How to implement a forecasting and planning tool– and get it right first time

by David Parmenter

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1. Introduction

Spreadsheets have no place in forecasting, budgeting and many other core financial routines.

Spreadsheets were not designed for many of the tasks they are currently used to accomplish. In fact, I often remark in jest at workshops that many people, if they worked at NASA, would try to use Microsoft Excel for the US space program, and many would believe that it would be appropriate to do so. A spreadsheet is a great tool for creating static graphs for a report or designing and testing a reporting template. It is not and never should have been a building block for your company's planning systems. The high level of errors in spreadsheets is the main reason why. A major accounting firm pointed out that there is a 90 percent chance of a logic error for every 150 rows in an Excel workbook.[i]

For many readers of this paper you will already be converted to the move away from large error prone spreadsheets, however just in case we need to start with answering "Why should the finance team replace their beloved spreadsheets?" and move on to answering all these questions.

- Why should the finance team replace their beloved spreadsheets?
- How should I sell the need for a planning tool to the senior executive team/C-Suite to get it over the line?
- Should we do a better annual plan or use the opportunity to move to a quarterly rolling forecasting and planning process?
- How should we design the forecasting process in the new tool?
- How should I select the right toolkit for us?
- How should I implement forecasting within the newly acquired planning tool?

Excel has no place in a modern organisation in the following areas:

1. Forecasting and planning – covered in this paper
2. Month-end and year-end reporting - these should be in a robust reporting tool often part of the planning and forecasting tool which is uploaded with the actuals. Seldom now is reporting generated from the general ledger reporting suite.
3. All forms of business analysis including treasury assessments of currency risk, forecast cash positions, wealth management portfolios - these spreadsheets get too large and are error prone
4. People Management - all information about people, whether they are employees, customers, supporters, or training attendees should be kept in a modern HR system, a one stop shop
5. Managing Operations – all quite complicated logistics such as Inventory flows should be run by a suitable cloud software, now linked to the accounting system
6. Office Administration- used for supporting day-to-day tasks such as invoicing, paying bills, and recording contract details, including dates, milestones, deliverables and payments. it is a dangerous tool involving much rekeying of data.
7. Project Management – where you have a nightmare of duplicate data whereas a purpose-built project management (PM) system can be one version of the truth
8. Managing Programs – again requiring duplicate data entry and if used to allocate resources and keep track of progress requires a time recording system.
9. Time recording system – often used to allocate overheads. A very costly way of doing something that should not be done in the first place
10. Account Management – one of its daftest uses, where duplicate keying in and multiple views of the future reside.

2. Why the finance team should replace their beloved spreadsheets

We have built spreadsheets that we should have thought twice about. I built a primitive general ledger in one to do my accounts. There was no accounts receivable ledger telling me who had not paid, no information on the unpaid supplier invoices other than the pile in the concertina file. Never has there been a happy moment than when I converted to MYOB.

Why did accountants love spreadsheets so much?

1. For those old enough to remember, it relieved us of the dreaded adding up large columns of figures in a machine and then rechecking the tape for completeness and accuracy.
2. The accountant could get what they needed quickly – no waiting for the IT department to answer their query.
3. It was for many the only time they built something, working on rebuilding an engine, reconstructing the layout of their house, etc was maybe deemed 'a bridge too far'.
4. Offered surges of delight when using a complex macro for the first time, so that the spreadsheet can no longer be understand by anyone else. We thus became the guru on a particular number, "Pat, please run the numbers and tell us what the current costs is to produce a ton of steel."
5. We could forecast magical numbers for the oncoming year-end telling management that the company would be flush with cash.
6. It was the first tool to help consolidate the dreaded annual budget/plan
7. It could at last make the month-end report look interesting with bar and pie charts.
8. Spreadsheets became a place to dump data and manipulate it.
9. It appears to be free, already paid for in the Office 365 annual licence- yet as I explore later it comes with a heavy cost.
10. A place to escape from the less challenging and repetitive tasks..

2.1. Rule of 100

I believe you can build a forecasting model in a spreadsheet application and can keep it within 100 rows without much risk. Pass this threshold and you expose yourself, your finance team and the organization. Forecasting requires a robust tool, not a spreadsheet that was built by an innovative accountant and that, now, no one can understand. I always ask in workshops, "Who has a massive spreadsheet written by someone else that you have to pray before you use it?" You can see the pain in the instant response. Most people know that the person who built the spreadsheet certainly was not trained in operational systems design. The workbook will be a collage of evolving logic that only the originator has a chance to understand.

Often, the main hurdle is the finance team's reluctance to divorce itself from the spreadsheet program. It has been a long and comfortable marriage, albeit one that has limited the finance team's performance.

2.2. Common problems with spreadsheets

Senior management is often blissfully unaware of the risks they take every time they rely on information from large spreadsheets.

Some common problems with spreadsheets are:

- *Broken links or formulas*: An individual may add or eliminate a row or column so when a group of spreadsheets are rolled up, the master spreadsheet is taking the wrong number from the one that was modified.
- *Consolidation errors*: **I say to attendees that Excel is one of the few applications that can make a grown person cry.** Often, a spreadsheet will lock up or show a screen full of "REF", "REF" "REF" errors, because it was not designed to be a tool for handling a rollup of dozens of different worksheets.
- *Input of the wrong numbers*: Entering the wrong number can happen in any process, but spreadsheet-based systems often require re-keying of information, which can produce data inconsistencies. A spreadsheet might use a look-up table that may be out of date or an entry might have been inadvertently or mistakenly overwritten.
- *Incorrect formula*: A subtotal might omit one or more rows, columns or both. An individual might overwrite a formula because they believe theirs is more accurate. Or, someone might use an outdated spreadsheet. Or, allocation models might not allocate 100 percent of the costs.
- *No proper version control*: Using an outdated version of a spreadsheet is very common
- *Lack of robustness*: Confidence in the number a spreadsheet forecast churns out is not assured. Many times you cannot check all the formulas because they can be found in any cell of the spreadsheet.
- *Inability to accommodate changes to assumptions quickly*: What would you do if the CEO asks "If we stopped production of computer printers what would be the financial impact? I need the answer at the close of play today". Your spreadsheets are not able to provide that quick answer.
- *Design is by accounting staff who are not programmers*: Most accounting staff have not been trained in system documentation, quality assurance, which you might expect from a designer of a core company system.
- *Lack of corporate office control:* Many people in a business can use spreadsheets to create their own forecasts at a ridiculous level of detail. This can lead, as a friend once said to me, "To the march of a million spreadsheets."

New CFO finds an error

A financial controller came to me with a great tale. He had just completed the annual budget that his team had been working on for many weeks long into the night and on weekends. Proudly, one Friday afternoon, he walked into the office of the recently appointed CFO and announced the first cut of the annual plan. The CFO spent five minutes looking at the plan and after quickly calculating some numbers said, "This annual plan is wrong; the numbers do not make sense."

The financial controller was taken aback, because he had made a special effort to conduct quality assurance on the numbers, and he had done comparisons to last year's plan, along with a few other things. He had wanted to make the best impression.

The CFO called him over to look at his brief calculation, "Pat, we know the planned sales have been signed off already, gross profit margin historically has been around x percent, overheads are roughly $XX, and thus, I am expecting a number around $XX- $YY." The financial controller could only agree.

That weekend, the team poured over the spreadsheet, which was enormous and included the consolidation of many worksheets from many sources. Late on Sunday, they experienced a "eureka" moment. An error was found and

rushed to the financial controller. As they processed the correction, they looked with disbelief because the new number was within the outline the CFO had suggested. "We have a pretty smart CFO; let's see how long this error has been around. Please look at the last two year's annual plan models," Pat requested.

