Benefits Summary

- Better access to higher quality information, for enhanced decision making, including:
  - Full visibility of departmental cost and income information
  - What-if? analysis capabilities

- Time to produce plans has reduced from 3 people taking 2-3 months, to one person taking 1½ hours

- Weekly 5-year student forecasts have replaced twice yearly forecasts

These days, universities need to run more like businesses. Whilst profitability is not the overall objective, every university is self-governing and therefore needs to make decisions about its own funding. The level of funding from the government is determined by the importance it places on each subject being studied, the quality of the teaching and the number of students attending. Therefore, universities are driven by the need to provide the best quality of education to the maximum number of students, and by the need to respond quickly to change, to reflect new trends, since what was important last year may not be important this year or in the future.

The University of Kent recognises that managing its performance in this way requires careful planning to ensure that sufficient funding is received, that adequate resources are in place to support the best quality education of the student population, and that costs are properly managed.

The finance department had created a resource allocation and 3-year business plan model to allocate central costs and income to the various educational departments based on the number of students studying each subject. The 'profitability' and ultimately the long-term sustainability of a department could then be established. Ideally, a department head should then be able to analyse the effects of additional costs or funding, for example, by employing extra staff and/or recruiting more overseas and UK students.

Finance suffers Excel exhaustion
The university was struggling with its Excel-based resource allocation model, which consisted of many linked spreadsheets, containing data for the 30 different academic units and 20 central units such as personnel, finance, etc. Dr Kathy Bennett, Budget Accountant at the University of Kent explains why working with spreadsheets was problematic, "Making and keeping track of changes to the linked spreadsheets was very difficult and time-consuming. It was important to ensure integrity was not

compromised every time we made a change. Getting data out of the system was slow, and providing senior management with an up-to-date report was virtually impossible.

We were working long hours to get the job done, which was extremely stressful for everyone involved. In summary, the spreadsheet model was becoming an absolute nightmare to maintain."

Inca educates the planning team
Having justified the need for a new resource allocation system with the university and secured the funding, the project team began the search to find a solution. The introduction of the nationwide Transparency Review, linking the possibility of additional government funding to increased levels of accountability, heightened the need for accurate financial planning and presented the University of Kent with additional justification for a system review.

A survey of the market was undertaken, with several software products being considered. Bennett recaps, "When we saw what Cognos Planning had to offer, we were absolutely bowled over. It met our requirements for a flexible and easy-to-use system, with the added bonus that we could use the software for other applications further down the line."

The University of Kent has been impressed by Inca, the leading Cognos partner, from whom they have purchased Cognos Planning and support services. "We have found Inca to be most helpful. The Cognos Planning - Analyst training was particularly useful and we were able to start modelling straight after the course. We also had some help from one of Inca's consultants who implemented the upgrade of our software," comments Bennett.

Now that the Cognos Planning resource allocation solution has been implemented, the various department heads have full transparency to the data. Since the information is more accessible, they are asking more questions and are able to perform detailed analysis themselves. Previously, what-if? analysis would have been so longwinded and complicated that it was not worth the effort. The net result is higher quality information on which to base decision-making. Says Bennett, "The users think the new system is marvellous - really easy-to-use and extremely flexible. The only downside is that they are now keen to get even more information!"
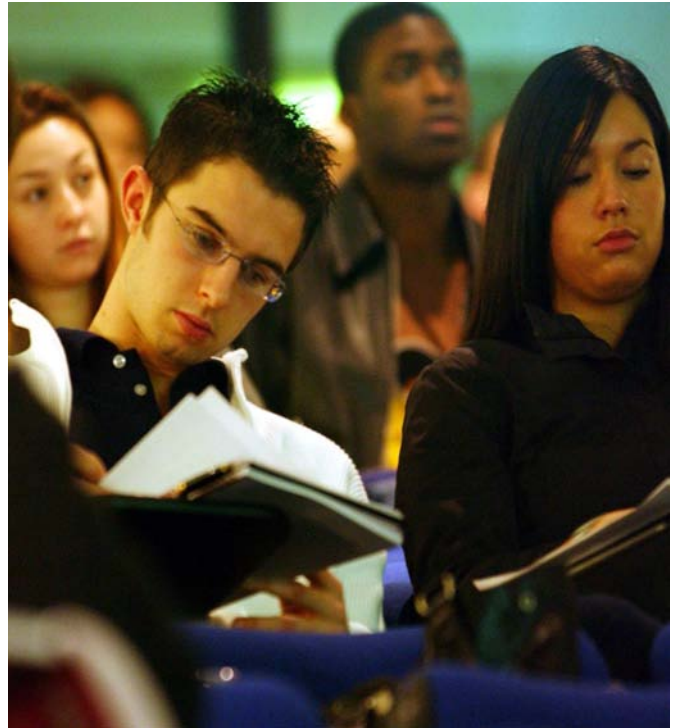
Cognos Planning provides a 5-year student forecast

Since the implementation, the student planning data office has developed a Cognos Planning application, which forecasts student numbers for the next 5 years. This type of planning is vital to ensure that application for funding is sufficient, and that resources such as staff levels, equipment and even lecture theatres are adequate for the projected student levels. This type of forecasting is complex as several factors are involved, including: home/overseas students, subject being studied, full-time/part-time study, campus location (the university has 8 different locations), likelihood of completing the studies. Historic data from the last 5 years is used so that previous trends can help determine future predictions.

Previously, Microsoft Excel was used for student number planning, taking 3 people 2-3 months to produce the forecasts. Silvia Dobre, Project Manager at University of Kent explains, "With all the data requirements, we were working with almost one thousand spreadsheets, each containing many complex calculations. Intense data manipulation left room for human error, while re-aggregating the right spreadsheets from the approved versions was another challenge."

The search for statistical knowledge

Dobre had searched the marketplace for a flexible tool that would enable real-time student planning. Due to the nature of the analysis required, a multi-dimensional, rather than relational approach was needed, to support the breakdown of the forecast by student type, location, year, programme of study etc. Dobre investigated the market-leading relational database and statistical products, but found that they were not able to offer a solution for producing multi-dimensional forecasts with complex embedded calculations. Finally, her search took her to the finance department where she was shown Cognos Planning. After 2 hours of intensive demonstrations, Dobre had found her solution.

Dramatic time-saving and real-time plans

Now that the student planning application has been implemented, Dobre produces an updated plan each week, which takes 1½ hours - quite a change from 3 people taking 2-3 months to produce a plan that was updated twice a year. Dobre's reaction to the application is understandably positive. "I really do not know how I could manage without my Cognos application - it's fantastic," enthuses Dobre.

Dobre intends to extend her student planning application across the university by incorporating an admission system, and new factors such as the changing profile of UK academic study.