Executive Summary

The full article describes how Buckman, a U.S.-based chemical manufacturer, redefined itself and its IT organization using "value" as the focal point for analysis. Buckman's Value Stream Initiative (VSI) used a micro-level, individual view of value as assessed by customers. The VSI project carried out a comprehensive and detailed micro review of the value of all key processes. VSI enabled Buckman's IT management team to discover the value being derived from IT activities and make necessary changes.

Value stream analysis has its roots in Lean thinking (an overview of which is provided in the full report). Buckman's management was attracted to a Lean approach because it would ensure the analysis looked across the entire organization and would specifically identify those activities that were producing value their customers would pay for, as well as those that were not producing value. Lean thinking also stresses, through a continuous improvement culture, the long-term focus Buckman hoped to achieve.

The VSI project was launched in April 2007 and culminated in 2011/2012 with continuous improvement (CI) and Lean Six Sigma (LSS) activities.

The VSI Project

Everyone in Buckman, from the CEO downwards, completed work activity logs (WALs) that identified all the activities in the processes in which they participated. This microlevel analysis fed into a micro analysis of the value of each activity, which supported decisions on whether to retain, improve or eliminate it. For each activity, employees described: its purpose; how it was initiated; the inputs and outputs and who received the outputs; the frequency of the activity; the time spent on it; and suggestions for improving the activity.

Following the completion of the WALs, each employee was interviewed by a member of the VSI project team and an external consultant to discuss the employee's activities in each process and to determine what value the activities and processes added to Buckman and its customers. The project team member and consultant then provided an initial categorization of the activities and processes (retain, improve, eliminate) and identified potential opportunities for improvement.

Next, the entire VSI project team reviewed the WALs and the interviewers' initial recommendations for process categorization, performed additional analysis, including further validation of customer value assessments, and finalized the categorization of activities and processes.

1 The full article is published in the September 2016 issue of MIS Quarterly Executive, available online at www.misqe.org.
The VSI project team then met with the head of each functional area, including IT, to discuss the findings for the people, processes and activities within that function. The functional head was given a month to evaluate the findings and present a plan for improvement.

**IT Changes Resulting from the VSI Project**

Analysis of IT WALs showed that the business felt that IT was not consistently delivering the products and services it needed. Projects often took too long, cost too much and failed to produce the benefits expected. It was clear that the IT organization needed to better understand what Buckman business management needed and be as efficient as possible. Several changes in the IT function resulted from the VSI analysis, including:

**A New Role for IT Managers.** IT managers now spend less time on technology and more time with business managers, understanding how to help deliver value to the company's customers.

**Elimination of a Major IT Activity.** Before VSI, IT had maintained a “knowledge” library, and employed information science professionals to manage and disseminate knowledge to the business. The VSI project showed that the library was not valued by the business or its customers, and it was therefore eliminated.

**Changes to IT Organizational Structure.** As a result of the VSI project, one level of the IT hierarchy was eliminated, more effectively connecting all of IT to its customers, as well as reducing cost and complexity and improving the value stream flow.

**IT Process Changes.** VSI analysis revealed that existing IT processes were not as effective as they should be and thus constrained value creation. IT management initiated long-term efforts to improve critical IT processes as well as the technologies employed to manage them.

**Technology-Specific Changes.** As a consequence of the VSI analysis, IT management determined that Buckman needed fewer technologies and fewer platforms. For example, separate ERP systems at each operating company were replaced by a single-instance, integrated, global ERP system.

**Benefits Realized from the VSI Project**

**Corporate Savings.** Company-wide savings from the VSI project included $2.6 million from reorganizing the IT, Operations and Global Marketing functions, and over $1 million from eliminating several non-value-added activities. In the two years following the project, Buckman realized additional savings of $14.2 million and saved an estimated 11,600 person-days.

**IT Savings.** The restructured IT organization was leaner, more productive and one level flatter, with 9% fewer managers, 7% fewer technical people and 9% fewer information scientists. These changes resulted in IT costs being about 10% lower in the following year.

**Cultural Changes.** Prior to the VSI project, the perception was that Buckman wouldn't fire anyone whose role was no longer needed or whose performance was inadequate. As a result, a culture of dependency and entitlement had developed. The changes resulting from the VSI analysis sent a clear message that Buckman was intent on becoming a high-performing organization and that every employee had to be a high-performer whose role could be tied to providing value for the company and its customers.

**Lessons Learned from Buckman's VSI Effort**

**Reacting to Employee Concerns about VSI.** The VSI team frequently observed anxieties among employees who were being asked to document and assess the value of their work. To ease these concerns, the team spent a great deal of time communicating the importance of the VSI work and the need to invigorate the company to ensure its viability for the long-term benefit of all stakeholders.

**Eight Practices that Worked Well.** 1) Frequent communication from the CEO; 2) Frequent communication from the VSI team; 3) Well-trained project team members; 4) A superior project management discipline; 5) User-friendly process for data collection and analysis; 6) Objective, data-driven decision making; 7) Focus on weaknesses in performance management; and 8) Focus on improving change management.

**One Practice That Didn't Work Well: Lack of a Change-Management Methodology.** Although the VSI project team spent considerable time and energy focusing on managing change, it did not have a formal change management methodology that would have provided a clear approach to actually making the organizational changes. This deficiency has now been rectified.

In conclusion, a VSI-type initiative is not a “quick fix” nor is it for the faint-hearted. Value stream analysis is a major undertaking that requires a significant amount of time and effort. Buckman’s experience, however, shows the potential benefits that can result both for the business and IT from a successful VSI approach.