As Pat recalled to me, with a wry smile, the error had been in the plans for the previous two years and had gone completely undetected.

2.3. Career limiting

Acquiring a planning tool is the major step forward, and one that needs to be pursued, not only for your organization's future, but also for the future careers of the finance team. Soon, a career prerequisite is likely to be planning tool experience, and, conversely, being a spreadsheet guru is likely to be career limiting. To those readers who believe a spreadsheet is still appropriate, I say to them, why not build your general ledger in a spreadsheet program and while you are at it, all your operations systems?

Try explaining to the CEO that only one person knows how these systems work and he or she left four years ago. You might as well clear your desk now.

2.4. Having large spreadsheets in the finance team is unprofessional

Having been a member of two accounting professional bodies and spoken in many others I am flabbergasted at the amount of training the professional bodies provide their spreadsheet hungry members.

It is like Nero playing his violin when Rome was burning. It is unprofessional for the following reasons:

1. Having large Excels is as inappropriate as large manual book keeping journals.
2. The amount of concealed errors in your spreadsheets undermine the credibility of the finance leadership team.
3. They often are accompanied by anti-lean processes such as rekeying in data, tasks carried out by staff who do not fully understand the model, and delay the reporting of the month-end results.

2.5. Moving to a planning tool is easier than you think

Planning tools look very much like spreadsheets except they do not have the drawbacks inherent in a spreadsheet. Appendix 1 shows examples of some of the screens you might expect to find from the available planning tools.

2.6. Many studies support the move to a planning tool

These deficiencies can be seen from the comments below, which came from a CFO.com survey of finance executives at nearly 300 midsize companies.

"We have a pretty complex spreadsheet process — the file from hell, we call it —that only one person in finance can effectively use."

"We hit the month of May and realized there was no way we would make our forecast and we had to cut our sales plan back almost 10 percent. I spent a week without sleep trying to forecast the impact. Unfortunately, our spreadsheet-based systems were inadequate to provide this analysis. We spent the next six months trying to drive the changes down to managers."

"I want to get away from spreadsheets and push the data to more people than just finance or senior management so they can make more informed decisions. I also want to take the resources out of maintaining the spreadsheet-based model and put them into thinking about the business itself."

"It takes so long before the spreadsheet is complete that the result just doesn't mean a whole lot. I want a rolling four-quarter forecast, consolidations, and the what if scenarios that I can review — spreadsheets always come up short."

3. Making the planning tool sale to the executive team (C-Suite)

The finance team must make two sales. The first is selling the need for a planning tool and the second is selling the move away from the annual planning process.

Finance teams around the world have wanted to embrace lean practices but are weary as many initiatives both inside the finance team and in other teams fail far too often. Leading and selling change within an organization, as most of us know from experience, is not easy and often prone to failure. In order to improve the chance of selling this change I suggest the following:

- Become a follower of John Kotter's work.
- Learn to sell through the emotional drivers of the buyer. Thus, we need to radically alter the way we pitch the idea of change to the senior management team (SMT), the CEO and the board.
- Kick-off the sales pitch with an attention-getting "elevator speech."
- Deliver a compelling burning platform presentation
- Get a coalition of oracles behind the project and prepare a compelling project plan, a blueprint of the vision and the way forward.

3.1. The need to create a reinvented future

Steve Saffron and Dave Logan in their book "The Three Laws of Performance" have written a compelling book that explains why so many of these initiatives have failed. The first law is "How people perform correlates to how situations occur to them." The writers point out that the organisation's "default future" which we, as individuals just know in our bones, will happen – will be made to happen. Thus in an organisation, with a systemic problem, the organisation's staff will be driven to make initiatives fail, so that the default future prevails. They went on to say that is why the more you change the more you stay the same. The key to change is to recreate, in the organisation's staff minds, a new vision of the future, let's call it an "reinvented future".

3.2. "Leading Change" by John Kotter

In 1996, John Kotter published "Leading Change[11]," which quickly became the seminal work in the field of change management. He pointed out that effecting change — real, transformative change — is hard. Kotter proposed an eight-stage process for creating major change, a clear map to follow when persuading an organization to move.

The eight-step process is:

1. **Establish a sense of urgency**— Here we need to appeal both to the intellectual and the emotional sides of the executive team. The process of getting the executive team on board requires first, a well-prepared elevator pitch to open the door, a masterful sales presentation to obtain permission to run a focus group to assess, validate and scope the proposed initiative (These are covered in subsequent sections).
2. **Create a guiding coalition**— In every organisation you have oracles; those individuals everyone refers you to when you need something answered (e.g., "You need to talk to Pat"). These oracles exist right across the organisation and may hold, seemingly unimportant positions. Do not be fooled.

   An investment at this stage is paramount. In one case study, an organisation held three, two-week workshops which were held for their planning tool implementation. Yes, that is six weeks of workshops. The CEO was present for part of each the workshops and the wisdom from the oracles was channelled, by an expert facilitator, into a successful blueprint for the project.

   No project will ever succeed without a guiding coalition of oracles behind it. In "The Three Laws Of Performance" Zaffron and Logan point out that when you present the

"burning platform" you are aiming for an overwhelming "Hell No" response upon asking the question "Do you want this future?" The oracles want the alternative future which you have also articulated.

3. **Develop a vision and strategy**— In order for the journey to be seen and resources made available, we must master future-based language that is compelling and motivational. Zaffron and Logan signify the importance of language (the second law) and that it is crucial that you talk using a future-based language (the third law).
4. **Communicate the change vision** — Kotter emphasized that it's not likely that you will under-communicate a little bit; you will probably under-communicate a lot, by a factor of 10 to 100 times. This will undermine your initiative, no matter how well planned. During a project, the project leader needs to obtain permission from the CEO to gate crash any gathering in the organisation and have a ten-minute slot to outline the project and progress to date. One sure fire way to failure is to believe that staff will read your project newsletters and emails.
5. **Empower broad-based action**— Early on the need for change and the right to change must be handed over to teams within the organisation. Zaffron and Logan concur with this view. Once the invented future is set in the minds of the organisation's staff, the staff will march towards this future. All the great writers have emphasized that some chaos is good so let teams embrace the project in their own way.
6. **Generate quick wins**— Obvious to us all but frequently missed. Always remember that senior management are, on occasion, inflicted by attention deficit disorder. Progress in a methodical and introverted way at your peril. We need easy wins, celebrated extrovertly, and we need to ensure we set up the CEO to score the easy goals.
7. **Consolidate gains and produce more change** — This is the flywheel affect so well put by Jim Collins in his books "Built to last" and "Good to Great". When the staff are working in unison the fly wheel of change will turn quicker and quicker. This was very evident in the case study where they had six weeks of coalition building workshops.
8. **Anchor new approaches in the culture**— Make heroes of the change agents, make sure their values are embedded in the corporate values and now ensure we weed out those in management who have not embraced the change and who, over time, will be dowsing the fire at night when nobody is looking.

There are two sales to make. Selling the PT and moving away from the annual planning process. Before we look at these let us first see that we have to learn to sell differently.

3.3. Selling by emotional drivers

Nothing was ever sold by logic, sales are made through the use of emotional drivers e.g. remember your last car purchase. Many finance team initiatives fail because we attempt to change the culture through selling by logic and issuing commands. It does not work. This project needs a public relations (PR) machine behind it. No presentation, email, memo, paper should go out unless it has been vetted with the help of a PR expert. All your presentations should be tailored to suit the different audiences' emotional drivers and these should be road tested in front of the PR expert.

