

Workload Automation

Cross-Enterprise Workload Automation Helps Reduce Cost and Complexity, Improve Service Delivery

Broadcom Receives Overall Positive Vendor Rating

82% of customers chose Workload Automation because it demonstrated better overall ROI

Workload Automation is used by **33** of the **Fortune 50** companies



Client Profile

Organization: HDFC Bank

Industry: Financial

Business Trends

The consumerization of IT challenges IT resources, staff and budgets. Eighty percent of executives say consumerization is increasing workloads.¹ With the right strategy and tools, you can reduce IT costs and boost productivity—re-allocating resources to drive innovation.

The role of the data center is rapidly evolving from simply supporting established business processes to continuously driving innovation through the optimal alignment of IT resources. The most effective organizations will progress to a fully integrated, dynamic data center where information systems are highly automated, applications execute across heterogeneous architectures and workloads are assigned to the best-suited servers.

It is no longer acceptable to restrict access to entire business applications during off-peak hours, while the necessary background processing happens.

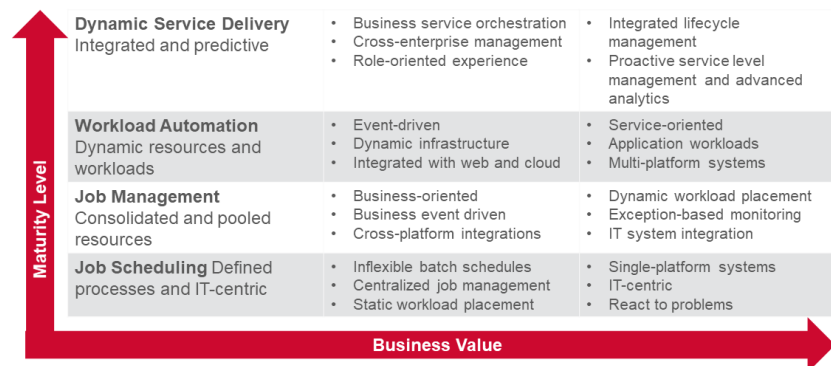
Business Trends (cont.)

When SLAs are missed, there is a direct cost to the organization, as well as an opportunity cost. The direct cost can usually be translated into a dollar value, while the opportunity cost is often expressed in terms of customer dissatisfaction.

As most IT organizations are required to provide 24x7 access to real-time data-driven enterprise applications, batch windows are constantly decreasing. It is no longer acceptable to restrict access to entire business applications during off-peak hours, while the necessary background processing happens.

Over the years we have seen enterprise workload automation evolve from the mainframe to distributed servers like Unix and Windows, then to include ERP platforms as well as other operating systems. Newer application delivery models such as Cloud and IT-as-a-Service are further disrupting the space and adding complexity to the underlying infrastructure. Moving from job scheduling methodologies to advanced workload automation, IT must closely examine the exact requirements of the complete workload automation solution as shown in the following figure.




Figure 1: Requiements for a Complete Workload Automation Solution



Customer Challenges

Different challenges exist at different levels in an organization as shown in the following figure. Each organization, needs a different solution.

Figure 2:The Value of a Complete Workload Automation Solution

	VP IT Operations 	Workload Teams 	Application Teams 
Challenge	<ul style="list-style-type: none"> Improve Service Delivery Increase Staff Productivity Reduce Costs and Complexity 	<ul style="list-style-type: none"> Simplify Complex Workload Management Deliver on SLAs 	<ul style="list-style-type: none"> Ensure Application Uptime Reduce Development Cycles
CA Value	<ul style="list-style-type: none"> Consistent, Reliable Service Delivery Increased IT Efficiency Accelerated ROI 	<ul style="list-style-type: none"> Single Point of Control Reduced Batch Windows Reduced Mean-Time-to-Recovery 	<ul style="list-style-type: none"> Increased Application Availability Ease of Use

What The Analysts Say

“Workload Automation solutions have been critical enablers of mission critical online business strategies and have helped improve business performance in a number of ways, such as improving mission-critical investment “readiness to trade” completion rates from 82% to 99.5% at a major financial services firm.”²

– Mary Johnston Turner, Vice President at IDC Research

Source: Workload Automation Emerges as a Business Innovation Engine in the Era of Cloud, Big Data, and DevOps, by Mary Johnston Turner, April 2015

CA Technologies Receives Overall Positive Vendor Rating

Gartner–Vendor Rating: CA Technologies, Cameron Haight, 26 March 2014³

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Solution

For Executives:

- Business driven approach to managing your enterprise helps you to better visualize, control and optimize cross-enterprise workloads, which can be triggered by virtually any business event.
- Advanced built-in automation capabilities are designed to reduce manual tasks and human errors which frees operation staff for higher profile, value-add projects.
- Ease of deployment and management helps accelerate return on investment and reduce operational costs.

