# Information That Predicts: Crystal Ball's Administrative Solution for Higher Education



#### FACT

- Crystal Ball is taught in over 800 universities around the world.
- Crystal Ball is included in many academic textbooks.

How can you fine-tune your recruiting efforts, better predict student enrollment and housing needs, streamline operational costs, and better forecast department budgets? Oracle's Crystal Ball can help you decide the best answers to these questions and more.



As a university administrator, you face increased pressure to meet institutional goals, despite continued reductions in public and private funding; increased competition for students and funding; and the emergence of new competitive models, such as for-profit and corporate programs. In the face of these and other challenges, you cannot afford to miscalculate on recruiting, budgets, enrollment, and a host of other university administrative tasks.

Running a university requires accurate fore-casting and simulation in order to optimize future decisions and improve the bottom line. However, it is nearly impossible to increase revenue, decrease costs, and reduce development time when your spreadsheets and other data-analysis tools lack the functionality, capability, and power to do the necessary "what if" analyses needed for successful performance management. You need to change the way you plan, estimate, and forecast—from a deterministic, fixed-input model to a stochastic process that allows for variables. This allows you to analyze a more accurate forecast and reduce the number of costly, last-minute decisions.

Oracle's Crystal Ball solution is the leading spreadsheet-based software suite for

predictive modeling, forecasting, simulation, and optimization. Used by 85 percent of Fortune 500 companies, and by your own professors to teach the importance of accurate forecasting and simulation, Crystal Ball gives you unparalleled insight into critical factors affecting risk, and helps you calculate the likelihood that you will reach your objectives. With Crystal Ball, you can improve your operational performance and streamline administrative tasks to effectively manage all of your campus processes.

# **Accurately Forecast Enrollment**

Accurately forecasting student enrollment is essential to the health of your university. Because enrollment affects every other university process and student program, underestimating or overestimating student enrollment can have disastrous consequences, such as budget shortfalls, housing shortages, unfunded programs, and unused grants.

Crystal Ball enables you to analyze historical data with more-current input parameters, such as student demographics, age/sex breakdowns of the general population, and student retention numbers—not only to forecast enrollment, but also to determine which variable-input parameter has the greatest impact on student enrollment. Armed with this information, you can change your recruitment strategies to ensure you meet your annual enrollment goals.

## **Better Predict Staffing Needs**

Poor planning for faculty and support staff can result in last-minute curriculum changes, underutilized facilities, and the inability to fully capitalize on faculty salary expenditure. Crystal Ball helps you to accurately predict students' program preferences and determine class size and fulfillment, resulting in more-efficient use of facilities and professor time.

For example, suppose you want to know if a class's enrollment level justifies the teaching of it every semester. When you run a Crystal Ball model using historical class enrollment numbers and changing student demographic information, you determine that enrollment for that class is slowly decreasing. You can then decide to drop the class for one semester—freeing the professor to teach another course or to spend time performing revenue-generating research for the university.

## Improve Capital Expenditure and Budgets

Universities build their budgets based not only on projected student enrollment, but also on other income variables, such as federal and state grants, royalties, and gifts—all of which carry varying degrees of uncertainty.

With Crystal Ball, you can use "Monte Carlo simulation" to generate the probabilities of these uncertainties impacting your budget. And you can easily enhance the simulation by adding historical data or switching variables. The result is a more realistic budget for building and maintaining facilities and for purchasing computers, furniture, and other equipment.

## Optimize Real Estate Planning

Build new dorms or renovate existing housing? Add a library wing or build a new

research facility? Universities grapple with difficult real estate decisions every year. And with finite budgets, accurate real estate planning is crucial to university growth and development. After all, a university that finds itself maxed-out on facility or housing space will have to turn away students and forfeit their potential tuition.

Crystal Ball's innovative predictor tool helps administrators make optimal decisions for all real estate planning scenarios, leading to more-efficient use of a university's real estate and associated costs—from teaching and housing facilities to heating, ventilating, and air conditioning (HVAC) expenditures.

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## **Enhance Grant Utilization**

Failure to utilize a grant results in its forfeiture. For universities that have many proposed projects and a limited amount of cash, it's essential that grants are planned for and used in a timely manner. Crystal Ball gives universities a better idea of their incoming grants and can help administrators decide which projects should be funded. Furthermore, Crystal Ball's Optquest feature lets administrators predict the right combination of proposed projects, resulting in the most-efficient use of grant money.

# Win with Crystal Ball

Your university's success depends on an integrated business solution capable of performing complex risk and uncertainty analyses across a broad range of applications. Crystal Ball's full suite of forecasting and simulation tools turns deterministic models and spread-sheets into stochastic tools that can account for the variability and uncertainty accompanying the information being analyzed. Oracle's Crystal Ball can be implemented throughout many departments to help you better plan for your university's future.



## CONTACT US

For more information about Crystal Ball, visit http://www.oracle.com/crystalball or call +1.800.ORACLE1 to speak to an Oracle representative.

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## Integrated Cloud Applications & Platform Services

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