I believe you could contract this service in for less than four days of fees for the whole project. You will never regret it.

To understand selling by emotional drivers let us look at how a second-hand car salesperson sells cars using emotional drivers.

Selling by emotional drivers: how a car sale is made

Three customers over the same day arrive to look at the "car of the week" that has been featured in the local paper. The sales person does not sell the cars by logic (price, features, car reviews), instead they tailor their approach to the buyer's emotional drivers.

The first person is a young information technology guru, from the Y generation, with latest designer gear, baggy trousers part way down exposing a designer label on his boxer shorts. The salesperson first ascertains that this young professional has enough resources and with some probing finds out that they are a highly paid Google employee. They are looking for signs of the emotional drivers of this potential buyer, looking for clues, such as clothing, the car that the person arrived in and more.

The sales pitch could be targeted around the performance and handling of the car and the prowess of the young professional's driving skills. The opening line could be, "Have you had any experience driving powerful cars around a track?" "Great, you will need to have the skills of a racing driver to handle the 280 BHP, the twin turbo, and the phenomenal cornering." SOLD.

The second person could be me, with my grey hair visible. The salesperson would say, "This car is the safest car on this car lot, it has a five-star rating for safety, eight air bags, enough power to get you out of trouble, unbelievable braking when you have to avoid the idiots on the road, and a cornering capability that will keep you on your side of the roads no matter how you come into the corner." SOLD.

The third person, with Italian designer clothing and leather briefcase, such as a SAP consultant, is asked to sit in the car. The focus is on the luxury. "This car has won many awards for its design. See the quality of the leather finish. It is Italian leather similar to your immaculate briefcase. You will notice that everything is in the right place." "If you don't mind me saying Pat, you look a million dollars in your outfit and I can assure you that every time you drive this car you will feel like a million dollars!" SOLD.

How would accountants sell the car? I often joke to accountants that we would be so busy, buried in a monster spreadsheet, that on sighting a customer we would slump our shoulders in a resigned way thinking, "This is the last thing I need".

Walking up to the customer, they would remember that they needed to smile and appear welcoming. However, the frowns on their forehead would give the game away. We would point out to the customer "As you know this car has been reduced by another $5,000 and it is full of features as you would expect in this top of the line car. I have listed all the features on the window and have printed Jeremy Clarkson's review - his only five star rating this year." Handing over the keys we would say "Make yourself comfortable, start the car and if you are still interested come over and see in my office and I will take you out for a test drive."

I can assure you that selling by logic **seldom** works and is the prime reason why many initiatives put forward by the finance team fail.

3.4. The emotional drivers for a planning tool sale

Some of the emotional drivers to use in selling senior management on a planning tool acquisition include:

- "Spreadsheet solutions for forecasting involve many long evenings and weekends away from family and friends."

- "Spreadsheet forecasts are expensive to run." Provide an estimate of the huge costs (because costs motivate boards).
- "Spreadsheet forecasts are likely to be materially wrong and could possibly lead to legal action by investors because experts have already stated publicly that large spreadsheets, with more than 150 rows, are not appropriate for forecasting."
- "Smart organizations have planning tools."
- "In today's world, working without a planning tool is like trying to operate without a general ledger application."
- A planning tool can improve decision making because it can be linked to main performance drivers. For example, the CEO can receive an answer in hours about the ramifications of pulling out a product line."
- A planning tool can improve the quality of reporting and often incorporates performance measures such as balanced scorecards.

The quarterly rolling concept has no alternative than to be designed in a robust planning software package. Organisations are saying to the SMT and Board "What price can you put on better decisions?" and endeavouring to move away from a cost benefit analysis approach. A good source of quotes is the white paper by CFO research services on "What CFOs want from performance management", first published in 2003.

3.5. The elevator speech

The 20 second elevator speech is designed to capture the attention of the targeted decision maker. The term came about in management books describing how you need to be able to get a point across in an elevator ride, as sometimes this is the only chance you may have to get through to a decision maker.

It must be ready so that when you ambush the CEO you are well practised and ready. The aim is, as they walk away, that they ask you to come to their office in the next few days to discuss this further. An elevator interaction might go like this.

> Elevator pitch #1: "Hello Jane, I need to tell you that I have just been looking at annual planning and I have estimated that over the next 10 years we will be spending £__M and £__M on numbers that are wrong as soon as the ink has dried. I have been researching a new approach, tried and tested elsewhere. I would only need 15 minutes of your time to outline a new approach that will rectify these issues saving much of this cost."
>
> Elevator pitch #2: "Hello Jane, I need to tell you about the risks of misinformation from large spreadsheets that are dominating forecasting and reporting in this organisation. These are costly to run and slow to deliver questionable information. I have been researching tools which have been tried and tested elsewhere, which would significantly reduce this cost. I just need 15 minutes of your time to explain this."

The key is to fine-tune the elevator speech so that it is compelling. I recommend you practice your elevator speech at least 20 times so that it is focused and no longer than 30 seconds. As Kotter said, we need to create a sense of urgency and connect both intellectually and emotionally. See Exhibit 3.1 for an elevator checklist.

EXHIBIT 3.1 Checklist for your next elevator speech

Preparation tips	Is it covered?
Use Post-It stickers to brainstorm content, target's points of pain. See guidelines in this chapter.	☐ Yes ☐ No
Avoid empty words (common terms that mean nothing; optimize, maximize, best practice etc.,)	☐ Yes ☐ No
Practice good interpersonal skills (making eye contact, smiling during pitch and being engaging)	☐ Yes ☐ No
Connect your sentences so they flow well	☐ Yes ☐ No
Practice 20 times including in the lift or the carpark where the interaction is likely to occur.	☐ Yes ☐ No
Have passion but avoid talking too fast.	☐ Yes ☐ No
Aim for a 20-30 seconds pitch.	☐ Yes ☐ No
Be prepared to answer three key questions that may be asked.	☐ Yes ☐ No
Delivery tips	☐ Yes ☐ No
Capture their attention in the first 8 seconds with three points of pain.	☐ Yes ☐ No
Use an analogy to sum up the points of pain	☐ Yes ☐ No
Offer benefits rather than talk about a solution	☐ Yes ☐ No
State a reference case study	☐ Yes ☐ No
Ask for 15 min pitch (but plan to take 20 minutes) and follow the 10-20-30 rule described in this chapter.	☐ Yes ☐ No

3.6. Deliver a compelling burning platform presentation

Assuming the elevator speech has given us an audience, we need to prepare and deliver a presentation that will get the senior management team to agree to holding a focus group workshop with the organization's "oracles," this presentation having been vetted by a PR expert and practiced many times. The argument being, "If I can convince the oracles that this project will work, and get their involvement in the project plan, I can table back to you a project that has a greater chance of success."— The organization's "oracles" being those "go to" individuals everyone refers you to when you need to get something done.

It's important to get this presentation right, because you will probably not get a second chance. Thus one needs to embrace the better practices around "winning" presentations. I have included my chapter on the subject in some electronic media that readers can access from www.cfo.davidparmenter.com.

3.7. The sales pitch

To create a successful sales pitch to your senior management team and the board, you should:

1. Make sure you have a good proposal with a sound focus on the emotional drivers that matter to your audience.
2. Focus on selling to the thought leaders on the senior management team and board before you present the proposal. This might take months of meeting informally, sending copies of appropriate articles, telling better practice stories

and more to awaken interest. It is worth noting that the thought leader of the senior management team and board might not be the CEO or chairperson.

