Quarterly rolling forecasting - the ten foundation stones

(extract from "How to implement quarterly rolling forecasting and quarterly rolling planning– and get it right first time" Whitepaper available from *www.davidparmenter.com*

By David Parmenter

Quarterly rolling forecasting (QRF) is one of the most important management tools of this decade and is a process that will revolutionise any public or private sector organisation. Yet many attempts of QRF flounder because of a poorly thought out design, consultants wedded to unnecessary detail, the use of cumbersome and error prone spreadsheets and a lack of understanding of the foundation stones on which a QRF system should sit.

QRF is a critical building block for what I call quarterly rolling planning (QRP) where management looks six quarters ahead, each quarter setting the targets and the funding for the next quarter.

This article is part series looking into QRF and QRP. This article will look at the foundation stones of a QRF process.

There are a number of QRF foundation stones that need to be laid down and never undermined. In addition just like when building a house you need to ensure that all the construction of the QRF model is undertaken on the foundations. These foundation stones are:

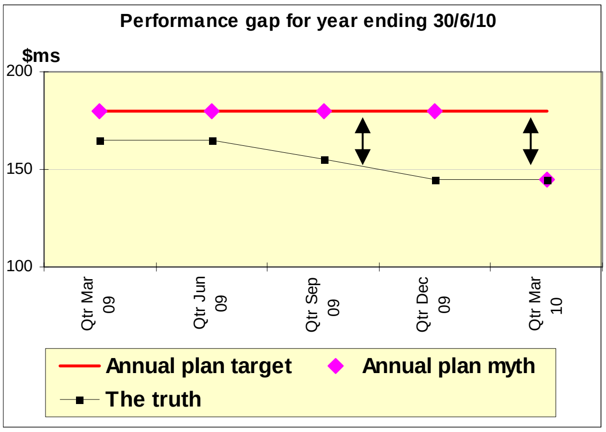
1. Separation of targets from forecasts (telling management what they need to know rather than what they want to hear)
2. A bottom-up process performed quarterly rather than monthly
3. Forecast past year-end (e.g., six quarters ahead)
4. The monthly targets are set a quarter ahead from the QRF
5. The annual entitlement to spend is replaced with a quarter-by-quarter funding mechanism
6. The annual plan becomes a by-product of the QRF
7. Forecasting at a detailed level does not lead to a better prediction of the future
8. The QRF should be based around the main events / key drivers
9. A fast light touch (an elapsed week)
10. Built in a planning application – not Excel

1. Separation of targets from forecasts (telling management what they need to know rather than what they want to hear)

Boards and the senior management team have often been confused between setting stretch targets and a planning process. Planning should always be related to reality. The Board may want a 20% growth in net profit, yet management may see that only 10% is achievable with existing capacity constraints. The performance gap should be reported to the Board so they can direct their attention to strategic decisions to manage the short fall. The Board have every right to say the stretch target is the basis for the bonus.

In these turbulent times the separation of targets and realistic forecasts is fundamental and a survival necessity. It is vital that the forecasting process generates realistic forecasts rather than forecasts that the Board or senior management want to achieve. Exhibit 1 shows where management have forced the plan prepared in March 09 to meet the target set by the Board. Each subsequent reforecast continues the charade until in the final quarter reforecast, performed in March 2010 the truth is revealed.

Exhibit 1: Reporting what the Board want to hear



If we now say forecasting will always show reality the performance gap would be identified as early on as the annual plan. Now the Board know that the target of $180m cannot be met, and as every reforecast is done, the Board are told that the performance gap is widening.

The fudged forecast

Mr Forecasting : "I have just updated the forecasts : the forecast EBIT this month is $1.2million"

CEO: "Our budget shows EBIT of $2.0m: go away and review the forecasts but make sure they show an EBIT of at least $2million".

Mr Forecasting: " But when we did the budget we didn't realise that we would have production problems and that the domestic markets would suffer so much from the economic downturn"

CEO: "Don't argue with me: review these forecasts as instructed.... or else"

The end result might be that the forecast gets "fudged" to say $1.5m or $1.6m.

