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Stanford University Decreases University Systems Support Costs by 30% with BMC

Stanford University Profile

◆ Estimated Returns

- 1st BMC Installment (FY1998)
 - Payback period: 14.8 months
 - Seven-Year ROI (FY1998 – FY2004): 9,640%
 - Project Savings: 51% of pre-BMC Installment Costs
- 2nd BMC Installment (FY2005)
 - Payback period: 5.6 months
 - Five-Year ROI (FY2005 – FY2009)
 - Relative to pre-BMC Installments: 18,656%
 - Relative to 1st BMC Installment: 165%
 - Project Savings:
 - Relative to pre-BMC Installment Costs: 48%
 - Relative to 1st BMC Installment Costs: 1%

◆ University Profile

Stanford University was founded in 1891 in Stanford, California. Recognized as one of the world's leading research and teaching institutions, Stanford has one of the most renowned faculties in the nation. The pioneering spirit that inspired Jane and Leland Stanford to start the university and that helped build Silicon Valley at the doorstep of the campus encourages boldness in everything it does - whether those efforts occur in the library, in the classroom, in a laboratory, in a theater or on an athletic field. In FY2004 Operations Budget was \$2.3 billion, and its Capital Budget was \$152 million. Stanford currently employs 2,000 faculty, 8,000 staff and enrolls 16,000 students.

◆ Implementation Facts

- BMC Software Solutions:
 - Remedy Action Request System® 6.0
 - Remedy Help Desk 5.5
 - Flashboards 6.0
 - Remedy Service Level Agreements 5.5
 - Remedy Encryption Premium
 - Remedy Migrator
- Number of Computers Supported: 55,000
- Number of Customers/Users Supported: 26,000
- Number of Support Systems Staff: 1,200 (391 FTE)

◆ Key Benefits

- Consolidated Operations
- Increased Intensity and Scope of Operations
- Decreased Staff Training Costs and Resolution Times
- Centralized Report Generation
- Improved Customer Satisfaction and Productivity
- Reduced Annual Labor Costs per Ticket by 49% while number of tickets soared 64-fold.

CHALLENGE

Before Stanford implemented Remedy Help Desk in FY1998, the support system had no tracking capabilities, requests were submitted by users via email, the support system was not receiving many requests for support, and many of the requests it did receive were fielded "out-of-rank." That is, instead of using the help desk first, end-users who experienced problems would call upon friends, colleagues, or whomever they knew who might be able to help them with their problem. As a result, campus students, faculty and administrators were

spending too much time dealing with technology repair issues, which drew them away from their core tasks of education and research.

According to Chris Lundin, Director of Services with Stanford's Information Technology Services (IT Services), when Stanford implemented Remedy Help Desk, it was looking for a system that would provide a "Single entry point for all requests from faculty, staff or students, with the flexibility to create additional entry points for specific customers." Stanford was hoping that such a single point of entry would also enable it to simplify the user input process, as well as consolidate information from disparate sources, so as to be able to centrally monitor its operations.

BUSINESS VALUE

In FY1998, Stanford installed the Remedy Action Request System® single interface tool kit. With this tool kit, Stanford was able to design

an application to provide a single point of contact for all tech-related issues and problems, and to be able to track and monitor help desk user volumes and resolution performance.

In May 2004 (FY2005), Stanford upgraded its Remedy system to Help Desk 5.5. Stanford decided that instead of having its own staff continue to customize its original home-grown Remedy system, it would instead upgrade its system to Help Desk 5.5, so as to be able to take advantage of the new features already available from the new version, such as performance analysis by department, routing rules, escalation, etc. With Remedy, "IT Services now provides a single request-tracking system for use by any support group on the entire campus. No department or School [Stanford is broken into 7 Schools] needs to

fund, design or support an independent application. The expense of licenses, servers, system administration is borne centrally, with no need for local investment."

When Stanford upgraded to the new Remedy Help Desk 5.5

system in May 2004, it was able to consolidate information and to centrally track, benchmark, and proactively improve its support function campus-wide. "Out-of-the-box functionality allowed Stanford to assign each department to its appropriate School, Vice Presidential or Vice Provostial Area (using the Region-Site-Department fields) for ease of reporting. In the prior custom-designed application, only 'Department' was a field, and so no roll-ups could be done except by labor-intensive manual processes."