For Workload Teams:

- Multi-platform scheduling allows you to manage and visualize a business process end-to-end across platforms from a central point of control.
- Advanced analysis, simulation and visualization makes it easier to understand the business impact of critical errors and facilitates improved communication and coordination to prioritize and respond to potential problems.
- Seamless application integration allows major business applications to be managed with greater reliability and flexibility and to be executed in sync with workflows running in the rest of the enterprise.

For Application Teams:

- Self-service gives end-users the ability to request and execute workload processing controlled by workload policy and governance processes. This helps provide higher levels of efficiency and control, while giving the business more control over their own services.
- Advanced viewing and reporting capabilities help improve decision-making accuracy and timeliness by leveraging comprehensive, current and critical workload content.
- Forecasting and simulation help improve workload application availability across the enterprise by simulating “what-if” scenarios using forecast analysis.

Business Impact

At HDFC Bank, IT is fundamental to the customer experience across all their banking channels and underpins the majority of financial transactions. With the bank’s strategic advantage, customer services, so closely interlinked with its IT capabilities, HDFC Bank wanted to ensure the availability and performance of its IT infrastructure. This, however, was becoming more and more difficult for the bank. Implementing Workload Automation helped in eliminating operational errors and reducing operational delays, thereby providing for timely release of systems and availability to HDFC Bank customers. Workload Automation was implemented across 82 applications, saving 40 operational hours daily through automation.

Sample Benefits from ROI Studies

Broadcom examined the total economic impact and potential ROI enterprises may realize by consolidating separate mainframe and distributed workload management solutions into a single, unified workload automation solution. Key results that companies can achieve include:

- IRR of 141%, ROI of 222% and a payback of 11 months
- 40% to 50% reduction in effort to manage workloads
- 32% to 37% improvement in IT administrative staff productivity

Broadcom can create custom ROI Business Cases upon request to assist our customers in identifying the potential quantifiable value our solutions can bring to their businesses.

Table 1: Summary of Benefits

Area of Savings	Impact Range
Incremental Revenue Gain from Increased Revenue Generating Applications Availability	17.5% - 22.5%
Improved IT Staff Productivity Improvements (Defining, Monitoring and Administration)	40% - 50%
Improved Productivity for Business End Users per Workload Automation	0.4% - 0.6%
Reduced Application Development Costs for Custom Workload Requirements	4.5% - 5.5%
Reduction in Cost of Replaced Software Maintenance Renewals	92.5% - 97.5%
Reduced Compliance Costs Enabled by More Complete Audit Trail Information	22.5% - 27.5%
Increased Availability of Processing MIPS as a Result of Better Use of CPU Resources (Mainframe Environments)	7.5% - 12.5%
Reduction in New Server Purchases (Distributed Environments)	60% - 70%

The impact ranges shown above are estimations derived from the analysis of benchmark data which is a composite of data derived from industry analyst published information, interviews with subject matter experts and experiential data from prior projective analyses with Broadcom customers. These values are not a guarantee of achievable results and will vary depending upon your current infrastructure, people and processes, as well as the appropriate, effective implementation, adoption, and use of the Broadcom® solution.

How Broadcom Can Help

- Comprehensive solution spanning mainframe, distributed and cloud environments.
- Proven scalability, reliability and performance. It is being used at 33 of the Fortune 50 companies.
- Single point of control from which users in either Application Development or Data Center Operations can define, monitor, control, manage and integrate workloads regardless of the processing platform, which helps simplify management and reduce operational costs.
- Unique event driven architectures dynamically initiate workload processes using passive event sensor technology to execute workload immediately and quickly, thus helping you meet your service level agreements.
- Reduce the need for custom application development thereby reducing expensive internal workload requirements. The breadth of workload capabilities can provide direct integration capabilities without the need for dummy jobs and needless file transfers.

For more information, please visit broadcom.com/products/mainframe/workload-automation.

1. Source: 2012 Consumerization of IT Survey, InfoWeek, February 2012

2. Techvalidate TVID: F49-B1B-172

3. Source: Gartner, Inc.; Vendor Rating: CA Technologies"; Cameron Haight, et al; March 6, 2013