8.3%	5.6%	7.0%	7.4%	5.9%
Employee annual attrition - involuntary	5.3%	6.1%	3.1%	4.7%	4.4%	4.8%	3.9%
Recommend company to friends/family	4.26	4.07	4.27	4.42	4.12	4.00	4.00
Management to employee ratio	12.90	12.14	9.10	10.73	10.38	11.43	12.31
Days to recruit and hire for std. positions	56.1	70.5	63.9	58.4	60.8	58.9	53.6
Days for a new hire to become productive	53.9	73.4	48.2	54.4	73.1	49.6	46.1
Guaranteed annual training days / emp.	8.88	10.39	8.84	5.83	9.34	10.00	8.75
Well-understood career path for all emp.	3.39	3.08	3.45	3.34	3.17	3.20	3.29
Employee billable utilization	71.4%	68.0%	70.9%	73.3%	67.9%	74.2%	69.6%

Source: Service Performance Insight, February 2016

Table 86: Human Capital Alignment by Vertical Service Market

Key Performance Indicator (KPI)	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Employee annual attrition - voluntary	10.0%	5.0%	4.5%	9.0%	6.5%	9.5%
Employee annual attrition - involuntary	9.2%	7.0%	4.5%	4.1%	7.6%	4.5%
Recommend company to friends/family	3.57	4.43	3.77	4.36	4.11	4.31
Management to employee ratio	13.21	9.29	10.38	7.73	11.88	11.15
Days to recruit and hire for standard positions	57.9	52.5	58.8	55.9	60.0	72.7
Days for a new hire to become productive	45.0	56.8	72.5	45.0	42.9	68.8
Guaranteed annual training days / employee	9.29	9.82	10.63	7.95	8.13	7.71
Well-understood career path for all emp.	3.31	3.50	3.00	2.91	2.88	3.31
Employee billable utilization	71.4%	67.5%	71.7%	71.8%	75.6%	66.7%

Source: Service Performance Insight, February 2016

Workforce Age and Gender

- ∆ 1927 - 1945 - Silent Generation or Traditionalists
- ∆ 1946 - 1964 - Baby Boomers
- ∆ 1965 - 1983 - Gen X or the Busters
- ∆ 1984 - 2002 - Gen Y or the Millennials
- ∆ 2003 - Current Gen Z or the Digital Generation

SPI Research asked questions about the age and gender of the global PS workforce. ***PS is a young man's game with 60.8% of the workforce under 40 while 63.6% of the workforce is male.*** This year the percentage of employees under 30 increased from 20.7% to 24.4% while over 50 employees declined from 18.2% to 15.1%. Embedded PSOs reported slightly younger workforces as they tend to provide better on-boarding programs than their independent counterparts and require the latest technical skills. EMEA has the oldest workforce with the most employees over 40 (40.6%). EMEA and APac are the most male-dominated with 66.7% male PS employees. The percentage of females has increased each year with the Americas leading the way in bringing women into the PS workforce with 37.9% females.

Table 87: Workforce Age and Gender by Organization Type and Geographic Region

Workforce Age (years)	2015	ESO	PSO	Americas	EMEA	APac
Under 30	24.4%	25.3%	24.0%	25.3%	21.6%	25.4%
30 - 40	36.4%	39.1%	35.1%	35.9%	37.8%	35.9%
40 - 50	24.1%	24.4%	24.0%	23.9%	25.6%	21.3%
Over 50	**15.1%**	**11.1%**	**17.0%**	**15.0%**	**15.0%**	**17.3%**
Average Age (Years)	38.4	37.4	38.8	38.2	38.8	38.5
Percentage Male	63.6%	64.9%	63.0%	62.1%	66.7%	67.1%

Source: Service Performance Insight, February 2016

By organization size, the smallest organizations have the oldest employees as highly skilled consultants leave larger firms to start their own. They also have the most male-dominated workforces at 68.6%.

Table 88: Workforce Age and Gender by Organization Size

Role	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Under 30	10.3%	25.1%	23.0%	26.1%	29.7%	30.3%
30 - 40	39.2%	37.2%	37.6%	35.9%	39.0%	29.9%
40 - 50	17.3%	22.9%	26.1%	25.8%	22.0%	25.2%
Over 50	33.2%	14.8%	13.4%	12.1%	9.3%	14.6%
Average Age (Years)	43.2	38.1	38.3	37.7	36.3	37.8
Percentage Male	68.6%	66.1%	62.0%	63.5%	63.5%	60.2%

Source: Service Performance Insight, February 2016

The largest firms employ the most employees under 30 at 30.3%. They also employ the most females at 39.8%. Large firms are an excellent choice for young consultants as they provide ample training and career growth options but may also require excessive travel and work hours leading to burnout.

Table 89 shows marketing and advertising has the youngest workforce with 40.7% of employees under 30. Marketing and advertising is the only PS sub-vertical that is female-dominated with 57.7% of the workforce reported to be female. Marketing and advertising firms reported that only 4% of the workforce is over 50. Architects and engineers are the most male-dominated sub-vertical with 69.2% male employees closely followed by software companies with 68.4% male PS employees. Management consultancies employ the oldest workforce with an average workforce age of 42.2 years; this makes sense as grey-hair and experience are virtues when it comes to management consulting strategies, depth of vertical industry knowledge and operational improvement skills. Management consulting and staffing firms employ the most employees over 50 with 29.1% and 23.5% respectively. SaaS organizations favor younger workers, with a low percentage of employees over 50 (8.1%), but they do a slightly better job than enterprise software ESOs of hiring females (41.4%).

Table 89: Workforce Age and Gender by Vertical Service Market

Role	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Under 30	25.7%	25.2%	**17.7%**	20.1%	33.8%	20.7%	22.6%
30 - 40	36.1%	39.1%	29.1%	36.5%	39.9%	42.7%	31.6%
40 - 50	24.5%	24.2%	24.1%	25.3%	18.2%	25.7%	28.9%
Over 50	13.8%	11.4%	**29.1%**	18.2%	8.1%	10.9%	16.9%
Average Age (Yrs)	38.0	37.5	42.2	39.6	35.3	37.9	39.4
Percentage Male	65.3%	68.4%	59.9%	**69.2%**	58.6%	65.0%	63.2%

Source: Service Performance Insight, February 2016

Table 90: Workforce Age and Gender by Vertical Service Market

Role	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Under 30	24.1%	10.4%	27.9%	**40.7%**	34.4%	21.2%
30 - 40	38.1%	41.5%	45.0%	36.0%	27.9%	35.8%
40 - 50	24.6%	36.4%	19.3%	19.3%	14.3%	25.4%
Over 50	13.1%	11.7%	7.8%	**4.0%**	23.5%	17.7%
Average Age (Yrs)	38.0	40.2	35.9	33.8	38.3	39.4
Percentage Male	58.3%	61.4%	53.5%	**42.3%**	58.8%	59.2%

Source: Service Performance Insight, February 2016

Employee Annual Attrition

Employee attrition or turnover is defined as the average number of employees who left the company, either voluntarily or involuntarily, over the past year divided by the number of starting employees. Voluntary attrition, employees who leave that are not asked to leave, is one of the most important key performance indicators in the services sector as employees are the most valuable resource. Involuntary turnover typically refers to an employer decision to terminate the employee. Reasons for involuntary turnover include poor performance, excessive absenteeism or violation of a workplace policy that is considered a terminable offense. Attrition due to layoff, reduction in force or job elimination is typically involuntary because the employment relationship ends based on the employer's circumstances, not the employee's decision to leave. Annual attrition in the professional services sector has been steadily climbing since the recession ended. With the economy continuing to pick up, and more new jobs available, average attrition has climbed to 12.9% in 2015 from 7.2% in 2012 coming out of the recession.

Table 91 shows the correlation between voluntary attrition and revenue growth and profit. This table demonstrates the negative consequences of high voluntary attrition rates. As attrition rises, most other aspects of performance suffer. The probability of on-time project delivery decreases while average project overruns increase. Remaining employees have to pick up the pieces from exiting workers and must quickly come up to speed

Table 91: Impact – Annual Employee Attrition – Voluntary

Annual Employee Attrition	Survey Percent	% of employees billable	On-time projects	Annual Rev. Growth	EBITDA
None	12.9%	67.5%	79.4%	8.5%	12.3%
1% - 5%	32.4%	71.8%	77.8%	11.5%	18.3%
5% - 10%	26.2%	68.8%	72.8%	9.9%	14.6%
10% - 15%	17.4%	70.1%	76.0%	10.7%	18.3%
15% - 25%	6.8%	73.4%	75.3%	11.2%	8.0%
Over 25%	4.3%	74.1%	75.2%	6.1%	11.3%
Total/Avg.	**100.0%**	**70.4%**	**76.1%**	**10.3%**	**15.5%**

Source: Service Performance Insight, February 2016

and reestablish client relationships. Clients are forced to back-track to reestablish previous decisions and vendor commitments.

The costs of high voluntary attrition permeate all aspects of the firm. Lower employee engagement influences the firm's ability to recruit top talent based on employee referrals. The very real cost to replace leaving employees shows up in 118 work days on average to find, recruit, hire and ramp new consultants. But this lost time is just the tip of the iceberg, as it does not measure lost productivity time for recruiters and managers nor the impact on the remaining workforce from taking over work after a valuable employee has left. SPI Research believes the real cost to replace a valuable consultant is in excess of $150,000 causing a big bottom-line profit impact and making it hard to increase revenue and margins when firms must backfill leaving employees.

Table 92: Impact – Annual Employee Attrition – Involuntary

Annual Employee Attrition	Survey Percent	Revenue / Billable Consult (k)	Voluntary Attrition	Annual Rev. Growth
None	22.5%	$178	5.1%	9.8%
1% - 5%	46.1%	201	6.7%	10.9%
5% - 10%	18.0%	204	9.9%	10.6%
10% - 15%	7.0%	204	10.7%	7.8%
15% - 25%	4.3%	213	14.1%	9.0%
Over 25%	2.1%	230	17.5%	8.6%
Total/Avg.	**100.0%**	**$198**	**7.7%**	**10.3%**

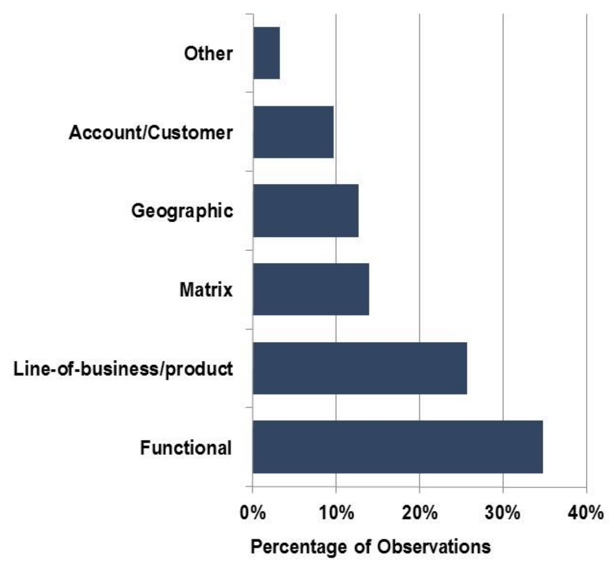
Source: Service Performance Insight, February 2016

Table 92 shows the correlation between involuntary attrition and revenue growth. Involuntary attrition or layoffs have a temporary positive impact on per consultant and per employee revenue yield as well as utilization because available work is performed by fewer employees. However, the long term effects of involuntary attrition show up in lower top-line growth and long term poor employee engagement. Interestingly, voluntary attrition rises directly in response to involuntary attrition as non-impacted employees fear they will be next or become disenfranchised with their prospects for long-term career growth.

Organizational Structure

Figure 49 depicts organization structure with functional predominant. This means most PSOs have defined functions for sales and marketing, project delivery, finance and operations, service engineering, human resources, etc. The second most prevalent structure is line of business or product-oriented meaning groups are organized by vertical industries or products. Matrix-oriented structures are favored, particularly by larger organizations which may have double-line

Figure 49: Primary Organizational Structure



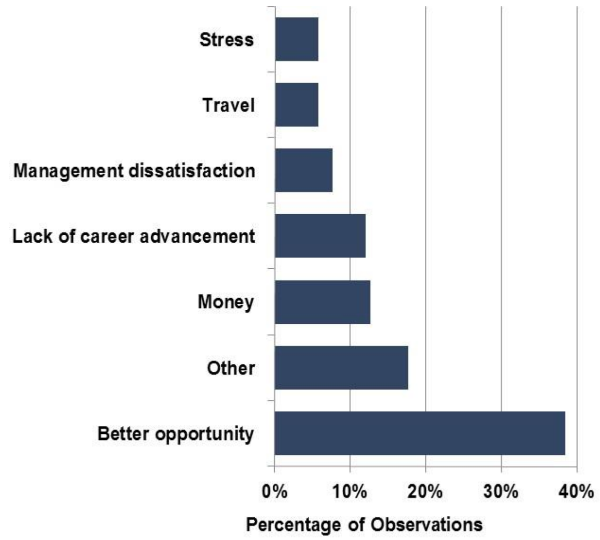
Source: Service Performance Insight, February 2016

reporting by geography, vertical, competency or product. Increasingly large organizations are creating technical and vertical competency centers of experts who are deployed to support geographical or account-based teams with specialized expertise. Geographic organizations are prevalent for new, young organizations as they expand city to city, state to state and country to country. Only 10% of organizations are structured primarily by account although account-specific teams exist within most large organizations.

Why Employees Leave

Why do employees leave? Obviously, employees leave for a variety of reasons, but in many cases there is one primary catalyst which is the reason for moving on. Figure 50 shows the top reasons why employees leave professional services organizations. The number one rationale (38.4%) is "better opportunity" which translates to a better work environment, perhaps better compensation or more opportunity for advancement. "Other (17.7%)" moved into second place. "Other" covers a magnitude of issues – "work/life" balance or leaving the industry entirely. "Money" was cited as the third reason (12.7%) followed by "Lack of career advancement" (12.1%) as the fourth most prevalent reason employees leave. A younger, less traditional workforce requires challenging projects; exposure to hot new technologies and leading edge clients plus training, communication and teamwork to remain engaged. "Management dissatisfaction" is cited by 7.7%. "Travel (5.8%)" is and will continue to be a major reason consultants quit, oftentimes for less-interesting, but more stable internal positions. Fortunately, remote service delivery tools and the ability to deliver more work virtually are having a beneficial effect on reducing travel time, cost and employee burnout. The Best-of-the-Best firms place a premium on their employees – finding ways to combine career development; challenging and exciting projects; with family/life/work balance and a measure of fun.

Figure 50: Why Employees Leave



Source: Service Performance Insight, February 2016

Recommend Company to Friends and Family

One of the most important employee engagement measurements is whether an employee would recommend their company "as a great place to work" to their friends and family. More than any other key performance measurement in the Human Capital Alignment pillar, recommending one's company as a great place to work is considered the litmus test of employee engagement.

Table 93 shows the impact of workplace satisfaction. The good news is 82.7% of the organizations in the survey would highly recommend their work environment. Great places to work are characterized by high employee engagement, a strong culture of achievement and confidence in the future.

Table 93: Impact – Recommend to Family and Friends

Score	% Surveys	Revenue Growth	Bid-to-win ratio	Billable Utilization	Revenue / emp. (k)
1 - No	1.1%	6.7%	1.90	68.0%	$100
2	5.9%	4.4%	4.32	62.6%	148
3	10.3%	7.7%	4.13	69.0%	169
4	37.7%	11.0%	4.98	70.7%	156
5 - Yes	45.0%	10.9%	5.23	72.0%	157
Tot/Avg.	**100.0%**	**10.2%**	**4.93**	**70.6%**	**$157**

Source: Service Performance Insight, February 2016

Management-to-Employee Ratio

The management-to-employee ratio divides the number of employees by the number of people managers. Management-to-employee ratio (also referred to as "span of control") is an important measurement of management effectiveness and is an indication of lean or excessive management overhead. The average management-to-employee ratio rose to 1 to 11.52 this year after a steep decline to 1 to 8.9 in 2010 during the depths of the recession suggesting firms laid off proportionately more individual contributors than managers.

With a significant upturn in business, firms are starting to hire again and are finding the burden of recruiting and ramping new employees is putting tremendous pressure on already stretched managers. Few small and medium-size firms have effective management training programs so we are seeing a significant number of "battle-field" promotions without the requisite support structure. The Best-of-the-Best organizations are starting to add a "team leader" position to groom the next generation of leaders.

SPI Research found Table 94 interesting because it shows the effect of management to employee ratios. It appears that a larger management span of control has a beneficial effect on performance. Of course this implies that employees clearly understand the work they are asked to perform and have a rich support structure of mentors, tools and knowledge to guide them so they don't have to rely solely on management for direction.

Table 94: Impact – Management-to-Employee Ratio

Management-to-Employee Ratio	Survey Percent	Billable Utilization	On-time delivery	EBITDA
1:5	27.9%	69.3%	75.3%	14.1%
1:10	40.7%	68.9%	76.2%	13.7%
1:15	16.0%	72.3%	76.3%	20.2%
1:20	9.6%	75.4%	76.5%	20.5%
Over 1:20	5.8%	75.3%	76.8%	14.9%
Total/Average	**100.0%**	**70.6%**	**76.1%**	**15.6%**

Source: Service Performance Insight, February 2016

The table compares the management-to-employee ratio to other key performance indicators for the 549 PSOs in the survey. 68.9% of the organizations maintain a 1:10 or less management to employee ratio. As the ratio increases, so do many of the key financial metrics. The key to profitable growth is finding the right balance of respected managers to employees. Integrated business applications and strong communication practices along with standardized methods, tools and knowledge sharing all contribute to higher productivity with less reliance on management overhead.

Time to Recruit and Hire for Standard Positions

SPI Research considers the length of time to recruit and ramp new employees to be very important determinants of overall performance and sustainable growth. “Ramping” time is critical because it not only focuses on making employees productive faster, but also reduces the non-billable time and cost of other resources who support the hiring and on-boarding process.

Most firms do not track the full cost of recruiting and hiring, but it is substantial (in many cases over 50% of the first year new hire base salary). This year the average cost of recruiting is over 1% of total revenue. The most mature firms create a dedicated recruiting function, armed with in-depth skill and personality profiles for targeted positions. Since all indicators point to a continuing talent shortage in PS – firms would be well-served to examine and improve their recruiting, on-boarding and training functions. Recruiting must be closely aligned with the sales pipeline and resource management plan.

Table 95 compares the time required to recruit for standard positions (such as consultants) to other key performance indicators. As it takes longer to recruit and hire, billable utilization suffers, as current employees spend more time helping out with the process, which limits their billable time. However, profitability improves with longer recruiting times because current employees must take on extra work. Although expensive and time consuming, recruiting time does not appear to be a major determinant of bottom-line profitability as it is better to spend extra time ensuring new hires will fit in.

Table 95: Impact – Time to Recruit and Hire for Standard Positions

Time to recruit and hire for standard positions	Survey Percent	Billable Util.	On-time Projects	EBITDA
Under 1 month	12.0%	70.0%	75.1%	14.1%
30 - 60 days	45.8%	71.6%	76.5%	14.8%
60 - 90 days	28.8%	68.8%	76.9%	15.3%
90 - 120 days	7.9%	72.4%	72.7%	20.5%
Over 120 days	5.4%	69.6%	73.5%	23.1%
Total/Average	**100.0%**	**70.6%**	**76.0%**	**15.8%**

Source: Service Performance Insight, February 2016

Time for a New Hire to Become Productive

Table 96 shows 41.5% of the PSOs in the survey reported over 60 days for a new consultant to become productive. Well-structured on-boarding and mentoring programs are mandatory for organizations planning on significant growth. This year the average time for a new hire to become productive declined to 57.9 days down from 64.1 days last year. This 6.2-day improvement in ramping time is significant. At $150 per hour, faster on-boarding translates to a potential gain in revenue per consultant of $7,440 per year.

Table 96: Impact – Time to Become Productive

Time to become productive	Survey Percent	Billable Util.	Rev. / Employee (k)	Staffing Time (days)
Under 1 month	27.8%	75.1%	$150	9.6
30 - 60 days	30.7%	69.8%	163	10.5
60 - 90 days	23.3%	69.6%	165	10.6
90 - 120 days	10.8%	66.8%	152	9.7
Over 120 days	7.4%	66.6%	158	12.5
Total/Average	**100.0%**	**70.6%**	**$158**	**10.3**

Source: Service Performance Insight, February 2016

Guaranteed Training Days per Employee per Year

The guaranteed number of training days per employee per year is the average number of training days budgeted each year per employee. Similar to the annual training budget, this indicator, while promised to employees, is not necessarily utilized, but does reflect the organization's commitment to employee development and shows the organization is investing in the future of its employees. Across the benchmark the average cost of training is 1.5% of total revenue.

Best-of-the-Best organizations mandate more than two weeks of training per year. Some firms provide over four weeks of training per year. Several best of the best firms put new hires through intensive three-month scenario-based training programs where they work as a team to develop requirements, architect and implement real-world solutions. PSOs find investments in both technical and interpersonal skill building pays dividends. In this year's benchmark, higher numbers of guaranteed training days positively correlate with revenue growth, on-time project delivery and revenue per consultant (Table 97). Access to high quality training is a major attraction driver. Many firms report they bring together the entire consulting team twice a year for skill-building, reinforcing the company's direction and strengthening collaboration and team-building. Team meetings give road warriors a break and allow them to establish new friendships and partnerships while rejuvenating. Several of the Best-of-the-Best firms include

Table 97: Impact – Guaranteed Training

Guaranteed Training Days per Employee per Year	Survey Percent	Revenue Growth	On-time delivery	Rev. / Billable Con. (k)
None	3.7%	6.0%	68.1%	$181
Under 5 days	24.6%	7.1%	73.8%	181
5 - 10 days	38.7%	10.2%	75.8%	200
10 - 15 days	18.8%	12.8%	77.5%	207
15 - 20 days	7.0%	11.0%	79.9%	212
Over 20 days	7.4%	12.8%	79.9%	216
Total/Average	**100.0%**	**10.0%**	**75.9%**	**$198**

Source: Service Performance Insight, February 2016

significant others and spouses in their annual events to thank them for holding down the fort while their road-warrior partners delight clients.

Well-Understood Career Path for all Employees

The survey asked if the organization provides a well understood employee career path, meaning as employees are hired and move within different positions, is there a planned next step for their career progression (Table 98). This KPI is important because it shows the firm's commitment to employee skill growth and career development. Even though this question is subjective, and answered by PS executives, who might have a bias, the results show how important career development is.

Table 98: Impact – Well-understood Career Path

Well-understood Career Path	Survey Percent	On-time Delivery	Rev. / Emp. (k)	Meet Margin Target
1 – Not very well	5.7%	64.8%	$138	86.1%
2	16.7%	69.6%	153	87.4%
3	29.4%	77.3%	166	90.3%
4	39.4%	77.0%	150	88.1%
5 – Very well	8.8%	84.8%	161	99.0%
Total/Average	**100.0%**	**75.9%**	**$156**	**89.5%**

Source: Service Performance Insight, February 2016

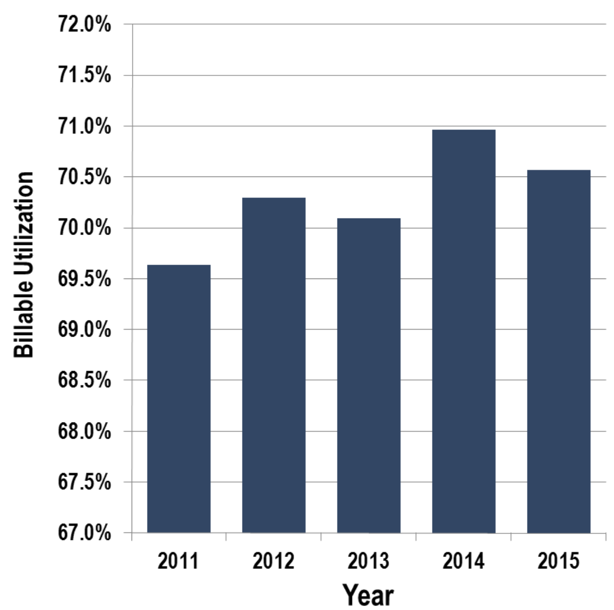
It shows employees with a well-defined career path are much more engaged with their work, delivering more on-time projects, more revenue per employee and more likely to achieve margin targets.

The table highlights the important role management plays in helping employees plan their careers while ensuring they have both the tools and opportunity for career growth. Numerous studies have shown that employees become increasingly productive with longer tenure with the same firm so keeping them engaged is an investment worth making.

Consultant Billable Utilization

SPI Research defines employee utilization on a 2,000 hour per year basis. Employee utilization is calculated by dividing the total annual billable hours by 2,000. This key performance indicator is central to organizational profitability. Utilization is consistently the most measured key performance indicator but must be examined in conjunction with overall revenue and profit per person along with leading indicators like backlog and size of the

Figure 51: Billable Utilization: 2010-2015



Source: Service Performance Insight, February 2016

sales pipeline to become truly meaningful. Utilization is a major indicator of opportunity and workload balance. It provides a signal to expand or contract the workforce.

To improve margins, PS executives must continually focus on increasing employee billable utilization, as well as increasing the percentage of billable employees. The primary gain from increased utilization is a significant increase in revenue per employee.

Table 99 shows the actual (not theoretical) benefits this year's firms experienced from increasing employee utilization. The optimal level of utilization is 70 to 80% with the best revenue growth, highest consultant and per employee revenue yields along with the best net margin achievement. According to this year's survey, extremely high utilization, over 80%, actually diminishes revenue per consultant and net profit. Billable utilization over 90% clearly leads to voluntary attrition and burnout.

Table 99: Impact – Billable Utilization

Billable Utilization	Survey Percent	Revenue Growth	Client Ref.	Billable Utilization	Revenue / billable cons. (k)	Revenue / employee	Voluntary Attrition	EBITDA
Under 50%	6.0%	8.6%	61.0%	69.0%	$171	$133	6.6%	6.0%
50% - 60%	12.4%	10.5%	65.0%	70.6%	185	147	9.6%	13.2%
60% - 70%	24.3%	10.2%	71.4%	75.8%	197	157	7.8%	16.7%
70% - 80%	35.7%	11.2%	73.7%	76.9%	210	170	7.1%	16.6%
80% - 90%	17.6%	8.6%	70.5%	79.5%	195	156	7.5%	13.6%
Over 90%	4.1%	9.0%	74.0%	83.8%	192	134	11.3%	15.9%
Total/Average	**100.0%**	**10.2%**	**70.7%**	**76.1%**	**$198**	**$158**	**7.8%**	**15.0%**

Source: Service Performance Insight, February 2016

Although PS firms would like to abandon the billable utilization metric (and all the accompanying time tracking it entails), unfortunately there is no other metric which provides as good a picture of workforce productivity. Perhaps as more and more firms shift to fixed price work the focus on billable utilization will decline but if this is the case firms will have to ratchet up their focus on project accounting and budget to actual performance. But here again, how can budget to actual performance be measured without tracking work hours?

Billable Utilization from the 2015 PS Global Pricing Report

Based on the 2015 PS Global Pricing report, Table 100 provides a snapshot comparison by role of the 2015 PS Pricing survey compared to the 2011 survey. The headline reads "lower bill rates" are offset by "significantly higher billable utilization targets" resulting in "significant increases in consulting revenue yields and profits". What this means is that the consulting industry is demanding more from their workforces to offset rate erosion. These productivity advances are a direct result of more virtual (off-site) consulting delivery, stronger consulting demand (more work) and productivity tools (less time spent on non-billable activities). The question which must be asked is "can the consulting

industry continue to ratchet up consultant productivity and billability, or are we near a breaking point?"