Also, with the new Remedy solution, "Single Category-Type-Item classification for all requests being handled allows the University to roll-up all support activities, be they IT-related, or central-office/business application related, or administrative support-related, etc., across the entire enterprise. While it started as an IT-support-related tool in 1997, Remedy is now used at Stanford to track everything from 'I need a new seating chart for my 3:00 p.m. Graduate School of Business class' to 'My computer needs to have that new software installed.'"

"The willingness of the numerous campus support organizations to use this simple tracking system has benefited the user and minimized the University's expense."

Chris Lundin, Director, Help Desk Services with Stanford's Information Technology Services (IT Services)

ESTIMATED COSTS

The costs to Stanford associated with implementing the Remedy Help Desk application involve software licensing, support and maintenance fees paid to Remedy for the use of the software; training costs for users to learn how to use the Remedy system; and miscellaneous costs for supporting hardware, software, and supplies.

ESTIMATED BENEFITS

Implementation of Remedy Help Desk has enabled Stanford to realize the following quantifiable benefits:

Consolidated Operations

Remedy Help Desk has greatly enhanced Stanford's ability to consolidate its operations across its 250 different support groups, organize its processes, and track its workflows, thereby decreasing resolution times and otherwise increasing the efficiency of its support operations. For example, by improving auto-assignment capabilities that allow more refinement of "skills-based" routing, ticket routing may now be performed "very precisely, getting the right cases to the right group on the first attempt – increasing 'First Touch' resolution." Moreover, Remedy has enabled Stanford to increase the efficiency of providing support, as both the size and scope of its operations has increased.

Stanford adapted the Remedy solution so as to enable certain groups, namely the Payroll Office and Student Financial Services, to be able to limit others from viewing confidential information. This adaptation enabled Stanford to support all groups on a single system, instead of requiring separate systems for those users with confidentiality issues.

Increased Intensity and Scope of Operations

While there has been slow, linear growth over time in the number of campus users, there has been exponential growth in the number of support systems requests. This is due primarily to increases in the breadth of system support use, and secondarily to increases in the depth of system support use. Breadth of use has increased because the number of different groups across the university that have been turning to the help desk for resolution of their problems has been increasing. Depth of use has increased because as users have discovered that the help desk is responsive to calls, more and more people have been turning to the help desk system to help with the resolution of more of their problems.

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Chris Lundin, Director of Services with Stanford's Information Technology Services (IT Services)

FAQs, so that such answers are directly available to support staff. Since these solutions are tied to specific Category-Type-Item combinations, they are readily available to support staff who are not yet familiar with Stanford's environment. This means that new or back-fill support staff can be more useful simply by using the canned Solutions."

Centralized Report Generation

Remedy Help Desk has enabled Stanford to centralize its support system and roll up reporting across all areas of the University. Stanford's consequent ability to generate centralized reports enables management to track measures, target areas for improvement, and take proactive steps to increase efficiency, and thus continue to provide top-notch system support and maintenance.

Improved Customer Satisfaction and Productivity

By providing end users with a single point of contact for all their requests, more users are increasingly using systems support for a wider variety of issues and problems. Furthermore, users who had previously been called upon for support by their peers and colleagues, in lieu of systems support staff, are now able to devote more of their attention to their core tasks.

FINANCIAL ANALYSIS

Most organizations are businesses that generate profits. In that case, return on investment (ROI) is calculated as the increase in organization's profitability attributable to the project at hand, relative to the costs of investing in the project.

However, universities do not generate profits, but rather, educational services. So, an investment which ultimately increases a school's efficiency translates into greater output of educational services, which cannot be defined in terms of profits. In this case, the calculation of ROI entails determining the avoided costs of generating the additional output of educational services, relative to the amount of the investment. That is, return on investment is the difference between the cost of the post-investment output under the pre-investment cost structure and that under the post-investment cost structure, relative to the amount of the investment. This ROI is equivalent to calculating a Paasche Price Index,

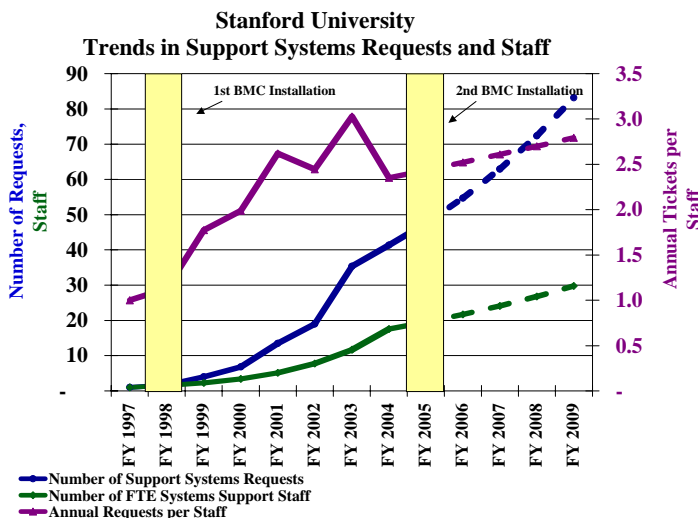
$$P_{ot} = \frac{\sum p_t q_t}{\sum p_0 q_t}$$

where p_0 represents the pre- BMC Software cost structure, p_t the post- BMC Software cost structure, and q_t the post- BMC Software level of services.

