

Kellogg School of Management

Kellogg Technology Network (KTN) Spring Summit White Paper

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Insights

Shared Challenges and Strategies

We share pain points. Most industries share common IT management challenges and success strategies.

Driving Growth and Profitability

Think big, start small, scale fast. Demonstrating value from small wins in the beginning validates your assumptions and builds a strong case for large scale adoption and sponsorship commitment. Another successful strategy is informal benchmarking – to look for and adopt successful ideas from other industries.

Driving Efficiency

Move machines around. The focus should be on process optimization and meaningful process improvements rather than process automation. Digitizing an existing bad process to incorporate newer technology does not add business value.

"You can't go out and target something that isn't going to move the needle."

Steve Stone, CIO of Lowe's

Cutting Operating Costs

Sometimes, less is more. Consolidating vendors and utilizing the volume discounts from fewer vendors, minimizes systems and technologies and is a successful strategy for lowering operational expenses. Another consideration is to consolidate the procurement of services. Leveraging a vendor's flexibility to lower operational expenses in favor of the increased capital spend can be used as a tool for striking a balance between capital and operational spending – especially when budgets are tight.

Project Ownership and Accountability

Business must own the business outcomes, but often does not. IT must deliver the system and work collaboratively with the business to ensure the solution delivered is what they need. The business side is in a better position to deal with change management and define the business case for the project. IT provides opportunities that may not be acted upon.

Communicate! Communicate! Communicate!

Teach others to speak our language. There is a need to have an IT marketing function. It is important to know the market that your IT is serving, from the business constituents to external customers. It is our role and responsibility as IT leaders to help our business understand the IT language and its complexities.

Governance

Keep score. A transparent governance process with balanced score cards is essential to deliver on the promise of IT. Such a process encourages factual and collaborative decision making verses a "whoscreams-the-loudest" approach. Successful leaders review the decision making and portfolio prioritization process periodically to make sure that IT stays aligned with business strategy.

Talent Management

Keep staff engaged and excited to avoid high turnover. Identify smart and loyal performers within your organization and train them to adapt the *most* critical skills. Leverage complimentary vendor programs (i.e. 'lunch and learn') to keep your staff involved in and informed of emerging technologies.

"We were improving operations to make processes more efficient, but essentially we were improving the quality of healthcare services that NMH provided."

Tim Zoph, CIO of Northwestern Memorial Hospital

Executive Summary

The inaugural KTN event, titled, "Driving Growth, Profitability and Efficiency through IT," convened information technology executives from diverse industries — including healthcare, retail, government, finance and energy — to share best practices and discuss challenges unique to IT leadership. During the one-day, intensive dialogue, which included a key note by Lowes' CIO, Steve Stone, CIO panel discussions, and break-out roundtable discussions, participants tackled issues facing IT leaders and shared insights that led their companies to achieve competitive gains.

Specifically, participants discussed how to manage the complex global supply chains and improve operations to compete in low margin businesses, and enable competition with large global entrants. Participants also voiced perplexities around key issues such as dealing with shortages of skilled staff and efficiently managing inventory to reduce the working capital. Building successful business-IT partnerships and selecting and executing upon the high impact projects given resource constraints, emerged as the key success factors. Participants gained an appreciation for how many of their challenges were shared by others, and how their peers leveraged different approaches to solve similar problems.

Senior IT executives from ArcelorMittal FCA, Banco General, British Petroleum, Cisco Systems, Department of Veterans Affairs, Grainger, Johnson Outdoors Inc., Lowe's, Northwestern Memorial Hospital, Pepsi Americas, Safeway Inc., Briggs Corporation, SIM Chicago, Teradata and TotalWorks Inc. participated in the event.

Challenges and Growth Strategies

Participating executives identified a range of challenges, most of them cutting across industries, and shared strategies for tackling these challenges. Discussion highlights included building effective IT-business partnerships, selecting the right projects, effectively managing the IT operations to reduce cost, identifying the right innovation opportunities, and enabling business agility.

The general consensus was that it is challenging to utilize the full potential of IT if business views IT as a cost center and, in some extreme cases, a road block to change. To manage extensive product lifecycles and projects that span across business units, it is critical to have business leaders as sponsors

who understand and appreciate the efforts of IT. People who don't view IT as a black box! Relationships become even more critical when times are tough.

Participants discussed success stories of how IT-led initiatives resulted in competitive differentiation. The key to success was identifying and executing upon the right non-disruptive growth and innovation opportunities. Some participants felt that small improvements to process and operational efficiency provide an opportunity to think out of the box. For example, process improvements and time savings can provide staff the opportunity to focus more on quality and the auxiliary services that competitors do not provide.

On the operational side, one major challenge discussed was the shortage of skilled staff especially with the retirement of baby boomers and a lack of interest in science and math. There was a concern that with the rising labor costs in developing counties, the off-shoring cost will continue to increase. Rising costs may lead to a situation where firms end up with a remote and possibly sub-standard labor force at a price that is close to the in-house cost. This puts even more focus on the training and



retaining of in-house talent. The industry as a whole also needs to address the perception of job losses due to outsourcing in order to overcome fear among the younger generation and encourage them to pursue science and computer-related degrees.

"I'm a firm believer that even in tough times, you must continue to innovate."

Steve Stone, CIO of Lowe's

Growing constraints due to the dismal U.S. economy was also a topic of discussion.