Table 100: Target Billable Hours and Rates Comparison 2011-2015 All PS Markets and Geographies

Level	2011			2015			Target Revenue Yield Delta (k)
	Target Annual Billable Hrs.	Realized Hourly Bill rate	Target Revenue Yield PP (k)	Target Annual Billable Hrs.	Realized Hourly Bill rate	Target Revenue Yield PP (k)	
VP / Executive Management	743	$265	$197	706	$235	$166	($31)
Director	771	217	167	785	213	167	0
Manager	852	178	152	879	176	155	3
Program Manager	1,211	167	202	1,368	174	238	36
Senior Project Manager	1,289	166	214	1,472	177	260	46
Project Manager	1,272	153	195	1,505	164	246	51
Principal Business Consult.	1,113	217	242	1,450	196	284	42
Sr. Business Consultant	1,298	193	251	1,519	169	256	4
Business Consultant	1,330	152	202	1,512	149	225	23
Solution Architect	1,316	185	243	1,391	178	248	5
Senior Technical Consultant	1,374	166	228	1,563	168	263	35
Technical Consultant	1,401	151	212	1,566	146	228	16
Non-weighted average	**1,249**	**$177**	**$214**	**1,353**	**$175**	**$237**	**$23**

Source: Service Performance Insight, 2015 PS Global Pricing report

Key findings from comparing the 2011 to 2015 PS Pricing report:

- Target annual billable hours have increased dramatically for all job categories except Executive Management. Target annual hours across all roles and geographies have increased from 1,249 in 2011 to 1,353 hours in 2015! The average PS consultant is targeted to bill almost 200 more hours per year! Most consulting job roles are now targeted at 75% billable utilization or higher.
- The only job category which has not experienced a decline in realized bill rates is the Project Management job category. At the same time, project managers are being asked to bill more hours. The combined impact of slightly higher rates and significantly higher utilization targets manifests in the greatest increase in per capita target revenue. A contributing factor to these increases is that the project management category has experienced the most significant decline in employee numbers as a percent of the overall consulting workforce. This means the remaining project managers are being asked to do more and scarcity has led to higher rates.
- The Business Consulting job category has experienced the steepest decline in realized bill rates at the same time this job category has experienced a sharp increase in billable utilization targets. The increase in billability has more than offset the decrease in rates, making the business consulting job category the richest revenue producers in the study.

- The Technical Consulting job category has experienced a moderate decline in realized rates and a moderate increase in annual billable targets. The net result manifests in moderately increased revenue targets.
- In the technical consulting job category, only senior technical consultants have experienced a slight increase in realized bill rates from $166 to $168 per hour. However, their billable utilization targets have soared from 1,374 hours in 2011 to 1,563 hours in 2015. The net result is they are targeted to generated $263K in annual revenue, up from $228K in 2011!

Table 101 shows a comparison of target billable hours by role for the major geographies represented in the 2015 PS Pricing study. India clearly expects the most from its consultants with annual target hours of 92% for its program managers; 82.5% for its senior business consultants and 86% for its technical consultants. EMEA targets the fewest billable hours.

Table 101: Target Billable Hours by Geography

Role	Level	Target Billable Hours				Target Billable Utilization			
		North Amer.	West. Europe	ANZ	India	North Amer.	West. Europe	ANZ	India
Mgmt.	VP / Executive Mgmt.	658	407	460	758	32.9%	20.3%	23.0%	37.9%
	Director	827	636	679	975	41.4%	31.8%	34.0%	48.8%
	Manager	979	883	700	672	49.0%	44.2%	35.0%	33.6%
Project Mgmt.	Program Manager	1,403	1,439	1,099	1,841	70.2%	72.0%	55.0%	92.1%
	Senior Project Manager	1,500	1,379	1,384	1,700	75.0%	69.0%	69.2%	85.0%
	Project Manager	1,525	1,469	1,466	1,688	76.3%	73.5%	73.3%	84.4%
Business Consulting	Principal Business Consult.	1,476	1,225	1,317	1,424	73.8%	61.3%	65.9%	71.2%
	Sr. Business Consultant	1,515	1,456	1,487	1,650	75.7%	72.8%	74.3%	82.5%
	Business Consultant	1,548	1,475	1,221	1,516	77.4%	73.7%	61.1%	75.8%
Technical Consulting	Solution Architect	1,421	1,351	1,127	1,680	71.0%	67.5%	56.3%	84.0%
	Senior Technical Consult.	1,586	1,480	1,530	1,775	79.3%	74.0%	76.5%	88.8%
	Technical Consultant	1,605	1,431	1,499	1,713	80.2%	71.6%	75.0%	85.6%

Source: Service Performance Insight 2015 PS Global Pricing Report

Annual Hours

Always one of the most anticipated metrics from the annual PS Maturity™ benchmark survey is the breakdown of work hours. Most organizations put a lot of focus on consultant time spent on both billable and non-billable tasks. Embedded organizations reported a 2.5% increase in billable hours from 1,317 to 1,350 while independents reported a slight decrease in billable hours from 1,488 to 1,481.

Across all job titles, billable utilization is higher for independents than embedded service organizations as embedded organizations must contend with more non-billable work to support product sales or to fix product or relationship issues.

Table 102: Annual Hour Comparison by Organization Type

Annual Hours	Survey			ESO			PSO		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	176	169	-4.0%	188	157	-16.5%	169	175	3.6%
Education/training	72	77	6.9%	84	94	11.9%	65	69	6.2%
Administrative	180	171	-5.0%	213	187	-12.2%	164	164	0.0%
Non-billable project hours	233	213	-8.6%	313	269	-14.1%	194	186	-4.1%
Total Billable Hours	1,431	1,439	0.6%	1,317	1,350	2.5%	1,488	1,481	-0.5%
▪ Billable hours on-site	811	803	-1.0%	696	622	-10.6%	868	887	2.2%
▪ Billable hours off-site	620	637	2.7%	620	729	17.6%	620	594	-4.2%
Total Hours	**2,092**	**2,069**	**-1.1%**	**2,115**	**2,058**	**-2.7%**	**2,080**	**2,075**	**-0.2%**

Source: Service Performance Insight, February 2016

Table 102 provides a year-over-year comparison of annual work hours by comparing embedded to independent organizations. The trend in total annual hours this year was very positive with fewer hours spent on administration and non-billable project hours contributing to fewer total hours worked with approximately the same number of billable hours (1,439). ESOs reduced non-billable vacation, administration and non-billable project hours but increased training time from 84 to 94 hours. Independents increased vacation and education time but decreased non-billable project hours.

Independent consultants billed 131 more hours (16 more days) than their embedded counterparts!

Table 103: Annual Hour Comparison by Region

Annual Hours	Americas			EMEA			APac		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	160	150	-6.3%	222	219	-1.4%	196	176	-10.2%
Education/training	67	74	10.4%	86	80	-7.0%	76	87	14.5%
Administrative	173	181	4.6%	210	136	-35.2%	170	206	21.2%
Non-billable project hours	242	219	-9.5%	201	198	-1.5%	237	211	-11.0%
Total Billable Hours	1,457	1,450	-0.5%	1,327	1,415	6.6%	1,458	1,427	-2.1%
▪ Billable hours on-site	801	740	-7.6%	821	922	12.3%	869	982	13.0%
▪ Billable hours off-site	655	710	8.4%	506	493	-2.6%	589	445	-24.4%
Total Hours	**2,099**	**2,073**	**-1.2%**	**2,046**	**2,048**	**0.1%**	**2,136**	**2,108**	**-1.3%**

Source: Service Performance Insight, February 2016

Table 103 shows employees in Asia work more hours than either American or European consultants. EMEA PS firms work the least due to more vacation and training time. In 2015 APAC firms invested the most in education and training followed by EMEA. Workaholic Americans spend the least amount of time on vacations and training but the most on non-billable project hours, and they reported a decrease in non-billable administrative time. Excessive administrative time usually results from not having enough billable work combined with poor systems and processes. By region, EMEA firms reported the biggest increase in both billable time and total work hours but still work less than in any other geography. ***The average consultant in APac worked 60 more hours than their European counterparts!***

Table 104 shows firms become more productive as they grow from small to large. Both total work hours and billable hours per year increase as firms grow. The benefits of growing from a small to mid-size firm show up in more vacation hours and fewer hours spent on administration and non-billable project hours. More work is delivered on-site as firms grow.

Table 104: Annual Hour Comparison by Organization Size (< 100 employees)

Annual Hours	Under 10			10 - 30			31 - 100		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	141	158	12.1%	181	175	-3.3%	180	177	-1.7%
Education/training	72	51	-29.2%	80	57	-28.8%	60	87	45.0%
Administrative	201	190	-5.5%	160	152	-5.0%	197	177	-10.2%
Non-billable project hours	234	261	11.5%	261	262	0.4%	263	213	-19.0%
Total Billable Hours	1,356	1,361	0.4%	1,396	1,415	1.4%	1,401	1,430	2.1%
▪ Billable hours on-site	548	726	32.5%	770	786	2.1%	762	769	0.9%
▪ Billable hours off-site	807	634	-21.4%	626	629	0.5%	639	661	3.4%
Total Hours	**2,003**	**2,022**	**0.9%**	**2,079**	**2,060**	**-0.9%**	**2,102**	**2,083**	**-0.9%**

Source: Service Performance Insight, February 2016

Table 105: Annual Hour Comparison by Organization Size (> 100 employees)

Annual Hours	101 - 300			301 – 700			Over 700		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	163	163	0.0%	198	157	-20.7%	181	169	-6.6%
Education/training	62	73	17.7%	86	75	-12.8%	113	104	-8.0%
Administrative	153	155	1.3%	229	173	-24.5%	132	200	51.5%
Non-billable project hours	197	174	-11.7%	187	173	-7.5%	160	212	32.5%
Total Billable Hours	1,537	1,477	-3.9%	1,415	1,515	7.1%	1,514	1,429	-5.6%
▪ Billable hours on-site	985	813	-17.5%	835	996	19.3%	995	805	-19.1%
▪ Billable hours off-site	552	664	20.3%	581	520	-10.5%	520	624	20.0%
Total Hours	**2,112**	**2,042**	**-3.3%**	**2,116**	**2,094**	**-1.0%**	**2,100**	**2,114**	**0.7%**

Source: Service Performance Insight, February 2016

Table 105 shows mid-size and large organizations bill almost 1,500 hours (75%) annually – making them generally more productive than their smaller counterparts. Organizations with over 700 PS employees logged less vacation and training time but significantly more administrative and non-billable project hours this year. To offset this lost productivity time, they required more annual work hours from their employees than smaller firms. This chart is a good reminder of the economies of scale that larger people-based organizations are able to achieve if they are appropriately sized and skilled for the amount of work available.

For embedded service organizations, hardware, SaaS and software PSOs all reported more billable hours in 2015 with hardware PSOs reporting the largest increase (3.1%). Unfortunately, higher billability came at the price of vacations for software and hardware PSOs. ***Average billable utilization for embedded PSOs was 67.5% in 2015 compared to 74% for independents. The average embedded consultant billed 1,351 hours compared to independents that billed 1,481.***

Table 106: Annual Hour Comparison by Embedded Service Organization Type

Annual Hours	Software PS			SaaS PS			Hardware/Network PS		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	209	160	-23.4%	128	155	21.1%	207	146	-29.5%
Education/training	86	91	5.8%	85	90	5.9%	93	150	61.3%
Administrative	208	182	-12.5%	215	175	-18.6%	228	346	51.8%
Non-billable project hours	293	290	-1.0%	367	299	-18.5%	263	127	-51.7%
Total Billable Hours	1,320	1,336	1.2%	1,313	1,351	2.9%	1,280	1,320	3.1%
▪ Billable hours on-site	716	638	-10.9%	732	323	-55.9%	635	1,013	59.5%
▪ Billable hours off-site	604	698	15.6%	581	1,028	76.9%	645	308	-52.2%
Total Hours	**2,117**	**2,058**	**-2.8%**	**2,107**	**2,069**	**-1.8%**	**2,070**	**2,089**	**0.9%**

Source: Service Performance Insight, February 2016

As shown in Tables 107, 108 and 109, IT consultants billed the most hours (1,521) while other PS billed the least (1,132). Management consultants spend the most time working on-site (993 hours) while SaaS PS spends the least (323). Independents reported an average decrease of 7 billable hours per consultant (1,481) compared to (1,488) in 2014 and 1,457 in 2013.

Table 107: Annual Hour Comparison by PS Market (IT & Management Consulting, Staffing)

Annual Hours	IT Consulting			Management Consulting			Staffing		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	176	166	-5.7%	145	176	21.4%	N/A	214	N/A
Education/training	66	69	4.5%	52	69	32.7%	N/A	116	N/A
Administrative	143	162	13.3%	217	146	-32.7%	N/A	202	N/A
Non-billable project hours	176	170	-3.4%	190	216	13.7%	N/A	94	N/A
Total Billable Hours	1,513	1,521	0.5%	1,454	1,475	1.4%	N/A	1,457	N/A

▪ Billable hours on-site	948	860	-9.3%	657	993	51.1%	N/A	831	N/A
▪ Billable hours off-site	565	662	17.2%	797	481	-39.6%	N/A	626	N/A
Total Hours	**2,073**	**2,088**	**0.7%**	**2,058**	**2,082**	**1.2%**	**N/A**	**2,083**	**N/A**

Source: Service Performance Insight, February 2016

Table 107 shows IT consultancies average 1,521 hours per consultant compared to 1,454 hours for management consultants. Unfortunately, their high levels of billability are more than offset by their low rate structure. According to the 2015 Global PS Pricing report the average management consulting rate is $197/hour while the average IT Consulting rate is only $163/hour for billable consultants.

Table 108: Annual Hour Comparison by PS Market (Advertising, Arch./Engr., Other PS)

Annual Hours	Advertising			Architecture/Engineering			Other PS		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	168	141	-16.1%	173	175	1.2%	162	227	40.1%
Education/training	98	101	3.1%	65	44	-32.3%	69	60	-13.0%
Administrative	135	202	49.6%	157	138	-12.1%	201	293	45.8%
Non-billable project hours	196	385	96.4%	201	155	-22.9%	284	270	-4.9%
Total Billable Hours	1,520	1,192	-21.6%	1,486	1,514	1.9%	1,415	**1,132**	-20.0%
▪ Billable hours on-site	903	303	-66.4%	822	858	4.4%	747	680	-9.0%
▪ Billable hours off-site	617	889	44.1%	664	656	-1.2%	668	452	-32.3%
Total Hours	**2,117**	**2,022**	**-4.5%**	**2,082**	**2,025**	**-2.7%**	**2,132**	**1,982**	**-7.0%**

Source: Service Performance Insight, February 2016

Table 109: Annual Hour Comparison by PS Market

Annual Hours	Accounting			Research & Development			Value-added Reseller		
	2014	2015	Change	2014	2015	Change	2014	2015	Change
Vacation/personal/holiday	N/A	198	N/A	N/A	207	N/A	N/A	147	N/A
Education/training	N/A	55	N/A	N/A	130	N/A	N/A	87	N/A
Administrative	N/A	126	N/A	N/A	221	N/A	N/A	148	N/A
Non-billable project hours	N/A	294	N/A	N/A	110	N/A	N/A	242	N/A
Total Billable Hours	N/A	1,373	N/A	N/A	1,560	N/A	N/A	1,385	N/A
▪ Billable hours on-site	N/A	1,218	N/A	N/A	1,333	N/A	N/A	648	N/A
▪ Billable hours off-site	N/A	154	N/A	N/A	228	N/A	N/A	738	N/A
Total Hours	**N/A**	**2,046**	**N/A**	**N/A**	**2,228**	**N/A**	**N/A**	**2,008**	**N/A**

Source: Service Performance Insight, February 2016

Table 108 shows marketing and communication consultants reported significantly lower billable hours this year (1,192) while architects reported slightly more billable hours this year (1,514) than last year. Architects and engineers reported the steepest decline in administrative time (-12.1%) and non-billable time (-22.9%) as business picked up in the construction industry. There was not enough information from the 2014 survey to statistically compare Accountancies, Research & Development Firms and VARs.

Employee Location

A fascinating topic is the composition and location of employees in the new world of project-based work. This year SPI Research saw an increase in the percentage of the overall PS workforce working from headquarters and offshore while the percentage of workers based in branch offices and home offices declined slightly. Over one-quarter of American PS workers work from home while only 11.6% of EMEA and 14.6% of APac workers do. APac reported the sharpest increase in home workers (from 8.4% in 2014 to 14.6% in 2015). EMEA has the largest concentration of employees working from a headquarters office. Both the Americas and APAC reported a decline in offshore workers from 2014 to 2015; declining from 5.7% to 5.6% in the Americas and from 6% to 4.2% in APAC. EMEA increased its reliance on offshore workers moving from 4.8% to 6.3%. Independents increased their reliance on offshore workers from 4.8% to 6% while embedded PSOs decreased their offshore workers from 7.6% to 5%. Many PS firms are reducing their usage of offshore workers as labor costs and turnover have skyrocketed in favored offshore destinations like India. Offshore quality and security concerns are also starting to offset labor cost advantages.

Table 110: Workforce Location by Organization Type and Geographic Region

Employee Location	2014	2015	ESO	PSO	Americas	EMEA	APac
Headquarters	50.5%	53.1%	41.6%	57.9%	49.0%	66.1%	45.5%
Branch offices	20.8%	19.5%	27.0%	16.5%	19.2%	15.9%	35.8%
Home based	23.2%	21.6%	26.4%	19.7%	26.3%	11.6%	14.6%
2015 Offshore / Nearshore	5.6%	5.7%	5.0%	6.0%	5.6%	6.3%	4.2%
2014 Offshore/Nearshore			7.6%	4.8%	5.7%	4.8%	6.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

Table 111: Workforce Location by Organization Size

Employee Location	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Headquarters	67.9%	56.0%	53.6%	50.9%	36.6%	35.9%
Branch offices	1.8%	12.6%	19.9%	26.3%	33.1%	35.3%
Home based	27.6%	26.4%	23.0%	14.5%	20.4%	14.9%
2015 Offshore / Nearshore	2.7%	5.0%	3.5%	8.3%	9.9%	13.9%
2014 Offshore/Nearshore	0.0%	1.4%	5.0%	10.8%	7.7%	13.7%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

Table 111 shows the use of offshore workers increases with organization size while the percentage of home-based workers' declines. Large organizations are becoming increasingly comfortable with virtual work teams with less than 40% of their workforces co-located at the headquarters location. Small organizations increased offshore use while midsize organizations decreased offshore use.

By vertical market, software and managed service providers have the largest percentage of home-based workers, closely followed by management consultancies. IT consultancies use the most offshore workers while managed service providers use the least. Many firms are opening onshore managed service, hosting and development centers in low cost areas like the Midwest and the South with excellent results in terms of costs and quality. Architect and engineering firms still favor centralized, headquarters based workstyles while hardware and networking providers invest in branch offices.

Table 112: Workforce Location by Service Market Vertical

Employee Location	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Headquarters	52.8%	35.6%	55.4%	77.2%	52.6%	64.4%	29.5%
Branch offices	16.9%	27.1%	13.2%	15.8%	27.1%	8.3%	49.0%
Home based	22.1%	29.9%	24.8%	5.1%	17.8%	25.9%	20.0%
Off /Nearshore	8.2%	7.4%	6.5%	1.9%	2.6%	1.4%	1.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

Table 113 shows Research and Development and Accountancies reported the use of no offshore workers. Almost one-third of VAR and Marketing and Advertising employees work from home.

Table 113: Workforce Location by Service Market Vertical

Employee Location	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Headquarters	41.5%	44.6%	57.8%	49.9%	58.2%	76.4%
Branch offices	36.4%	22.0%	33.3%	13.1%	19.2%	3.3%
Home based	22.1%	31.3%	8.9%	31.8%	17.6%	20.3%
Off /Nearshore	0.0%	2.1%	0.0%	5.2%	5.0%	0.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Service Performance Insight, February 2016

9. Service Execution Pillar

The Service Execution Pillar measures the quality, efficiency and repeatability of service delivery. It focuses on the core activities for planning, scheduling and delivery of service engagements. Regardless of the maturity of every other area of the PSO it will not succeed unless it can successfully and profitably deliver services, with an emphasis on quality, timeliness and customer value.

The Service Execution pillar is where money is made in professional services. Work must be scoped, bid, sold, delivered and invoiced in order to maximize client and project margin. The alignment of sales, service and finance is critical for success. All project-related information (time, expense, project details and knowledge) must be captured in order to be invoiced and to improve the next service delivered.

In an increasingly competitive consulting marketplace, success most often comes down to operational excellence – with visibility and management controls in place to ensure effective resource and project management. Done right, gross project margins in excess of 60% are possible. Done wrong, project yields can drop to single digits, or go negative.

Table 114 highlights the maturity levels in the Service Execution pillar, as the PSO moves from basic reactive "all hands on deck" project delivery to greater efficiency, repeatability and higher quality service execution.

Table 114: Service Execution Performance Pillar Mapped Against Service Maturity

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Service Execution	No scheduling. Reactive. Ad hoc. Heroic. Scheduling by spreadsheet. No consistent project delivery methods. No project quality controls or knowledge management.	Skeleton methodology in place. Centralized resource mgmt. Initiating project mgmt. and technical skills. Starting to measure project satisfaction and harvest knowledge.	PSA deployed for resource and project management. Collaborative portal. Earned Value Analysis. Project dashboard. Global Project Management Office, project quality reviews and measurements. Effective change management.	Integrated project and resource management. Effective scheduling. Using portfolio management. Global PMO. Global project dashboard. Global Knowledge Management. Global resource management.	Integrated solutions. Continual checks and balances to assure superior utilization and bill rates. Complete visibility to global project quality. Multi-disciplinary resource management.

Source: Service Performance Insight, February 2016

Core Service Execution Business Processes

The power of modern PSA solutions is that they provide workflow, rules, alerts and reporting that mimic best practices in business management. Decades ago services businesses had few viable options as they were forced to build their own, or substantially customize manufacturing-oriented applications, to handle projects and resources. Now, PSA solutions provide modules that support essential business processes, including the critical "quote-to-cash" process (Figure 52).

Figure 52: Primary business processes cross multiple departments

PSA solutions are designed to integrate core business processes across the organization so that each department has a clear understanding of their specific goals and measurements and how they ultimately impact the organization's ability to succeed. Success can be defined in many terms, such as growth, profit, quality, streamlined operations or reduced administration and rework. Regardless, when everyone works with the same set of information and is focused on the critical path to quality completion of project-based work, results tend to improve.

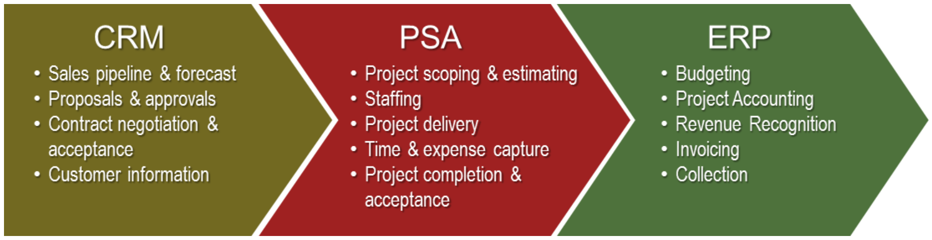
The most important reason why project- and services-based organizations purchase integrated PSA solutions is their ability to support and streamline business processes across the entire organization. No longer can solutions only provide visibility into specific functions. Now, as each department adds value, the business processes that enable success must be mirrored in the PSA solution. The following sections highlight two of the most critical business processes within project- and services-based organizations: 1) *quote-to-cash*, and 2) *resource management*.

Quote-to-cash business processes

In today's economy, cash flow rules. Every organization must focus on cash flow to maintain a solid financial position and maximize profitability and liquidity. In service-oriented organizations this process begins with a client quote and ends once payment is received and the money is in the bank. This macro process of converting sales opportunities into paying customers is often referred to as "quote-to-cash," and its optimization is essential for financial well-being.

Figure 53 shows quote-to-cash is a series of interrelated processes supported by client relationship management (CRM), PSA and enterprise resource planning (ERP) modules. To optimize these fundamental business processes, executives rely on the integration of essential business applications to provide visibility, transparency and control. Although each of these applications are offered on a stand-alone basis, the true power of managing the complete quote-to-profit business cycle is best accomplished by integrating best of breed applications together or purchasing an integrated suite of applications.

Figure 53: Quote-to-cash process



Changing Client Demand

Client demand impacts utilization. PSOs are being asked to demonstrate the value they deliver faster and more explicitly. Each year, clients are less willing to accept time and materials contracts and are shifting more risk and greater accountability for success to their suppliers through fixed-price, deliverables-based and shared-risk contracts. This demand increases administrative effort and reduces billable hours, as consultants must spend more time in presales, "proof of concepts" and documentation to prove the worthiness of their services.

To ensure projects deliver client value within budget requirements, clients are starting to segment projects into shorter and faster phases, which they can monitor more closely, using agile tools and earned value analysis. Clients also demand the ability to cancel at a moment's notice if the project fails to fulfill expectations.

In response, most Professional Service Automation suppliers now provide rich customer and partner portals so clients can actively manage and view the status of projects and deliverables. Partners are given access to vendor-supplied portals containing methods, tools, best practices and development environments so they too can enhance time-to-value. Subcontractors have their own resource management portal so they can manage their availability, skill profiles and project preferences.

Strategic Resource Management for PSOs

Given market growth and an increasing talent shortage, effective resource management has become critical as the supply of qualified consultants is outstripped by the demand for services. Improving and maintaining high levels of billable utilization is a constant challenge requiring a delicate balance between supply and demand.

Resource Management business processes

One of the most important elements of service execution is resource management and scheduling. Service Performance Insight has developed a "Resource Management Maturity Model" in Table 1YY:

- ***Sales Pipeline:*** Integration of the sales project pipeline with resource requirements and availability.
- ***Resource Management:*** The process for scheduling and deploying resources. Resource management can be centralized or decentralized.
- ***Functional Interlock:*** Alignment between the sales project pipeline, the resource management process, the recruiting process, the human resource onboarding and skill development process and the resources themselves.
- ***Human Resource Processes:*** Recruiting, onboarding, ramping, and resource skill development.
- ***Resources:*** The consultants and contractors available to deliver projects and engagements.

Table 115: The Resource Management Maturity Model

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Service Execution	No scheduling. Reactive. Ad hoc. Heroic. Scheduling by spreadsheet. No consistent project delivery methods. No project quality controls or knowledge management.	Skeleton methodology in place. Beginning to centralize resource mgmt. Initiating project mgmt. discipline. Starting to measure project satisfaction and harvest knowledge.	PSA deployed for resource and project management. Collaborative portal. Earned value analysis. Project dashboard. Global Project Management Office, project quality reviews and measurements. Effective change management.	Integrated project and resource management. Effective scheduling. Using portfolio management. Global PMO. Global project dashboard. Global knowledge management. Global resource management.	Integrated solutions. Continual checks and balances to ensure superior utilization and bill rates. Complete visibility to global project quality. Multi-disciplinary resource management.
Sales Pipeline	Sales pipeline and forecast is disconnected from scheduling. Reactive or no sales resource demand forecast or plan.	Standalone CRM and resource forecast. Limited visibility into resource schedule or available skills.	CRM and resource management applications deployed. Sales starts forecasting future resource and skill requirements by engagement.	Fully integrated CRM and Resource management. High levels of pipeline forecast accuracy. Ability to dynamically and automatically map the sales forecast to resource requirements.	Optimized and integrated CRM and resource management. Sales visibility into resource availability and skills. Strong analytic and query tools.
Functional Interlock	Reactive resource brokering and bartering. Sales picks and commits resource "favorites." Time-consuming manual scheduling.	Weekly resource brokering meetings to assign resources and discuss future projects and resources requirements.	Centralized resource management function handles the majority of resource requests and schedules. At least manual integration between CRM and PSA.	Centralized resource management function handles resource requests and schedules. Integrated with HR for recruiting and resource skill development.	Completely optimized and seamless sales -> resource management -> recruiting -> skill and career development processes.
Consulting Resources	Reactive and ad hoc scheduling. No visibility to future projects. No career or skill plan. Broad job requirements but limited training or support. Firefighting leads to consultant burnout.	Project initiation and closeout processes. Some visibility into future projects. Some ability to plan and express project preferences. Training support to improve skills.	Central PMO and resource management provide methodology guidance and oversight. Ability to input skill and role preferences. Visibility to upcoming projects. Reasonable notice given for schedule changes. Integrated career & skill development plans.	Fully integrated systems and tools to support career and skill growth. Self-service employee portal allows employees to continually maintain and update skills and preferences. Visibility to preferred assignments. Career planning and training. Predictable schedule.	Global, on-site, off-site roles. Ability to view and bid on preferred assignments. Employees have input to and control over their career and skill progression. Specialized horizontal, vertical and technical roles. Career growth. High employee satisfaction.

Source: Service Performance Insight, February 2016

Which resource management strategy is best?

