



Revenue Recognition for a Professional Services Organisation

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Introduction

As a professional services business grows the proportion of revenue generated by larger projects rather than simple time-hire contracts increases, and the proportion of these projects undertaken on a fixed price basis usually increases as well. This introduces complexity into a business: rather than recognise revenue based on cash received or invoices sent out, the revenue in your monthly P&L for a piece of work should reflect the level of completion, the risk of additional costs and the risk of not getting paid.

Revenue recognition can seem very complicated because there are many factors that affect it. This paper looks to simplify it and outlines a standard approach that will accurately state your revenue position.

Scope

The scope of this paper is for a professional services business. Accounting for delivery of professional services as part of a software business can be more complex because product and services delivery may be connected and each may affect how revenue is recognised for the other.

Time and Materials

Revenue recognition for time and materials projects is straightforward. Revenue recognised in a month is based on the time worked multiplied by the day rate agreed and in most cases this will also be the amount invoiced to the client for the month. Even if an invoice is not sent out the revenue recognised remains the same. And on the same basis, the costs recognised for the month are the salaries paid or the subcontractor fees due whether or not an invoice from the subcontractor has been received.

If you have agreed to do any remedial work, for example fixing bugs, for free then you should not recognise all of the time worked but should reserve some revenue to cover the remedial work. This commitment should really be avoided: for a time and materials project the client is paying for the time you spend not for an end product, and especially not for bug-free software!

Fixed Price Projects

For a fixed price project the revenue is not dependent just on the amount of work done because if you do more, or less, work than planned you will still get paid the same amount. And the invoicing is likely to be based on project milestones rather than the amount of work done.

The main consideration is that revenue should be recognised based on how complete the project is, and the certainty that you will be paid for the work done. So as well as the level of completion you need to consider the level of risk, whether you should hold back revenue to cover contingencies, if there are any penalties and if there is an on-going obligation to fix defects or provide support.

A common approach when starting to take on fixed price projects is to recognise revenue based on time worked at the rates used to estimate when bidding for the work. Unfortunately if the project overruns all of the revenue will have been used up and additional days will need to be worked at zero rate. This can have a big impact on the P&L at the end of a project and can often come as a shock.

Percentage Complete

The first principle is that the revenue recognised should be based on how complete the project is. So if the project is 35% complete, 35% of the project revenue may be recognised. And the amount recognised this month is 35% of the project value less any revenue recognised previously. Let's look at an example:

Total project value = £100,000

Month	Project Completion	Revenue recognised this month
1	20%	$20\% * £100,000 = £20,000$
2	35%	$(35\% * £100,000) - £20,000 = £15,000$
3	60%	$(60\% * £100,000) - £35,000 = £25,000$

The next thing to consider is: How do you measure how complete the project is? This could be based on how much of the effort required has been completed (Effort Complete), the proportion of the total cost expended (Cost Complete) or, maybe, the Milestones Delivered.

Milestones Delivered

This method is based on assigning a value to each milestone delivered, with all milestones adding up to the total project value. The value of each milestone may be assigned based on the estimated cost required to complete it, an estimate of the value that the client gets from it or the value of the payment associated with completing the milestone. The latter method may seem a good way, but what if you have a payment milestone on commencement of the project?

The milestone method is less commonly used because it can result in lumpy revenue reporting which doesn't align with costs and may mean no revenue is recognised in some months if no milestones are completed. There is also a risk that you don't take care to know how much more effort is required to finish.

Effort Complete

At the end of each month calculate the total days spent to date. This is not just the days spent in the month; it's the total number since the beginning of the project. Then calculate the number of day's effort required to complete the project. This should be re-estimated each month not just calculated as the original estimate minus the days spent to date – very few projects take exactly the amount of effort estimated before starting. The percentage completion is then:

$$\frac{\text{Total effort to date}}{(\text{Total effort to date} + \text{Effort remaining})} * 100\%$$

Cost Complete

Although effort expended is a good approximation of the percentage completion, revenue should really reflect cost expended. If your resource costs on a project have a wide range – for example junior and senior staff, or offshore and onshore staff – then the Effort Complete method may give a somewhat different answer to the Cost Complete method. For example:

Resource	Cost Rate	Days Complete	Days Remaining	Cost Complete	Cost Remaining
Consultant	500	10	5	5,000	2,500
Junior	250	0	20	0	5,000
Total		10	25	5,000	7,500

$$\text{Effort Complete} = 10 / (10 + 25) * 100 = 28\%$$

$$\text{Cost Complete} = 5,000 / (5,000 + 7,500) * 100 = 40\%$$

Therefore the Cost Complete method is recommended.

