IDC ExpertROI® SPOTLIGHT

Using HP Application Lifecycle Management Solutions at a Global Aerospace and Defense Technology Provider to Reduce IT Costs, Increase IT Staff Productivity, and Improve Time to Market

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The security division of a leading global aerospace and defense technology company — one of the largest defense and security contractors in the world with more than 120,000 employees and reported annual revenue that exceeds $30 billion — deployed HP Application Lifecycle Management (ALM) solutions to increase IT staff productivity; reduce costs associated with hardware, software, bandwidth, and training; improve time to market for new releases; and enhance end-user productivity, leading to a three-year benefit of $7.8 million and a return on investment (ROI) of 222%.

Overview

After winning a $300-million-a-year Department of Defense contract, which required the security division to provide comprehensive management of a major application with more than 20 components, the company was motivated to implement a new IT management solution that would increase software quality assurance, improve performance testing, and successfully supervise and administer every fundamental element of the firm's application lifecycle management.

The division evaluated a number of approaches before determining that the HP Application Lifecycle Management suite of solutions would deliver the most consistent application quality and guarantee that every delivered application would meet the essential needs required by the business.

Business Value Highlights

Organization: Security division of a large global aerospace and defense technology company

Challenge: To increase IT staff productivity and enhance software quality assurance

Solution: HP Application Lifecycle Management, specifically HP Quality Center, HP Performance Center, and HP Application Security solutions

Benefits:
- Annual savings of $2.18 million from increased IT staff productivity
- Shortened time to market and cost reduction of $193,000 a year
- Three-year ROI of 222% with payback in 15.8 months
Although the company had a solution in place, it felt that the solution could not meet its requirements going forward. According to the director of IT, "With our new requirements, the division needed an improved solution that would increase our agility, decrease time to market, and improve our customer service. In particular, test management was crucial. We needed centralized testing, where all of us would have access to the test cases throughout the test. We also needed to automate performance and functional tests to reduce our costs."

**Benefits**

With the deployment of HP ALM solutions, the division has a standardized, integrated, and centralized platform for managing and automating the application lifecycle, which allows IT teams to plan, build, and release better-quality applications with fewer delays.

With HP Quality Center software, IT teams can launch applications confidently by catching and correcting defects earlier in the application lifecycle. The software helps with planning projects and tracking progress, requirements management, test management, and business process testing.

HP Performance Center allows the division to centralize testing resources and infrastructure associated with load testing and to standardize the testing environment. It provides a globalized load testing capability that enables IT teams to access centrally maintained resources via a browser on a 24 x 7 basis.

Additionally, since application quality includes not only functionality and performance but also Web application security, HP WebInspect and QAIInspect software help to standardize Web application security testing during QA testing.

By using these HP ALM solutions, the division has increased IT staff productivity significantly while reducing costs and enhancing end-user productivity. Figure 1 shows the breakdown of the annual savings.

**Figure 1.**

![Annual Benefits Pie Chart]

- User productivity, $285,774
- IT productivity, $2,179,252
- Cost reduction, $193,000

Total = $2.6M

Source: IDC, 2011
**Increased IT Staff Productivity**

Since the implementation of HP ALM, the division's 150 IT professionals are measurably more productive. Time to market for new releases has decreased by 35%. Total IT staff hours have been cut by 34%, including reductions of 33% in planning, 38% in coding, and 35% in testing. In addition, the division has realized IT staff hour savings of 23% in deployment and 33% in integration work with other applications.

The division has also reduced the number of IT staff hours devoted to functional quality management and service delivery management by 50%.

Finally, the division has lowered the number of IT staff involved with regression testing, which occurs four to six times a year, from 50 to 20 full-time employees, a 60% savings.

Collectively, IDC estimates that the savings from increased IT staff productivity total **$2.18 million** per year.

**Cost Reduction**

With the HP ALM deployment, the division has saved on IT staff travel as well as on hardware, software, bandwidth, and training costs. "We saved the cost of two servers we didn't have to buy," the IT director said. "We also saved on training. We only had to send one person, and now we have free online training. It's very user-friendly." Also, IDC estimates that by avoiding the cost of other tools and the previous software maintenance charges, the division has saved an additional $150,000 a year.

IT staff travel for testing has been cut dramatically. Before deploying the HP solution, IT staff would typically make 50 trips a month, with up to 22 days for each test cycle. The test cycle has been reduced to four days, on average, and the number of IT staff involved cut by 75%.

In total, based on customer data provided, IDC calculates that cost reductions have averaged **$193,000** annually.

**Enhanced End-User Productivity**

Before the implementation of HP ALM solutions, it would typically take 60 minutes to identify and fix problems with applications. On average, 33% of the 200 users would be impacted each time, reducing their productivity. With HP ALM, the average time to identify and fix a problem has been cut to 30 minutes, and the percentage of users impacted on each occasion reduced to 23%.

IDC estimates that the total savings have averaged more than 16,500 user-hours per year, which translates to annual benefits of **$285,774** from improved end-user productivity.

**Return on Investment**

IDC projects that the security division of this global aerospace and defense technology provider will realize a three-year ROI of **222%** from its use of the HP ALM solution. Payback on the investment occurred within **15.8 months** after the deployment was completed (see Table 1).
Table 1.

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<thead>
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<th>Three-Year ROI Analysis</th>
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<td>Benefit (discounted)</td>
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<td>Discount rate</td>
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Source: IDC, 2011

**IDC ROI Methodology**

IDC conducted interviews with the security division to quantify the benefits and investment associated with its deployment of the HP ALM software solution. IDC then created an ROI analysis from the results. IDC calculates the ROI and payback period in a three-step process:

1. Measure the benefits from increased IT staff and end-user productivity and other cost savings since deployment.
2. Ascertain the total investment.
3. Project the investment and benefit over three years and calculate the ROI and payback period. The ROI is the three-year net present value of the benefit divided by the discounted investment. To account for the time value of money, IDC bases the ROI and payback period calculations on a 12% discounted cash flow.

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