To improve utilization, PSOs must improve resource management effectiveness. As the following chart shows, there are pluses and minuses to different resource management strategies. Green shading indicates "Best in Class" and red shading indicates "Worst in class" based on responses from 549 firms. This year Center of Excellence resource management delivered the best results while local management appears to deliver the worst results.

Table 116: Impact – Resource Management Strategy

Resource Mgmt. Strategy	Survey Percent.	Annual Revenue Growth	Revenue Per Project (k)	Employee Billable Utilization	On-time Delivery	EBITDA
Centrally Managed	55.0%	10.8%	$212	70.9%	77.0%	15.1%
Locally Managed	21.1%	9.3%	$170	69.1%	73.5%	15.9%
By Account	8.6%	7.7%	$280	70.3%	75.6%	11.8%
By Horizontal Skill Set	8.2%	9.0%	$231	71.5%	77.2%	11.2%
Center of Excellence	4.8%	12.9%	$415	72.9%	75.8%	23.8%
Other	2.3%	8.5%	$423	70.4%	73.2%	35.0%
Total / Average	**100.0%**	**10.1%**	**$225**	**70.6%**	**76.0%**	**15.6%**

Source: Service Performance Insight, February 2016

SPI's research shows there may not be "one magic bullet" resourcing strategy that is clearly superior to all others. The five strategies that follow enable PSOs to manage talent and fulfill client demands. Although centralized resource management is the most prevalent strategy, each organization must create a resourcing strategy that works best for their business, with the ultimate goal of increasing utilization *and* client and employee satisfaction.

1. **Centrally-managed** – Most resource management pundits favor "centralized" resource management. It provides superior management visibility into the entire project backlog and level of skills required both today and in the future. Central control may be best for fast-growing organizations with large projects but may not produce the highest levels of billable utilization because a certain amount of churn and resource and client unhappiness can result from impersonal centralized staffing policies.

2. **Local resource management** – Local resource management is the preferred form of resourcing for young organizations where the workforce is small enough to foster real esprit de corps, and employees wear many hats. Smaller organizations can't afford the overhead of a dedicated resource management function, as relationships and roles are fluid, requiring more local control and finesse.

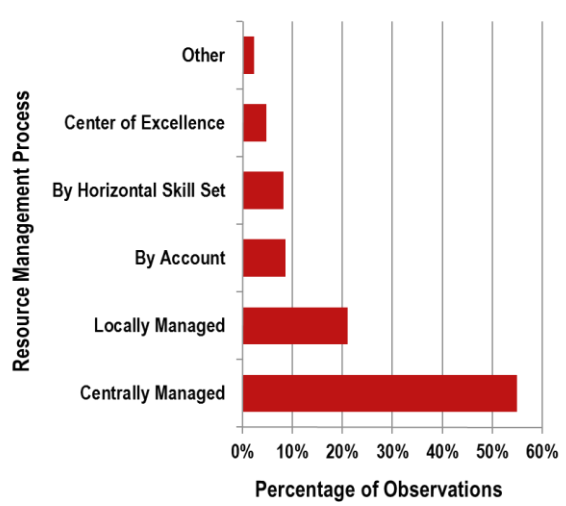
3. **By horizontal skill sets** – Managing resources by horizontal skill set is useful for developing best practices, repeatable processes and shared knowledge. For example, many firms have project and program managers report directly or indirectly to the PMO. By building affinity around "birds of a feather," project managers or specialized consultants can more easily share best practices and

standardize methodologies, templates, etc. As organizations grow, a horizontal or competency-based overlay reporting structure can help firms develop repeatable best practices and deep, shared expertise while still enjoying the efficiency of centralized management.

4. **Account-based** – Resource management by account may be a good strategy for very large accounts where there is a strong backlog of projects, but account-based resourcing can cause big issues if account revenue dries up. An example was Electronic Data Systems' (EDS) reliance on revenue from General Motors. As the relationship with General Motors soured, and its fortunes began to wane, Electronic Data Systems was left holding the bag. The other drawback to account-based resourcing is that it narrows consultant range of experience as teams are not exposed to different business models and challenges.
5. **Centers of excellence** – The current trend towards vertical Centers of Excellence (COE) was pioneered by Accenture over the last decade. The advantage of industry-specific "Centers of Excellence" is the development of deep business-domain knowledge. In theory, each Center of Excellence acts as a clearinghouse for specialized knowledge, expertise and solutions. Clients and prospects delight in seeing a "Vision of the Future" for their unique industry challenges. The downside of COE can be excessive overhead, the creation of an ivory tower mentality and the inability to learn from emerging new horizontal and vertical trends. Further, use of horizontal skills sets and technologies outside the COE can become cumbersome and inefficient. Centers of Excellence are favored for outsourced consulting – particularly development and managed service centers where consultants are collocated to maximize collaboration, design and quality control while minimizing cost.

Figure 54 shows over 55% of respondents manage resource management centrally, with locally managed resource management coming in second at 21%. It is important to remember professional service organizations are based on the unique knowledge, skills and personalities of a highly motivated and compensated workforce. So, erring too far in making resource management more science than art may not always take best advantage of hard-to-find experts. Leading firms understand the skills required and available, and work toward providing additional training to improve employee performance, while ensuring individual travel and project-types and career aspirations are factored in.

Figure 54: Resource Management Process



Source: Service Performance Insight, February 2016

Investment in people, process and systems allows these organizations to minimize employee attrition and drive utilization to extremely high levels. SPI's research shows PSOs that create standard job positions clarify the skills their workers must have.

Providing visibility and additional training helps increase both productivity and morale, both of which improve organizational performance.

PSA is Critical for Service Delivery

Professional Services Automation provides the systems basis for initiation, planning, resource management, scheduling, execution, close and control of projects and services. PSA provides a resource and project dashboard including the demand forecast. It helps manage service delivery by overseeing opportunities, staffing, project management, and collaboration. PSA is typically the system of record for resource skills, competencies and preferences with integration to the employee and contractor database. It is used to collect time and expense by project and resource down to the task level so it is the system of record for resource utilization and project cost and estimating. Most PSA applications now offer billing modules with some level of revenue recognition by type of billing method – time and materials, work in process or fixed price. They also support accurate time and expense capture. PSA extensions for the construction industry include modules for material costs and procurement.

Core modules

PSA vendors segment their products into application modules that emphasize the management of costs, clients and resources:

- ∆ ***Opportunity Management***: The management of client information, sales activities, proposals, and contracts to improve sales effectiveness. Some PSA solutions let a CRM tool handle opportunity management; and instead focus on resource demand management and forecasting functions based on the opportunities tracked in the CRM application.
- ∆ ***Engagement Management***: The management and control of the overall set of project deliverables.
- ∆ ***Resource Management***: The management processes associated with resources (people, material, equipment, etc.) used during the services delivery lifecycle.
- ∆ ***Project Management***: The initiation, planning, execution, close and control of projects.
- ∆ ***Project Accounting***: The tracking of project-related costs to determine budget to actual costs and profitability.
- ∆ ***Time and Expense Management***: The capture and tracking of project-related time and expense information.
- ∆ ***Invoice Management***: The preparation and presentation of invoices based on information captured from the time and expense module or from pre-assigned time or project completion milestones.
- ∆ ***Practice / Management Reporting:*** Core reports include project dashboards, resource management and utilization dashboards, capacity planning and forecasting, project profitability, etc.

Additional modules

While every PSA solution is unique, some have expanded their capabilities through additional modules. Additional modules include:

- ***Social:*** The ability to easily incorporate social channel information from LinkedIn, Facebook, Twitter, etc. along with social collaboration to facilitate knowledge sharing.
- ***Collaboration Management***: The management of information used to create effective communication and iterative knowledge sharing during the services delivery lifecycle.
- ***Knowledge Management***: The centralization of information improves operational efficiency. This information can be anything related to the ongoing business and includes information on resources, projects, capital and clients.
- ***Revenue Management***: PSA solutions provide deferred revenue and work in progress tracking and revenue reporting to automate revenue reporting for time and materials, fixed bid, milestone-based and term engagements.
- ***Performance Management***: The use of information to determine effectiveness and budget to actual performance for different aspects of the organization.

PSA Benefits

Each year SPI Research's Professional Services Maturity™ benchmark quantifies the benefits achieved by services organizations with solutions that integrate Client Relationship Management and financial processes, Human Capital Management and financial processes, and Professional Services Automation and financial processes. Of course, the systems themselves are only part of a broader firm-wide commitment to behavioral change that fosters collaboration and enhanced communication, coordination and quality management.

When it comes to PSA software, project- and services-based organizations now have a range of attractive choices – systems that are designed to support the needs of the always-on, virtual, mobile service economy by providing a number of key benefits:

- Project revenue and cost data is contained in a central database.
- The user interface is consistent across all applications.
- Costs and deliverables reside in the same place so productivity can be measured, analyzed and improved at the territory, account, project and individual resource level.
- Reporting and analytics are embedded within the application, alerting decision-makers to issues before they become problems.
- A more seamless audit trail to better identify success and failure points.
- Enhanced support for global operations with multicurrency, multilingual applications, which conform to local regulations and taxes.
- Lower administration costs due to fewer manual, error-prone spreadsheets and costly data re-entry.
- One-source of the truth – real-time information visibility, constantly updated.

There are many more benefits provided by integrated PSA solutions. It is intuitively obvious that with one consistent set of information, decision-makers have the visibility and control they need to improve organizational performance.

The case for PSA

After nearly 20 years of research on the performance of PSOs, the benefits of PSA speak for themselves. Service Performance Insight research, provides an example of how PSOs have improved performance in all areas when professional services automation has been deployed. PSA provides the necessary visibility to efficiently run projects with fewer overhead resources, resulting in better resource management and profit.

Table 117 shows a few of the most critical key performance indicators (KPIs) and how adopting a PSA can affect them. While increased billable utilization tends to be the primary measurement, there are many other metrics positively impacted by these applications.

Table 117: PSA offers significant benefits

Key Performance Indicator (KPI)	PSA Used	No PSA Used	▲
Employee billable utilization	71.3%	67.3%	6%
Year-over-year change in PS revenue	11.2%	6.3%	78%
Concurrent projects managed by PM	5.94	5.23	14%
Projects delivered on-time	76.4%	74.3%	3%
Use a standardized delivery methodology	65.3%	61.5%	6%
Annual revenue per billable consultant (k)	$199	$191	4%
Profit (EBITDA)	**15.9%**	**12.8%**	**25%**

Source: Service Performance Insight, February 2016

PSOs can manage the business with lower administrative overhead and deliver more projects on time, driving better financial performance. The bottom line is that organizations that use a PSA solution grow faster, are much more profitable, and simply operate far more efficiently.

Service Performance Insight's research into PSA also highlights many qualitative benefits, some of which include:

- Δ Improved time and expense processing
- Δ Improved management effectiveness
- Δ Increased resource utilization
- Δ Improved forecasting capabilities
- Δ Improved project effectiveness
- Δ Improved communication and collaboration
- Δ Improved client satisfaction
- Δ Improved resource investments
- Δ Reduced revenue leakage
- Δ Reduced total administration costs

Survey Results

The following section reviews and analyzes 2016 PS Maturity™ benchmark results from 549 participating professional services organizations. In this section SPI Research analyzes 14 Service Execution KPIs that are critical to attaining superior service delivery performance.

Table 118 shows Service Execution trends for the last five years. Several positive trends include: more projects concurrently managed by a project manager (lowering the overall cost of project management); larger and longer projects (improving firm's ability to forecast demand). Across the subjective dimensions of effectiveness of resource management; estimating; change control; project quality and knowledge management processes all improved. However, several negative trends have emerged. Based on a skills shortage, it is taking longer to staff projects; this is probably a contributing factor to fewer projects being delivered on-time with significantly greater project overruns. Sadly, the use of standardized delivery methods and tools which could mitigate project delivery problems has declined.

Table 118: Service Execution Pillar 5-year trend

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Average project staffing time (days)	12.64	12.48	9.48	9.41	10.40
Concurrent projects managed by PM	4.18	5.30	5.16	4.23	5.77
Average project staff (people)	3.96	3.73	3.76	4.85	4.70
Average project duration (months)	5.17	5.31	5.15	5.57	6.21
Projects delivered on-time	76.5%	78.6%	77.3%	78.3%	76.1%
Projects canceled	2.1%	3.7%	1.9%	1.7%	2.6%
Average project overrun	8.3%	9.2%	8.5%	8.9%	10.0%
A standardized delivery methodology is used	66.6%	63.6%	65.1%	66.2%	64.6%
Effectiveness of resource management process	3.47	3.53	3.47	3.59	3.60
Effectiveness of estimating processes and reviews	3.59	3.44	3.49	3.37	3.55
Effectiveness of change control processes	3.38	3.39	3.36	3.26	3.44
Effectiveness of project quality processes	3.43	3.45	3.38	3.36	3.58
Effectiveness of knowledge management processes	3.04	2.95	3.04	3.01	3.36

Source: Service Performance Insight, February 2016

Table 119 shows little difference in the average project staffing times between embedded and independent service organizations, with most organizations requiring two working weeks to commence project initiation. Each year the number of projects managed per project manager has inched up from 4.18 in 2011 to 5.77 in 2015. Today's project managers receive more training and PMI/PMP certification than ever before. At the same time, the nature of projects is shifting towards more configuration, user interfaces and report design away from the complex, custom mega projects of the past making them somewhat easier to manage and keep within scope. A host of accelerators, configuration, project and knowledge management tools have come to market to enhance knowledge sharing and collaboration while facilitating more natural oversight, guidance and real-time quality reviews to mitigate risks.

Table 119: Service Execution KPIs by Organization Type and Geographic Region

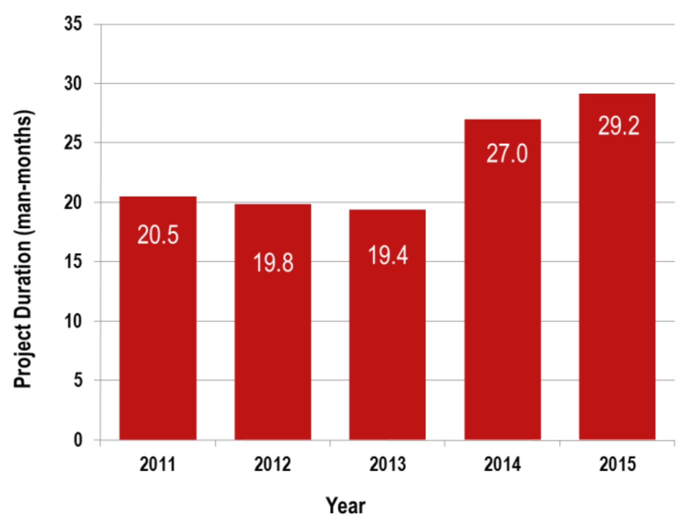
Key Performance Indicator (KPI)	2011	2015	ESO	PSO	Americas	EMEA	APac
Average project staffing time (days)	12.64	10.40	11.13	10.05	10.46	10.00	11.29
Concurrent projects managed by PM	4.18	5.77	6.59	5.39	6.28	4.67	4.82
Average project staff (people)	3.96	4.70	4.64	4.73	4.89	4.19	4.72
Average project duration (months)	5.17	6.21	5.59	6.50	6.22	6.45	5.20
Projects delivered on-time	76.5%	76.1%	72.0%	78.0%	76.2%	75.6%	77.0%
Projects canceled	2.1%	2.6%	2.4%	2.7%	2.6%	2.7%	2.2%
Average project overrun	8.3%	10.0%	11.2%	9.5%	10.0%	10.2%	9.2%
Use of a standardized delivery meth.	66.6%	64.6%	65.4%	64.2%	65.7%	61.1%	66.6%
Effect. of resource management	3.47	3.60	3.55	3.62	3.60	3.57	3.69
Effect. of estimating and reviews	3.59	3.55	3.52	3.56	3.58	3.42	3.71
Effect. of change control	3.38	3.44	3.45	3.44	3.45	3.38	3.60
Effect. of project quality	N/A	3.58	3.41	3.66	3.58	3.51	3.83
Effect. of knowledge management	N/A	3.36	3.30	3.39	3.37	3.32	3.47

Source: Service Performance Insight, February 2016

Across all types of organizations and geographies the average project staff is 4.7 people. As shown in Figure 55 project staff size has been inching up since the recession, growing from 3.96 in 2011 to 4.7 in 2015. Project duration has likewise been growing from 5.17 months in 2011 to 6.21 months in 2015. With economic recovery, project sizes are growing as companies have more time and money to spend on improving their businesses. In the past five years the average project has grown from 20.5 man months to 29.2 man months, representing 42% growth. Quite significant!

Unfortunately, while improvements have been made in the number of projects concurrently managed by a project manager and project staff size and duration have increased, almost no improvements have been reported in the number of projects delivered on-time. This is an important metric which depends on a host of other processes such as accurate estimates, clear requirements, great client communication and scope control. But the sad reality exists, in 2011 76.5% of projects were delivered on-time while only 76.1% were delivered on-time in 2015. ESOs do a poorer job of on-time project delivery due

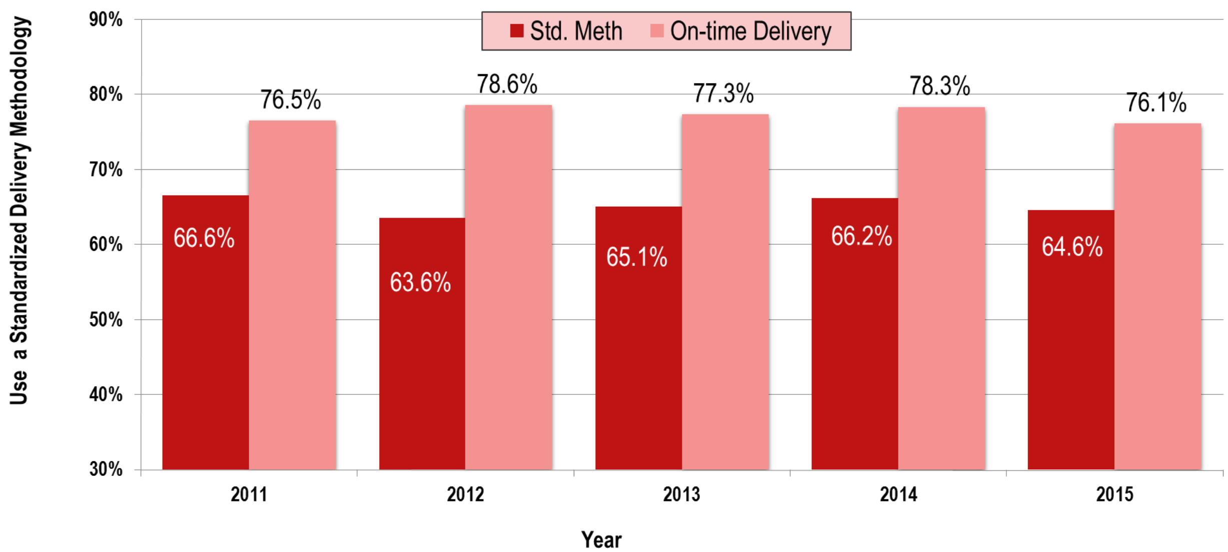
Figure 55: Project Duration (man-months) 5-year trend



Source: Service Performance Insight, February 2016

in large part to their role of ensuring client adoption. When faced with product problems, the PS team must continue to trudge on, often at no charge to ensure the client receives a useful solution.

Figure 56: Standardized Delivery Methodology use mapped against On-time Delivery 5-year trend



Source: Service Performance Insight, February 2016

Unfortunately, over the same five-year time horizon, the magnitude of project overruns has increased substantially from 8.3% in 2011 to 10% in 2015. The sad fact is the one thing that could improve on-time project delivery and reduce project overruns is not being used. ***The use of standardized service delivery methods has actually declined from 66.6% of all projects in 2011 to only 64.6% in 2015***. Very disappointing at a time when the PS industry is undergoing tremendous growth and gaining stature and global visibility. Just think of the myriad news headlines heralding poor project management and ineffective service delivery processes – mine explosions, gas line leaks, oil spills…. All of which could have been prevented with quality service delivery processes and reviews! Areas of improvement in service execution have been in resource management, estimating, change control, quality and knowledge management processes.

Table 120 shows the differences in service execution metrics by size of organization. The smallest organizations do the best job of on-time project delivery. The largest organizations gave themselves the best marks for estimating, change control, project quality and knowledge management. They certainly need these processes as they manage the largest, most risk intense projects.

Table 120: Service Execution KPIs by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Average project staffing time (days)	7.98	8.10	9.98	12.02	10.65	12.84
Concurrent projects managed by PM	6.33	5.79	5.52	5.89	5.17	6.12
Average project staff (people)	2.65	3.35	4.09	5.46	5.86	6.98
Average project duration (months)	5.61	5.59	5.94	6.75	6.15	7.10

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Projects delivered on-time	79.1%	76.0%	75.8%	74.6%	76.3%	77.3%
Projects canceled	3.3%	2.6%	1.7%	2.7%	3.4%	3.2%
Average project overrun	8.9%	10.3%	10.4%	9.9%	9.9%	10.0%
Use of a standardized delivery meth.	62.8%	62.9%	68.3%	61.6%	65.4%	65.3%
Effect. of resource management	3.57	3.78	3.54	3.43	3.65	3.77
Effect. of estimating and reviews	3.65	3.54	3.51	3.49	3.48	3.71
Effect. of change control	3.60	3.34	3.28	3.41	3.38	3.91
Effect. of project quality	3.72	3.52	3.43	3.56	3.53	3.92
Effect. of knowledge management	3.58	3.20	3.22	3.31	3.38	3.77

Source: Service Performance Insight, February 2016

Table 121 shows service execution metrics by vertical market. Remarkably, most service execution metrics are very similar across markets. Management consultants do the best job of on-time project delivery as the majority of their projects are fixed price with clear value-added deliverables. SaaS PSOs reported the worst on-time project delivery which directly contradicts their claims of "No more software". SaaS PSOs have the greatest opportunity to develop repeatable, packaged services with the highest use of standardized service delivery methods (72.7%) yet their service execution metrics are among the poorest. Clearly their thirst for market expansion has sidelined their quest for service delivery excellence.

Table 121: Service Execution KPIs by Vertical Service Market

Key Performance Indicator (KPI)	IT Cons.	Soft-ware	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Average project staffing time (days)	10.58	11.89	10.37	8.56	9.53	9.23	11.35
Concurrent projects managed by PM	5.19	6.89	4.07	7.38	6.90	6.38	6.15
Average project staff (people)	5.08	4.54	4.17	4.13	4.38	5.65	5.54
Average project duration (months)	6.24	5.84	6.55	8.52	5.09	5.88	5.36
Projects delivered on-time	77.4%	71.4%	83.6%	76.8%	70.9%	72.7%	76.3%
Projects canceled	2.4%	2.7%	2.1%	3.9%	2.1%	2.2%	2.5%
Average project overrun	10.0%	12.3%	6.8%	8.9%	11.4%	11.5%	7.1%
Use of a standardized delivery meth.	67.5%	63.4%	61.6%	65.2%	72.7%	68.5%	50.0%
Effect. of resource management	3.63	3.51	3.77	3.43	3.49	3.93	3.62
Effect. of estimating and reviews	3.57	3.40	3.82	3.30	3.51	3.71	3.92
Effect. of change control	3.49	3.37	3.57	3.15	3.33	3.86	3.50
Effect. of project quality	3.63	3.38	3.85	3.55	3.33	3.71	3.54
Effect. of knowledge management	3.33	3.16	3.55	3.47	3.49	3.80	3.31

Source: Service Performance Insight, February 2016

Table 122: Service Execution KPIs by Vertical Service Market

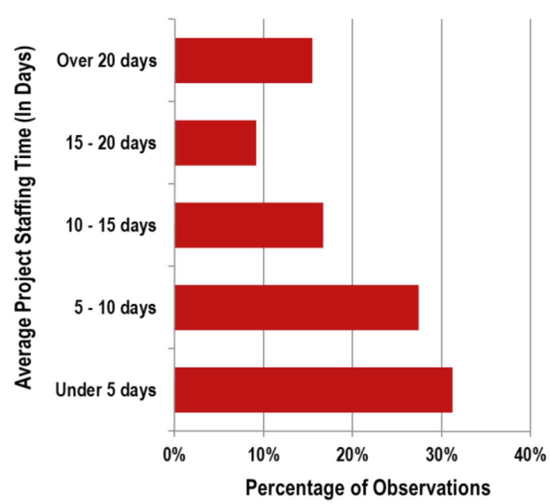
Key Performance Indicator (KPI)	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Average project staffing time (days)	12.32	12.32	6.82	5.68	11.56	9.79
Concurrent projects managed by PM	4.96	4.35	7.00	5.79	4.63	6.58
Average project staff (people)	6.25	4.29	3.14	5.13	4.94	3.83
Average project duration (months)	6.86	5.36	2.91	4.04	6.39	7.54
Projects delivered on-time	70.7%	73.6%	70.5%	80.5%	74.4%	77.1%
Projects canceled	3.2%	1.9%	3.3%	2.5%	5.4%	2.7%
Average project overrun	11.7%	7.7%	14.8%	8.8%	11.6%	9.2%
Use of a standardized delivery meth.	47.1%	67.1%	60.9%	64.5%	65.0%	48.3%
Effect. of resource management	3.62	3.57	3.55	3.75	3.44	3.46
Effect. of estimating and reviews	3.75	3.64	3.27	3.33	3.22	3.69
Effect. of change control	3.85	3.79	3.36	3.17	3.00	3.38
Effect. of project quality	3.92	3.36	3.27	3.42	3.33	4.00
Effect. of knowledge management	3.69	3.07	3.36	3.08	3.22	3.38

Source: Service Performance Insight, February 2016

Project Staffing Time

As PSOs grow in size and the scope of projects increases, project staffing complexity increases exponentially. Now, many PSOs take days or weeks to staff projects, waiting to find the "right" resources. Average project staffing time in 2015 is 10.4 days, one day worse than the 9.4 days reported in 2014. ESOs reported slightly longer staffing time (11.1 days) than their independent counterparts (10.1 days).

Figure 57: Project Staffing Time (days)



Source: Service Performance Insight, February 2016

This key performance indicator is important because it is an early warning sign of too much demand when it takes longer and longer to assemble the right team. It is a leading indicator of tightening resource availability and can be a signal to start recruiting and hiring. Rapid resource deployment can only be attained with accurate visibility to current and future demand along with the right mix of required resource skills, schedules and preferences.

Concurrent Projects Managed by Project Manager

The number of concurrent projects managed by a project manager is a measurement of project management efficiency and effectiveness. Larger more complex projects require more skilled, dedicated project or program managers, while multiple, smaller concurrent projects tax the scheduling and multi-tasking ability of even the most skilled project managers. It is also a good indicator of project complexity and risk. Typically, firms use a 20-20 rule for project management, 20% of the overall cost of the project is allocated to project management and a project manager is usually assigned at least 20% of his/her time to a given project. Project management effort is most intense at the beginning and end of the project.

Table 123 shows mixed results in terms of utilization but revenue per employee and net profit improved with more projects managed by each project manager. The greater the number of projects managed shows a higher net profit, meaning less overhead on a per project basis. As shown in the table, the percentage of the workforce in dedicated project management roles is declining in favor of tasking either business consultants and/or technical consultants to perform this role in addition to their own billability.

Table 123: Impact – No. of Concurrent Projects Managed by Project Mgr.

Concurrent Projects Managed	Survey Percent	Billable Utilization	Revenue / Emp. (k)	EBITDA
1 - 2	20.8%	71.9%	$155	13.8%
3 - 5	39.9%	69.7%	157	15.6%
6 - 8	18.9%	70.5%	147	14.5%
9 - 11	7.9%	70.4%	149	19.2%
Over 11	12.6%	70.6%	182	17.0%
Total/Average	**100.0%**	**70.5%**	**$157**	**15.5%**

Source: Service Performance Insight, February 2016

Project Staff Size

Based on technology advancements in ease of use, integration and configurability, there has been a trend toward shorter project durations with smaller project team sizes particularly for cloud deployments. However, this situation is changing as cloud technologies have moved to the enterprise, with greater complexity and business process change. Shorter, more iterative

Table 124: Impact – Project Team Size (people)

Project Team Size (people)	Survey Percent	Billable Utilization	Revenue / Billable Emp. (k)	Revenue / Emp. (k)
1 - 2	23.5%	68.0%	$175	$150
3 - 5	49.3%	70.7%	209	161
6 - 8	17.7%	71.4%	200	157
9 - 11	4.9%	76.0%	164	140
Over 11	4.7%	74.6%	219	181
Total/Average	**100.0%**	**70.6%**	**$198**	**$157**

Source: Service Performance Insight, February 2016

"agile" projects usually result in improved project value and ROI plus clients can cancel projects that fail to meet objectives. Smaller, faster projects make it more difficult to plan and schedule resources, increasing resource management complexity and bench time, which reduces overall profitability. This situation creates more resource churn, and must be accounted for in terms of higher bill rates or greater projected hour padding.