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$$\text{Standard ROI} = \text{Incremental Output} / \text{Incremental Costs} = A / B$$

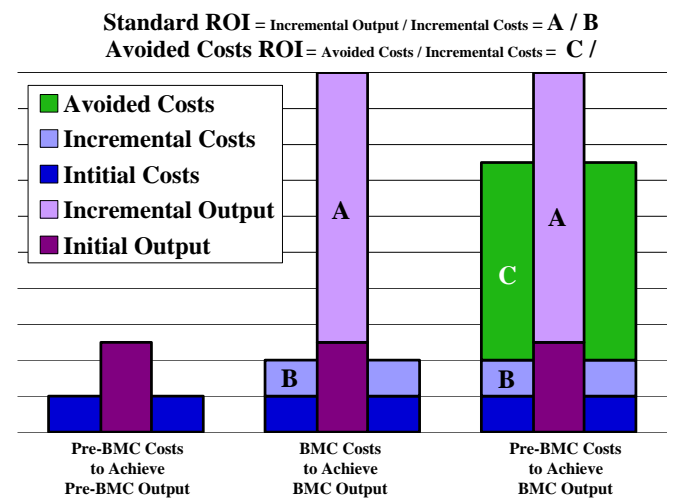
$$\text{Avoided Costs ROI} = \text{Avoided Costs} / \text{Incremental Costs} = C / B$$



Implementation of Remedy Help Desk has also enabled Stanford to realize the following unquantifiable benefits:

Decreased Staff Training Costs and Resolution Times

According to Chris Lundin, "Stanford is now populating the Solutions functionality with commonly-used answers from its various web-based



QuantAA, a business consulting firm, performed an avoided costs return on investment analysis using data provided by Stanford. Alternative scenarios were tested using less favorable discount rates, costs incurred and benefits achieved. The results of the analysis were relatively robust to these alternative assumptions.

RESULTS

In the case of Stanford's installation of BMC's solutions, there are two possible approaches to an ROI analysis: (1) view Stanford's implementations of BMC's solutions as one continuous project, or (2) view Stanford's implementations of BMC's solutions as two independent projects.

Under the *one project configuration*, the pre-implementation scenario corresponds to the FY1997 period and the post-implementation scenario corresponds to all years subsequent to FY1997.

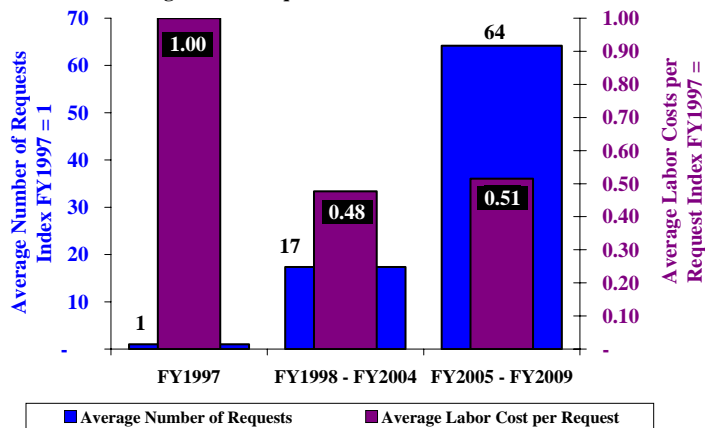
Under the *two project configuration*, there are two separate analysis to perform. For the first project, FY1997 represents the pre-implementation period and FY1998 through FY2004 represents the post-implementation period. For the second project, FY2004 represents the pre-implementation period and FY2005 through FY2009 (a five year project period) represents the post-implementation scenario.

In other words, the difference between the one project and two project configurations is whether savings during the FY2005 through FY2009 period are calculated relative to the period before Stanford adopted any BMC software solutions, represented by FY1997, or if the savings are calculated relative to the period but after Stanford adopted the first installment of BMC software solutions, represented by FY2004.