3. Read two books, Presentation Zen by Garr Reynolds and Slide:ology by Nancy Duarte, and adopt their practices.
4. Use Guy Kawasaki's "10/20/30 rule" for a sales pitch presentation. Have ten slides, make sure it lasts no more than 20 minutes and ensure all content is no smaller than 30 pitch.[ii]
5. Practice your delivery. The shorter the presentation, the more you need to practice. An important pitch to the board should be practiced more than 10 times.
6. Make sure you prime the thought leader to speak first, after you deliver your presentation. Your proposal now has the best possible chance for a positive vote.

See Exhibit 3.2 for a suggested sales pitch presentation.

3.8. Getting the green light from influential sages at your business

One important step in selling change is to get the people who matter, the sages, behind you before you sell to your senior management team. These sages are the individuals who, although often buried deep in the organization, almost everyone turns to for advice, to find out about the past and to get a dose of wisdom.

This consensus is achieved though a focus group workshop, see a later section for the agenda. The aim of the day is to get a collective understanding of the issues of the past, present the new solution and listen to the "wisdom of the crowd" as Gary Hamel suggests.[iii] Then, in the final session of the workshop ask the attendees, "In your opinion is this project to move forecasting and planning to a planning tool a green, amber or red light?"

Naturally, you start off by asking the opinion of a couple of sages, who are already convinced to vote green before they attended the one-day workshop. To achieve this presale, you must act as you have been doing your campaigning for some time and by providing them with articles and papers and discussing the benefits over coffee.

3.9. Progress by stealth

Successful planning requires more than implementing the perfect planning tool. You must also replace the annual plan with a quarterly forecasting and planning regime, where the four updates are completed in less elapsed time than the existing annual planning process. However, to implement this change, "progress by stealth" might be the best way forward unless your CEO is leading the "beyond budgeting" charge.

What I mean by this is that you first justify purchasing the planning tool for a more accurate annual plan, better forecasting and for its month-end reporting capability. Then, when the forecasting system is running well, you start implementing some of the beyond budgeting techniques such as quarterly rolling funding. At a later stage, senior management might well want to remove the annual process completely.

3.10. Market success stories during the implementation

All successful project managers always have a few success stories up their sleeves so that they can mention them whenever they meet any members of the senior management team. The success stories during the project could include:

- Number of areas that have been simplified in the new forecasting process
- Estimated time savings already achieved by the new approach
- Progress of the pilots (Peter Drucker recommended having three pilots when testing a system)
- Status of the planning tool appraisal
- New report formats implemented

12. Appendix 1: How a QRF can be laid out in a planning tool.

Example of a rolling forecasting model in a planning tool

IBM Cognos TM1 Web

[Base]

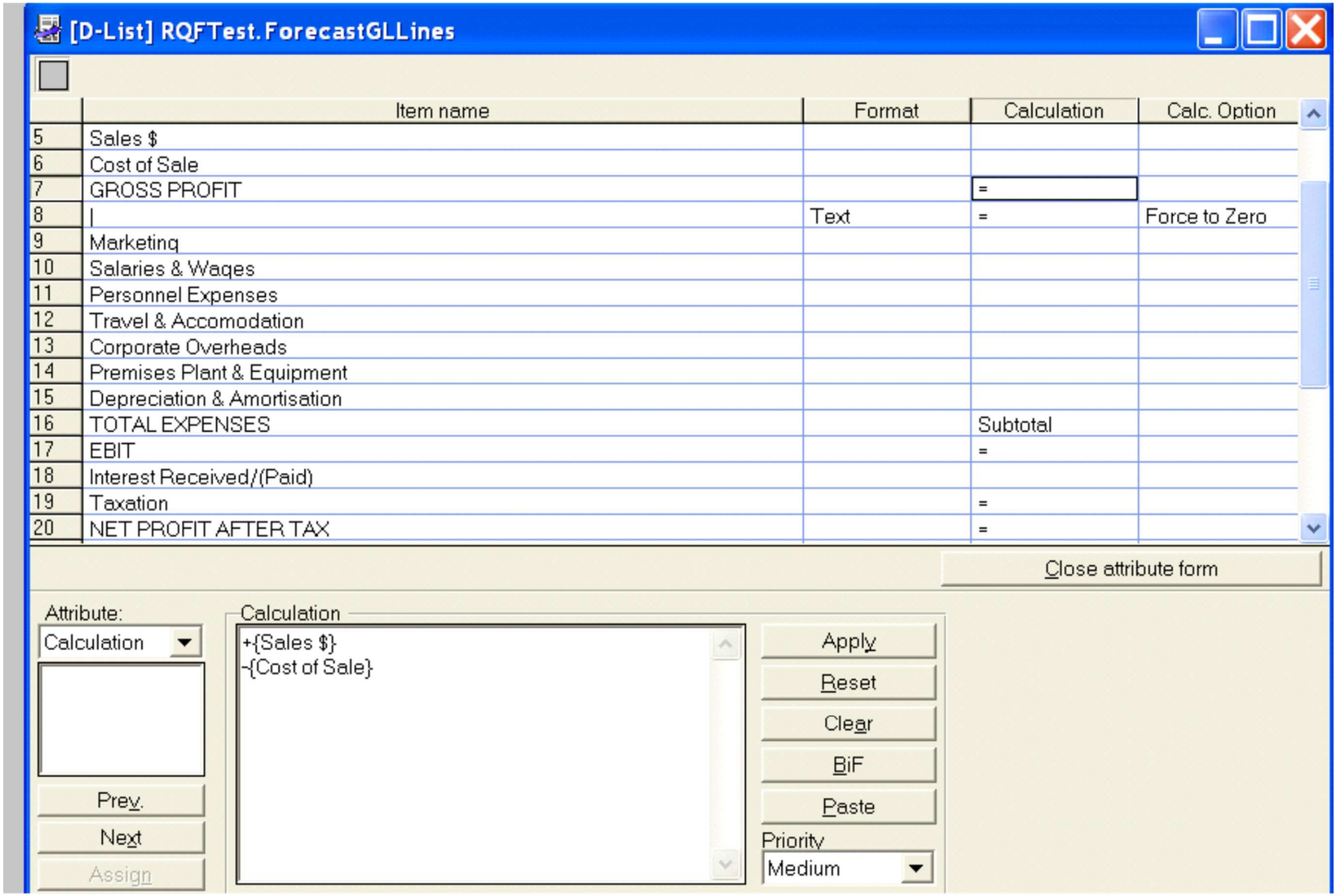
Rows: Measures [Measures]

Columns: Periods [Periods]