Table 124 shows that 72% of projects have five or fewer people. Overall firm profitability increases with project team size because firms have greater visibility and lower resource churn with large project teams. Today's PSOs must learn to effectively manage a project portfolio of both short and longer projects. Effective resource management, use of standard methods, tools and templates and high quality project management are best practices regardless of project size.

Project Duration

The average project duration, expressed in months, depicts the effectiveness, or lack thereof, of selling longer term projects. The average project duration, like average project staff size, is important in that it shows the average length and scale of today's projects. Longer projects are easier to staff but are not necessarily more profitable because longer and larger projects may involve significantly more risk and complexity.

Table 125: Impact – Project Duration

Project Duration (months)	Survey Percent	Billable Utilization	On-time project delivery	Revenue per billable consult. (k)
Under 1	7.0%	65.4%	75.4%	$171
1 - 3	17.2%	67.8%	79.0%	184
3 - 6	31.1%	68.7%	74.4%	199
6 - 9	23.4%	72.4%	75.3%	212
9 - 12	11.5%	74.4%	75.8%	194
Over 12	9.8%	76.2%	78.5%	207
Total/Average	**100.0%**	**70.6%**	**76.0%**	**$198**

Source: Service Performance Insight, February 2016

Table 125 shows 55% of project are six months or less in duration while 45% are longer than 6 months. Obviously, revenue per project increases as the duration increases, and billable utilization also rises as the duration increases. Interestingly, project duration does not seem to impact on-time project delivery as both the shortest and longest duration projects reported the best on-time project delivery.

On-time Project Delivery

The percentage of projects delivered on time is a measurement that divides the number of projects completed on-time by the total number of projects. This KPI is critical for billable service organizations, because when it decreases, both profitability and client satisfaction decline. Unfortunately, on-time project delivery rates tend to be less than 80% on average for PSOs.

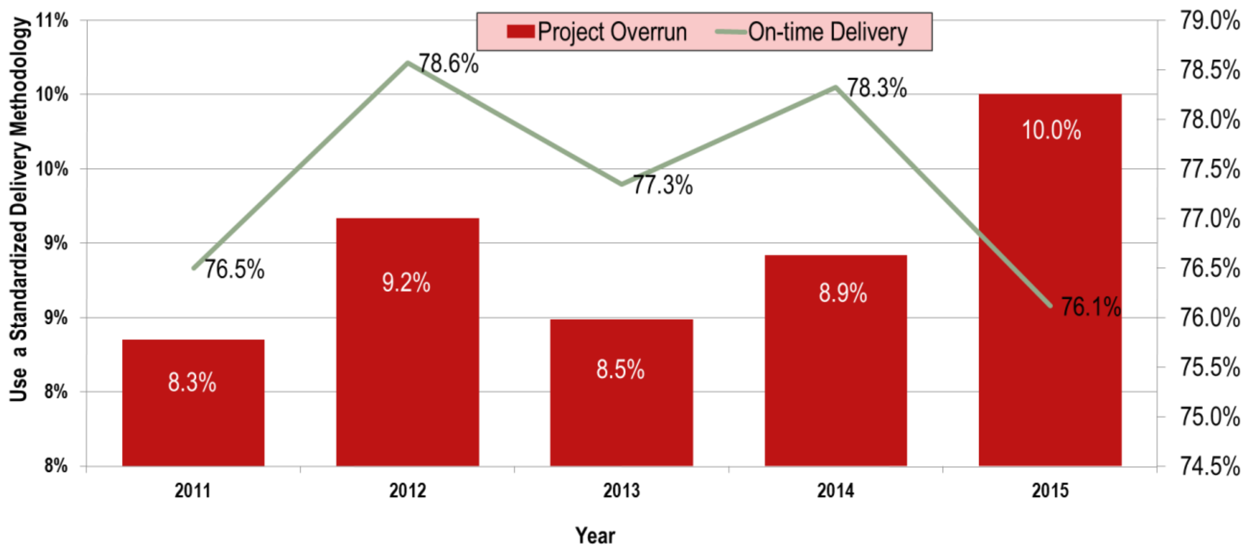
In 2015 the percentage of projects delivered on-time declined to the lowest level in five years (76.1%). Independents do a much better job of on-time project delivery (78%) than embedded PSOs (72%). On-time delivery is an extremely important key performance indicator because it impacts both client satisfaction and the ability to take on new projects. When projects are delivered late, client satisfaction suffers. It also causes new projects to be delayed because of the lack of available resources. PS executives strive to keep employees utilized. However, when they cannot start work because prior projects are late, everyone suffers. As Figure 58 shows, on-time delivery and project overruns have both worsened over the past five years, this is a very negative trend which PSOs must take immediate steps to reverse.

Table 126: Impact – On-time Delivery

On-time Project Delivery	Survey Percent	Rev. per Billable Consult. (k)	Project Margin	% of Revenue Achieved
Under 40%	3.7%	$174	26.3%	80.6%
40% - 60%	8.3%	182	29.9%	87.8%
60% - 70%	16.6%	184	29.7%	90.4%
70% - 80%	22.5%	190	34.5%	91.2%
80% - 90%	28.8%	215	36.0%	92.4%
Over 90%	20.1%	208	38.0%	94.5%
Total/Average	**100.0%**	**$194**	**34.1%**	**91.4%**

Source: Service Performance Insight, February 2016

Figure 58: On-time Delivery Mapped to Project Overrun 5-year trend



Source: Service Performance Insight, February 2016

Project Cancellation

The project cancellation rate represents the number of projects canceled divided by total projects. In billable professional services organizations, the project cancellation rate is typically quite low when compared to internal IT organizations. However, it is important because if projects are canceled the organization must scramble to reallocate resources to keep utilization rates high, not to mention strive to improve the damaged client relationship.

As we have seen throughout the 2016 PS Maturity benchmark, project cancellation rates have risen precipitously.

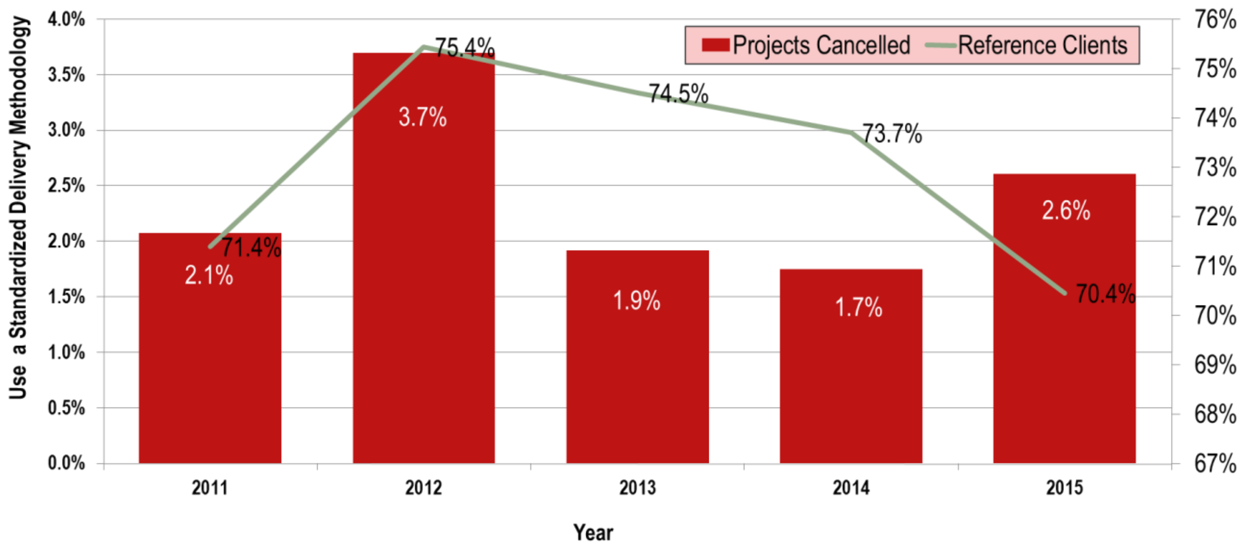
Figure 59 shows the correlation between project cancellation rates and reference clients. This year, cancellation rates have almost doubled, while the percentage of reference clients has reached its lowest level in five years. These are very troubling statistics which must be turned around to preserve growth across the PS industry.

Table 127: Impact – Project Cancellation

Project Cancellation	Survey Percent	Project Margin	Annual Rev. per employee (k)	Annual Rev. per employee (k)
None	17.5%	34.5%	$198	$151
0% - 1%	23.3%	34.7%	211	170
1% - 2%	19.5%	34.5%	207	161
2% - 5%	22.9%	33.5%	195	157
5% - 7%	9.0%	32.1%	189	151
7% - 10%	4.8%	28.6%	146	117
Over 10%	3.0%	36.5%	195	168
Total/Avg.	**100.0%**	**33.9%**	**$199**	**$158**

Source: Service Performance Insight, February 2016

Figure 59: Referenceable Clients Mapped to Projects Cancelled 5-year trend



Source: Service Performance Insight, February 2016

Project Overrun

Project overrun is the percentage of actual to budgeted cost or actual to budgeted time. Project overruns may be expressed in actual time/cost versus plan. This KPI is important because anytime a project goes over budget in either time or cost; it cuts directly into the PSO's profitability. Project overruns, like projects not delivered on time, limit future work and client satisfaction. In many instances project overruns indicate a lack of project governance, which negatively impacts bottom-line results. Table 128 highlights how project overruns significantly impact billable utilization, on-time project completion and the percentage of work which much be written-off. Employee morale is also negatively impacted when projects go awry as evidenced by higher levels of voluntary attrition.

Table 128: Impact – Average Project Overrun

Avg. Project Overrun	Survey Percent	Billable Utilization	On-time Completion	% of Work Written Off	Voluntary Attrition
Never	5.9%	74.2%	81.6%	1.7%	7.8%
0% - 5%	29.4%	72.8%	84.0%	1.8%	6.4%
5% - 10%	28.4%	68.9%	78.3%	2.7%	7.6%
10% - 20%	25.2%	68.3%	69.2%	4.1%	8.0%
20% - 30%	7.3%	69.6%	66.7%	3.7%	9.8%
Over 30%	3.9%	56.1%	53.4%	8.3%	12.1%
Total/Average	**100.0%**	**69.8%**	**76.1%**	**3.0%**	**7.7%**

Source: Service Performance Insight, February 2016

Standardized Delivery Methodology

SPI Research asked PSOs what percentage of the time they used a standard delivery methodology to manage projects. Mature firms invest significant time and attention to methodology development as a means to standardize project processes; define expectations and institutionalize quality. Using a standardized delivery methodology is a critical component of a services productization strategy. It helps improve project forecasting, resource management, cost and profitability. PSOs that can accurately plan and execute services in a structured way, are not only more productive but also more likely to deliver quality results. There is significant effort involved in developing, implementing and adhering to standardized delivery methodologies, but the net impact for PSOs is beneficial.

Table 129: Impact – Standardized Delivery Methodology Use

Standardized Delivery Methodology Use	Survey Percent	Bid-to-win ratio	Billable Utilization	On-time Project Completion
Under 20%	10.9%	4.35	67.2%	66.4%
20% - 40%	10.1%	4.85	68.9%	70.2%
40% - 60%	14.7%	4.98	70.4%	69.9%
60% - 80%	23.6%	5.06	71.4%	76.9%
Over 80%	40.6%	5.06	71.3%	81.2%
Total/Average	**100.0%**	**4.95**	**70.5%**	**75.8%**

Source: Service Performance Insight, February 2016

Table 129 compares the percentage of time a standardized delivery methodology is used to other key performance indicators for the PSOs answering the question. The table shows that PSOs using a standardized delivery methodology have improved bid-win rates, higher utilization and are much more likely to deliver projects on-time.

Effectiveness of the Resource Management Process

SPI Research asked survey respondents to rate the effectiveness of their resource management process with 1 = poor and 5 = great. Although subjective, this key performance indicator is an important measurement of how effective the organization views its resource management processes. Resource management is critical to project planning and execution. PSOs who effectively and efficiently manage resources show much higher utilization rates, more projects delivered on-time and higher project margins and company profitability.

Table 130 compares the effectiveness of resource management processes to other key performance indicators for the PSOs answering the question. The table shows a strong correlation between resource management effectiveness, billable utilization, on-time completion and project margin. Clearly resource management effectiveness improves directly with the use of PSA solutions. While this question is subjective in nature, the results are compelling enough to show how important resource management is to improving performance.

Table 130: Impact – Resource Management Effectiveness

Resource Management Effectiveness	Survey Percent	Use PSA	Billable Utilization	On-time Completion	Project Margin
1 - Low	3.3%	64.3%	61.1%	50.8%	25.5%
2	8.7%	80.6%	67.4%	66.0%	27.7%
3	25.9%	79.1%	70.0%	73.5%	32.7%
4	49.2%	79.2%	71.2%	77.0%	33.4%
5 - High	12.9%	83.3%	72.5%	82.1%	37.1%
Total/Average	**100.0%**	**79.3%**	**70.4%**	**74.9%**	**32.9%**

Source: Service Performance Insight, February 2016

Effectiveness of Estimating Processes and Reviews

SPI Research asked survey respondent to rate the effectiveness of their estimating processes and estimate reviews, with a rating of 5 for excellent to one for poor. This key performance indicator is important as accurate estimates hold the key to all other service delivery metrics. Inaccurate estimates lead to miss-set client expectations; project overruns and poor client satisfaction. While this subjective KPI might

Table 131: Impact – Effectiveness of estimating processes and reviews

Effectiveness of estimating processes & estimate reviews	Survey Percent	Billable Utilization	On-time Delivery	EBITDA
1 - Low	1.6%	57.1%	53.3%	15.7%
2	13.4%	67.5%	62.3%	15.9%
3	27.5%	68.2%	73.1%	16.3%
4	44.5%	72.7%	78.9%	18.8%
5 - High	12.9%	71.9%	81.0%	25.5%
Total/Average	**100.0%**	**70.4%**	**74.9%**	**18.6%**

Source: Service Performance Insight, February 2016

be hard to fathom, its results show how some of the most important KPIs improve as the organization becomes more effective in their estimating processes.

Table 131 compares the effectiveness of estimating processes to other key performance indicators. On-time project completion improves; so does revenue per employee and most importantly, overall net profit improves dramatically. Estimating requires significant investment in methodology development and scoping projects to the task level, but obviously from this table it is well worth the time to ensure accuracy and completeness.

Effectiveness of Change Control Processes

SPI Research asked executives their opinion of the effectiveness of their change control processes, with a rating of one for poor to five for excellent. All projects involve risk, scope management and change. The important question is how these variables are managed. Mature PSOs invest in developing change and risk management policies along with PM training and PMO oversight and guidance. They must also consider the impact of the change and how it will effect subsequent projects. A critical component of change control is to ensure project margins do not suffer. Ideally, project changes are clearly outlined; client perception is appropriately managed and change orders are put in place. Too many change orders not only impact the budget and schedule but may be signs of scope creep as well as inadequate executive sponsorship and poor communication.

Table 132 compares the effectiveness of change control processes to other key performance indicators. Again, similar to the organizations with high levels of resource management and estimating effectiveness, those organizations that manage change the best demonstrate significantly higher KPIs in both the service execution and finance and operations pillars. What these key performance indicators demonstrate is that the devil is in the details. Organizations that focus on basic execution issues such as resources, estimating and change control drive superior results compared to those organizations that place less emphasis on these critical issues.

Table 132: Impact – Effectiveness of change control processes

Effectiveness of change control processes	Survey Percent	Billable Utilization	On-time Delivery	EBITDA
1 - Poor	2.1%	57.8%	47.5%	22.6%
2	13.5%	67.4%	64.6%	17.0%
3	32.9%	70.6%	75.1%	16.7%
4	40.0%	71.6%	78.8%	18.5%
5 - Excellent	11.6%	71.1%	77.6%	24.9%
Total/Average	**100.0%**	**70.4%**	**74.9%**	**18.5%**

Source: Service Performance Insight, February 2016

Effectiveness of Project Quality Processes

SPI Research asked executives their opinion of the effectiveness of their project quality processes, with a rating of one for poor to five for excellent. Quality must be a core organizational attribute that is built into projects and project management processes. Most leading professional services organizations build in quality checks and balances to assure the work is done correctly.

Table 133: Impact – Effectiveness of Project Quality Processes

Effectiveness of Project Quality Processes	Survey Percent	On-time Completion	Revenue/ Consult. (k)	Revenue/ Emp. (k)
1 - Poor	1.9%	54.3%	$132	$133
2	12.7%	63.2%	188	149
3	24.7%	73.1%	185	153
4	46.1%	76.8%	195	154
5 - Excellent	14.6%	84.8%	228	179
Total/Average	**100.0%**	**74.9%**	**$195**	**$156**

Source: Service Performance Insight, February 2016

As more PSOs work to productize their services offerings, they must incorporate quality processes and procedures, as well as metrics. High quality service delivery underlies client satisfaction and drives referrals and repeat business. Table 133 shows results improve across the board as quality processes are implemented.

Effectiveness of Knowledge Management Processes

SPI Research asked benchmark respondents their opinion of the effectiveness of their knowledge management processes, with a rating of one for poor to five for excellent (Table 134). Knowledge management has become a critical component of service execution. Best practices and other quality-driven initiatives are built-in into project delivery. Assuring the right information is available to all those who need it is paramount to success. Over the past five years' knowledge management, especially through the use of social media and collaboration tools, has moved to the forefront of service execution. Team members now work more collaboratively to achieve project objectives. The table shows that effectiveness of Knowledge Management processes has a positive impact on both service delivery and financial results.

Table 134: Impact – Effectiveness of Knowledge Management processes

Effectiveness of Knowledge Mgmt. processes	Survey Percent	Billable Utilization	On-time Completion	EBITDA
1 - Poor	3.1%	59.2%	57.5%	12.1%
2	16.5%	70.4%	66.7%	19.4%
3	28.1%	68.7%	74.0%	14.8%
4	38.7%	71.4%	78.1%	20.1%
5 - Excellent	13.7%	73.6%	82.0%	16.3%
Total/Average	**100.0%**	**70.4%**	**75.0%**	**17.7%**

Source: Service Performance Insight, February 2016

10. Finance and Operations Pillar

The Finance and Operations pillar represents the realm of the CFO for large PS organizations, and is an intrinsic part of the role of the chief service executive for all PS organizations, regardless of size. In this service performance pillar SPI Research examines 38 key performance measurements for revenue, margin and operating expense. We have added detailed profit and loss statements and expense ratios by organization size, geography and vertical.

Table 135 highlights attributes of the Finance and Operations pillar as the organization matures.

Table 135: Finance and Operations Performance Pillar Maturity

	Level 1 Initiated	Level 2 Piloted	Level 3 Deployed	Level 4 Institutionalized	Level 5 Optimized
Finance and Operations	The PSO has been created but is not yet profitable. Rudimentary time & expense capture. Limited financial visibility and control. Unpredictable financial performance. Rudimentary contract management. Manual systems and processes.	5 to 20% margin. PS becoming a profit center but still immature finance and operating processes. Investment in ERP and PSA to provide financial visibility. May not have real-time visibility or BI. Standard Library of Contracts and Statements of Work.	20 to 30% margin. PS operates as a tightly managed P&L. Standard methods for resource mgmt., time & expense mgmt., cost control & billing. In depth knowledge of all costs at the employee, sub-contractor & project level. Processes in place for contract management, legal and pricing decisions.	PS generates > 20% of overall company revenue & contributes > 30% margin. Well-developed finance and operations processes and controls. Systems have been implemented for CRM, PSA, ERP and BI. IT integration and real-time visibility. Systems have been implemented for contract management, legal and pricing decisions.	> 30% margin. Continuous improvement and enhancement. High profit. Integrated systems. Real-time visibility. Global with disciplined process controls and optimization. Completely integrated financial, CRM, resource management, contracts and pricing systems, processes and controls.

Source: Service Performance Insight, February 2016

As shown in Table 136, in 2015 almost all financial metrics trended down. The only major area of improvement was in larger project sizes, growing from an average of $189K per project in 2014 to $225K in 2015. Financial metrics declined significantly in several important areas, particularly, revenue per employee, which declined from $167K in 2014 to $157K in 2015. Given the scope of this benchmark, (representing 350,000 PS employees) this decline represents as much as $3.5 billion in lost revenue. Other KPIs which declined significantly include project margins for both time and materials and fixed price contracts as well as subcontractor margins.

Falling leading indicators portend rough sledding in 2016. On top of the dramatic decline in sales pipelines outlined in the CRM chapter, project backlog declined significantly from a relatively healthy 48.4% of quarter-starting forecast in 2014 to only 40.4% in 2015. This is the lowest level of backlog we have seen since the great recession of 2009 when backlog declined to 41.9%.

Table 136: Finance and Operations Pillar 5-year trend

Key Performance Indicator (KPI)	2011	2012	2013	2014	2015
Annual revenue per billable consultant (k)	$197	$206	$193	$197	$198
Annual revenue per employee (k)	$167	$168	$155	$167	$157
Average revenue per project (k)	$202	$170	$189	$189	$225
Project margin for time and materials projects	33.4%	35.9%	36.3%	36.3%	33.7%
Project margin for fixed price projects	33.5%	35.9%	37.6%	35.8%	33.0%
Average project margin — subs, offshore	29.9%	29.7%	28.8%	28.4%	26.2%
Quarterly revenue target in backlog	45.1%	43.3%	45.0%	48.4%	40.4%
Percent of annual revenue target achieved	93.0%	91.2%	89.9%	90.5%	91.4%
Percent of annual margin target achieved	89.6%	87.7%	88.2%	87.0%	89.4%
Revenue leakage	3.97%	4.04%	4.17%	4.05%	4.20%
% of inv. redone due to error/client rejections	2.0%	2.2%	2.1%	2.3%	2.6%
Days sales outstanding (DSO)	45.0	44.7	44.1	43.4	43.8
Quarterly non-billable expense per employee	$1,613	$1,266	$1,392	$1,443	$1,908
% of billable work is written off	2.68%	3.20%	3.00%	3.10%	3.00%
Executive real-time wide visibility	**3.56**	**3.37**	**3.57**	**3.58**	**3.32**
Profit (EBITDA)	**13.5%**	**16.8%**	**11.4%**	**13.2%**	**15.5%**

Source: Service Performance Insight, February 2016

Other sources of worry are shown in higher revenue leakage; more invoices that must be redone due to client issues or inaccuracies; and higher amounts of discretionary non-billable expense per employee. Yet with all this bad news, reported earnings before income tax and percentage achievement of annual revenue and margin targets improved in 2015. This may mean the worst is yet to come in 2016 as these metrics are reflections of 2015 performance, and do not predict 2016 performance. Now is a good time for all PSOs to take a careful look at their 2016 targets while scrubbing backlog and sales pipelines to ensure they can be achieved. The global economy may be in for rocky seas throughout 2016 so caution is advised.

The impact of effective planning and budgeting

An effective planning and budgeting process that enlists and enfranchises the collective intelligence and vision of the firm is one of the most powerful tools in the executive handbook. The best performing organizations have moved from reactive to proactive planning. Real-time visibility and analysis have transformed decision-making from tactical to strategic. With the assistance of powerful planning and analysis tools, planning does not have to be a dreaded once-a-year, laborious process. It can become a fluid, collaborative, all-year-long process that facilitates input and cooperation across all functions and levels. With the right tools, managers at all levels are empowered to analyze business performance, conduct their own root cause analysis and take immediate action before it is too late.

Each year organizations should devote time to reenergizing their vision and strategies as they plan the upcoming year's business. The business planning process can be a valuable catalyst for growth and profit. Enlightened firms use the planning process to sharpen vision; align leadership; reevaluate and improve go to market and sales strategies; discuss new and better ways to motivate the workforce and streamline processes and systems.

For many people-based organizations, annual planning has become an empty ritual. Firms often waste too much time and energy reliving past failures instead of exploring new avenues for growth. Done right, instead of a necessary evil, business planning can open up fresh new ideas and facilitate playing to strengths rather than shoring up weaknesses. The best-of-the-best project and service-focused organizations each year find new and better ways to do the things they love to do – and are especially good at – while minimizing the hassles and tedium of repeating the things that hold them back or waste precious time and resources.

Before embarking on a planning and budgeting exercise, SPI has explored some of the reasons why organizations fail to deliver their desired results. Our experience has shown that when things go wrong, it most often starts at the top and then cascades downward throughout the organization, ultimately showing up in lackluster financial performance with poor predictability. Eliminating the root causes of dysfunction and inefficiency goes a long way toward driving organizational success. Common issues:

- ∆ ***Unclear strategy*** – lack of clarity around target markets, target clients and why we win. Inability to capitalize on market opportunities due to lack of alignment, lack of employee engagement or leadership and cultural issues. No leverage to drive repeat sales, limited competitive differentiation, poor sales and marketing execution.
- ∆ ***Lack of alignment –*** unclear service charters – particularly a problem for embedded service organizations – with conflict between driving revenue and margin versus helping the overall company achieve its objectives of market expansion and client delight.
- ∆ ***Silos*** – exist in all companies – they usually occur in the choppy waters between groups or functions where responsibility and accountability are blurry. A classic example… who is responsible for driving new service revenues – is it sales or delivery? How can disconnected processes and poor handoffs be improved?
- ∆ ***Reactive not proactive*** – planning is seen as a necessary evil with finance-imposed tops down targets combined with grudging business unit participation. The planning process itself is either overly burdensome with endless rounds of manual spreadsheet inputs or chaotic and reactive. Managers have no ability to analyze and recalibrate to take advantage of changing market conditions leading to missed targets and a demoralized workforce.
- ∆ ***Rearview mirror instead of focused on best growth alternatives*** – because the planning process is reactive and manual, business unit leaders and finance executives must rely on past business performance rather than being able to spot trends and take advantage of them in real-time. Business units are often working from stale data from disparate systems and tools.
- ∆ ***Poor financial performance*** – All of the above factors – lack of strategic clarity, poor alignment, silos, and of out-of-date information contribute to reactive, rearview mirror business forecasting and planning. The net result is revenue and margin below targets, poor forecasting accuracy, unpredictability and high levels of risk.

The Planning and Budgeting Maturity Model

Service Performance Insight has extended its industry-leading Professional Service Maturity Model™ to focus on advancing maturity in planning and budgeting. The Planning and Budgeting Maturity Model™ provides a view of the transformational power of shifting planning from reactive, heroic and painful to become a core competence leading to renewal and growth (Table 137).

Table 137: Planning and Budgeting Maturity Model™

	Level 1	Level 2	Level 3	Level 4	Level 5
	Ad Hoc, Opportunistic, Heroic and Reactive	**Piloted, Experimental, Pockets of Excellence**	**Deployed, Basics in Place for All Key Elements**	**Institutionalized, in the Company DNA / Fabric**	**Visionary, Agile, Innovative, Continuous Renewal and Improvement**
People	Budgeting and planning is considered a necessary evil. Tops down, reactive, silo'ed. Business ignores targets, no feedback processes or ability to modify based on changes. **Limited commitment and accountability.**	Starting to see the need to incorporate business units in planning and budgeting. Finance-driven**. Discrete functions starting to collaborate, participate and take accountability for planning.**	Starting to align corporate vision and strategy to business planning. Goals and measurements in alignment. Real-time measurements and controls. **Business is accountable for planning, goal setting and achievement.**	Budgeting and planning becomes a core competence – driving critical business decisions, goals and growth. Collaborative, business-driven. **Business is committed to planning and achievement.**	Budgeting and planning is fully automated & reflects & capitalizes on changing market dynamics. Fluid, flexible, collaborative based on fact-based decisions. Able to spot trends in real-time. **Business is enfranchised.**
Processes	Planning is a painful nuisance. No consistent budgeting and planning processes. **Ad hoc, reactive.**	Planning is reactive but tolerated. Starting to align business processes, systems, measurements and controls. **Piloting streamlined processes. Pockets of excellence**	Planning has become a powerful catalyst to drive alignment and growth. **Proactive, integrated planning process incorporates & consolidates real-time information**.	Planning process has become core to driving strategy, alignment and collaboration across the business. **Optimized systems, tools, processes.**	Fully automated global planning and budgeting process, systems and tools continually monitor, measure and take advantage of shifting business priorities.
Systems	Budgeting and planning by spreadsheet. Manual, inconsistent, error prone. Limited investment in systems and tools. **Reactive, rearview mirror.**	Starting to invest in systems for major processes – ERP, CRM and PSA. Piloting CPM applications. **IT and Finance-centric.**	Fully integrated information infrastructure including CPM applications for budgeting, planning and performance management. **Business centric.**	Fully integrated and optimized information infrastructure with powerful, easy-to-use management tools. **Mobile, agile**.	Global, integrated, optimized information infrastructure provides high levels of management visibility and control. Able to capitalize on emerging trends. **Optimized.**

Source: Service Performance Insight, February 2016

Survey results

The following section reviews and analyzes 2016 PS Maturity™ benchmark results from 549 participating professional services organizations. In this section SPI Research analyzes 39 finance and operations key performance measurements that are critical to attaining superior financial performance.

