White Paper:

Planning in the Education Industry

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Fictitious case study - every University has a Matthew

Matthew the Budget Officer has a passion to plan and budget expenses down to infinite detail. His pride & joy is a 17-sheet macro drenched Excel model that builds up the faculty's employment expense budgets from the lowest level.

The model incorporates payroll complexities including contract start and end-dates, step increases, market loading, oncost calculations, agreed rates and EB% increases. It carries occupant information as well as position information and a complex macro removes duplicate information where multiple occupants per position occur. The model is refreshed by uploading data from Business Objects reports that extract information from the University's HR system which are exported to Excel.

In good months where the HR IT team have made no changes to the reports, it only takes Matthew four days to fully refresh and check the model. Three months ago an upgrade to the HR system changed some of the reports and Matthew spent more than a week fixing the formulas in his model!

The power of the model lies in its ability to report employment expenses at any level for the faculty and the flexibility to easily add new budgeted positions or change underlying assumptions.

Senior faculty management have become so reliant on the information produced by Matthew's model that it is now known as the 'Matthew model'. Understandably it has become critical to the faculty and Matthew is highly protective of his model, ensuring several backup-copies exist and not allowing anyone else to update the model.

(Fast-forward 2 years)

A major restructure has taken place, merging Matthew's faculty with another. As the 'Matthew model' is far more advanced than the spreadsheet used by the other faculty it is decided to incorporate the additional 5 schools and 430 employees into the 'Matthew model'.

Matthew undertakes this mammoth task, but growing frustrated by the slow response from the HR IT team to modify reports and his inability to fulfil requests for employment reports to his high standards he decides enough is enough and resigns to use his skills elsewhere.

No-one else was ever allowed to update the Matthew model, so no-one has the ability to complete the changes required for the merger. Senior management now uses a combination of reports, some obtained from the Matthew model and others from the other faculty's spreadsheet and their confidence in the information quickly reduces.

A few months down the line another upgrade to the HR system necessitates changes to some reports that feed the 'Matthew model'. Now the Mathew model cannot be refreshed anymore!

To regain control over expense budgeting in the new merged faculty, Ruth, an experienced Business Officer from one of the other faculties is seconded. Ruth's old faculty did things totally different, thus she decides to scrap the 'Mathew model' and bring in the 'Ruth model' a complex spreadsheet feeding from several Business Objects reports...

Although this is not an entirely true story it is a pretty accurate reflection of what we see when we visit Universities to discuss their planning and reporting needs. There are a lot of very talented Mathews working in universities across the world and more often than not their Excel based solutions are critical to the management of the organisation. That said the situation often follows a similar cycle to the one that we have light-heartedly covered in the previous case study. Universities get caught up in a forecast and budget modelling cycle like the one pictured in Figure 1:

Produce Detailed Forecast Model in Excel

Model scrapped as being a "black box"