First calculate the total cost to date. This is the same as the days spent to date but multiplying each day by the cost rate of the person who worked it. Then calculate cost remaining in the same way – days remaining multiplied by the cost rate for each resource. The percentage completion is:

$$\frac{\text{Total cost to date}}{(\text{Total cost to date} + \text{Cost remaining})} * 100\%$$

and the revenue recognised in a month is:

$$\frac{\text{Total cost to date}}{(\text{Total cost to date} + \text{Cost remaining})}$$

* Total Project Value

- Revenue Previously Recognised

Contingency

When estimating the remaining cost for a project there may be some uncertainty: a complex problem that needs to be solved; an external dependency; or just a lack of 100% confidence in the estimates. In this case it is sensible to include a contingency for these unknowns. This could be managed by allocating some effort against a 'contingency' task not available to the project team. This would then feed into the revenue recognition calculation. Alternatively, and more explicitly, contingency could be managed by setting a particular contingency value. This could be, for example, 10% of the total project value or 10% of the cost remaining. Starting with a % of the total project value is recommended, with the amount of contingency retained reviewed each month based on an assessment of the level of risk remaining, progress to date, number of milestones completed etc. Of course, you hope not to need the contingency at all and to earn a larger profit on the project.

The revenue recognised in a month is then (using the Cost Complete basis):

$$\frac{\text{Total cost to date}}{(\text{Total cost to date} + \text{Cost remaining})}$$

* (Total Project Value – Contingency)

- Revenue Previously Recognised

Penalties

If the contract contains penalties for example for late delivery or failing acceptance tests then you may want to allow for these in the same way as for contingency. You will need to decide whether to allow for the full potential value of penalties, part of the value, or not at all. The revenue recognised is:

$$\frac{\text{Total cost to date}}{(\text{Total cost to date} + \text{Cost remaining})}$$

* (Total Project Value – Contingency – Penalty Allowance)

- Revenue Previously Recognised

Warranty

A final element to consider is whether the contract includes a warranty period during which support will be provided or any problems or defects corrected free of charge. If so, the warranty cost should be included based on the number of days work estimated to be spent on warranty multiplied by the cost rate of the resource doing the work.

This gives a final calculation of revenue recognised in a month as:

$$\frac{\text{Total cost to date}}{(\text{Total cost to date} + \text{Cost remaining} + \text{Warranty Cost})} \\ * (\text{Total Project Value} - \text{Contingency} - \text{Penalty Allowance}) \\ - \text{Revenue Previously Recognised}$$

Project Completion

When the project is complete: there is no more effort required on project activities or warranty activities and delivery is complete with no penalties due, the allowances you have made for all of these may be released and the final revenue calculation is:

Total Project Value – Revenue Previously Recognised

Other Types of Projects

Capped Time and Materials

This is like a time and materials project but with a maximum value after which work has to be done free to complete the project. It would be better never to work on this basis since it is the worst of both worlds for a supplier: you will never gain any benefit from delivering a project under budget but will always suffer if it is over budget!

For revenue recognition, it may be treated as time and materials providing that it will be finished at a total price less than or equal to the cap, but if it may exceed the cap then it should be treated as a fixed price project and recognised at a lower rate than the billing rate.

Call Off

A call off agreement is usually for ad-hoc support on a paid for as used basis. This is the same as a time and materials project.

Fixed Fee Support

If you will provide unlimited support for a period for a fixed fee you may treat it in a number of ways. The simplest, and most common, is to recognise a proportion of the revenue each month e.g. for a 12 month contract recognise 1/12 of the value of the contract each month. Alternatively, if you expect to put in more effort in some months e.g. in the first 3 months of the contract, you could treat the project as fixed price using the Cost Complete method to calculate the revenue to recognise each month. The one thing you should avoid is, if you bill in advance, recognising all of the revenue at the beginning.

Summary of Monthly Revenue Recognition

Time and Materials	<ul style="list-style-type: none">• Days worked * Day rate
Fixed Price	<ul style="list-style-type: none">• $\frac{\text{Total cost to date}}{\text{Total cost to date} + \text{Cost remaining} + \text{Warranty cost}} * (\text{Total project value} - \text{Contingency} - \text{Penalty Allowance}) - \text{Revenue previously recognised}$
Capped Time and Materials	<ul style="list-style-type: none">• Avoid if possible• Treat as time and materials or fixed price depending on total cost estimated.
Call Off	<ul style="list-style-type: none">• Treat as time and materials
Annual Support	<ul style="list-style-type: none">• 1/12 of total contract or fixed price

About the Author

Steve Anderson (steve.anderson@capitalisepartners.com) is an experienced and successful company director and entrepreneur who has worked in start-up, growth and multinational companies in the technology sector. His experience includes starting, growing and exiting IT businesses twice and working in senior roles in US and Japanese multinationals. He now works as a Managing Partner at Capitalise, in a non-executive, advisory capacity for a number of technology businesses, and has a track record of investing in technology start-ups.

Capitalise brings together some of the UK's most experienced technology founders and VC professionals to provide investment and advisory services to entrepreneurs looking to grow and exit their software or services business. Having realised shareholder value from multiple exits, Capitalise is unique in the composition of its partner team and focus, its combined investment and advisory proposition and its extended industry network.