Table 138 compares the finance and operations key performance indicators by the type of organization and by region. This year, embedded service organizations reported substantially more revenue per consultant and employee than independents. Independents delivered much larger projects but had lower backlog. Employee productivity declined in 2015. Revenue per consultant increased slightly from $197,000 to $198,000 while revenue per employee declined from $167,000 to $157,000 because firms increased overhead and discretionary spending. Across the board, EMEA reported the most significant decline in all major metrics, partially due to a decline in the euro and pound versus the US dollar.

Table 138: Finance and Operations KPIs by Organization Type and Geographic Region

Key Performance Indicator (KPI)	2014	2015	ESO	PSO	Americas	EMEA	APac
Annual revenue per billable consultant (k)	$197	$198	$217	$189	$217	$148	$200
Annual revenue per employee (k)	$167	$157	$176	$148	$172	$114	$166
Average revenue per project (k)	$189	$225	$182	$244	$230	$180	$333
Project margin for fixed price projects	36.3%	33.7%	35.3%	32.9%	35.8%	27.2%	37.0%
Project margin for time and materials projects	35.8%	33.0%	32.5%	33.3%	34.9%	27.6%	34.4%
Average project margin — subs, offshore	28.4%	26.2%	28.6%	25.0%	27.5%	22.0%	28.4%
Quarterly revenue target in backlog	48.4%	40.4%	42.5%	39.4%	44.7%	31.9%	30.3%
% of annual revenue target achieved	90.5%	91.4%	92.1%	91.1%	92.1%	89.6%	91.8%
Percent of annual margin target achieved	87.0%	89.4%	89.8%	89.3%	90.0%	87.6%	91.0%
Revenue leakage	4.05%	4.20%	4.80%	3.92%	4.34%	3.91%	3.86%
Invoices redone due to error/client reject.	2.3%	2.6%	2.8%	2.4%	2.6%	2.4%	2.8%
Days sales outstanding (DSO)	43.4	43.8	43.8	43.9	45.5	40.3	40.2
Qtr. non-billable expense per emp.	$1,443	$1,908	$2,088	$1,826	$2,042	$1,590	$1,788
% of billable work is written off	3.10%	3.00%	3.66%	2.69%	3.10%	2.70%	3.11%
Executive real-time visibility	3.58	3.32	3.30	3.33	3.33	3.31	3.26
2015 Net Profit (EBITDA)		**15.5%**	**20.9%**	**13.6%**	**16.3%**	**11.9%**	**17.2%**
2014 Net Profit Comparison		13.2%	19.0%	10.8%	12.5%	15.5%	13.1%

Source: Service Performance Insight, February 2016

Based on more than twice as many completed surveys in 2015 compared to 2014, average net profit (Earnings before Interest, Taxes, Depreciation and Amortization) improved this year to 15.5% compared to 13.2% in 2014. Embedded PSOs saw net profit improve slightly to 20.9% compared to 19% in 2014. Independents also saw net profit increase to 13.6% compared to 10.8% in 2014. By geography, profit was up in the America's and APAC but down appreciably in EMEA to 11.9% in 2015 compared to 15.5% in 2014.

Backlog is always a very important KPI. Backlog declined across the board from 48.4% to 40.4%, a sure sign of stormy seas ahead. The Americas reported the strongest backlog of 44.7% down from 50% in 2014. Firms in EMEA were hit especially hard with a downturn in business. EMEA backlog declined to 31.9% in 2015, down from 46.9% in 2014. Backlog declined in APac for the third year in a row from 45.8% in 2013 to 41.3% in 2014 and now 30.3% in 2015. These alarmingly low levels of backlog are an important predictor of slower growth in 2016. SPI Research recommends firms maintain at least a 50% quarter-beginning backlog. 2016 is getting off to an ominous start with more bad news daily.

Non-billable expense per employee soared in 2015. Excessive non-billable expense is a danger signal directly related to poor cost management and ineffective business development processes. Embedded PSOs increased non-billable expense per employee; they spent $1,671 per consultant per quarter in 2014 compared to $2,088 in 2015, a jump of 25%! Independents reported an increase in non-billable expense from $1,173 in 2013 to $1,344 in 2014 and now $1,826 in 2015; a whopping 36% increase! Higher discretionary spending will directly impact bottom-line net profit.

Table 139 compares finance and operations KPI's by organization size. Mid-size and larger firms reported net profit improvement while profit declined in small firms. Project size increased with organization size with organizations over 700 consultants delivering the largest average projects at $315,000. Midsize organizations from 31 to 300 consultants reported the strongest backlog at 43%. Larger firms had a much higher backlog than the smaller firms providing them greater financial stability. Smaller organizations did the best job of containing non-billable expense per employee. One area of concern as organizations grow in size is the time to collect payment (days sales outstanding (DSO)). The largest firms had a DSO 50% higher than that of the smaller firms, which negatively impacts cash flow, and profitability. The largest firms reported high non-billable expense for their employees.

Table 139: Finance and Operations KPIs by Organization Size

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Annual revenue per billable consultant (k)	$162	$186	$214	$199	$206	$199
Annual revenue per employee (k)	$129	$146	$166	$161	$164	$164
Average revenue per project (k)	$102	$113	$228	$279	$282	$315
Project margin for fixed price projects	29.6%	31.2%	35.8%	33.7%	34.3%	34.9%
Project margin for time & materials projects	31.0%	30.8%	35.7%	31.6%	34.3%	33.1%
Average project margin — subs, offshore	21.2%	25.1%	28.4%	23.7%	25.2%	31.4%
Quarterly revenue target in backlog	29.3%	38.1%	43.5%	42.5%	39.0%	41.9%
% of annual revenue target achieved	91.0%	87.0%	91.2%	91.8%	92.8%	96.0%

Key Performance Indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700	Over 700
Percent of annual margin target achieved	90.6%	84.1%	88.1%	90.6%	91.5%	94.1%
Revenue leakage	3.34%	4.07%	4.30%	4.27%	4.20%	4.72%
Invoices redone due to error/client reject.	1.7%	2.5%	2.1%	3.0%	3.1%	3.0%
Days sales outstanding (DSO)	34.1	41.4	44.7	46.9	44.5	46.9
Qtr. non-billable expense per employ.	$1,538	$1,250	$1,872	$2,033	$1,972	$2,875
% of billable work is written off	2.18%	3.25%	2.76%	3.21%	3.04%	3.44%
Executive real-time wide visibility	3.68	3.44	3.33	3.15	3.31	3.17
2015 Net Profit (EBITDA)	**14.3%**	**14.2%**	**14.2%**	**14.1%**	**11.7%**	**N/A**
2014 Net Profit Comparison	16.6%	14.6%	12.4%	10.6%	15.5%	11.9%

Source: Service Performance Insight, February 2016

Table 140 shows financial results by vertical market. It Consulting, SaaS PS, Managed Services and Hardware and Networking firms all reported profit improvements. Embedded software PS delivered the highest revenue per employee and per consultant. Hardware PSOs and Management consultancies delivered the largest projects with the strongest backlog. Architects and engineers reported the poorest financial metrics with the lowest per person and consultant revenue yield, the smallest projects and the lowest project margins. SaaS PSOs seem to have finally reversed the profit slide we saw in 2012 and 2013. SaaS organizations saw profit decline from 25.9% in 2012 to 4.3% in 2013; slight improvement was shown in 2014 to 7.8% and now significant improvement in 2015 to 25.7%. This is an important KPI to watch, as many organizations are turning to the cloud for their information infrastructure. The SaaS PS profit swings are a direct result of shifting PS charters within cloud companies. As these firms rely on annuity subscription revenue, the PS emphasis has shifted to "customer adoption" meaning many embedded SaaS PSOs now deliver a lot of free consulting to ensure customers are really using the software so they will renew their contracts and buy more seats.

Table 140: Finance and Operations KPIs by Vertical Service Market

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Annual revenue per billable consultant (k)	$198	$226	$216	$142	$205	$198	$202
Annual revenue per employee (k)	$153	$184	$178	$109	$170	$146	$165
Average revenue per project (k)	$256	$183	$307	$135	$142	$151	$304
Project margin for fixed price projects	36.0%	37.3%	36.4%	19.8%	33.2%	29.2%	33.3%
Project margin for time & materials	35.6%	33.5%	36.9%	21.5%	30.4%	31.3%	35.5%
Average project margin — subs, offshore	28.3%	28.7%	26.0%	14.4%	27.0%	19.1%	33.8%
Quarterly revenue target in backlog	43.5%	45.3%	33.8%	34.5%	40.2%	31.3%	45.4%
% of annual revenue target achieved	90.4%	93.5%	91.4%	91.6%	90.0%	89.2%	91.3%
% of annual margin target achieved	88.8%	89.4%	92.7%	85.7%	90.6%	90.4%	90.0%
Revenue leakage	4.15%	4.89%	2.93%	4.76%	4.56%	3.68%	4.59%

Key Performance Indicator (KPI)	IT Consult.	Software	Mgmt. Consult.	Arch./ Engr.	SaaS	Mgd. Serv.	Hard. & Netwrk.
Invoices redone due to error/client reject.	2.5%	2.7%	1.8%	2.9%	3.2%	3.8%	1.3%
Days sales outstanding (DSO)	42.5	49.0	40.6	49.4	39.5	34.6	35.0
Qtr. non-billable expense per employee	$1,842	$2,474	$1,886	$1,826	$1,820	$1,417	$2,100
% of billable work is written off	3.02%	4.15%	1.78%	3.73%	3.21%	2.83%	3.23%
Executive real-time wide visibility (1 to 5)	3.39	3.30	3.66	3.02	3.46	3.27	2.42
2015 Net Profit (EBITDA)	**13.3%**	**19.9%**	**12.2%**	**11.2%**	**25.7%**	**15.6%**	**32.3%**
2014 Net Profit Comparison	10.2%	20.5%	14.0%	12.3%	7.8%	N/A	24.5%

Source: Service Performance Insight, February 2016

Table 141: Finance and Operations KPIs by Vertical Service Market

Key Performance Indicator (KPI)	R&D	VAR	Acct.	Advert. (Marcom)	Staff.	Other PS
Annual revenue per billable consultant (k)	$188	$232	$150	$155	$153	$184
Annual revenue per employee (k)	$155	$184	$136	$128	$97	$143
Average revenue per project (k)	$537	$214	$93	$68	$150	$147
Project margin for fixed price projects	34.6%	36.1%	32.7%	32.2%	21.9%	28.2%
Project margin for time & materials proj.	31.2%	31.1%	30.9%	39.0%	25.0%	26.8%
Average project margin — subs, offshore	25.8%	35.4%	18.3%	27.2%	14.3%	23.5%
Quarterly revenue target in backlog	47.3%	39.2%	19.5%	42.2%	37.5%	34.5%
% of annual revenue target achieved	88.9%	92.1%	96.4%	91.5%	93.1%	93.2%
Percent of annual margin target achieved	92.5%	89.6%	97.3%	81.5%	88.1%	88.0%
Revenue leakage	5.00%	5.93%	2.25%	2.55%	3.69%	3.65%
Invoices redone due to error/client reject.	3.1%	3.1%	1.5%	1.5%	6.2%	2.2%
Days sales outstanding (DSO)	52.7	41.9	50.5	43.5	48.6	38.6
Qtr. non-billable expense per employ.	$1,625	$1,038	$2,023	$1,125	$1,969	$1,864
% of billable work is written off	1.33%	3.04%	1.45%	2.90%	1.88%	1.35%
Executive real-time wide visibility	2.77	3.64	3.33	3.30	2.63	2.91
2015 Net Profit (EBITDA)	**N/A**	**20.1%**	**20.9%**	**14.7%**	**3.4%**	**14.4%**
2014 Net Profit Comparison	N/A	N/A	N/A	1.7%	N/A	N/A

Source: Service Performance Insight, February 2016

Bill Rates (taken from SPI's 2015 Global Pricing Report)

SPI's PS Global Pricing Report is a large and comprehensive PS pricing study based on pricing information provided by 140 organizations representing almost 12,000 consultants worldwide. The study provides analysis of list price and realized bill rates across a broad range of PS verticals, geographies and job levels. It provides analysis of pricing strategies: time and materials; fixed price and shared risk with an unprecedented view of PS workforce distribution and composition by industry segment.

Table 142 provides a glimpse of the pricing information provided in the 2015 PS Global Pricing Report. Based on the weighted average across all job categories, the typical PS organization in this study was comprised of approximately 104 billable people. Management comprises 13% of the workforce, project management 16%, business consultants 29% and technical consultants 42% respectively. The majority of the work, billable hours and revenue is produced by business consultants and technical consultants. Both business consultants and technical consultants work on-site approximately 50% of their time.

Table 142: Bill Rate Summary – All PS Markets and Geographies

Role	Level	No. of People in the role	% billable work on site	Target Annual Billable Hrs.	Published Hourly Bill rate	Realized Hourly Bill rate	Disc.
Management	VP / Executive Management	2.7	17.9%	706	$271	$235	13.5%
	Director	3.9	21.8%	785	242	213	11.8%
	Manager	7.2	25.4%	879	202	176	12.9%
Project Management	Program Manager	5.2	48.0%	1,368	200	174	12.8%
	Senior Project Manager	4.5	46.0%	1,472	202	177	12.4%
	Project Manager	6.5	42.8%	1,505	190	164	14.1%
Business Consulting	Principal Business Consult.	6.0	50.6%	1,450	232	196	15.6%
	Sr. Business Consultant	11.0	49.0%	1,519	189	169	10.8%
	Business Consultant	13.8	47.9%	1,512	173	149	14.0%
Technical Consulting	Solution Architect	9.5	46.9%	1,391	205	178	12.9%
	Senior Technical Consultant	15.2	53.6%	1,563	194	168	13.2%
	Technical Consultant	19.1	47.7%	1,566	167	146	13.0%
Total	**Weighted Average**	**104.4**	**41.3%**	**1,363**	**$202**	**$175**	**13.1%**

Source: Service Performance Insight, 2015 PS Global Pricing Report

Based on SPI's 2015 PS Global Pricing report, bill rates reached their highest level in 2008 and then subsided as the economy stalled and moved into a prolonged recession. Table 144 highlights bill rate trends over the past seven years by role. It shows rates for the primary consulting job categories of project management, business consulting and technical consulting have remained flat or have slightly declined. Only senior manager and solution architect roles have experienced a moderate increase over this seven-year period.

Steps Taken to Improve Profitability

For the fifth year in a row SPI Research asked "What steps will your organization take to improve profitability?" For the first time, increasing rates rose to the top of the list of improvement priorities, tied with improving hiring and ramping and improving methods and tools.

Interviews with this year's Best-of-the-Best revealed that top performing firms are considering moderate rate increases as the demand for their services has outstripped supply. Healthcare and recruiting costs have risen sharply; salaries have also risen for the most in demand skills and locations – like the Silicon Valley and Boston so rate increases are warranted. On the other hand, the glut of low cost offshore providers is a constant competitive threat. Lower cost offshore firms will continue to cause rate pressure and commoditization in legacy skills.

Table 143: Steps Taken to Improve Profitability Comparison: 2014-2015

Key Performance Indicator (KPI)	2014	2015	▲
Increases rates	2.90	3.85	32.8%
Improve hiring and ramping	3.48	3.85	10.7%
Improve methods and tools	3.60	3.85	6.9%
Reduce non-billable time	3.26	3.83	17.7%
Improve solution portfolio	3.59	3.78	5.2%
Improve sales effectiveness	3.94	3.78	-4.0%
Improve utilization	3.85	3.78	-2.0%
Improve marketing effectiveness	3.65	3.52	-3.7%

Source: Service Performance Insight, February 2016

For the first time, improving methods and tools has risen to become a top priority. SPI's research demonstrates the powerful impact integrated business solutions can have on productivity and profit. It is remarkable that 30% of surveyed organizations still have not invested in Professional Service Automation. 45% have not yet invested in Human Capital Management applications. Both of these application areas should make the short list for improving profitability. Business applications should be a component of any plan to reduce non-billable administrative time. It is shocking how many PSOs still rely primarily on spreadsheets for resource management, project accounting, forecasting and analysis.

Other improvement priorities include improving solution development, and sales and marketing effectiveness. Why is it so hard to effectively package and sell professional services? The answer lies in the intangible nature of services and the fact

Table 144: Published Bill Rate Comparisons: 2008 to 2015

Level	2008	2009	2010	2011	2015
Senior Manager	$222	$232	$222	$211 - $239	$202 - $271
Project/Program Manager	191	186	191	173 - 205	190 - 202
Business Consultant	176	171	179	174	173
Technical Consultant	170	158	166	168 - 185	167
Solution Architect	186	181	181	211	205

Source: Service Performance Insight, 2015 PS Global Pricing Report that typically the best consulting sellers are quite often the best consultants – which creates a dilemma around whether to sell or deliver?

Annual Revenue per Billable Consultant

Annual revenue per billable consultant depicts the service organization's total revenue divided by the number of billable consultants. Alternatively, this metric is derived by multiplying the consultant's average bill rate times billable hours. Revenue per consultant provides an indication of consultant productivity; the likelihood the firm will be profitable is foretold by the labor multiplier. SPI Research considers revenue per billable consultant to be one of the most important KPIs, but it must be viewed in conjunction with labor cost. Revenue per billable consultant should minimally equal 1.5 times the fully loaded cost of the consultant. Revenue multipliers of three and higher are typical for engineering and architecture firms while a labor multiplier greater than three is standard in management consulting and legal professional services.

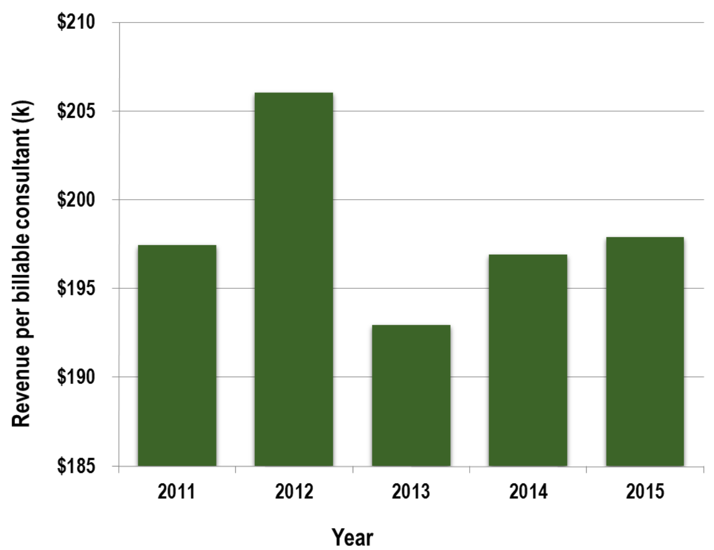
Table 145: Impact – Revenue per Billable Consultant

Revenue per Billable Consultant	Survey Percent	Revenue Growth	Pipeline	Billable Util.
Under $100k	13.5%	4.3%	128%	68.3%
$100k - $150k	18.0%	7.6%	148%	69.8%
$150k - $200k	19.3%	9.6%	164%	70.8%
$200k - $250k	21.2%	13.1%	187%	69.3%
$250k - $300k	14.6%	11.1%	202%	75.4%
Over $300k	13.5%	15.2%	198%	69.6%
Total/Average	**100.0%**	**10.2%**	**171%**	**70.5%**

Source: Service Performance Insight, February 2016

Billable consultant revenue yield is a strong predictor of PS profit. Average consultant revenue production declined from $206K in 2012 to $193K in 2013 but increased to $197K in 2014 and now $198K in 2015. Simple math shows a $1,000 increase in revenue produced by each of the 350,000 consultants represented in this benchmark means overall revenue could have increased by $350 million for the 549 firms in this study. ***A slight improvement in billable utilization is the primary catalyst for this increase.***

Figure 60: Revenue per Billable Consultant Five-year Trend



Source: Service Performance Insight, February 2016

Annual Revenue per Employee

This calculation looks at the overall revenue yield for all PS employees – both billable and non-billable. Annual revenue per employee is similar to annual revenue per billable consultant; it divides total PS revenue by the total number of employees. It includes both billable and non-billable headcount. Revenue per employee is a powerful indicator of the overall profitability of the firm. If the average cost per employee is known, profit can be estimated by comparing cost per employee to revenue per employee. Similar to revenue per consultant, this KPI is highly correlated with profitability, utilization and bill rates.

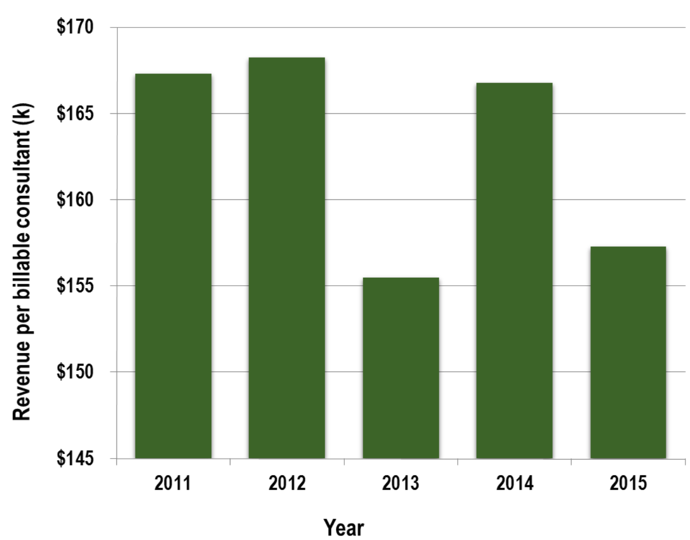
Table 146: Impact – Annual Revenue per Employee

Revenue per Employee	Survey Percent	Annual Rev. Target Achieved	Recruit Exp. as a % of Revenue	EBITDA
Under $100k	23.0%	84.7%	0.6%	9.3%
$100k - $150k	25.4%	91.8%	0.7%	14.8%
$150k - $200k	24.7%	89.7%	1.0%	13.9%
$200k - $250k	15.2%	94.1%	1.2%	19.8%
$250k - $300k	5.9%	93.8%	1.6%	21.4%
Over $300k	5.9%	92.5%	3.5%	16.5%
Total/Average	**100.0%**	**91.3%**	**1.0%**	**14.6%**

Source: Service Performance Insight, February 2016

PSOs with a high percentage of non-billable employees have lower annual revenue per employee. Revenue per employee is very important in determining the appropriate size and financial health of the organization. Based on the high cost of talented consulting staff, SPI Research believes this figure should be close to two times the fully loaded cost per person to maintain strong financial viability. If the organization achieves an acceptable revenue yield per billable consultant but is below the benchmark for revenue per employee, this is an indication of excessive non-billable overhead. Figure 61 shows revenue per employee dropped dramatically in 2015. Since revenue per consultant trended up slightly, the primary reason for this drop in per person revenue is firms have added in loads of non-billable headcount. The percentage of non-billable headcount increased dramatically from 25% in 2014 to 30% in 2015. Discretionary spending also increased significantly. This trend must to be reversed in 2016 for firms to be able to maintain the excellent net profit margins shown in 2015.

Figure 61: Revenue per Employee Five-year Trend



Source: Service Performance Insight, February 2016

Revenue per Project

Average revenue per project is calculated by dividing the total revenue of the service organization by the total number of projects. This KPI provides insight into the size, number of employees involved, and duration of projects. Many PSOs have lots of small projects along with a few really big ones which may skew revenue per project. Wide variability in project size stresses resource management predictability.

Project size has varied greatly over the past five years, but this year revenue per project rose to $225K compared to $189K in 2014. Independents grew average project size significantly from $190K in 2013 to $219K in 2014 to $244K in 2015. Embedded PSOs saw their average project size increase from $121K in 2014 for $182K in 2015.

Although net profit margin is not directly related to project size it is harder to manage and make money on smaller projects. Smaller projects can strain utilization levels and cause resource churn, meaning effective resource management and service packaging is critical.

Smaller projects imply greater resource churn and are harder to manage based on transaction volumes. If the majority of projects are small, PSOs must focus on efficiency and repeatability. The worst possible scenario is a series of short projects requiring unique skills with little potential for repeat or referral business. The trend toward shorter, faster, more iterative projects bodes well for project success and client satisfaction, but adds additional business development costs and resource scheduling strain to quickly staff projects and dynamically reassign resources.

Table 147 compares the average revenue per project to other key performance indicators. The results show as projects become larger in size, PSOs are able to improve per consultant and per employee revenue yields. The results also show larger projects produced higher on-time project completion rates and better gross project profit margins. Large projects are easier to plan and staff but mega projects (over $500K) involve substantial risk. If not carefully managed, mega projects can deliver big losses and unwarranted levels of risk. It is important to note that the use of standard project methodologies and project management governance practices must increase with project size and complexity. The good news is that the project management discipline has improved significantly over the past 20 years with many organizations investing in PMI training and certification.

Table 147: Impact – Revenue per Project Comparison

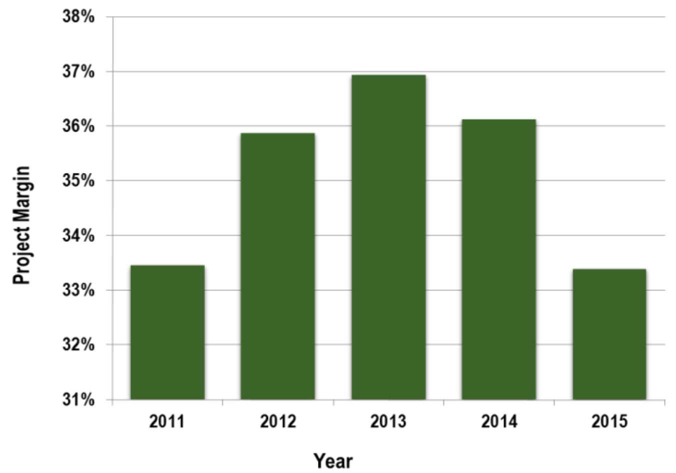
Revenue / Project	Survey Percent	On-time Delivery	Rev./ Bill. Emp. (k)	Rev./ Emp. (k)	Proj. Margin
Under $25k	23.0%	72.7%	$111	$88	25.3%
$25k - $50k	14.1%	76.1%	178	148	33.6%
$50k - $100k	16.8%	76.8%	206	160	34.1%
$100k - $250k	20.2%	73.4%	215	166	35.2%
$250k - $500k	22.1%	76.7%	227	176	37.4%
$500k - $1mm	14.5%	80.0%	234	197	37.2%
Over $1mm	8.4%	80.3%	264	217	34.6%
Total / Avg.	**100.0%**	**75.7%**	**$198**	**$157**	**33.8%**

Source: Service Performance Insight, February 2016

Project Margin

Project margin is the percentage of revenue which remains after accounting for the direct costs of project delivery. Projects can be fixed-price, milestone-based, "not to exceed" or time and materials, where the PSO essentially charges by the hour with additional payment for any materials used during the engagement. Typically, time and materials based projects produce the best profitability as long as bill rates are set appropriately. "Not to exceed" projects should be avoided as they provide none of the benefits of fixed price projects but carry all of the risks. Cost-plus contracts are also undesirable; they are most prevalent in government work which tends to be penny-wise and pound-foolish. Clients and service providers alike should be focused on paying fairly for work that delivers promised results. If the project benefit is substantial, then assuring successful delivery is of paramount importance. Figure 62 shows average project margins improved in 2013 but declined in 2014 and declined further to 32% in 2015, the lowest project margins we have seen since the recession. This metric underscores the importance of a holistic view of PS, as one important metric like project profit can cause a ripple effect leading to lower overall net profit.