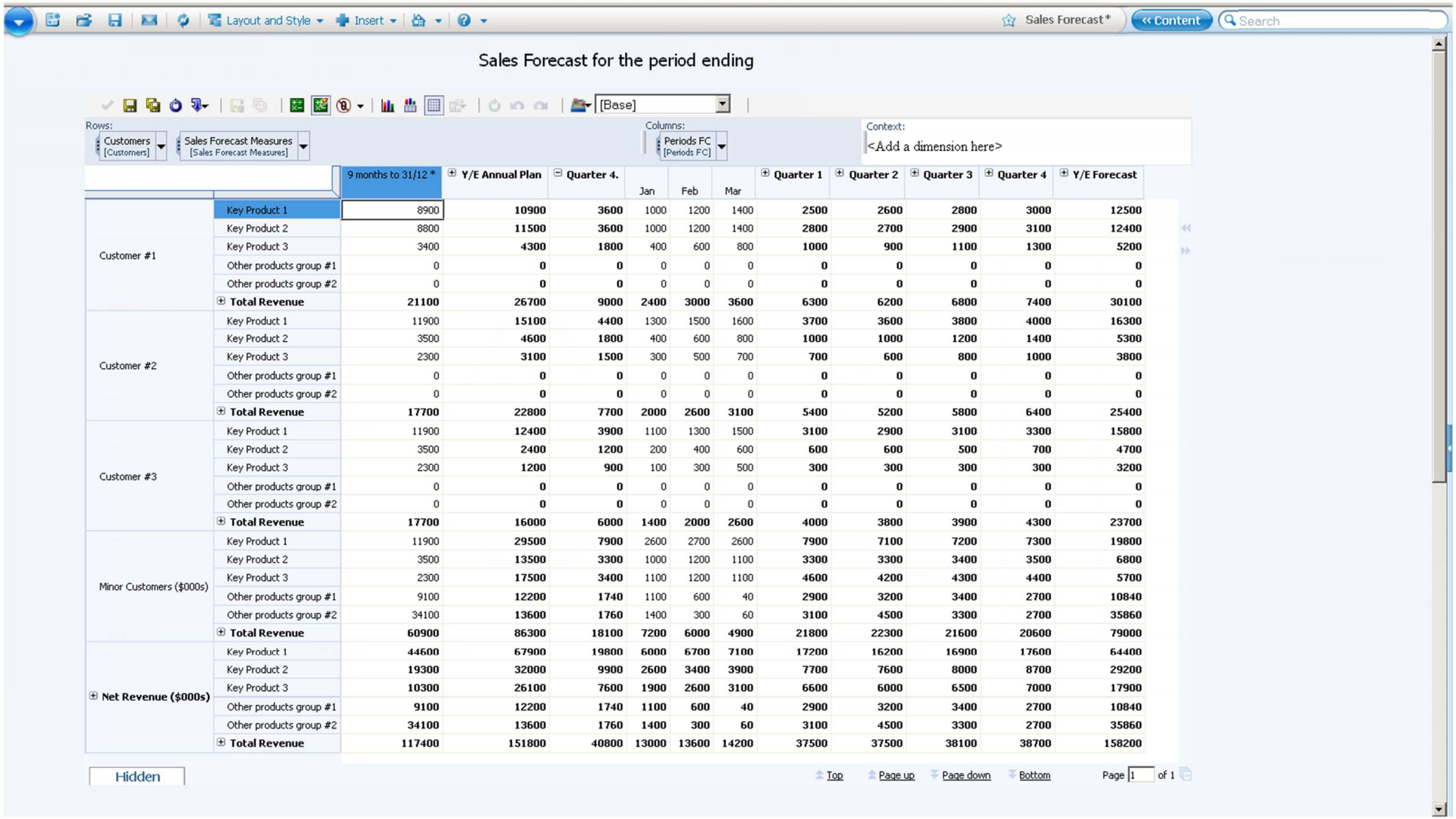
	Month +1	Month +2	Month +3	Qtr +1	Month +4	Month +5	Month +6	Qtr +2	Qtr +3	Qtr +4
Revenue (schedule)	13000	13600	14200	**40800**	12700	12100	12700	**37500**	**41500**	**42500**
Cost of sales	-5700	-6000	-6200	**-17900**	-5600	-5300	-5600	**-16500**	**-18300**	**-18700**
GROSS PROFIT	**7300**	**7600**	**8000**	**22900**	**7100**	**6800**	**7100**	**21000**	**23200**	**23800**
Sales & wages (schedule)	3400	3300	3200	**9900**	3100	3500	3400	**10000**	**11000**	**12000**
Personnel expenses	450	430	450	**1330**	820	880	840	**2540**	**1290**	**1310**
Premises ,plant and equipment	590	580	600	**1770**	570	600	550	**1720**	**1730**	**1530**
Communications	350	360	380	**1090**	350	350	350	**1050**	**1100**	**900**
Marketing	350	420	440	**1210**	420	460	430	**1310**	**1340**	**1440**
Training	240	200	210	**650**	200	220	190	**610**	**630**	**720**
Corporate Overheads	550	540	550	**1640**	530	550	530	**1610**	**1640**	**1520**
Miscellaneous	250	260	270	**780**	280	270	270	**820**	**830**	**790**
Travel and accommodation (schedule)	400	450	430	**1280**	470	460	460	**1390**	**1400**	**1370**
TOTAL EXPENSES	**6580**	**6540**	**6530**	**19650**	**6330**	**6850**	**6600**	**19780**	**20960**	**21580**
Interest received (paid)	-40	-30	-20	**-90**	-50	-30	-40	**-120**	**-130**	**-120**
Taxation	-200	-310	-440	**920**	-220	20	-140	**-330**	**-630**	**-630**
NET PROFIT AFTER TAX	**480**	**720**	**1010**	**2140**	**500**	**-60**	**320**	**770**	**1480**	**1470**
Headcount	510	500	500	**500**	490	530	510	**510**	**515**	**520**
Sales per employee ($) per month	$25,000	$27,000	$28,000	**$27,000**	$26,000	$23,000	$25,000	**$25,000**	**$27,000**	**$27,000**
gross profit % on product y	45%	45%	45%	**45%**	45%	45%	45%	**45%**	**50%**	**50%**
gross profit % on product x	55%	55%	55%	**55%**	55%	55%	55%	**55%**	**50%**	**50%**

Source: IBM.Cognos TM1 www.ibm.com

Example of how the model uses formula



In this sales forecast view tailored within the planning system, planners can focus on major customers and the major products their major customer's purchase. Small customers can be grouped by region. Minor products are grouped into categories.



		9 months to 31/12 *	Y/E Annual Plan	Quarter 4.	Jan	Feb	Mar	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Y/E Forecast
Customer #1	Key Product 1	8900	10900	3600	1000	1200	1400	2500	2600	2800	3000	12500
	Key Product 2	8800	11500	3600	1000	1200	1400	2800	2700	2900	3100	12400
	Key Product 3	3400	4300	1800	400	600	800	1000	900	1100	1300	5200
	Other products group #1	0	0	0	0	0	0	0	0	0	0	0
	Other products group #2	0	0	0	0	0	0	0	0	0	0	0
	Total Revenue	21100	26700	9000	2400	3000	3600	6300	6200	6800	7400	30100
Customer #2	Key Product 1	11900	15100	4400	1300	1500	1600	3700	3600	3800	4000	16300
	Key Product 2	3500	4600	1800	400	600	800	1000	1000	1200	1400	5300
	Key Product 3	2300	3100	1500	300	500	700	700	600	800	1000	3800
	Other products group #1	0	0	0	0	0	0	0	0	0	0	0
	Other products group #2	0	0	0	0	0	0	0	0	0	0	0
	Total Revenue	17700	22800	7700	2000	2600	3100	5400	5200	5800	6400	25400
Customer #3	Key Product 1	11900	12400	3900	1100	1300	1500	3100	2900	3100	3300	15800
	Key Product 2	3500	2400	1200	200	400	600	600	600	500	700	4700
	Key Product 3	2300	1200	900	100	300	500	300	300	300	300	3200
	Other products group #1	0	0	0	0	0	0	0	0	0	0	0
	Other products group #2	0	0	0	0	0	0	0	0	0	0	0
	Total Revenue	17700	16000	6000	1400	2000	2600	4000	3800	3900	4300	23700
Minor Customers ($000s)	Key Product 1	11900	29500	7900	2600	2700	2600	7900	7100	7200	7300	19800
	Key Product 2	3500	13500	3300	1000	1200	1100	3300	3300	3400	3500	6800
	Key Product 3	2300	17500	3400	1100	1200	1100	4600	4200	4300	4400	5700
	Other products group #1	9100	12200	1740	1100	600	40	2900	3200	3400	2700	10840
	Other products group #2	34100	13600	1760	1400	300	60	3100	4500	3300	2700	35860
	Total Revenue	60900	86300	18100	7200	6000	4900	21800	22300	21600	20600	79000
Net Revenue ($000s)	Key Product 1	44600	67900	19800	6000	6700	7100	17200	16200	16900	17600	64400
	Key Product 2	19300	32000	9900	2600	3400	3900	7700	7600	8000	8700	29200
	Key Product 3	10300	26100	7600	1900	2600	3100	6600	6000	6500	7000	17900
	Other products group #1	9100	12200	1740	1100	600	40	2900	3200	3400	2700	10840
	Other products group #2	34100	13600	1760	1400	300	60	3100	4500	3300	2700	35860
	Total Revenue	117400	151800	40800	13000	13600	14200	37500	37500	38100	38700	158200