As a respected planning expert said to me.

> “Even with foundation stones 2-10 working like clockwork, the end result doesn't benefit from all this good work because all or some of the following factors are in operation:
>
> 1) Senior Management is running the organisation through fear.
>
> 2) There is no clarity between what can be reasonably achieved and a unreasonable arbitrary target.
>
> 3) Mr Forecasting hasn't the ability to articulate and sell bad news stories as the most likely future outcomes.
>
> Therefore by getting foundation stone 1 right, you then get the maximum benefit on foundation stones 2-10.” John Poppe

2. A bottom-up process performed quarterly rather than monthly

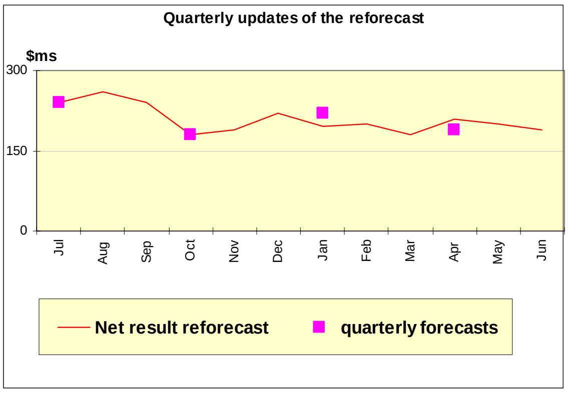
Many forecasts have little input and no buy-in from the budget holders. We do not have the time, process or tools to get the budget holder involved. These forecasts I call a top-top forecast, the finance team talking amongst them selves and with senior management.

Typically management have reforecast the year-end numbers on a monthly basis. Why should one bad month, or one good month translate into a change of the year-end position. We gain and lose major customers, key products rise and wane; this is the life cycle we have witnessed many times. Besides if you change your forecast each month management and the Board know whatever number you have told them is wrong –you will change it next month!

As shown in Exhibit 2 we now have only four re-forecasts done a year, instead of the twelve updates.

Only businesses that are in a volatile sector would need to forecast monthly e.g., the airline industry. Even for these organisations you do not need to get all budget holders to participate in a monthly reforecast. You may be able to limit this extra work to sales and production with the major all embracing cycle still being quarterly.

Exhibit 2: quarterly re-forecasting



3. Forecast past year-end (e.g., six quarters ahead)

Typically corporate accountants have reforecast only to year-end. Two months before year-end management appear to ignore the oncoming year. A foundation stone of a QRF process is forecasting for a rolling period that passes through the year-end barrier. There are various options as to how far forward you go, these include:

- Forecast always two years ahead –this is particularly relevant where the business is very seasonal and much activity happens in the last quarter
- Forecast six quarters ahead
- Variations such as four or five quarters ahead

I advocate the six quarter ahead (18-month) rolling forecast regime, as it has some substantial benefits that include:

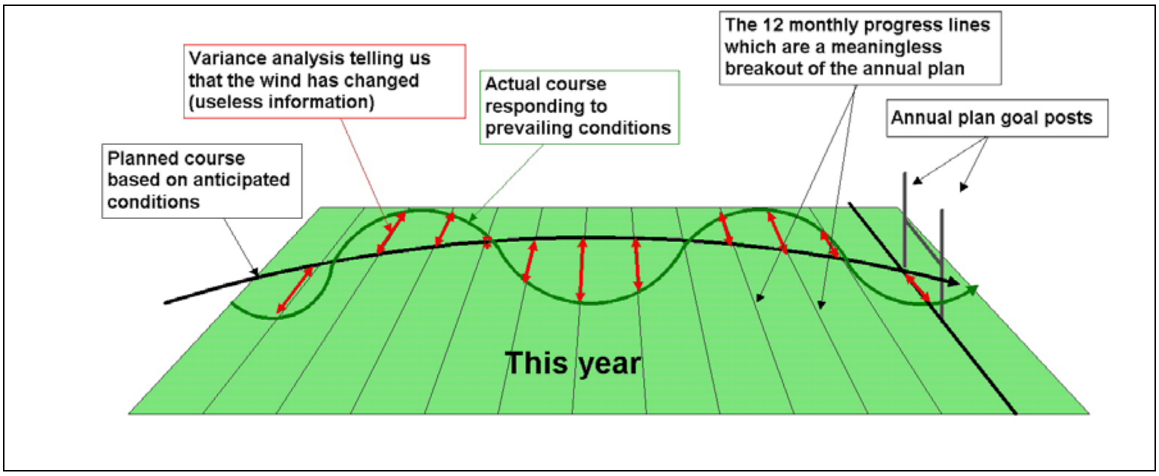
- you see the full next year half way through the current year, e.g. the third quarter forecast can set the goal posts for next year's annual plan
- the QRF is consistent each time it is performed, as opposed to organisations who always look ahead for two financial years (the QRFs will vary between 15 to 24 months)
- your annual plan is never set from a cold start as you have seen the whole financial year in the previous quarter's reforecast

4. The monthly targets are set a quarter ahead from the QRF

As accountants we like things to balance. It is neat and tidy. Thus it appeared logical to break the annual plan down in to twelve monthly breaks before the year had started. We could have been more flexible. Instead we created a reporting yardstick that undermined our value to the organization. Every month we make management, all around the organization, write variance analysis which I could do just as well from my office in New Zealand. "it is a timing difference…." "we were not expecting this to happen", "the market conditions have changed radically since the Plan" etc.

I use a sporting analogy to explain the folly of the monthly budget, Exhibit 3. The annual plan is the establishment of goal posts at the end of the pitch, the budget process is where we set 12 X 10 metre lines to report against, see diagram. The problem is that the 10 metre lines (the monthly budgets) are wrong as soon as the year has started. When there is stoppage, a player fanning injury on queue, management come on the pitch and ask "why are you here you should have been over there". The reply from the team is "the ball is over here" and this report back on progress is of the same use as our monthly variance commentary, in other words useless.

Exhibit 3: Sporting analogy to explain the folly of the monthly budget



We should instead report against more recent targets derived from quarterly rolling forecasting process. This process will give us the monthly targets for the next quarter. It is important to realise that monthly targets are not set any further out than the quarter ahead. In fact information for quarters 3,4,5,6 are set only quarterly. In other words we patiently wait until the relevant quarter is upon us before putting the BHs estimates in the reporting tool.

This change has a major impact on reporting. We no longer will be reporting against a monthly budget that was set, in some cases 17 months before the period being reviewed.

As an organisation matures in this environment targets for departments that respond directly to the customer demands become flexible. Their progress is measured by observing ratios, cost per unit etc., To understand more read Jeremy Hope's work[1] and a book on Toyota[2].

[1] Reinventing the CFO: How Financial Managers Can Transform Their Roles and Add Greater Value, Jeremy Hope, Harvard Business School Press, 2006

[2] "How Toyota Became #1 – Leadership Lessons From The World's Greatest Car Company" by David Magee