Stanford University Savings with BMC Software			
	1 st Period FY1998 \$ FY2004	2 nd Period FY2005 \$ FY2009	Overall FY1998 \$ FY2009
Payback Period	14.8 months	5.6 months	20.4 months
ROI			
One Project	9,640%	18,656%	13,511%
Two Projects	9,640%	165%	5,572%
Savings / Original Costs			
One Project	51%	48%	49%
Two Projects	51%	1%	30%
Decrease Labor Costs per Request			
One Project	52%	49%	49%
Two Projects	52%	-8%	5%

The majority of benefits derive from a reduction in labor costs needed to support technology operations. Tremendous increases in efficiency achieved by service providers after the implementation of Remedy Help Desk decreased labor costs per ticket by almost half while the number of tickets soared a hundred-fold.

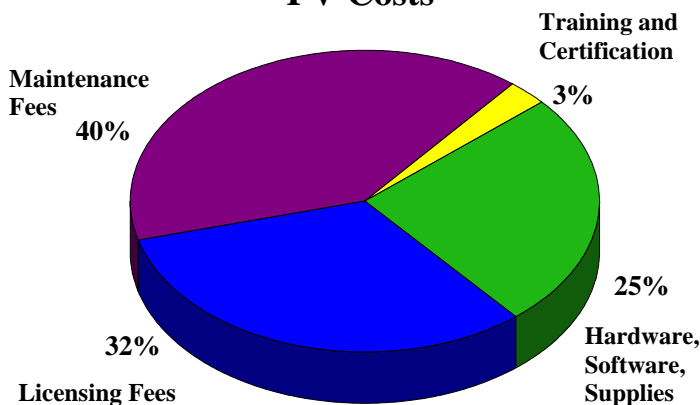
Stanford University
Average Period Requests and Labor Costs



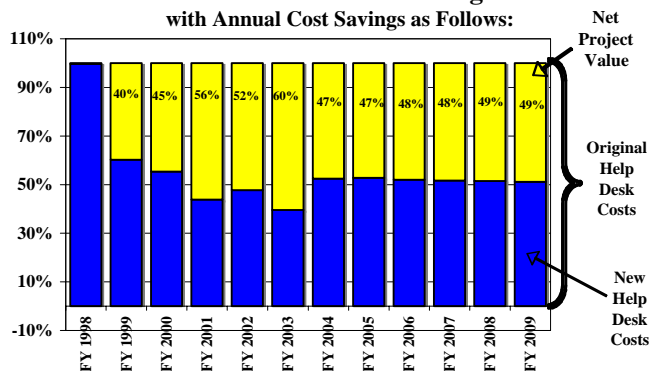
In other words, with BMC's solutions, Stanford's system support staff is able to solve exponentially more problems with a fraction of the staff that would have been required without BMC.

The costs required to implement the program are attributable to ongoing maintenance fees (40% of implementation costs); software licensing and professional services fees (32%); hardware, software, supplies and development costs required to implement Remedy Help Desk (25%); and training and certification costs (3%).

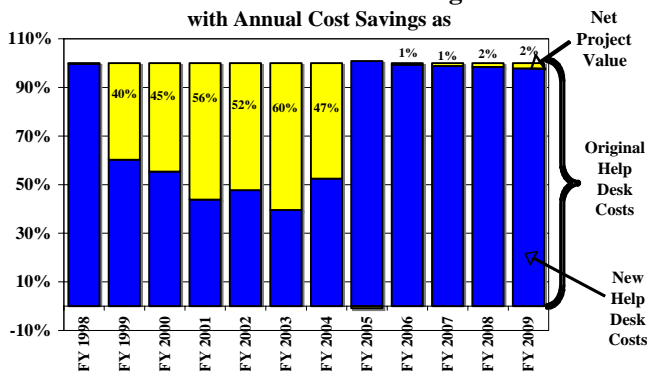
Distribution of Estimated
PV Costs



One Project Scenario
49% Overall Cost Savings
with Annual Cost Savings as Follows:



Two Project Scenario
30% Overall Cost Savings
with Annual Cost Savings as



About BMC Software

BMC Software, Inc. (NYSE:BMC) is a leading provider of enterprise management solutions that empower companies to manage their IT infrastructure from a business perspective. Delivering Business Service Management, BMC Software solutions span enterprise systems, applications, databases and service management. Founded in 1980, BMC Software has offices worldwide and fiscal 2004 revenues of more than \$1.4 billion. For more information about BMC Software, visit www.bmc.com