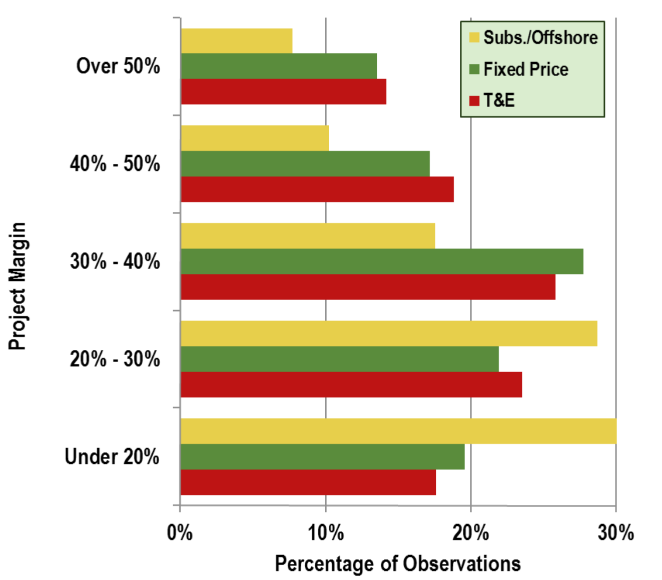
Figure 62: Project Margin Five-year Trend



Source: Service Performance Insight, February 2016

Leading professional services organizations strive to achieve project margins over 35% but as Figure 63 shows, less than 20% of organizations consistently achieve project margins greater than 40%. Low margin projects are caused by a variety of issues including poor estimates, significant scope change, lack of a clear project charter, poor management, poor execution and poor communication. Organizations with lower project margins struggle to meet annual revenue targets.

Figure 63: Project Margin



Source: Service Performance Insight, February 2016

Project Margin: Time and Materials Projects

Table 148 compares the average project margin on time and expense projects to other key performance indicators. SPI Research found similar results when compared to fixed price projects. Most of the key performance indicators improve as project margins rise. Real-time visibility and a strong project management discipline are key ingredients of driving project success. All PSOs should maintain and review a real-time project dashboard showing the health of projects including budget to actual performance.

Table 148: Impact – Project Margin – Time and Expense Projects

Project Margin – Time and Expense Projects	Survey Percent	Billable Utilization	Rev. / Billable Consult (k)	Real-time Visibility
Under 20%	17.6%	68.9%	$138	2.84
20% - 30%	23.5%	70.4%	198	3.36
30% - 40%	25.8%	70.5%	211	3.37
40% - 50%	18.9%	71.5%	221	3.45
Over 50%	14.2%	71.6%	223	3.59
Total/Average	**100.0%**	**70.5%**	**$199**	**3.32**

Source: Service Performance Insight, February 2016

Project Margin: Fixed Price Projects

Table 149 compares the average project margin on fixed price projects to other key performance indicators. Every organization strives for high project margins, which help drive organizational profit to higher levels. This table shows organizations with the highest fixed price project margins completed more projects on-time. They also generated higher revenues per employee and higher net profit margins.

Table 149: Impact – Project Margin – Fixed Price Projects

Project Margin – Fixed Price Projects	Survey Percent	On-time Completion	Revenue/ Employee (k)	Billable Utilization
Under 20%	19.6%	69.0%	$122	70.1%
20% - 30%	21.9%	72.3%	150	70.0%
30% - 40%	27.7%	79.1%	164	70.0%
40% - 50%	17.2%	78.7%	182	72.8%
Over 50%	13.5%	80.3%	185	70.2%
Total/Average	**100.0%**	**75.7%**	**$159**	**70.5%**

Source: Service Performance Insight, February 2016

Project Margin: Subcontractors

The margin derived from subcontractors and offshore resources is an extremely important key performance indicator and should be managed very closely, as it can significantly impact net profit. Typically, the goal for subcontractor margin is at least 30%. Unfortunately, the average subcontractor margin has gone down every year for the past five years. In 2011 subcontractor margin was a relatively healthy 29.9%. It is now only 26.2% - a relative decline of more than 12%. Interestingly, over the same

Table 150: Impact – Project Margin – Subcontractors/Offshore

Project Margin – Subcontractor / Offshore	Survey Percent	Project Margin: T&M	Project Margin: Fixed Price	EBITDA
Under 20%	35.8%	25.6%	26.1%	12.1%
20% - 30%	28.7%	31.9%	32.2%	17.1%
30% - 40%	17.5%	38.6%	34.8%	16.6%
40% - 50%	10.3%	42.0%	40.1%	16.2%
Over 50%	7.7%	50.1%	46.7%	18.8%
Total/Average	**100.0%**	**33.3%**	**32.4%**	**15.3%**

Source: Service Performance Insight, February 2016

five-year period, the percentage of overall revenue generated by subcontractors has also gone down every year from 13.1% in 2011 to 10.9% in 2015. These two metrics are clearly tied. If firms can no longer make good margins by using subcontractors, they will move to a richer mix of direct labor. The bloom is somewhat off the subcontractor rose. Although seasoned consultants may enjoy a role as independent contractors because they have more control over the type of work and work hours, service providers will only use a variable workforce if it gives them greater flexibility at the same or higher margins. This is an important metric to watch and measure as it can have a dramatic effect on bottom-line profit. The use of subcontractors will decline as PS growth slows.

Backlog

Quarterly revenue backlog is the amount of already sold (booked) business in backlog (ready to execute) divided by forecasted quarterly revenue. Backlog represents "fuel in the tank"; it improves an organization's ability to grow and increases the accuracy of financial forecasts. Some organizations measure backlog as the amount of already sold work plus the amount of work from a factored sales forecast. ***Decreasing backlog levels are a clear indication of slowing growth.*** Backlog is one of the most powerful leading indicators. Product-focused organizations have more problems with backlog as they frequently sell a "bank of hours" with the product sale which may never be consumed. It is a good idea to frequently "scrub" backlog to determine whether booked deals can actually be delivered in the current quarter. If they cannot, this "shadow" backlog should not be counted. Typically, if backlog is not consumed (delivered) within a year it should be written off or removed from the revenue forecast as it is unlikely the client will actually use the consulting time they have been sold.

This year the quarterly revenue target in backlog was 40.4%, which was 17% lower (40.4% vs. 48.4%) in 2015, when compared to 2014, and 7% lower than the past five-year's survey average (43.5%). Independent service providers had values 26% lower than embedded services organizations (29.3% vs. 39.4%). Organizations from the Americas had the highest (44.7%) quarterly revenue target in backlog, while those from APac had the lowest (30.3%). Organizations with 31 to 100 employees had the highest (43.5%) quarterly revenue target in backlog, while those with fewer than 10 employees had the lowest (29.3%). SPI Research found Staffing Agencies showed the highest quarterly revenue target in backlog (47.3%), while Accountancies showed the least (19.5%).

Table 151 compares the quarterly revenue target in backlog to other key performance indicators. As one might expect higher backlog is an indication of future demand and produces better financial metrics. This table shows that once PSOs achieve greater than 50% of their quarterly revenue target in backlog their financial results are very impressive.

Table 151: Impact – Quarterly Revenue Target in Backlog

Quarterly Revenue Target in Backlog	Survey Percent	Annual Revenue Growth	Bid to Win Ratio	Sales Pipeline
Under 20%	24.3%	7.1%	4.81	143%
20% - 40%	25.7%	9.5%	4.85	179%
40% - 50%	15.9%	9.5%	4.79	157%
50% - 60%	11.5%	12.7%	4.99	170%
60% - 70%	8.7%	14.4%	5.03	200%
Over 70%	13.9%	14.6%	5.35	211%
Total/Average	**100.0%**	**10.4%**	**4.93**	**172%**

Source: Service Performance Insight, February 2016

Annual Revenue Target Achieved

The annual revenue target achieved is the percentage of the annual revenue goal that is attained. PSOs create detailed annual business plans; this figure shows how accurate they are in business planning and execution. If the organization does not meet its annual revenue target it is a sure bet that the annual margin or profit target will be missed as well as most organizations plan expenses from their revenue projections. On the other hand, if the organization exceeds its revenue projections by a wide margin this results in quality issues, staff burnout and potentially client satisfaction issues because the organization is understaffed to meet demand.

The percentage of annual revenue target achieved was 1% higher (91.4% vs. 90.5%) in 2015, when compared to 2014, and basically the same as the past five-year's survey average (91.2%). Independents and embedded services organizations achieved the same percentage of their annual revenue targets (91.0% vs. 91.1%). Organizations from the Americas had the highest (92.1%) percent of annual revenue target attainment, while those from EMEA had the lowest (89.6%). Organizations with over 700 employees had the highest (96.0%) percent of annual revenue target attainment, while those with between 10 and 30 employees had the lowest (87.0%). SPI Research found Accountancies showed the

Table 152: Impact – Percentage of annual target revenue achieved

Percentage of annual target revenue achieved	Survey Percent	Revenue Growth	Billable Utilization	On-time Delivery
Under 80%	16.3%	6.9%	66.4%	70.6%
80% - 90%	31.0%	8.6%	71.1%	75.0%
90% - 100%	29.4%	9.1%	70.4%	75.8%
100% - 110%	15.0%	14.7%	72.5%	81.3%
Over 110%	8.3%	19.7%	73.3%	82.1%
Total/Average	**100.0%**	**10.3%**	**70.5%**	**76.0%**

Source: Service Performance Insight, February 2016

highest percent of annual revenue target achieved (96.4%), while Staffing Agencies showed the least (88.9%).

As Table 152 shows there is a direct correlation between achieving revenue targets, revenue growth and on-time delivery. PSOs that exceeded their revenue goals produced higher margins, higher revenue growth and superior billable utilization. There is also a strong positive correlation between meeting annual revenue targets and profitability, assuming revenue and profit targets are set appropriately. SPI Research also found organizations who achieved their revenue targets had lower attrition rates, reflecting financial stability and the organization's ability to reward performance and reinvest in the business. Complex revenue accounting rules have negatively impacted revenue forecasting.

Annual Margin Target Achieved

The annual margin target achieved, similar to the annual revenue target achieved, is the percentage of the annual profit goal which was attained. SPI Research measures revenue and margin target attainment to calibrate the accuracy of annual business plans. Even if PSOs don't accurately measure other benchmark metrics, they usually do know if they achieved their targets or not. Target attainment is important from a planning and investment perspective. If the organization does not meet its margin goals it might have to scale back future initiatives, potentially limiting growth.

The percentage of annual margin target achieved was 3% higher (89.4% vs. 87.0%) in 2015, when compared to 2014, and 1% higher than the past five-year's survey average (88.6%). Independent service providers had values 1% lower than embedded services organizations (90.6% vs. 89.3%). SPI Research found organizations from APac had the highest (91.0%) percent of annual margin target achieved, while those from EMEA had the lowest (87.6%). Organizations with over 700 employees had the highest (94.1%) percent of annual margin target achieved, while those with between 10 and 30 employees had the lowest (84.1%). SPI Research found Accountancies showed the highest percent of annual margin target achieved (97.3%), while marketing and communication firms showed the least (81.5%).

Perhaps one of the most important gauges of financial maturity is the ability to consistently achieve annual margin targets. Consistently the percentage of firms who are able to achieve their margin targets is less than the percentage of firms who are able to achieve their revenue targets. Only 19.5% of survey respondents achieved 100% or more of their annual margin target! Table 153 compares the percentage of annual target margin achieved to other key performance indicators. This KPI

Table 153: Impact – Percentage of Annual Target Margin Achieved

Percentage of annual target margin achieved	Survey Percent	Revenue Growth	On-time Delivery	Project Margin
Under 80%	22.7%	6.6%	70.2%	29.2%
80% - 90%	27.9%	9.7%	75.8%	32.5%
90% - 100%	29.8%	10.7%	77.9%	36.7%
100% - 110%	13.1%	15.2%	78.1%	36.8%
Over 110%	6.4%	15.3%	84.7%	38.2%
Total/Average	**100.0%**	**10.4%**	**76.0%**	**33.9%**

Source: Service Performance Insight, February 2016

shows organizations improve financially as they meet their margin targets.

Revenue Leakage

Revenue leakage refers to revenue that has been earned but is lost before it can be realized. Causes of revenue leakage include billing errors, time the firm is unable to bill for product or project delivery issues and incorrect statements of work or misquotes.

Table 154: Impact – Revenue Leakage

Revenue Leakage	Survey Percent	Average Project Overrun	Backlog	% of Invoices redone
Under 2%	37.3%	6.7%	37.9%	1.5%
2% - 5%	36.9%	9.9%	40.0%	2.7%
5% - 10%	17.9%	13.3%	43.4%	3.4%
Over 10%	8.0%	16.8%	44.5%	5.1%
Total/Average	**100.0%**	**9.8%**	**40.2%**	**2.6%**

Source: Service Performance Insight, February 2016

Revenue leakage is difficult to determine in many cases, making it a "silent killer" of profitability, as in many instances organizations don't even realize the revenue has not been billed, making it a very difficult figure to calculate. It is also a barometer for overall operational efficiency, as PSOs with higher levels of revenue leakage reported lower utilization, lower EBITDA and poorer on-time project delivery than organizations that better managed contracts, capturing hours and expenses and billing.

Average reported revenue leakage this year was 4.2%. It was 4% higher (4.2% vs. 4.0%) in 2015, when compared to 2014, and 2% higher than the past five-year's survey average (4.1%). Independent service providers had values 15% lower than embedded services organizations (3.3% vs. 3.9%). Organizations from the Americas had the highest (4.3%) revenue leakage in the survey, while those from APac had the lowest (3.9%). Organizations with over 700 employees had the highest (4.7%) revenue leakage, while those with less than 10 employees had the lowest (3.3%). SPI Research found Staffing Agencies showed the highest revenue leakage (5.0%), while Accountancies showed the least (2.3%).

Invoices Redone due to Errors or Client Rejections

Invoices rejected for whatever reason dip into profit, as the PSO must finance the debt incurred while still delivering the service. Some PSOs do not consider invoices that have to be redone due to inaccuracies or client rejections in their DSO calculation – they probably should. If expectations are properly set and time and expense accurately reported, ideally no invoice should be rejected. Invoicing problems tend to be systemic and emanate from the inaccurate capture of time and expense information; unclear statements of work; lack of approved change orders; inaccurate billing and exceeding pre-determined spending limits.

The percentage of invoices redone due to error/client rejections was 10% higher (2.6% vs. 2.3%) in 2015, when compared to 2014, and 11% higher than the past five-year's survey average (2.3%). This trend must not go on, as PSOs might be forced to raise rates or suffer deteriorating profits. Independent service providers had values 30% lower than embedded services organizations (1.7% vs. 2.4%).

SPI Research found organizations from APac had the highest (2.8%) percentage of invoices redone due to error/client rejections, while those from EMEA had the lowest (2.4%). Organizations with 301 to 700 employees had the highest (3.1%) percentage of invoices redone due to error/client rejections, while those with less than 10 employees had the lowest (1.7%). SPI Research found Managed Services providers showed the highest percentage of invoices redone due to error/client rejections (3.8%).

Table 155: Invoices Redone due to Errors or Client Rejections

Invoices Redone due to Errors or Client Rejections	Survey Percent	On-time Delivery	Revenue Leakage	EBITDA
None	9.1%	80.6%	2.8%	21.7%
Under 1%	33.8%	78.4%	3.2%	16.1%
1% - 3%	30.8%	75.1%	4.1%	14.9%
3% - 5%	14.6%	73.9%	5.8%	10.5%
5% - 10%	7.8%	69.3%	5.8%	22.6%
Over 10%	4.0%	74.4%	8.1%	14.0%
Total/Average	**100.0%**	**76.0%**	**4.2%**	**15.8%**

Source: Service Performance Insight, February 2016

Days Sales Outstanding (DSO)

Days Sales Outstanding (DSO) is still one of the most important KPIs for financial executives. It reflects the importance of accurately producing invoices and efficiently collecting payment. DSO is also a powerful measurement of client satisfaction, strong operating controls and client credit-worthiness.

Table 156: Days Sales Outstanding (DSO)

Invoices Redone due to Errors or Client Rejections	Survey Percent	Leadership Index	% of annual margin target achieved	EBITDA
Under 30 days	24.0%	29.5	90.3%	16.8%
30 - 50 days	45.4%	30.5	88.6%	14.0%
50 - 70 days	20.0%	28.5	88.5%	14.8%
70 - 100 days	7.4%	28.3	89.7%	26.6%
Over 100 days	3.1%	25.6	89.6%	10.3%
Total/Average	**100.0%**	**29.6**	**89.1%**	**15.7%**

Source: Service Performance Insight, February 2016

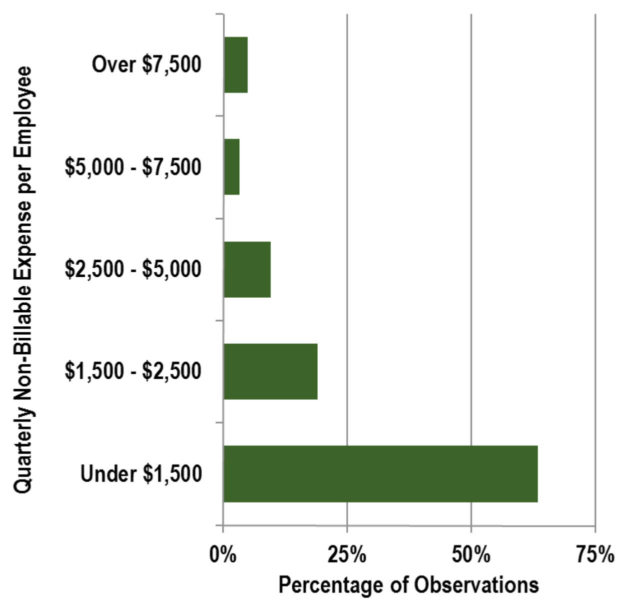
This year the average DSO was 43.8 days, which was 1% higher (43.8 vs. 43.4) in 2015, when compared to 2014, and 1% lower than the past five-year's survey average (44.1). Independent service providers had values 22% higher than embedded services organizations (34.1 vs. 43.9). Organizations from the Americas had the highest DSO (45.5), while those from APac had the lowest (40.2). Organizations with over 700 employees had the highest DSO (46.9), while those with less than 10 employees had the lowest (34.1). SPI Research found Staffing Agencies showed the highest DSO (52.7), while Managed Services providers showed the least (34.6). DSO goes up as PSOs sell to larger companies, utilities or the government as these clients are notorious for slow payment. Firms must carefully manage DSO to maintain healthy cash flow.

Quarterly Non-Billable Expense per Employee

Quarterly non-billable expense per employee shows how well PSOs manage employee expenses not related to billable work. Ideally, this metric is minimized, but there are always expenses due to travel, training, IT and business development that cannot be billed.

The quarterly non-billable expense per employee for 2015 was $1,908, and was 32% higher ($1,908 vs. $1,443) when compared to 2014, and 19% higher than the past five-year's survey average ($1,607). This rise should cause concern for PS executives who are struggling to cut costs. Excessive non-billable employee expense is usually a symptom of poor or ineffective business expense policies. It may also be a symptom of runaway business development expenses with non-essential personnel wasting valuable time and money chasing non-qualified opportunities.

Figure 64: Quarterly Non-Billable Expense per Employee



Source: Service Performance Insight, February 2016

Independent service providers had values 16% lower than embedded services organizations ($1,538 vs. $1,826). Organizations from the Americas had the highest ($2,042) quarterly non-billable expense per employee, while those from EMEA had the lowest ($1,590). PSOs with over 700 employees had the highest ($2,875) quarterly non-billable expense per employee, while those with between 10 and 30 employees had the lowest ($1,250). SPI Research found Software PS organizations showed the highest quarterly non-billable expense per employee ($2,474), while marketing and communication firms showed the least ($1,125).

These figures are still below pre-recession discretionary spending of more than $3,000 per employee. Common causes of high non-billable discretionary spending are high business development and training expenses or employee expense misuse. Unlike other metrics, non-billable expense per employee does not appear to have a direct correlation with overall profit, utilization, reference clients or employee satisfaction. In fact, very few key metrics appear to have been greatly impacted by non-billable spending. By no means is this a recommendation for PSOs to increase discretionary expense, but perhaps those that did so found other ways to improve profit and increase revenue.

Percentage of Billable Work Written-Off

Inaccurate invoicing, improperly accounting for time, project overruns and other project-related issues force many PSOs to write-off billable work, which naturally hurts profits. The formula is simple. The more work written off, the lower the firm's profit. The differential is significant. Obviously, no firm wants to write-off billable hours as doing so implies clients were not satisfied with some aspect of the work. However, to accomplish this feat requires significant effort to clearly define requirements and deliverables; assure work is scoped correctly; projects are delivered on-time and within budget; and invoices are accurate. SPI Research believes this initiative is well worth the effort.

The percentage of billable work that is written off was 3% lower (3.0% vs. 3.1%) in 2015, when compared to 2014, and the same as the five-year survey average (3.0%). Independent service providers had values 19% lower than embedded services organizations (2.2% vs. 2.7%).

SPI Research found organizations from APac had the highest (3.1%) percentage of billable work that was written off, while those from EMEA had the lowest (2.7%). Organizations with over 700 employees had the highest (3.4%) percentage of billable work written off, while those with under 10 employees had the lowest (2.2%). SPI Research found Software PS organizations showed the highest percentage of billable work is written off (4.1%), while Staffing Agencies showed the least (1.3%).

Table 157 shows a clear correlation between increased levels of work being written off and lower performance in terms of on-time delivery and other financial metrics. Billable work written off does not show up in utilization percentages, but is directly related to essentially throwing money away, which limits an organization's ability to grow and meet profit objectives.

Table 157: Percentage of Billable Work Written-Off

Percentage of Billable Work Written-Off	Survey Percent	Billable Utilization	On-time Delivery	EBITDA
None	14.4%	71.0%	77.1%	20.1%
Under 1%	22.8%	70.6%	77.5%	16.5%
1% - 3%	28.9%	71.5%	78.2%	15.3%
3% - 5%	18.1%	70.8%	74.1%	14.9%
5% - 10%	10.3%	68.3%	72.8%	14.3%
Over 10%	5.4%	66.6%	68.2%	6.6%
Total/Average	**100.0%**	**70.5%**	**76.0%**	**15.6%**

Source: Service Performance Insight, February 2016

Real-Time Visibility

Real-time information visibility is one of the most important management tools. SPI Research asked survey respondents whether their executives had real-time visibility into all business activities (sales, service, marketing, finance, etc.). The rewards are significant for organizations who have integrated systems and management dashboards that allow them to pinpoint issues and spot trends in real-time. Executives who have real-time visibility run companies that are much more profitable than those that are not as they are able to take advantage of changing market conditions.

This year's survey found executive real-time wide visibility was 7% lower (3.32 vs. 3.58) in 2015, when compared to 2014, and 4% lower than the past five-year's survey average (3.44). Independent service providers had values 11% higher than embedded services organizations (3.68 vs. 3.33). Organizations from the Americas had the highest (3.33) executive real-time wide visibility, while those from APac had the lowest (3.26).

Organizations with less than 10 employees had the highest (3.68) executive real-time wide visibility, while those with between 101 and 300 employees had the lowest (3.15). SPI Research found Management Consultancies showed the highest executive real-time wide visibility (3.66).

Real-time visibility is a very important key performance indicator. As Table 158 shows, organizations that have comprehensive visibility can make the decisions necessary to grow and achieve high levels of profitability. And it is not for just those KPI's listed in this table, it is for a majority of the other metrics tracked by SPI Research as well.

Table 158: Real-Time Visibility

Real-Time Visibility	Survey Percent	Revenue Growth	Bid-to-win ratio	Revenue / Billable Employee (k)	Revenue / Employee (k)	EBITDA
1 - None	6.0%	4.7%	3.54	$165	$131	12.1%
2 - Minimal	16.6%	9.0%	4.74	178	143	13.0%
3 - Some	31.5%	10.5%	4.92	196	158	17.4%
4 - Substantial	31.3%	11.2%	5.02	212	165	14.2%
5 - Comprehensive	14.5%	12.6%	5.37	210	162	18.2%
Total/Average	**100.0%**	**10.4%**	**4.90**	**$198**	**$157**	**15.5%**

Source: Service Performance Insight, February 2016

Extended real-time visibility is only attained through application integration. "Extended" means information that flows across departments and functions, so that employees have a more complete picture of operations, and can make quick, fact-based decisions. Without real-time visibility, decision-making can be subjective and reactive which hurts business performance. SPI Research believes these results help organizations justify expenditures in IT to provide the systems and tools they need to visualize, monitor and control the business.

Income Statements

In this section SPI Research analyzes income statements by organizational type and size. Inputs were:

Revenue

- Δ ***Direct gross PS revenue***: Directly delivered PS revenue (not including re-billable travel)
- Δ ***Reimbursable travel and expense revenue***: (includes re-billable travel and expense revenue)
- Δ ***Indirect gross revenue***: (revenue from subcontractors, outside resources)
- Δ ***Pass-thru revenue***: (revenue from hardware, software, materials, etc.)

Expense

- Δ ***Direct Labor expense***: (does not include fringe benefits, vacation, sick time or overhead)

- Δ ***Fringe benefit expense***: as a percentage of direct labor (for healthcare, pensions, vacation and sick pay)
- Δ ***Billable travel and business expense***: business expenses that can be billed to clients
- Δ ***Non-billable travel and business expense***: business expenses that cannot be billed to clients
- Δ ***Subcontractor/outside consultant expense***: cost of subcontractors and outside consultants
- Δ ***Pass-thru expense***: (expense for hardware, software, materials, etc.)
- Δ ***Recruiting expense***: (includes recruiting headcount, fees and signing bonuses)
- Δ ***Sales expense***: (includes sales headcount, bonus and non-reimbursable sales expense)
- Δ ***Marketing expense***: (includes marketing headcount, bonus and marketing program expense)
- Δ ***Education, training and certification expense***:
- Δ ***PS IT expense***: supporting the IT infrastructure (personnel, applications, networking, etc.)
- Δ ***All other G and A***: non-billable headcount, general and administration costs, facilities, headcount and overhead

Profits rose in 2015 when compared to 2014, showing the strength of the Professional Services market (Table 159). Both embedded and independent profit improved as did the profit reported by both the Americas and APac. Unfortunately, profit declined in EMEA. Average profit for the entire benchmark increased to 15.7% in 2015 as compared to 13.2% in 2014.

Table 159: Income Statement by Organization Type and Embedded Service Type

Key performance indicator (KPI)	Survey	ESO	PSO	Americas	EMEA	APac
Surveys	549	179	370	371	141	37
REVENUE						
Direct gross PS revenue	82.5%	79.7%	83.5%	83.9%	79.7%	75.0%
Reimbursable Travel & Expense revenue	4.3%	4.6%	4.2%	3.5%	6.8%	5.2%
Indirect gross revenue	8.8%	10.0%	8.4%	8.8%	7.8%	11.8%
Pass-thru revenue	4.4%	5.8%	3.9%	3.7%	5.7%	7.9%
Total Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
EXPENSES						
Direct Labor	41.1%	40.4%	41.3%	39.5%	46.4%	42.6%
Fringe benefit	6.3%	6.6%	6.1%	6.9%	5.0%	3.1%
Billable Travel & Expense	3.2%	4.7%	2.7%	3.3%	3.1%	3.0%
Non-billable Travel & Expense	1.9%	2.2%	1.9%	1.9%	2.4%	1.3%
Subcontractor /outside consultant	7.8%	6.9%	8.2%	8.2%	6.1%	9.0%
Pass-thru Expense	2.4%	1.5%	2.7%	1.8%	3.6%	5.5%
Recruiting Expense	1.0%	1.0%	1.1%	1.0%	1.1%	0.8%
Sales	5.3%	5.1%	5.4%	5.6%	4.9%	4.3%
Marketing	2.0%	1.6%	2.2%	2.1%	1.7%	1.9%
Education, training, certification	1.4%	1.5%	1.4%	1.3%	2.0%	1.0%

Key performance indicator (KPI)	Survey	ESO	PSO	Americas	EMEA	APac
PS IT	2.4%	2.0%	2.6%	2.5%	2.4%	2.0%
All other G&A	9.5%	5.8%	10.8%	9.6%	9.4%	8.2%
Total Expenses	84.3%	79.3%	86.4%	83.7%	88.1%	82.7%
2015 EBITDA	**15.7%**	**20.7%**	**13.6%**	**16.3%**	**11.9%**	**17.3%**
2014 EBITDA Comparison	**13.2%**	**19.0%**	**10.8%**	**12.5%**	**15.5%**	**13.1%**

Source: Service Performance Insight, February 2016

Profitability (EBITDA) rose for the second straight year in 2015 for the overall benchmark survey. EBITDA was 17% higher (15.5% vs. 13.2%) in 2015, when compared to 2014, and 7% higher than the past five-year survey average (14.4%). Both embedded and independent professional services organizations showed solid profitability growth with the independents showing the largest increase. In their income statements, embedded service organizations typically do not pay for much of the infrastructure borne by the independents, and therefore their profitability is typically higher.