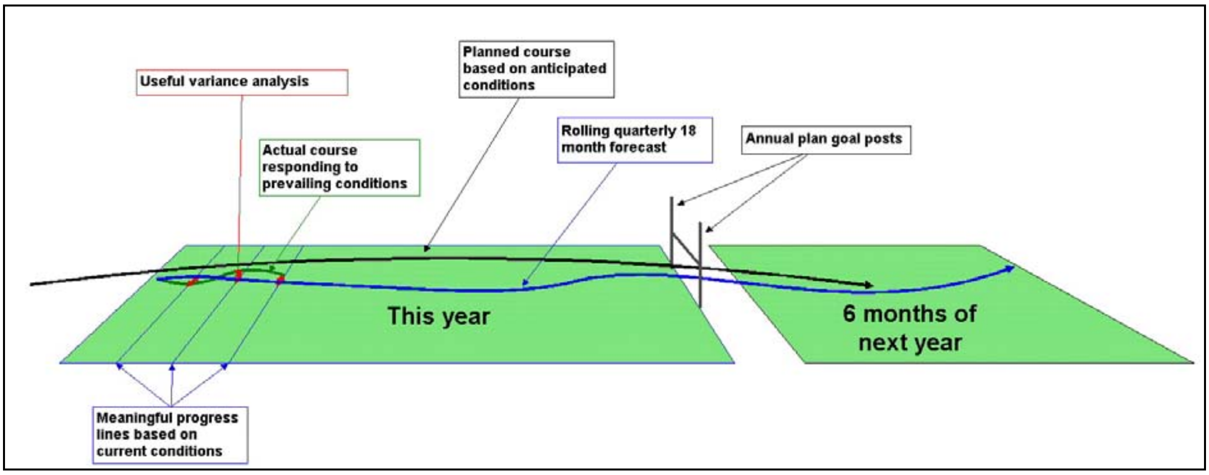
5. The annual entitlement to spend is replaced with a quarter-by-quarter funding mechanism

The key is to fund budget holders on a rolling quarter-by-quarter basis. In this process the management asks, "yes we know you need $1m for the year and we can fund it, but how much do you need in the next three months". At first the budget holder will reply, "I need $250,000 this quarter", to which is replied, "Pat, how is this? You last five quarterly expenditures have ranged between $180,000 and $225,000". "Pat, you are two team members short and your recruiting is not yet underway, be realistic you will only need $225,000 tops"

It will come as no surprise that when a budget holder is funded only three months ahead the funding estimates are much more precise and there is little or nowhere to hide those slush funds.

Using an sporting analogy once more, the "ground staff" then draw these lines on the pitch and management become very accountable about progress, see Exhibit 4 below. This process means that the approval process through the senior management team (SMT) will be quicker as the SMT are only approving the annual number and can adjust the quarter-by-quarter allocations as the conditions and environment dictate.

Exhibit 4: The new vision



Organisations are recognising the folly of giving a budget holder the right to spend an annual sum, while at the same time saying if you get it wrong there will be no more money. By forcing budget holders to second-guess their needs in this inflexible regime you enforce a defensive behaviour, a stock piling mentality. In other words you guarantee dysfunctional behaviour from day one! The quarterly rolling planning process thus highlights "free funds" which can re reallocated for new projects earlier on in the financial year.

The released funds can fund new initiatives that the budget holder could not have anticipated at the time of the budget round. This will get around the common budget holder dilemma "I cannot undertake that initiative, though we should, as I did not include it in my budget". In the new regime the budget holder would say "I will put it in my next update and if funds are available I am sure I will get the go ahead".

This more flexible environment, as long as it is communicated clearly and frequently to budget holders will have good buy-in. The logic of quarterly rolling funding can be shown in an analogy.

The nine year old's birthday cake

Quarterly rolling funding process has a lot in common with the handling of a 9 year old's birthday cake. A clever parent says to Johnny, here is the first slice, if you finish that slice, and are not going "green around the gills" and want more, I will give you a second slice. Instead, what we do in the annual planning process is divide the cake up and portion all of it to the budget holders. Like 9 year olds, budget holders lick the edges of their cake so even if they do not need all of it no body else can have it. Why not, like the clever parent, give the manager what they need for the first three months, and then say "what do you need for the next three months" and so on. Each time we can apportion the amount that is appropriate for the conditions at that time.