Now we can look at product "A" in detail. We could also break down into sales to key customers.

Enter Sales Unit Volume, Cost and Discount information for each product.

Help

Northland | Product A | Budget

Product A
Product B
Product X
Group 1
Product C

	Total			Mar	Apr	May	Jun	Jul	Aug	Sep
Units Sold				62,666	70,000	70,000	70,000	70,000	70,000	70,00
Price				50.00	41.67	22.54	27.14	29.68	29.68	29.6
Sales $	26,			3,133,313	2,916,667	1,577,666	1,900,078	2,077,369	2,077,369	2,090,08
Discount %				1.15%	1.15%	1.15%	1.15%	1.15%	1.15%	1.15
Discount $	304,747	26,378	25,169	36,033	33,542	18,143	21,851	23,890	23,890	24,03
Unit Cost $	10.21	10.24	10.24	10.21	10.21	10.21	10.21	10.21	10.21	10.2
Cost of Goods Sold	8,204,848	465,580	667,561	639,785	714,658	714,658	714,658	714,658	714,658	714,65
Cost of Sale	8,509,595	491,958	692,730	675,818	748,200	732,801	736,509	738,548	738,548	738,69
Gross Margin $	17,990,160	1,801,800	1,495,893	2,457,495	2,168,467	844,865	1,163,570	1,338,822	1,338,822	1,351,39
Gross Margin %	66.38%	78.55%	68.35%	78.43%	74.35%	53.55%	61.24%	64.45%	64.45%	64.66

Syntech

Profit&Loss | KPIs | Revenue | Submitted Scenario | SalaryInput | SalaryAllocations | Salary Exps | SalaryAssumptions | Wage Exps | Capex | ExpensesByDept

costs are

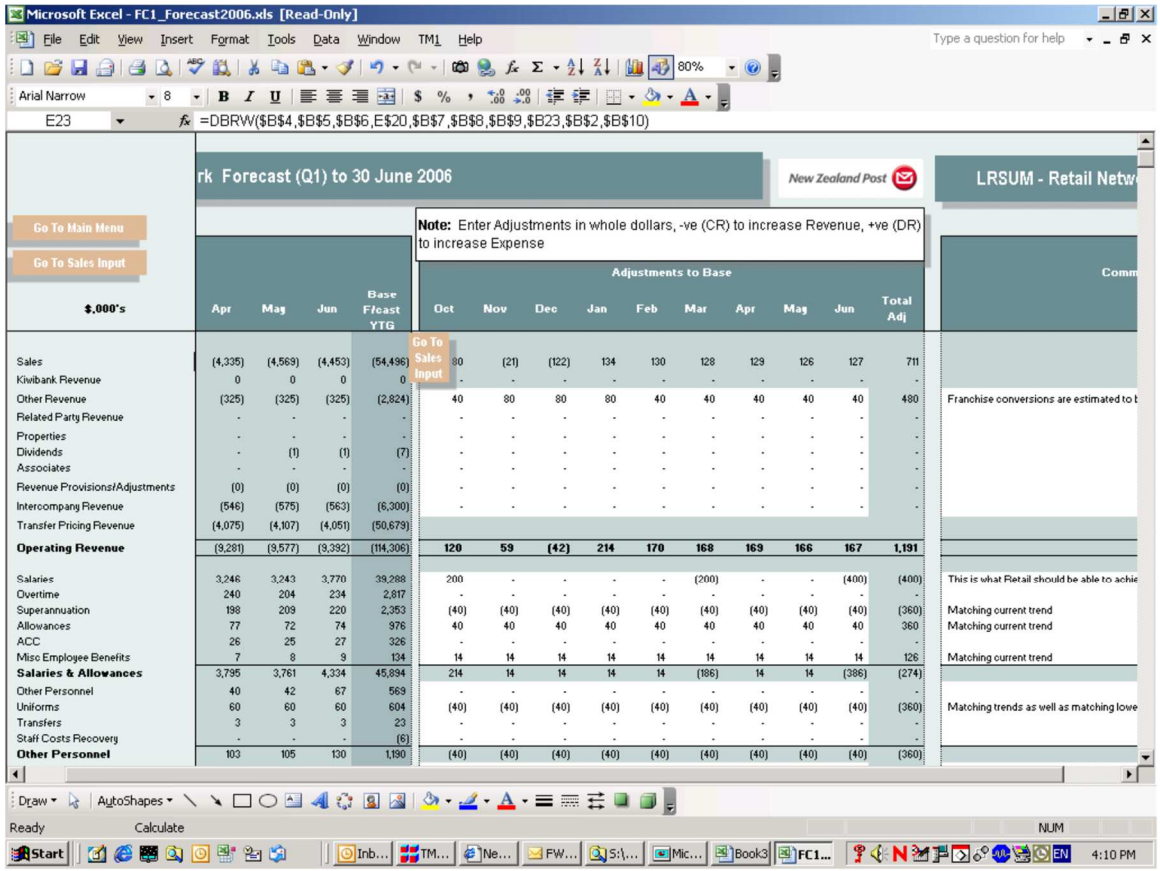
Enter details for your employees. Choosing from available Job Grades and Regions will determine Salary Rate, but this can be overriden.