Author moves on
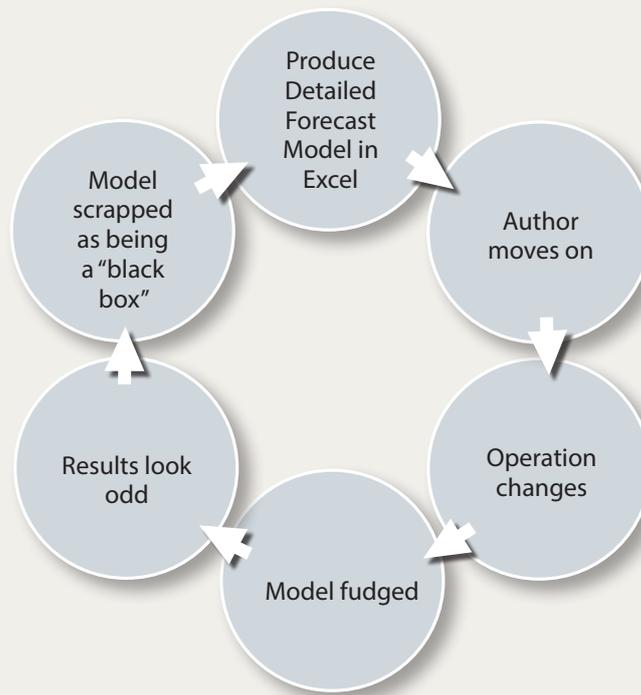
Results look odd

Operation changes

Model fudged

Figure 1: Typical budget model lifecycle

This outcome is at least in part, due to the complicated nature of universities and the level of detail required to produce forecasts. The outcomes illustrated are obviously not welcome and represent challenges that most universities are looking to overcome.

Before we look at how other universities have resolved these challenges, let's look in more detail into the reasons why these processes are so difficult.

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Why are universities so complicated to model?

1. Each faculty/division is unique

Most universities are large scale organisations comprising of distinctly different organisational units. Faculties teach; Institutes do research; Divisions operate and manage the University's infrastructure. As each of these organisational entities focus on a different mixture of activities, Budget Officers for each area quickly end up 'doing their own thing'.

These custom budgeting solutions are closely aligned to an area's unique needs and complexities, but are often based on non standard assumptions, created in a custom format and are a nightmare to consolidate. These custom solutions also require a high level of maintenance to keep in step with University wide changes and often become redundant when key staff members who maintained these models leave.

2. Disparate business activities

Teaching is cyclical by nature with revenue and expenses mostly driven by expected student numbers. Research activities are project-oriented, non-cyclical and could span from a few months to several years. University operations are primarily fixed and predictable, requiring management of scheduled/planned activities. Each of these contrasting revenue/expenses patterns requires a different budgeting/forecasting approach.

3. Complex organisational structures and reporting needs

Vertically revenue and expenses are managed and reported by a faculty/division's structures being school/department, cost centre, responsibility centre and then project. Horizontally projects are grouped by funding source/activity with several activities making up a program. Additional reporting is needed by natural account as well as reporting from a total University view point. Any Budgeting/reporting solution needs to be able to deal with these complex organisational structures and reporting needs.

4. Student Load Modelling

Due to a significant change in the Higher Education sector, the need for Australian Universities to be able to model multiple student load plans has increased dramatically. Universities need to be able assess the impact of the events like the Global Financial Crisis and the Bradley Review on overseas and local student numbers and revenue. A robust tool that can model future student numbers and revenue at multiple levels of detail is thus needed.

5. Regular restructures

As the demand for different study directions change and Universities strive to run cost efficient institutions, regular organisational restructures are unavoidable. Budgeting solutions need to be able to easily accommodate structural changes.

6. Large volumes of data

Universities are large complex organisations, comprising a multitude of organisational entities, sub-entities and projects. Universities also employ a large number of people. Any budgeting solution needs to be able to cater for large volumes of data with good response times as well as enabling reporting at summary and detail levels.

7. Complex employment expenses

As employment expenses constitutes 60-70% of any University's cost, any budgeting model needs to be able to do detailed modelling of employment expenses. This would include incorporating major HR system complexities and exceptions.

8. The devil is in the detail

By default, the people who design and maintain the forecast models need to understand the operations. This task is performed by Budget Officers who by their nature are focussed on detail.

However, focussing on too much detail can be inefficient when applied to planning out the next 5 years – we should always remember that a budget or forecast is no more than an educated guess as to what might happen.

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Is there a solution?

Yes there is. Software solutions have been available for a long time that can automate, control and manage your planning, budgeting and reporting processes. But the challenge comes in translating what is generic software content for standard organisations into specific, tailored content for a University. Too often we hear that Universities cannot use standard software solutions because their needs are unique, examples include:

1. Our organisational structures and processes are complex, commercial off the shelf planning solutions are too generic and cannot cater for each unique area

2. Universities are big organisations with massive data volumes. Commercial off the shelf planning solutions can simply not cater for the required size and user-base

3. In Excel we can keep track of our own assumptions and calculations. Replacing Excel with other software will remove that audit trail, leaving us with a planning system that is a 'black box' where nobody will trust the outputs.