6. The annual plan becomes a by-product of the QRF

With quarterly rolling forecasting one of the quarters also generates the annual plan. The QRF process will allow you to have a quick annual planning process, as:

- budget holders will become more experienced at forecasting (they are doing it four times a year), they have already looked at the next year a number of times
- The politics is taken out of the annual planning cycle as BHs realise that they no longer obtain an annual entitlement. There is no use demanding more than you need as the real funding is sorted out on a quarter by quarter basis where slush funds cannot be hidden.
- The third quarter forecast firms up both the 4th quarters funding and the annual plan numbers
- The CEO supports the guillotined process
- There is no point spending too much time as the next quarter's forecast is a more up to date view of the future.

Organisations who have truly adopted the beyond budgeting principles, developed by Jeremy Hope, will also throw out the annual plan target. Why should one view of year-end be any better than a subsequent more current view? The March quarter forecast, which sets the annual plan for a June year-end organisation, is no longer called the annual plan, but simply the March quarter forecast.

Exhibit 5: How a forecasting model consolidates account codes

Old detailed approach		Forecasting by categories		Notes
Stationery	4,556			
Uniforms	3,325			
Cleaning	1,245			
Miscellaneous	7,654			No detail required
Consumables	2,367			
Tea & coffee	2,134			
kitchen utensils	145			
	21,426	Consumables	21,400	
Salaries and wages	25,567,678	Salaries and wages	27,400,000	BH first calculates S&W to the nearest $100,000
Taxes	2,488,888	Taxes	2,900,000	Taxes are automatically calculated by model
Temporary staff	2,456,532	Other employment costs	4,200,000	This number is the balancing item
Contract workers	2,342,345			
Students	234,567			
	33,090,010	Employment costs	34,500,000	BH then estimates costs to the nearest half million

7. Forecasting at a detailed level does not lead to a better prediction of the future

A forecast is a view of the future. It will never, can never, be right. As Harry Mills says "It is better to be nearly right than precisely wrong". Looking at detail does not help you see the future better, in fact I would argue it screens you from the obvious.

Whilst precision is paramount when building a bridge, every small detail needs to be right, a forecast should concentrate on the key drivers and large numbers.

Following this logic it is now clear that as accountants we never needed to set targets at account code level. We simply have done it because we did it last year, without thinking as well. Do you need a target or budget at account code level if you have good trend analysis captured in the reporting tool? I think not. We therefore apply Pareto's 80/20 and establish a category heading which includes a number of G/L codes, as shown on Exhibit 5.

Rules I have developed:

- limit the categories that BH's need to forecast to no more than twelve
- select the categories that can be automated, and provide these numbers
- separate out a forecasting line in the model if an account is over 10% of total Expenditure or revenue e.g. show revenue line if revenue category is over 10% of total revenue. If account code is under 10% amalgamate it with others until you get it over 10%. Thus a category will have a number of account codes within it. This rule applies at budget holder and consolidated forecasting levels.
- map the G/L account codes to these categories – a planning tool can easily cope with this issue without the need for a revisit of the chart of accounts, see Exhibit 5 for an example.
- accurate forecasting of personnel costs requires analysis of all current staff (their end date if known, their salary, the likely salary review and or bonus), all new staff (their starting salary, their likely start date)

In one workshop I ran for a service sector organisation the group came up with the decision that there would be a maximum of **fifteen categories** of which seven would be automated, see Exhibit 6.

Exhibit 6: Categories used in one case study

BH's forecast only these categories	**The categories that can be automated**
revenue (3 to 4 categories)	operational equipment R&M
salaries & wages ordinary time	office equipment, computer & consumables
other personnel expenditure	communications costs
health & welfare	fleet costs
training & conferences including travel	accommodation
consultancy fees	miscellaneous costs
Promotional activities	Depreciation

8. The QRF should be based around the main events / key drivers

A forecasting tool needs to be based on the main events / key drivers and thus the finance team should be able to quickly inform management of the impact should there be a major change. In-depth interviews with the Senior Management Team (SMT) coupled with some brainstorming will quickly identify the main drivers which may include:

- what if we contract in size e.g. stop production of one line, sell a business
- what if we grow through acquisition
- what if we lose a major customers
- what if there is a major change to key economic indicators e.g. interest rates, inflation, oil price, exchange rate etc.
- what if a major overseas competitor sets up in our region
- what are the plant capacity ramifications from gaining a large increase in business e.g. collapse of a major local competitor

If you have second guessed the likely SMT requests and have designed the model around them you will have a planning tool that can quickly model the implications of such changes robustly.