On a regional basis both the Americas and the Asia-Pacific region showed strong profitability growth from 2014 to 2015. However, Europe, the Middle East and Africa suffered a significant drop in profitability. In 2014 EMEA reported the highest profitability and one year later it showed the lowest. What hurt Europe the most was the high direct labor cost relative to the other regions.

As organizations grow in size, they typically report lower profitability. In 2015, different size organizations with under 300 employees averaged virtually the same profit, at around 14%. SPI Research did not have enough income statement data from firms with over 700 employees to feel comfortable enough to publish.

Table 160: Income Statement by Organization Size

Key performance indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700
Surveys	55	90	147	123	55
REVENUE					
Direct gross PS revenue	89.5%	84.9%	86.3%	80.0%	79.9%
Reimbursable Travel & Expense revenue	4.2%	3.4%	2.9%	4.8%	3.9%
Indirect gross revenue	4.4%	8.3%	8.0%	9.0%	14.2%
Pass-thru revenue	1.8%	3.4%	2.7%	6.1%	2.0%
Total Revenue	100.0%	100.0%	100.0%	100.0%	100.0%
EXPENSES					
Direct Labor	46.3%	41.1%	45.1%	37.7%	45.2%
Fringe benefit	7.2%	6.8%	6.1%	6.8%	6.0%
Billable Travel & Expense	3.9%	3.4%	2.9%	4.0%	2.8%
Non-billable Travel & Expense	1.9%	2.2%	1.5%	1.5%	3.3%
Subcontractor /outside consultant	6.6%	9.8%	6.7%	9.2%	9.1%

Key performance indicator (KPI)	Under 10	10 - 30	31 – 100	101 - 300	301 - 700
Pass-thru Expense	2.3%	2.3%	1.3%	4.5%	1.0%
Recruiting Expense	0.7%	0.8%	1.0%	0.7%	2.7%
Sales	3.7%	4.3%	6.6%	4.2%	4.1%
Marketing	2.0%	2.6%	2.0%	2.0%	1.3%
Education, training, certification	2.5%	2.2%	0.9%	0.8%	2.4%
PS IT	2.7%	2.5%	1.9%	2.8%	2.8%
All other G&A	5.9%	7.8%	9.9%	11.8%	7.5%
Total Expenses	85.7%	85.8%	85.9%	86.0%	88.2%
2015 EBITDA	**14.3%**	**14.2%**	**14.1%**	**14.0%**	**11.8%**
2014 EBITDA Comparison	**16.6%**	**14.6%**	**12.4%**	**10.6%**	**15.5%**

Source: Service Performance Insight, February 2016

In this year's survey, SPI Research received excellent profitability metrics from most of the vertical markets (*Only markets with sufficient income statement data are shown*). However, some, with fewer than 10 employees, did not provide enough information to be statistically valid. For the organizations with plenty of observations (Table 161) SPI Research found that both SaaS and software's service providers reported the highest profitability. This increase by SaaS providers was very important, as in 2014 their profitability was less than 10%. The two main independent groups, IT and management consultancies showed solid profitability albeit less than the survey average. SPI Research found Architecture and Engineering firms showed the poorest profitability (11.2%).

Table 161: Income Statement by PS Market Vertical

Key performance indicator (KPI)	IT Consulting	Software	Management Consulting	Architects / Engineers	SaaS
Surveys	190	89	68	50	43
REVENUE					
Direct gross PS revenue	81.4%	80.4%	82.5%	87.2%	77.8%
Reimbursable T&E rev.	4.1%	4.1%	6.1%	2.1%	11.5%
Indirect gross revenue	9.0%	10.6%	9.2%	8.6%	4.8%
Pass-thru revenue	5.5%	4.8%	2.2%	2.1%	5.9%
Total Revenue	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
EXPENSES					
Direct Labor	41.4%	38.8%	40.0%	44.2%	42.0%
Fringe benefit	5.7%	6.1%	5.9%	6.8%	8.7%
Billable Travel & Expense	2.9%	5.7%	3.7%	2.1%	3.8%
Non-billable Travel & Exp.	1.6%	2.5%	1.8%	1.2%	1.6%
Sub. /outside consultant	8.5%	7.4%	6.4%	11.0%	2.1%

Key performance indicator (KPI)	IT Consulting	Software	Management Consulting	Architects / Engineers	SaaS
Pass-thru Expense	3.1%	0.8%	2.1%	3.1%	0.7%
Recruiting Expense	1.2%	1.2%	1.9%	0.1%	0.5%
Sales	7.0%	4.7%	5.0%	2.1%	5.4%
Marketing	2.3%	1.6%	2.2%	1.9%	1.7%
Education/ training, cert.	1.3%	1.8%	1.6%	1.8%	0.9%
PS IT	2.4%	2.7%	3.4%	2.4%	1.2%
All other G&A	9.3%	6.8%	13.8%	12.2%	5.6%
Total Expenses	**86.7%**	**80.1%**	**87.8%**	**88.9%**	**74.2%**
2015 EBITDA	**13.3%**	**19.9%**	**12.2%**	**11.1%**	**25.8%**
2014 EBITDA Comp.	**10.2%**	**20.5%**	**14.0%**	**12.3%**	**7.8%**

Source: Service Performance Insight, February 2016

Table 162: Income Statement by PS Market Vertical

Key performance indicator (KPI)	Managed. Services	VAR	Accounting	Advertising (Marcom)	Staffing
Surveys	17	14	13	12	9
REVENUE					
Direct gross PS revenue	99.2%	77.0%	78.4%	92.3%	100.0%
Reimbursable T&E rev.	0.8%	3.9%	8.3%	0.7%	0.0%
Indirect gross revenue	0.0%	9.2%	9.1%	3.7%	0.0%
Pass-thru revenue	0.0%	9.9%	4.2%	3.4%	0.0%
Total Revenue	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
EXPENSES					
Direct Labor	72.1%	40.8%	52.0%	33.2%	49.2%
Fringe benefit	6.8%	6.9%	5.1%	5.8%	13.1%
Billable Travel & Expense	0.5%	3.1%	0.3%	0.8%	0.0%
Non-billable Travel & Exp.	0.3%	1.9%	0.7%	1.8%	10.1%
Sub. /outside consultant	0.0%	6.5%	4.0%	5.7%	2.4%
Pass-thru Expense	0.0%	3.0%	2.6%	2.2%	4.2%
Recruiting Expense	0.0%	0.8%	0.6%	0.6%	0.4%
Sales	2.1%	8.9%	0.4%	7.4%	6.6%
Marketing	1.9%	1.6%	1.1%	4.3%	3.4%
Education/ training, cert.	0.1%	1.6%	0.8%	1.3%	1.4%

Key performance indicator (KPI)	Managed. Services	VAR	Accounting	Advertising (Marcom)	Staffing
PS IT	0.1%	0.5%	8.8%	3.4%	1.0%
All other G&A	0.5%	4.4%	2.8%	18.9%	4.8%
Total Expenses	**84.4%**	**80.0%**	**79.2%**	**85.4%**	**96.6%**
2015 EBITDA	**15.6%**	**20.0%**	**20.8%**	**14.6%**	**3.4%**
2014 EBITDA Comp.	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Source: Service Performance Insight, February 2016

SPI Research was impressed that profitability has increased for two years in a row. While still not at the pre-recession levels, many of the core income statement KPIs did improve. As usual, embedded services organizations showed high levels of profitability as they typically have a different cost structure then independents as they do not pay the full burden for corporate sales, marketing, IT and G&A expense. Although 2015 showed solid revenue growth combined with solid profitability, global economic uncertainties and a massive stock market correction are powerful indicators of 2016 uncertainties. Now is the time for PS executives to carefully revisit their 2016 business plans to ensure sales pipelines are robust enough to support growth forecasts. A careful eye must be turned to scrubbing backlog and reviewing overhead and discretionary spending. We could be in for a rough ride in 2016.

11. 2016 Professional Services Maturity™ Model Results

SPI Research has spent over nine years developing and improving the Professional Services Maturity™ Model. Over 10,000 billable professional services organizations use the model to benchmark and improve organizational performance. With over 2,000 billable services organizations participating over the past eight years, SPI Research has further refined the model to improve its accuracy.

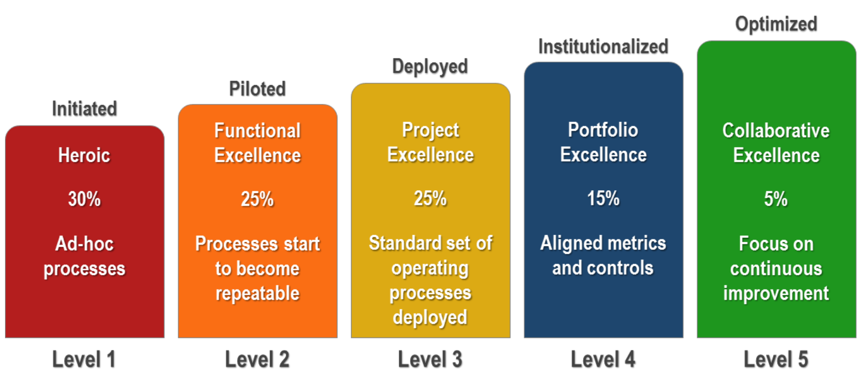
549 firms participated in 2015 representing approximately 350,000 consultants worldwide, continuing to make this one of the most comprehensive studies of the global PS industry. While a majority of the participating organizations are headquartered in North America, the firms surveyed have employees distributed globally, and SPI Research believes it to be an accurate representation of the global PS industry. SPI Research clients continue to use the model to develop, prioritize and implement performance gains.

In this chapter SPI Research reveals the analytic basis of the model and gives insight into our survey techniques. For this year's model, SPI Research used the current database of 549 firms surveyed over the last three months of 2015.

Maturity Levels

The maturity rating for each Service Performance Pillar varies based on the performance of the organization. In each of the five performance pillars, every firm operates at one of the five maturity levels (Figure 65):

Figure 65: Professional Services Maturity Model™ Levels



Source: Service Performance Insight, February 2016

- ∆ **Level 1 (Initiated – 30% of the respondents)**: In the initial stages, the focus of the organization is primarily on client acquisition and building a reference base. In order to accomplish this core mission, the organization must recruit and hire excellent staff. Therefore, at Maturity Level 1 the priority focus areas are Customer Relationships and Human Capital Management.
- ∆ **Level 2 (Piloted – 25% of the respondents)**: The organization is becoming a profit center so focus is still on client relationships but human capital and finance and operations have become more important as the organization moves from a cost center to a profit center.

- Δ **Level 3 (Deployed – 25% of the respondents)**: The organization has now deployed core operating processes in all five service performance pillars. At this point, the organization must continue to accentuate Human Capital Alignment but the key focus has shifted to Finance and Operations and Service Execution. The organization must start to consider strategy and vision to ensure the focus is on the right clients, markets and competition. At this level, the organization must have deployed standard business processes across all dimensions.
- Δ **Level 4 (Institutionalized – 15% of the respondents)**: At this level, the organization must start optimizing across all dimensions. However, maintaining and growing service revenue and margin is of paramount importance. The organization must start developing a differentiated approach to clients with vertical and horizontal market segments and geographies so a focus on the Client Relationship pillar is critical.
- Δ **Level 5 (Optimized – 5% of the respondents)**: By definition, the organization has achieved "black belt" status in all functional areas. Processes are fully developed, deployed and institutionalized. The organization is now developing comprehensive measurement, monitoring, and optimization processes across all pillars.

While every organization should strive to attain Maturity Level 5 in each of the five service performance pillars, some areas are more important than others depending on the overall maturity of the company or its market. For instance, early in the life of a professional services organization client relationships are far more important than profitability because without clients there can be no future. Over time, client relationships always remain important, but the organization must equally focus efforts on other Pillars. To be a truly optimized organization, the firm must aspire to reach Level 5 in all dimensions.

Model Improvements

Each year SPI Research makes modifications to improve the model based on additional surveys, its own analysis, and feedback from PSOs that use the model. This year, there are several changes to the model that should improve its accuracy and validity. These changes include:

- Δ Questions concerning bill rates were eliminated and put into the **2015 PS Global Pricing Study**. This change enabled SPI Research to reduce the survey length to 177 questions.
- Δ Value-added Resellers (VARs) and Managed Service providers were added as an increasing number of VARs and hosting providers focus on professional services as a differentiator.
- Δ Hardware, software or other equipment resale was incorporated into the question on PS revenue makeup to reflect how product sales have become increasingly important to independent PS providers.
- Δ Project Portfolio Management (PPM) solutions were added as a solution category.
- Δ Service revenue was further delineated by new (logo) and existing clients and new versus existing services to show how PSOs grow revenue.
- Δ Annual employee attrition was split into voluntary and involuntary to provide greater insight into turnover.

- Δ Recruiting costs were added to the income statement as recruiting costs are large and growing as firms combat the war for talent.

Similar to every other year, not every question is included in the PS Maturity™ model. Demographic information in particular is not part of the PS Maturity™ model but helps PS executives better compare their organizations to the benchmark.

Model Inputs

SPI Research conducts correlation analysis between the questions to determine what, if any, impact each of the key performance indicators (KPIs) have on each other. The questions were then rated by relative importance from 0.0 (unimportant) to 1.0 (very important) for each of the KPIs. Each question was assigned a maximum value based on the answer given and the weight of the question. At the bottom of each of the following tables is the total maximum value possible in each maturity rating. Here is a synopsis of the SPI Research methodology:

- Δ ***Factor***: Respondent's unique answers to the given question. Some questions are answered within a range to reduce the time to complete the survey.
- Δ ***Weight***: The relative value of the question as compared to others. Questions were weighted from 0.0 to 1.0 depending on the overall importance of the question. Questions with a weight of 1.0 are the most important in determining organizational maturity.
- Δ ***Pillar Correlation***: SPI Research incorporates a correlation coefficient for each question to all pillars, reflecting the inter-relationship that exists between different functions and key performance metrics within PSOs. Correlations range from -1.0 to 1.0 depending on the KPI's negative or positive impact on performance.
- Δ ***Maximum Score***: The maximum score for each question is determined by multiplying the normalized value of the question by its weight. Scores are normalized on a scale from 1 to 100 and then assigned a Maturity Level based on a score from 1 to 5.

The minimum scores for each Pillar are summarized in Table 163. The maximum value is 100, which means the organization is at the "Optimized" level. By design, maturity scores are relative to the size of the survey with approximately 5% of organizations designated at Level 5 (Optimized) in any given pillar.

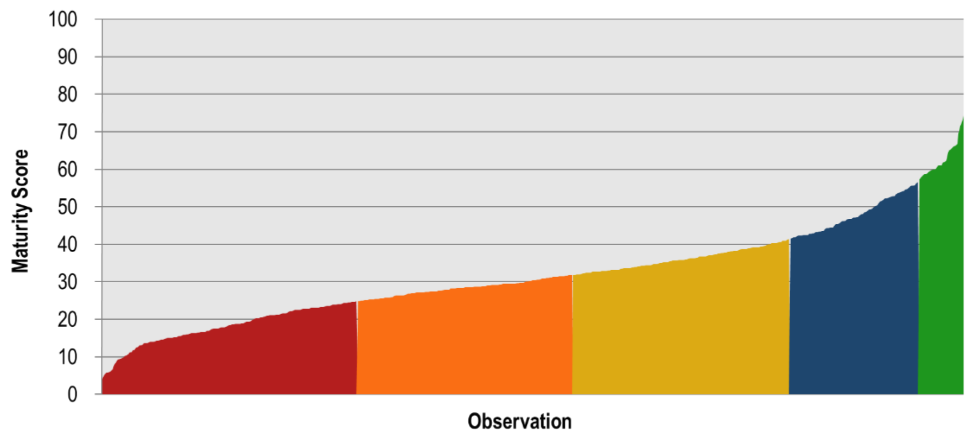
Table 163: Minimum Normalized Performance Pillar Scores

Pillar	Level 1	Level 2	Level 3	Level 4	Level 5	Maximum
Leadership (LE)	0.0	47.3	56.1	62.9	71.1	100.0
Client Relationships (CR)	0.0	36.2	43.1	50.8	58.9	100.0
Human Capital (HC)	0.0	47.1	53.7	60.0	66.1	100.0
Service Execution (SE)	0.0	36.1	43.7	50.7	58.0	100.0
Finance & Operations (FO)	0.0	24.7	31.8	41.5	57.3	100.0

Source: Service Performance Insight, February 2016

Moreover, SPI Research assumes 15% perform at Level 4; 25% perform at Level 3; 25% perform at Level 2 and the other 30% perform at Level 1. These scores are slightly different from the 2015 report in most pillars as SPI Research annually adjusts scores based on economic conditions and the feedback received over the past year.

Figure 66: Normalized Finance & Operations Pillar Scores



Source: Service Performance Insight, February 2016

What might be interesting to readers of this report is that when analyzing the normalized scores (1 to 100) in each Pillar it shows that no firm scores a "0", meaning the lowest level of performance, nor does any firm score a "100", meaning the highest level. Figure 66 highlights the scores for the Finance and Operations Pillar. Figure 66 shows that no firm scored over 75, meaning there is always room for improvement, despite how well the organization runs!

Figure 67: Increase performance by focusing on low-performing KPIs

Finance & Operations Performance Indicator	Consulting Rus	Peer Average	Survey Average	Level 1	Level 2	Level 3	Level 4	Level 5
Annual revenue per billable consultant (k)	$150k - $200k	$193	$197					
Annual revenue per employee (k)	$150k - $200k	$159	$167					
Average revenue per project (k)	$50k - $100k	$220	$189					
Project margin for time & materials projects	Under 20%	35.8%	36.3%					
Project margin for fixed price projects	Under 20%	34.7%	35.8%					
Average project margin — subs, offshore	Under 20%	26.6%	28.4%					
Quarterly revenue target in backlog	Over 70%	49.7%	48.4%					
Percent of annual revenue target achieved	80% - 90%	92.8%	90.5%					
Percent of annual margin target achieved	Under 80%	86.1%	87.0%					
Revenue leakage	Over 10%	3.29%	4.05%					
% of inv. redone due to error/client rejections	3% - 5%	2.08%	2.32%					
Days sales outstanding (DSO)	70 - 100 days	40.7	43.4					
Quarterly non-billable expense per employee	$2,500 - $5,000	$1,231	$1,443					
% of billable work is written off	5% - 10%	2.19%	3.10%					
Executive real-time wide visibility	Substantial	3.58	3.58					

Source: Service Performance Insight, February 2016

SPI Research works with services organizations to improve performance in each Pillar. The analysis highlights how the firm scored relative to its peers (for example, management consultancies with between 100 and 300 employees) and the overall survey. This graphical display highlights areas where the organization performs poorly and where additional attention should be paid to produce improvements. After over five-years of engagements using the Professional Services Maturity Model™

SPI Research recommend firms look first at the areas performing poorly (**red**), as opposed to further improving areas where it already does well (**green**). Figure 67 highlights one such example.

Model Results

SPI Research analyzed each of the 549 participating firms to minimize any bias when comparing PSOs of different sizes. Table 164 shows the majority of organizations in each size category have similar averages for each pillar.

Table 164: Average Service Maturity by PSO Size (People)

		Average Maturity Level				
Organization Size (people)	**Count**	**LE**	**CR**	**HC**	**SE**	**FO**
Under 10	55	2.33	2.07	2.42	2.18	2.00
10 – 30	90	2.23	2.14	2.23	2.18	2.14
31 – 100	147	2.45	2.61	2.46	2.63	2.59
101 – 300	123	2.38	2.37	2.39	2.37	2.49
301 – 700	55	2.40	2.36	2.44	2.42	2.36
Over 700	79	2.66	2.70	2.53	2.48	2.59
Total	**549**	**2.41**	**2.41**	**2.41**	**2.41**	**2.41**

Source: Service Performance Insight, February 2016

As might be expected, this year's model showed greater success among the larger firms, while those with between 31 and 100 consultants also did very well in the two core areas of delivering services and generating revenue and profit. Last year these firms were leaders in selling as well. Those firms with under 30 showed the lowest performance on average, many are new firms without the structure, standardization and breadth to enhance business systems and processes, a prerequisite for maturity.

Table 165: Average Service Maturity by PSO Type

		Average Maturity Level				
Organization Size (people)	**Count**	**LE**	**CR**	**HC**	**SE**	**FO**
Embedded	179	2.40	2.53	2.35	2.37	2.49
Independent	370	2.42	2.36	2.44	2.43	2.37
Total	**549**	**2.41**	**2.41**	**2.41**	**2.41**	**2.41**

Source: Service Performance Insight, February 2016

SPI Research analyzed the maturity of PSOs by type (embedded vs. independent), and the results are summarized in Table 165. This year's results show that embedded service organizations scored better in only two of the five performance pillars; in the past embedded organizations exhibited greater maturity in all five dimensions. Embedded PSOs are typically early adopters of business applications as they receive the benefit of sophisticated IT investments while independents tend to forego solution acquisition in favor of business development and marketing expenditures. This year independents were superior in leadership, talent management and service delivery.

Table 166 shows the average level of maturity for each of the performance pillars by select vertical markets. When comparing vertical markets with more than 20 surveys, professional services within software organizations scored highest in three of the five pillars compared to IT and management consultancies.

Table 166: Average Service Maturity by Vertical Market

		Average Maturity Level				
Market	**Count**	**LE**	**CR**	**HC**	**SE**	**FO**
Accounting	13	1.85	1.85	1.92	2.00	2.15
Advertising (Marcom)	12	2.33	2.17	2.42	2.42	2.42
Architecture/Engineering	50	2.02	1.78	2.12	1.70	2.04
IT Consulting	190	2.53	2.54	2.51	2.59	2.48
Managed Services/Hosting	17	2.35	2.00	2.35	2.12	2.00
Management Consulting	68	2.68	2.51	2.79	2.84	2.44
PS within HW & Networking	16	2.25	2.13	2.19	2.13	2.25
PS within SaaS company	43	2.49	2.67	2.44	2.28	2.19
PS within Software company	89	2.26	2.52	2.22	2.38	2.63
Research & Development	15	2.20	2.40	2.07	2.27	2.60
Staffing	9	1.89	2.00	1.89	1.56	1.78
Value-added Reseller (VAR)	14	3.21	3.21	3.07	3.14	3.43
Other PS	13	2.31	1.92	2.23	2.00	2.00
Total / Average	**549**	**2.41**	**2.41**	**2.41**	**2.41**	**2.41**

Source: Service Performance Insight, February 2016

The Financial Benefits of Moving Up Levels

The PS Maturity Model™ was developed to demonstrate the importance of organizational improvement through the use of benchmarking. SPI Research believes that the importance of the maturity model is to help organizations improve ***balanced performance across the entire organization***, not just in terms of financial performance. However, if the organization is profit-motivated (which most are), increasing maturity levels do show up in significant bottom-line profit. Table 167 highlights some of the key performance indicators by maturity level, and should alone be an important reason why PS executives should looker deeper into using it to accelerate both productivity and profit.

Table 167: Key Performance Indicators (KPIs) by Maturity Levels

Key performance indicator (KPI)	Level 1	Level 2	Level 3	Level 4	Level 5
Year-over-year change in PS revenue	4.5%	6.2%	12.2%	18.7%	24.9%
Well understood vision, mission and strategy (1-5)	3.01	3.57	4.07	4.49	4.86
Confidence in PS leadership	3.03	3.79	4.22	4.54	4.83
Bid-to-Win ratio (per 10 bids)	4.07	4.43	5.55	5.73	6.41
Deal pipeline relative to quarterly bookings forecast	122%	161%	186%	221%	254%
Employee billable utilization	62.8%	70.0%	72.7%	78.0%	77.9%
Projects delivered on-time	64.3%	76.1%	79.6%	83.7%	88.8%
A standardized delivery methodology is used	54.3%	62.4%	67.8%	74.0%	75.0%
Annual revenue per billable employee (k)	$110	$184	$231	$244	$269
Annual revenue per employee (k)	$91	$137	$185	$197	$215
Project margin	23.3%	31.0%	38.5%	41.4%	40.6%
Percent of annual revenue target achieved	81.3%	89.6%	94.4%	98.3%	100.7%
Percent of annual margin target achieved	79.4%	86.4%	92.7%	96.7%	97.8%
EBITDA (Profit) %	**0.7%**	**3.8%**	**8.5%**	**19.1%**	**36.0%**

Source: Service Performance Insight, February 2016

This table shows some of the benefits in moving up levels. Virtually every one of the 172 KPIs improve as firms move up from one level to the next. Most organizations SPI Research has worked with find that improving by one maturity level annually is about all they can do. While moving up even one level can be difficult, the model shows the investment is well worth it.

The Inter-relationship of Pillars

Process improvement can both positively and negatively impact other Key Performance Indicators (KPIs) in the same Service Performance Pillar as well as the other four. Some examples include:

- Δ Bid-to-Win (*Client Relationships*) impacts margins and revenue growth (*Finance and Operations*). Winning bids might improve a PSO's sales effectiveness, but might worsen its Finance and Operations pillar due to lower profit margins if heavy discounting is required to win the bids.
- Δ Leadership issues (communication, well understood vision, mission and strategy,) can impact the ability to grow (*Finance and Operations*), staffing levels (*Human Capital*) and the ability to effectively deliver projects (*Service Execution*).
- Δ If a project is delivered late (*Service Execution*) it can negatively impact relations with the client and future sales effectiveness (*Client Relationships*), revenue growth and project profitability (*Finance and Operations*).

SPI Research took these interrelationships into account when building the Professional Services Maturity Model™ (Figure 68). It adds complexity to the model, but SPI Research believes it provides a real-world balanced view that improves PSOs ability to positively enact change.

Figure 68: Key Performance Indicators (KPIs) are Correlated

Source: Service Performance Insight, February 2016

Model Conclusions

In nine years of building the Professional Services Maturity Model™ SPI Research has seen the correlation of KPIs vary from year-to-year, as the economy and competitive environment dictate how PS organizations operate. The model is an aggregate built for PSOs (both embedded and independent), different size organizations, as well as for the different vertical markets surveyed. Therefore, the results will have some type of "generic bias." PS executives who wish to have their organization compared directly to their peer group (i.e., IT Consultants with 100 to 300 employees) should contact SPI Research.

As organizations grow in size, they will gain greater operational efficiency and other advantages, while losing intimacy and ease of communication. Every vertical market has its own constraints, particularly in pricing strategies, in many cases limiting the ability for high levels of profitability. The key to this maturity model is for executives to hone in on their own vertical market, as well as organization size, to better determine relative performance. Service Performance Insight can further segment this information to help PS executives specifically analyze performance relative to their exact peer group. Contact SPI Research for more information on the Professional Services Maturity Model™.

12. Conclusions and Recommendations

This report is SPI Research's ninth such endeavor, how time flies! Each year the benchmark reveals fresh insights into the professional services market, and the issues impacting its growth, performance and profitability. The significant number of responses this year shows just how much the Professional Services Maturity™ Benchmark and Professional Services Maturity Model™ are valued by professional service executives around the world. You can take advantage of this information in a variety of ways: to benchmark your organization and work to "get the **red** out" or to use the Professional Services Maturity Model™ to efficiently determine where you should focus and prioritize your transformational energies. Regardless, we hope you find it beneficial in better understanding your organization and how you compare to your peers and the industry at large.

2015 Ended in Uncertainty

2015 started off strong but ended with increased global uncertainty. Some economic analysts are even starting to use the dreaded "R" word (recession) to describe the 2016 economic climate. Growing competition drove lower sales pipelines, fewer winning bid percentages and decreased backlog. These sales factors, coupled with an increased level of employee attrition (both voluntary and involuntary), caused ripples in market growth. Although there were reductions in many key financial metrics, there was one notable exception, the one that matters most – profitability, which actually rose to its highest level in four years. What continues to be amazing in the professional services market is that revenue growth is always higher than employee headcount growth, meaning professional services organizations continually improve service delivery efficiency.