Help

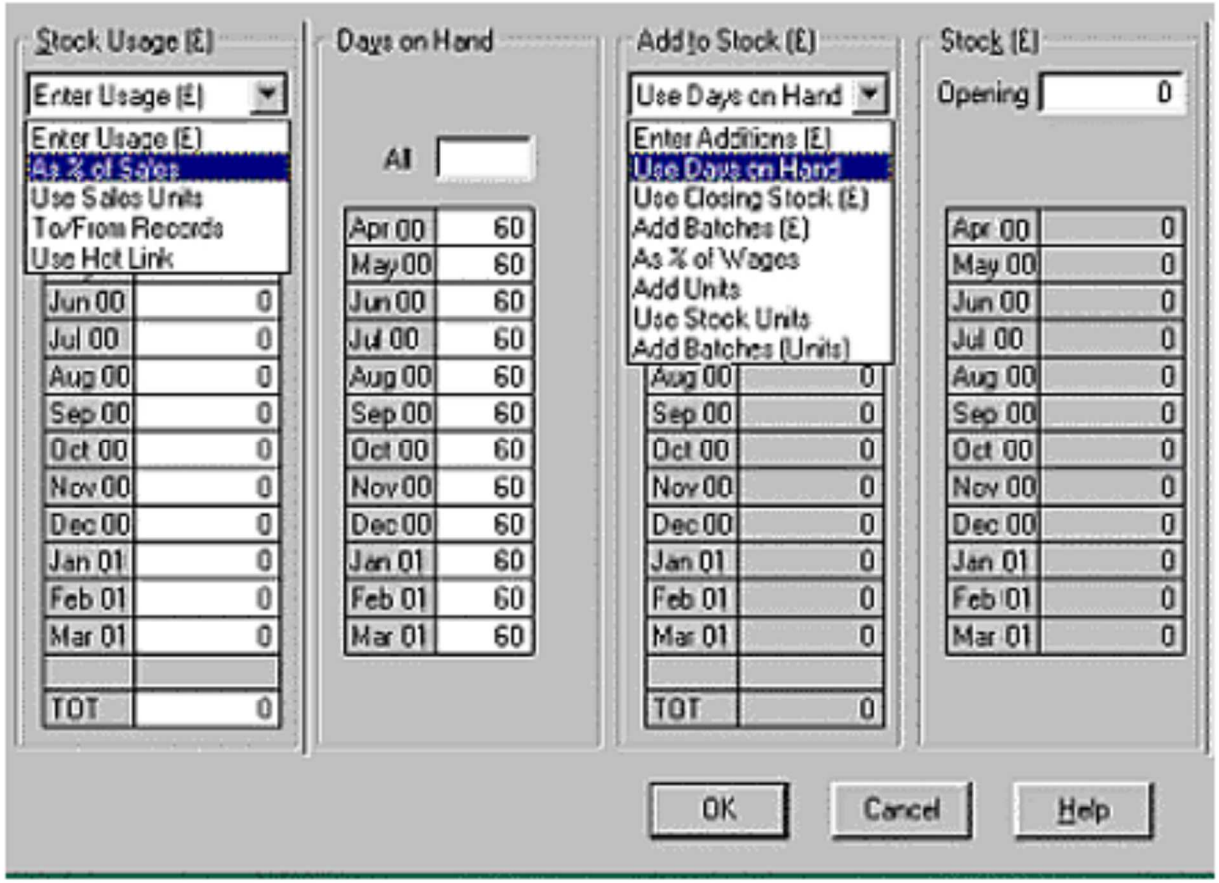
Northland | Scenario A

	Employee Name	Position Grade	Region	Comment	Std Annual Salary	Override Salary	Start Month	End Month	Increase Month
1	John Jump	Junior	AUS-NSW		35,000	40,000	Jun		Sep
2	Chris Hospt	Sales	AUS-NSW		70,000				
3	Terry Big	Sales	AUS-VIC		68,000			Aug	
4									
5									
6									
7									
8									
9									
10									
TOTAL					173,000	40,000			