American express found that their forecast has principally based around a few drivers, customer numbers and average spend.

9. A fast light touch (an elapsed week)

QRFs should be performed within five working days, with the 4th quarter forecast, taking an extra week as it is creating the annual plan. QRFs can be quick because:

- consolidation is instantaneous with a planning tool
- since you have run a workshop on budget preparation with BHs they know what to do
- the model is based around Pareto's 80/20 principle, focusing on the major items, events, drivers etc
- training has been given to budget holders so they can enter directly into the planning tool
- the quarterly repetition aids efficiency
- forecasting is at a high level, at category not account code level e.g. only 12 to 15 categories per budget holder
- repeat costs can all be standardised for the whole year, e g Dublin to London return flight Euro 250, and overnight in London Euro 280

10. Built in a planning application – not Excel

Forecasting requires a good robust tool not a spreadsheet, built by some innovative accountant, which now no one can understand. Often the main hurdle is the finance team's reluctance to divorce itself from Excel. It has been a long and comfortable marriage albeit one that has limited the finance team's performance.

Acquiring a planning tool is the first main step forward, and one that needs to be pursued not only for the organisation's future but also for the finance team members' future careers. It will soon be a prerequisite to have planning tool experience, and conversely career limiting to be an Excel guru.

Excel is a great tool for a one-off costing estimate done whiloe awaiting your plane. It is not and never should have been a building block for your company's key financial systems. As a forecasting tool it fails on a number of counts:

- it has no proper version control, we have all burnt the midnight oil pulling our hair out wondering whether all spreadsheets are the correct versions!!
- for every 150 lines there is a 90% chance of a logic error (from a recent study)
- its lack of robustness (show me a CFO who can be confident of the number an Excel forecast churns out!)
- it cannot accommodate changes to assumptions quickly e.g. what would you do if the CEO asking "what if we stop production of computer printers, please tell me the impact by close of play today", I suspect the best thing would be to pray!
- it is designed by accounting staff who; are not programmers, have not been trained in system documentation, quality assurance etc which you might expect from a designer of a core company system.

New planning tools are being built all the time and this table, on Exhibit 7, will be certainly out of date at the time of you reading it. The table is not intended to be a comprehensive list as this would be a paper in itself. The following "search strings" will help unearth many applications:

- "planning tools"
- "quarterly rolling forecasting" + applications+ freeware
- "forecasting tools" + rolling+ applications

Exhibit 7: Some of the planning tool providers and their applications

Company	**Package Name**	**Web address**
Bi Predict	Proclarity Analytics	www.bipredict.co.nz
Adaptive Planning	Adaptive Planning Software	www.adaptiveplanning.com
PROPHIX Software Inc.	prophix	www.prophix.com
Business Forecast Systems, Inc	forecastpro	www.forecastpro.com
Alight	Continuous Planning & Scenario Analysis	www.alightplanning.com
Hyperion	Hyperion Planning	www.hyperion.com
IBM	IBM® Cognos® TM1™	www-01.ibm.com
Corvu Corp	CorStrategy	www.corvu.com
Beacon Group	GEAC Performance Mngt Suite	www.beaconit.com.au
Mondelio	Mondelio	www.mondelio.com
Sage	Winforecast	www.sage.com

David Parmenter FCA is an international presenter and writer. This article is an extract from his whitepaper "How to implement quarterly rolling forecasting and quarterly rolling planning– and get it right first time" which can be acquired from www.davidparmenter.com. Further better practices can be accessed from his book "Pareto's 80/20 rule for corporate accountants". He can be contacted at parmenter@waymark.co.nz Tel:+64 4 499 0007.