4. Application implementers don't speak our language. How will they be able to build what we need if they do not understand our University's unique requirements?

5. Staff turnover in Universities is relatively high. We will be forever training new people on a completely new system.

But with a bit of help the generic software solutions that are fit for purpose for a standard organisation can be developed to deliver excellent results for Education Sector organisations like QUT, University of Melbourne, Sydney University, Navitas and IDP.

What makes our solutions different?

M-Power Solutions is focused on delivering planning, budgeting and reporting services into the Education sector.

Our team of experienced consultants have encountered most of the challenges in the planning, budgeting & forecasting space and worked through different ways of delivering successful outcomes for our clients. That knowledge and experience has been encapsulated in our pre-built Planning, Budgeting and Reporting solution for the Education Sector.

Our pre-built planning application is based on the industry global leader in budgeting software Oracle Hyperion Planning. M-Power Solutions Education Accelerator Templates provide a pre-built solution covering all of the major aspects Universities focus on. Installed at your site or available as a hosted or managed service, our Education Accelerator Templates include the following modules:

Workforce Module - Enables automated, tight integration with your HR system to source actual data enabling you to plan sessional workers, secondments, pay grades, maternity leave and facilitate variance analysis. The workforce module provides a position based planning capability. Users review current workforce and manage new hires/retrenchments; the model references various assumptions to derive the total cost of employment.

Opex Module - Provides a driver based planning solution, for example, operating costs are linked to a core business activity such as student numbers, floor space or headcount. Actuals are loaded from the General Ledger allowing variance analysis at cost centre/account code detail by faculty.

Student Load Planning Module – Enables a bottom-up approach - once historical student data has been loaded, continuing student numbers can be projected based on historical progressions rates. Student numbers exist at the lowest course level, enabling revenue forecasting based on the student contribution band and CGS funding clusters. Plus a top-down approach - revenue targets can be entered that would translate back into required student numbers and offers to be made.

Revenue/Funding Module - Provides the ability to formulate a revenue plan by student numbers, courses and course fees. Once again, actual information is loaded from the General Ledger allowing deep analysis of variances and trends.

Capex/Projects Module - From the time a project is first conceived, through the various approval and execution phases, the Capex module provides a single reference point for planning and reporting actuals versus plan.

Financials Module - P&L, Balance Sheet and Cash Flow solution linked to the other modules above. The Cash Flow component is used to derive actual as well as plan data. Most of our clients leverage the templates capability to complete budgets and forecasts 5 years or more out, with the option to run numerous "what if" scenarios assessing different operational strategies and seeing their impact through to financials.

M-Power Solutions Education Accelerator Templates cover a broad range of a University's requirements but we understand that every University is different and a "one size fits all" approach is not practical. Typically, we find that 80% of your Planning and Reporting needs will be covered by our templates. For the remainder, we work with you and your team through a set of pre-defined gap analysis techniques to define the perfect solution for you.

The benefits of deploying M-Power Solutions Education Accelerator Templates include:

- Reduced implementation timeframes, lowering costs and gets your team up a running quicker – with the hosted solution this can be even quicker.

- Reduced project risks. Every project carries risks. Our templates, industry knowledge and track record reduces implementation risks substantially

- Strong User Acceptance – Enabled by early visualisation of a pre-built solution and ease of use for operational staff built in

- Simplified Administration – We've preloaded the smarts that minimise administration and support costs

- Standardised, low risk, industry specific deployment of Hyperion Planning

For more information about M-Power Solutions, Oracle | Hyperion and the Education Accelerator Templates
please visit us at www.mpowersolutions.com.au, or email us at info@mpowersolutions.com.au
or contact your local M-Power Solutions representative on the details below:

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