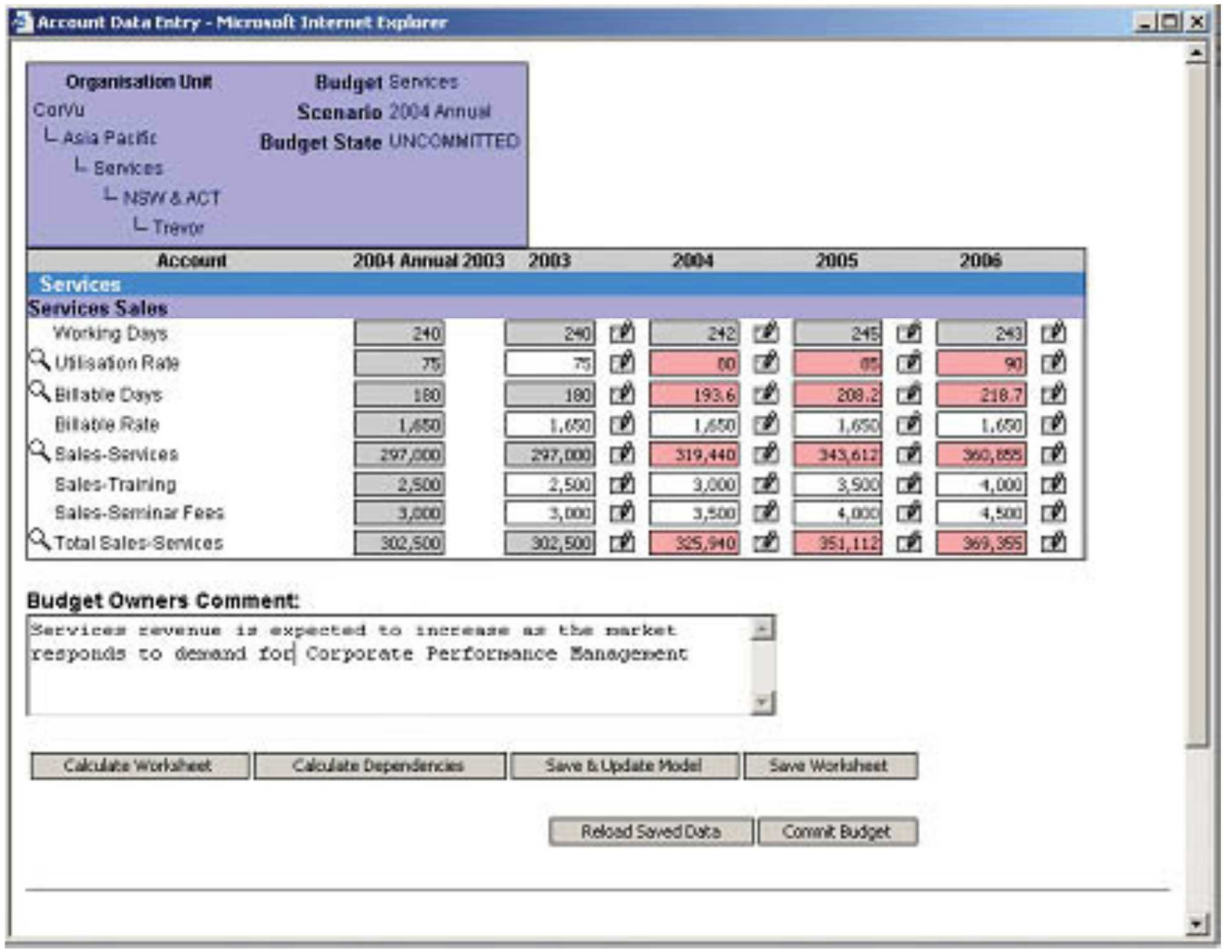
TM1 example

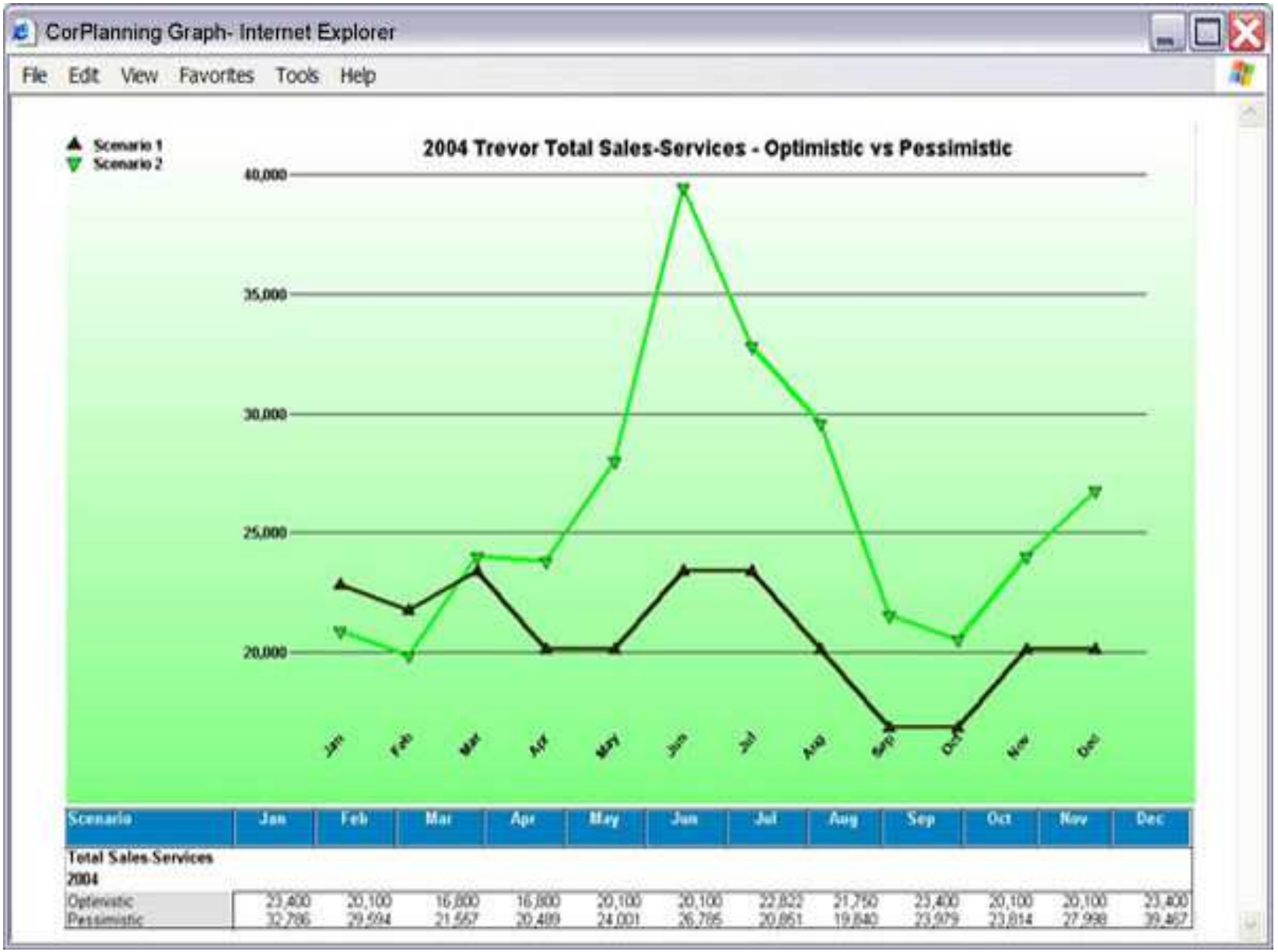


Winforecast example



Corvu example





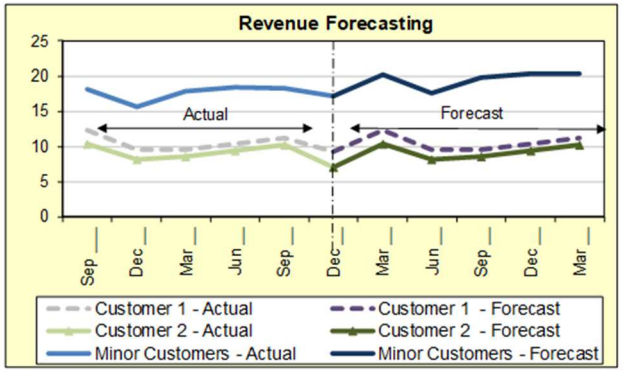
Scenario	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Sales Services 2004												
Optimistic	23,400	20,100	16,800	16,800	20,100	20,100	22,822	21,750	23,400	20,100	20,100	23,400
Pessimistic	32,786	29,594	21,567	20,489	24,001	26,795	20,851	19,640	23,979	23,814	27,998	39,467

13. Appendix 2: Suggested report formats

Exhibit 12.1 Suggested Sales Forecast Model

Sales Forecast for the period ending _____

	9 months to 31/12 *	Quarter 4 Jan	Quarter 4 Feb	Quarter 4 Mar	Y/E Forecast	Quarter 1 Apr	Quarter 1 May	Quarter 1 Jun	Quarter 2 Jul - Sept	Quarter 3 Oct - Dec	Quarter 4 Jan - Mar	Annual Plan
Major Customers ($000s)	* includes estimate for December											
Customer #1												
Key Product 1	8.9	1.0	1.2	1.4	13	0.9	0.7	0.9	2.6	2.8	3.0	10.9
Key Product 2	8.8	1.0	1.2	1.4	12	1.0	0.8	1.0	2.7	2.9	3.1	11.5
Key Product 3	3.4	0.4	0.6	0.8	5	0.4	0.2	0.4	0.9	1.1	1.3	4.3
Other Products Group #1	5.1	0.6	0.6	0.6	7	0.6	0.6	0.6	1.8	1.9	2.0	7.5
Other Products Group #2	4.6	0.5	0.5	0.5	6	0.5	0.5	0.5	1.6	1.7	1.8	6.6
Total	30.8	3.5	4.1	4.7	43.1	3.4	2.8	3.4	9.6	10.4	11.2	40.8
Customer #2												
Key Product 1	11.9	1.3	1.5	1.6	16	1.3	1.1	1.3	3.6	3.8	4.0	15.1
Key Product 2	3.5	0.4	0.6	0.8	5	0.4	0.2	0.4	1.0	1.2	1.4	4.6
Key Product 3	2.3	0.3	0.5	0.7	4	0.3	0.1	0.3	0.6	0.8	1.0	3.1
Other Products Group #1	4.7	0.5	0.5	0.5	6	0.5	0.5	0.5	1.8	1.9	2.0	7.2
Other Products Group #2	4.2	0.4	0.4	0.4	5	0.4	0.4	0.4	1.6	1.7	1.8	6.3
Total	26.6	2.9	3.5	4.0	37.0	2.9	2.3	2.9	8.6	9.4	10.2	36.3
Customer #3												
Key Product 1												
Key Product 2												
Key Product 3												
Other Products Group #1												
Other products group #2												
Total												
Minor Customers ($000s)												
Key Product 1	18.2	2.6	2.7	2.6	26	2.2	2.3	2.2	7.1	7.2	7.3	28.3
Key Product 2	8.9	1.0	1.2	1.1	12	0.9	1.1	1.0	3.3	3.4	3.5	13.2
Key Product 3	9.1	1.1	1.2	1.1	13	1.0	1.1	1.0	4.2	4.3	4.4	16
Other Products Group #1	9.1	0.9	1.0	1.1	12	0.8	0.9	1.0	3.2	3.4	2.7	12
Other products group #2	8.6	0.7	0.9	1.0	11	0.7	0.8	0.6	2.0	2.1	2.4	8.6
Total	53.9	6.3	7.0	6.9	74.1	5.6	6.2	5.8	19.8	20.4	20.3	78.1
Revenue ($000s)	111.3	12.7	14.6	15.6	154.2	11.9	11.3	12.1	38.0	40.2	41.7	155.2



Areas to Note

1. _____
2. _____
3. _____
4. _____