The Promise of 2016

2016 is a new year, and regardless of the volatility shown in the first two months, the promise of on-going prosperity in professional services remains high. In each of the PS markets, there is optimism in the air:

- Technology complexity is increasing exponentially. The variety, overlap, interdependence and pace of new technology introduction is only accelerating. IT consultants will be called upon to make sense of it all to create greater efficiencies while containing costs through information visibility. Most IT consultancies have already stared hitching their wagons to the cloud; this is where growth and future revenues will come from.
- Management consultancies are in higher demand as a result of a changing market dynamics, which necessitate the need for new strategies, mergers and acquisitions, business process improvement and transformation. As global expansion becomes increasingly prevalent in all industries, management consultancies must be there to help navigate complex waters.

- Δ As top-line growth slows, embedded PS organizations within product companies are being ask to produce more profit. Customer adoption and expansion are still top priorities but firms are waking up to the potential of higher level services as a catalyst to drive customer value. Look for the embedded PS organizations to offer an exciting array of unique customer insights and accelerators. Service productizing and packaging are the key to unlocking more customer value without wasting precious time and money. PS leaders are finally getting a seat at the executive table. Many are assuming a new role of Chief Customer or Chief Service executive, charged with leading and aligning support, PS and account management functions.
- Δ The world is changing, and architects and engineers look to show solid growth in the upcoming decade as the call for new infrastructure and green technologies necessitate the need to develop new facilities for both industrial production, retail and housing.
- Δ Digital marketing has become critical to the marketing and sales process, and advertising agencies have made great shifts in the services offered to better pinpoint products and services to their clients' base. Marketing and communication firms, although still in love with glitzy ads, are making their money from on-line advertising. Although creativity is still prized, these firms are starting to run campaigns like projects with real metrics and measurements. This vertical is rapidly adopting technology and PS business process maturity to wring greater productivity and profit from talented social media wizards.

These are just a few of the changes SPI Research sees that will drive the market for professional services in 2016.

Obviously, in the United States, the world's largest economy, the presidential election looms, and could impact the overall direction of the economy and the professional services market. Economic volatility, increased deficits and reductions in government spending will no doubt continue. China is the wildcard in the global market equation, as it fights its own issues with security, growth and government intervention. And of course, oil, with the lowest prices in over a decade, impacts some markets negatively, but at the same time allows consumers to put more money in their pockets from which to spend. These issues hopefully will shake out over the next few months.

SPI Research projects moderate but consistent growth in the professional services sector in 2016. Our clients are already reporting pipeline growth and labor shortages. Many firms are starting to revamp their recruitment, hiring and retention plans. Undoubtedly, with time, the boom-bust-boom cycle will sort itself out and the winners will be able to grow revenue and mature their business processes and systems at the same time.

The Professional Services Maturity™ Model

After nine years of development and enhancement, the Professional Services Maturity™ Model has become a proven and trusted framework. Each year thousands of organizations use it to improve organizational productivity and profitability. SPI Research works with a number of firms globally to ensure their business transformation projects start-off on the right foot. Our fact-based analysis helps executive teams coalesce around improvement priorities backed by real metrics and standards. With over 500 firms participating in this year's benchmark, SPI Research was better able to analyze additional PS markets, which will help all PS organizations understand the art of the possible. The drive to performance improvement begins with the alignment of people, business processes and finances. Information will continue to be a primary weapon in the quest to increase performance and profit.

SPI Research continues to improve the Professional Services Maturity™ Model, working with PS executives on additions and enhancements, as well as further data analysis to determine new and potentially revealing correlations that can have a positive impact on performance.

One of the key benefits of the PS Maturity Model™ and benchmark is that it provides clear metrics and guidance on over 200 key performance measurements. SPI Research believes running a service organization is a game of singles and doubles. Small percentage improvements in just a few key performance areas have a compounding and dramatic impact on bottom-line results. PS executives often feel isolated and have a limited support base within their companies to rely on for advice. The Professional Services Maturity™ Benchmark and its associated score-carding process takes the emotion and guesswork out of metrics. Completing the PS Maturity™ survey highlights gaps in information while enabling PSOs to conduct their own self-assessment.

Focus on performance improvement

In the PS industry, constant change and improvement is a way of life. No firm can maintain the status quo without anticipating and taking advantage of change. In this industry staying the same means falling behind. Conditions and regulations change, so do client needs, technologies, and the workforce. PS executives who embrace change can better prepare their organization for the future challenges and opportunities that lie ahead.

SPI Research continues to advocate how PSOs should implement their performance improvement initiatives:

1. ***Start with market positioning.*** Develop a winning strategy. A best practice is to annually revisit the organization's market position, strengths, weaknesses and competitive threats. This benchmark has proven time and again that a rising tide floats all boats. Firms that are well-positioned in growth markets or are clearly the experts in their specialty area are always the winners. Me too organizations who don't bring fresh new ideas and competencies quickly become irrelevant. This people-based business has in infinite capacity for too much work but becomes disenfranchised and complacent with not enough new and stimulating work.
2. ***Begin with Pillars that offer the greatest benefit***: Establish "quick wins" and "big wins". But not too many of them. PSOs should give the greatest attention to those pillars (functions, processes and systems) that can demonstrate the greatest value to the organization from improvement. Determine the expected impact of improving each pillar by one level of maturity, and then calculate the investment required, actions and owners to develop an action plan.
3. ***Develop teams to address Performance Pillars***: Put someone in charge. Improvement priorities are typically assigned on top of already over-worked managers. PS executives should seriously

consider building teams, led by subject matter experts, and supported with funding and executive guidance to address each of the five performance pillars. Their initial focus should be to compare the organization with this benchmark, and determine ways to improve each service performance pillar to an acceptable level.

4. ***Startup Improvement — get clients***: Start-up PSOs should concentrate on client acquisition and the successful deployment of early customers. Ensuring the success of early customers trumps all other activities including services revenue and profitability. Continue to build technical and domain knowledge as well as recruit a consulting organization and start developing an operational infrastructure.
5. ***Manage, report and celebrate success***: Executives responsible for individual pillar improvement should carefully monitor and measure success, and report back to the organization as a whole. This will keep executive commitment from waning; showing the entire PSO the possibilities if they stay focused.

These recommendations are still as vital today as they were when we introduced the Professional Services Maturity™ Benchmark, and SPI Research believes that 2016 could be the year to embark on a business transformation — to position the organization for success when the market picks up.

Remember, get the red out first

A key take-away from this study is the leverage effect of concentrating on the Human Resource and Client relationship pillars. These two pillars provide the greatest performance improvement potential and impact on service revenue, margin and customer satisfaction. Talent continues to be a great concern and so does sales and marketing effectiveness. *Two of the most important key performance indicators in determining the overall health of the organization are attrition (which is rising rapidly) and bill rates (which now are under increased pressure to rise to keep up with costs). If your organization scores low in either the Human Capital or Client Relationship pillar these should become primary focus areas for improvement.*

Implement an Information Strategy with Clear Performance Objectives and Demonstrable Results

For nearly a decade SPI Research has analyzed the impact of information-driven business solutions, and their ability to provide value. We have seen dramatic improvements when professional services organizations implement new technologies, but only when executives understand how applications are used, and embrace their use. Integration of these applications is key, as greater visibility across the organization yields significant performance improvements. Social, Mobile, Analytics and Collaboration (SMAC) applications have become increasingly important at the executive level. They provide the necessary information required to collaborate and make informed decisions in real time. An informed organization armed with the skills and tools they need will be better prepared to compete in the new decade.

Begin with the core financial management solution (ERP), then focus on client relationship management (CRM), and then professional services automation (PSA). In the next few years' human capital management (HCM) solutions will become increasingly important as talent issues loom. And of course, business intelligence (BI) has gained wider adoption, as executives realize the importance of deep analysis into the success and failures of their organization.

And also don't forget other supporting applications such as remote service delivery, knowledge management, project portfolio management and social. These applications have become increasingly prevalent in professional services as organizations work to improve communication and collaboration both internally and externally.

We thank everyone who participated and contributed to this body of work. We will continue to improve the model to help organizations around the world improve operational performance and profit.

Sincerely,

Jeanne Urich and David Hofferberth

13. Appendicies

Appendix A: Acronyms Used in This Report

Table 168: Lexicon of Acronyms and Abbreviations

Acronym	Meaning
APac	Asia-Pacific
BI	Business Intelligence
BPM	Business Process Management
BPO	Business Process Outsourcing
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
CRM	Client Relationship Management
DSO	Days Sales Outstanding
EMEA	Europe, Middle East, Africa
ERP	Enterprise Resource Planning
ESO	Embedded Service Organization
EVM	Earned Value Management
HCM	Human Capital Management
HR	Human Resources
ISV	Independent Software Vendor
IT	Information Technology
KPI	Key Performance Indicator
MarCom	Marketing Communication / Advertising
PA	Project Accounting

Acronym	Meaning
PMI	Project Management Institute
PMO	Project Management Office
PMP	Project Management Professional
PPM	Project Portfolio Management
PS	Professional Services
PSA	Professional Services Automation
PSO	Professional Services Organization
ROI	Return on Investment
RSD	Remote Service Delivery and Collaboration
SaaS	Software as a Service
SCM	Supply Chain Management
SM	Social Media
SMAC	Social, Mobile, Analytics, Cloud
SRP	Service Resource Planning
SLA	Service Level Agreement
SLM	Service Lifecycle Management
STEM	Science, technology, math and engineering
SVC	Service Value Chain
VSOE	Vendor-Specific Objective Evidence
WBS	Work Breakdown Structure

Source: Service Performance Insight, February 2016

Appendix B: Financial Terminology

The following table contains a list of standard key performance measurement terms and definitions used in the benchmark report. The terms and definitions have been compiled from our knowledge and experience and a variety of sources including www.wikipedia.org http://www.investopedia.com and Morris, Manning and Martin, LLP. SPI Research is interested in expanding and evolving common key performance measurements, standards and definitions for Professional Service organizations. If you would like to add terms or suggest changes, your comments and suggestions will be appreciated.

Table 169: Standard Key Performance Indicator (KPI) Definitions

Term	Definition
70% utilization	~ 1,400 billable hours/year or 350 hours/quarter
Allocations	Corporate allocations refer to a company's policy of distributing the cost of shared resources, for example, facilities, healthcare, IT and Sales, General and Administrative (SG&A) costs to specific functions or departments.
Annual Billable Utilization %	Annual Billable Hours/(2080 hours – vacation and holidays) or Billable days/(260 days – 10 vacation – 10 holidays ~ 240 days)
Attrition %	Attrition % = (Voluntary + involuntary) / Total Beginning Employees
Backlog	Backlog = Bookings - Billings The total value of contract commitments yet to be executed: Total Backlog = Previous fiscal year's contracts not yet billed + Latest fiscal year's sales - Latest fiscal year's revenue
Bid Win Ratio	The ratio of successful bids (resulting in signed contracts) divided by the total number of bids or proposals issued. Bid Win ratio is a good measure of sales and marketing effectiveness because it demonstrates the organization is pursuing appropriate types of business and is able to beat its competitors.
Billings	Completed, accepted work that can been billed (T&M, Work in process, Milestone, Deliverables)
Bookings	Signed Contracts (signed PS Agreement + signed SOW + PO)
Burdened Cost	Typically employee burdened costs are the costs per employee for benefits (Healthcare, Pensions, 401K) and an apportioned cost for the employee's facility and IT usage + all discretionary expense. The difference between burdened cost and fully burdened cost is that fully burdened cost includes an allocation for corporate SG&A costs.
Capitalization	**Expensed computing equipment:** expenses (typically less than $100k) vs. capitalized (paid for over a time period). Servers for example, are typically capitalized and depreciated over a 3 year period. Capital expenditures usually refer to expenses a company makes for property, buildings or equipment. Capitalized items typically have a useful life of several years.
Cash	The value of the most liquid assets within the balance sheet. Cash equivalents are assets such as money market accounts that can be accessed quickly and are not subject to significant change. Does not include the value of accounts receivable.
Cash flow	Is the balance of the amounts of cash being received and paid by a business during a defined period of time, sometimes tied to a specific project. The timing of cash flows into and out of projects is used as input to financial models such as internal rate of return, and net present value.
Cost per person	Cost Per person = Base + Fringe (~25%) + Bonus

Term	Definition
Days Sales Outstanding (DSO)	A measure of the average number of days that it takes a company to collect revenue after a sale has been made and a bill has been issued. A low DSO means that it takes a company fewer days to collect its accounts receivable. A high DSO means that a company is selling its product to slow-paying customers and it is taking longer to collect money. Days sales outstanding is calculated as: $= \frac{\text{Accounts Receivable}}{\text{Total Credit Sales}} \times \text{Number of Days}$ OR $= \left[\frac{\text{Accounts Receivable}}{\left(\frac{\text{Total Credit Sales}}{\text{Number of Days}}\right)}\right]$ DSO is a key performance measurement of the credit-worthiness of a company's clients; a general indicator for client satisfaction and the effectiveness of the billing and collection process. DSO is reported either quarterly or annually.
Depreciation	An expense recorded to allocate a tangible asset's cost over its useful life. Because depreciation is a non-cash expense, it increases free cash flow while decreasing reported earnings.
Direct Costs	Cost incurred as a direct consequence of producing a good or service, as opposed to overhead or indirect costs.
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization. $\text{EBITDA} = \text{Revenue} - \text{Expenses (excluding tax, interest, depreciation and amortization)}$ EBITDA is essentially net Income with interest, taxes, depreciation, and amortization added back to it. EBITDA can be used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions. However, this is a non-GAAP measure that allows a greater amount of discretion as to what is (and is not) included in the calculation. This also means that companies often change the items included in their EBITDA calculation from one reporting period to the next.
EITF	An organization formed in 1984 by the Financial Accounting Standards Board (FASB) to provide assistance with timely financial reporting. The EITF holds public meetings in order to identify and resolve accounting issues occurring in the financial world. EITF 08-01 and EITF 09-03 are scheduled to go into effect in June, 2010. These new rulings provide revenue recognition guidelines around the value of multi-element contracts which include products and services. These new rulings will allow companies to more accurately recognize revenue as services are delivered for complex multi-element contracts. They create a hierarchy of evidence to support revenue recognition including VSOE (Vendor Specific Objective Evidence), TPE (Third Party Evidence) and ESP (Estimated Selling Price).
FASB	A seven-member independent board consisting of accounting professionals who establish and communicate standards of financial accounting and reporting in the United States. FASB standards, known as generally accepted accounting principles (GAAP), govern the preparation of corporate financial reports and are recognized as authoritative by the Securities and Exchange Commission.
Fixed Costs	Fixed costs are costs that remain the same regardless of changes in the business. For example, facility lease costs remain the same for the life of the lease, regardless of the level of occupancy. If the business is expanding, the percentage of fixed costs may decrease whereas if the business is contracting, the percentage of fixed costs may increase.
Fringe Benefits	A collection of various benefits provided by an employer, which are exempt from taxation as long as certain conditions are met. Fringe benefits commonly include health insurance, group term life coverage, education reimbursement, childcare and assistance reimbursement, cafeteria plans, employee discounts, personal use of a company owned vehicle and other similar benefits.
Gross Margin	**Gross Margin = (Total Services Revenue – Expense or Cost to Deliver the Services)** The gross profit generated per dollar of services delivered. A company's total sales revenue minus its cost of goods or services sold. This dollar amount represents the gross amount of money the company generated over the cost of producing its goods or services.
Gross Margin Percentage	Gross Margin % = (Total Services Revenue – Expense or Cost of Services Delivered) / Total Services Revenue Gross Margin %= Gross Margin / Revenue
Gross Profit Percentage	A company's total sales or service revenue minus cost of goods or services sold, divided by the total sales revenue, expressed as a percentage. Gross profit and gross margin are used interchangeably.

Term	Definition
Income Statement or Profit and Loss Statement	A financial statement that summarizes the revenues, costs and expenses incurred during a specific period of time - usually a fiscal quarter or year. The statement of profit and loss follows a general format that begins with an entry for revenue and subtracts from revenue the costs of running the business, including cost of goods sold, operating expenses, tax expense and interest expense. The bottom line is net income (profit).
Labor Burdened Cost	Labor Burdened Cost per Productive Hour (or Fully-burdened Cost) (Labor Burdened Cost + gross payroll labor cost) ÷ the number of actual work (productive) hours Number of actual productive hours ÷ the total additional cost of the employee = Employee labor burden cost per productive hour
Labor Multiplier	Labor multiplier = total $ amount of labor hours billed / fully loaded (burdened) labor cost Note: a labor multiplier of 1.0 indicates a breakeven point. Any usability cost-benefit analysis should value people's time based on their fully loaded cost and not simply on their take-home salary. The cost to a company of having a staff member work for an hour is not that person's hourly rate but also includes the cost of benefits, bonuses, vacation time, facility costs (office space, heating and cleaning, computers etc.), and the many other costs associated with having that person employed. The simplest way to derive the average loaded cost of an employee is to add up all corporate or division expenses and divide by the total number of productive hours worked. Commonly, the fully loaded cost of an employee is at least twice his or her salary. This is why consultants charge so much more than regular employees: their billable hours have to cover the many overhead costs that are implicit for full-time employees. In fact, looking at common consulting rates for the kind of staff you are dealing with is a shortcut for estimating the fully loaded value of your employees' time. EXAMPLE: base rate/hour (BR)= dollar per hour pay for the staff category OH multiplier (OHM) = firm's overhead (OH) percentage + 100% Profit multiplier (PM)= profit percentage + 100% **"loaded" rate/hour** = BR X OHM X PM Base rate/hour= $45.00 per hour overhead multiplier = 135% overhead + 100% = 235% = 2.35 Profit multiplier = 10% profit + 100% = 110% = 1.1 **"loaded" rate/hour =** $45.00 X 2.35 X 1.1
Lagging Indicators	**Investopedia explains** LAGGING INDICATORS Lagging indicators confirm long-term trends, but they do not predict them. Some examples are unemployment, corporate profits and labor cost per unit of output. Interest rates are another good lagging indicator as interest rates change after severe market changes. In services, billable utilization, revenue per person and net profits are lagging indicators because they reflect changes in market conditions after the change has already occurred.

Term	Definition
Leading Indicators	A measurable economic factor that changes before the economy starts to follow a particular pattern or trend. Leading indicators are used to predict changes in the economy, but are not always accurate. In services, leading indicators are backlog and sales pipeline because they are predictors of future revenue. **What Does the** COMPOSITE INDEX OF LEADING INDICATORS **Mean?** An index published monthly by the Conference Board used to predict the direction of the economy's movements in the months to come. The index is made up of 10 economic components, whose changes tend to precede changes in the overall economy. These 10 components include: 1. The average weekly hours worked by manufacturing workers 2. The average number of initial applications for unemployment insurance 3. The amount of manufacturers' new orders for consumer goods and materials 4. The speed of delivery of new merchandise to vendors from suppliers 5. The amount of new orders for capital goods unrelated to defense 6. The amount of new building permits for residential buildings 7. The S&P 500 stock index 8. The inflation-adjusted monetary supply (M2) 9. The spread between long and short interest rates 10.Consumer sentiment
Loaded Cost per Person	Base + Fringe Benefits (~25%) + Target Variable Compensation + % Corporate and Practice Overhead allocation per person. Non-billable time (bench time) must be added to calculate the actual cost per hour of productive time.
Margin %	Margin % = (Revenue - Cost)/Revenue
Markup %	Markup % = (Revenue-Cost)/Cost For example, 60% markup = 40% margin
Measurement Utilization %	Billable Hours + Approved non-billable hours (pre-sales, Customer Satisfaction, Special Projects)/(2080 hours or 260 days - vacation and holidays)
Measurement Utilization	Measurement Utilization = (Billable Hours + Approved non-billable hours)/ (2080 hours – Vacations – Holidays) Approved non-billable hours are usually associated with presales, overtime not billed to clients, customer satisfaction resolution time, internal projects or skills training.
Net Income	A company's total earnings (or profit). Net income is calculated by taking revenues and adjusting for the cost of doing business, depreciation, interest, taxes and other expenses. This number is found on a company's income statement and is an important measure of how profitable the company is over a period of time. The measure is also used to calculate earnings per share. Often referred to as "the bottom line" since net income is listed at the bottom of the income statement. Net income is calculated by starting with a company's total revenue. From this, the cost of sales, along with any other expenses that the company incurred during the period, is removed to reach earnings before tax. Tax is deducted from this amount to reach the net income number.
Non-billable Travel	Non-billable travel expense represents travel expense which cannot be re-billed to a client. Typically consulting non-billable travel is associated with business development or training activities.
On-Target Earnings (OTE)	The typical pay structure for a salesperson is composed of a fairly low basic salary with an additional amount of commission. The package will usually be called OTE or on-target earnings, meaning that if a salesperson hits the specified target, they will be guaranteed that amount of money. A higher commission can be paid if the person performs beyond this target.
Operating Income	Operating income would not include items such as investments in other firms, taxes or interest. In addition, nonrecurring items such as cash paid for a lawsuit settlement are often not included. Operating income is required to calculate operating margin, which describes a company's operating efficiency. **Operating Income = Gross Income – Operating Expenses – Depreciation**
Operating Margin	Operating margin is a measurement of what proportion of a company's revenue is left over after paying for variable costs of service delivery such as wages and benefits. **Operating Margin = Operating Income / Net Sales** Operating Profit = (Total Service Revenue – Total cost of service delivery – Total Operating Expense)/ Total Service Revenue
Operating Profit / Margin	The amount of profit realized from a business's own operations. A ratio used to measure a company's pricing strategy and operating efficiency.

Term	Definition
Overhead Costs	Usually, fixed costs - a business cost that is not directly accountable to a particular function or product; a fixed cost such as facilities. Costs incurred that cannot be attributed to the production of any particular unit of output. The general, fixed cost of running a business such as rent, lighting, and heating expenses, which cannot be charged or attributed to a specific product or part of the work operation.
Profit Margin = Return on Sales (ROS)	The percentage of every dollar of sales that makes it to the bottom line. Profit Margin is Net Income after Tax divided by Net Sales. A ratio of profitability calculated as net income divided by revenues, or net profits divided by sales. It measures how much out of every dollar of sales a company actually keeps in earnings.
Project Margin £$€	Project Revenue – Direct Cost of project service delivery
Revenue Estimate	Revenue Estimate = Billable headcount X Billable hours X Average Bill rate X Average Utilization Rate
Revenue	Revenue = Billings that can be recognized within the time period + Re-billable travel and expense The amount of money that a company actually bills during a specific period, including sales discounts.
Revenue per person	Actual Bill Rate * Billable Hours + re-billable travel and expense
Recurring Revenue	The best revenues are those that continue year in and year out, they are often referred to as “recurring” revenue. Examples of recurring revenues are multi-year maintenance contracts and multi-year Software as Service (SaaS) subscription revenues. Temporary revenue increases, such as those that might result from a short-term promotion, are less valuable and garner a lower price-to-earnings multiple for a company.
Run Rate	How the financial performance of a company would look if you were to extrapolate current results out over a specified period of time.

Term	Definition
Revenue Recognition	http://www.mmmlaw.com/publications/article_detail.asp?articleid=103 (Selected excerpts from the article) Any business generating revenue from licensing, selling, leasing or otherwise marketing software will experience serious problems from failure to recognize the significance of the New SOP. This section summarizes the importance of revenue recognition. Revenue recognition is a fundamental component of generally accepted accounting principles (GAAP) and is a key consideration in maintaining the integrity of financial statements. The central issue is one of timing and amount : When should revenue generated in a software transaction be recognized in a software company's income statement, and in what amounts? In most cases, companies strive to recognize revenue as quickly as possible, thereby improving their financial performance. Even private software companies generally try to improve financial performance by accelerating revenues whenever possible. Before issuance of SOP 91-1 in December 1991, there was no specific guidance for recognizing revenue in software transactions. The ensuing lack of uniformity among software companies in their revenue recognition policies led to the inability of third parties to make meaningful comparisons among companies. Similarly, the New SOP is designed to provide even greater uniformity by addressing inconsistent applications of SOP 91-1 in software transactions. Basic Revenue Recognition Criteria. SOP 91-1 and the New SOP each define basic criteria that must be satisfied before revenue can be recognized. Under the New SOP if an arrangement to deliver software does not require significant production, modification, or customization of the software, then the New SOP specifies four criteria which must be met prior to recognizing revenue from a single-element arrangement or for individual elements in a multiple-element arrangement.1 These four criteria are: 1. persuasive evidence of an arrangement exists; 2. delivery has occurred; 3. the software vendor's fee is fixed or determinable; and 4. Collectability is probable. Although these basic revenue recognition criteria are substantially the same as those contained in SOP 91-1, the New SOP takes a fundamentally different approach in certain areas such as: (1) providing detailed guidelines for recognition of revenue in "multiple-element arrangements," and (2) eliminating the concept of remaining "significant vendor obligations" under SOP 91-1. Changing Sales Behavior. A software company's sales force will be critical to implementation of the New SOP. As a general rule, software companies tend to bundle software and services together in order to offer a turn-key software solution to the buyer. Additionally, the description of and the fees for the software and services being offered are typically combined. This bundling makes the sale easier for a sales representative because it makes the offering easier for the buyer to understand and it prevents the buyer from removing elements of the transaction that the buyer might not otherwise pay for if they knew the individual price for the element. However, the result of this bundling could be a deferral of revenue recognition. Therefore, many software companies will have to change the manner in which their sales personnel work in order to achieve their revenue recognition goals. Sales Force Compensation. From an internal perspective, many companies base compensation and bonus arrangements, at least in part, on recognized revenue within a specified time period. If revenue recognition policies are changed, bonus plans may be affected. With the adoption of the New SOP, benefit plans will require further examination to verify the suitability of these plans in achieving a company's objectives and motivating employees to complete all the requirements for revenue recognition as a basis for earning a bonus.
Subcontractor Margin	Subcontractor Margin = (Total subcontractor generated revenue – total subcontractor cost)/ Total subcontractor generated revenue
Variable Costs	Variable costs are costs that vary based upon usage. Training, travel and business expenses are variable, whereas costs for facilities are treated as a "fixed" cost because they do not vary based on use. Commonly variable costs may also be termed "discretionary" because management can make decisions to make or not make the expenditure.

Term	Definition
VSOE	**VSOE = Vendor-Specific Objective Evidence (accounting/contracting)** VSOE is the price established by management having relevant authority. Once a firm has established the VSOE price and officially acknowledged it as such, that price must not be expected to change prior to the introduction of that element into the marketplace. The introduction of that deliverable into the marketplace on a separate basis ought to be within a very short period of time after the VSOE price is set. Accounting firms have differing opinions on how long is too long, so make certain you are aware of your accounting firm's guidelines. Vendor Specific Objective Evidence (VSOE) is an agreed-upon value for goods and services. For service organizations, VSOE is usually established by the company's auditors based on historical bill rates or actual realized revenues from service packages. When VSOE service prices are set the effect can be very painful because the firm's auditors review past engagements to set current VSOE rates. This means if a firm's services were significantly discounted in the past the service organization will be penalized with "Past sins" when auditors calculate current VSOE rates. With software companies the accepted practice is to amortize each sale across the contract's lifetime and to apply all labor hours whether billable or not.

Source: Investopedia, Wikipedia,** Morris, Manning and Martin, LLP, a**nd Service Performance Insight, February 2016

About Service Performance Insight

R. David Hofferberth, PE, Service Performance Insight founder, managing director and licensed professional engineer has served as an industry analyst, market consultant and product director. He is focused on the services economy, especially productivity and technologies that help organizations perform at their highest capacity.

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Service Performance Insight (SPI Research) is a global research, consulting and training organization dedicated to helping professional service organizations (PSOs) make quantum improvements in productivity and profit. In 2007, SPI developed the PS Maturity Model™ as a strategic planning and management framework. It is now the industry-leading performance improvement tool used by over 10,000 service and project-oriented organizations to chart their course to service excellence.

SPI provides a unique depth of operating experience combined with unsurpassed analytic capability. We not only diagnose areas for improvement but also provide the business value of change. We then work collaboratively with our clients to create new management processes to transform and ignite performance. Visit **www.SPIresearch.com** for more information on Service Performance Insight, LLC.