"I'm a firm believer that even in tough times, you've got to continue to innovate," said Steve Stone, CIO of Lowe's. "And with the effects of the sub-prime mortgage meltdown still rippling through the world's economy, times are tough indeed."

Stone, like others, said that the housing slump is more than just a housing slump, and that as consumers buy primarily out of necessity, retail managers must find other ways to spur growth.

"IT might be just the place to start," said Stone.

Other Lowe's IT challenges have included building a skilled workforce that's able to answer customer questions on the selling floor and balance professional skill with tasks assigned, said Stone. At Lowe's, solutions for these areas were derived by the business, but were enabled by technology.

"IT is in a unique position," said Stone. "We can see things all across the company."

Citing his own experience, where he oversaw the creation of a tracking system for "out-for-repair" items that saved the company hours of labor per week, Stone emphasized the importance of choosing projects that have immediate, measurable effects on the company's productivity.

"You can't go out and target something that isn't going to move the needle," added Stone.

Participants also discussed security and compliance issues that are becoming even more prominent due to the rise of enterprise web 2.0 and social networking. Advancements have created added risks to enterprise contents and intellectual property. Data and content security is no longer limited to the enterprise boundaries, but has extended to the reach of the internet. Modern day employees have access to a wide variety of tools and avenues in their personal lives and tend to bring that to the workplace which, in the absence of a well defined corporate policy, can potentially lead to the misuse of corporate soft assets.

Cross Industry Best Practice Exchange



Johnson Outdoors

To put focus on growth through innovation, IT at Johnson Outdoors conceptualized the idea of a device that measures a snowboarder's air-time.

"I looked at On-Star technology for autos and thought 'How can we apply this technology to our outdoor recreation products at Johnson Outdoors," said John Moon, CIO of Johnson Outdoors. "It made perfect sense to provide On-Star type service to the people engaged in outdoor activities like hiking or skiing" he added.

It was a creative and cool idea that excited snowboarders and prompted a competition to jump the farthest. IT took the idea all the way from concept to R&D, marketing and production. It was this out of the box thinking that led to business growth.

Northwestern Memorial Hospital

Northwestern Memorial Hospital improved the quality of service by improving IT operations.

"We were improving operations to make processes more efficient, but essentially we were improving the quality of healthcare services that NMH provided," said Tim Zoph, CIO of Northwestern Memorial Hospital. "Quality is a function of the efficient processes in some way. If nurses have easy access to relevant information they are more likely to better perform their job," said Zoph.

Creating Effective Business Partnerships

Participants agreed that gaining trust and working collaboratively with business partners is extremely important in making IT relevant to the business. Gaining and maintaining the business commitment and sponsorship throughout long project lifecycles is key to successful project management. From an execution perspective, a common point of view was that although IT has a huge stake in the success of

any project involving IT, the business should own the project's ultimate success. At times, IT becomes overly focused on the technical aspect of projects and ignores critical issues like change management and training. Usually business is in a much better position to deal with these issues, leaving IT to focus on the technical and operational implementation.

Every project should be a viewed as a business project and not an IT project. There is a need to have transparency and accountability within IT to help the business understand what IT does, and it also helps build credibility. IT should do a better job of documenting and delivering the business value. Expectations and achieved results should be clearly stated and published. Documenting the baseline before taking up any business process improvement is a critical success indicator. In the absence of a documented baseline, the improvements and results achieved are 'subjective'.

Executives weighed in on the alignment of business strategy and IT execution. There was collective agreement, backed by independent research, that IT can play the strategic role only when it directly reports to the CEO. It enables IT's involvement in strategic decision making. Effective portfolio management and smart project prioritization is a direct result of staying close to the business strategy formation. IT departments reporting to a CFO or COO tend to be more operational than strategic and do not make significant contributions to business growth. Instead, they remain focused on operational efficiencies.

"I looked at On-Star technology for autos and thought 'How can we apply this technology to our outdoor recreation products at Johnson Outdoors.""

John Moon, CIO of Johnson Outdoors

A number of companies shared their experience of strengthening the IT-business relationship by using customer relationship managers as a buffer. Many companies are moving towards the concept of business architects. It is a role that blends the business process understanding with technical complexities. Safeway has created a model of one-on-one IT-business relationship managers and it is very successful.

Most of the participating companies do not currently use a dedicated marketing function within IT to promote its brands and services. However, executives recognized having such a function. Perception is key and if the business views IT as an operational tool, they are less likely to support the innovation efforts.

Another important aspect of brand creation is an effective communication strategy. IT has to recognize that technical staff typically do not possess these skills naturally and there is a need to have experts taking care of it. Usually, the technical staff tends to use a language that is not well understood by the business. However, some raised the question whether this is all up to IT to speak in a language that is understood by the business. How much responsibility does the business bare when it comes to proactively learning the IT speak and complexities? An 'IT for business' training program could be a reasonable compromise.

Selecting the Right Projects Given Resource Constraints

At Safeway, alignment with business strategy is the number one criteria when it comes to prioritizing projects, even if the return on investment is compromised in the short term. Once prioritized based on the business strategy, projects are evaluated against IT capabilities to come up with a yearly master execution plan. IT also follows a separate process to secure funding for the shared infrastructure and services.

Participants identified how project prioritization criteria should be reviewed periodically to make sure that IT stays aligned with the business strategy. It is up to IT's governance function to define a set of rules that drive the strategic decision making in a consistent manner.

Northwestern Memorial Hospital has taken the prioritization process down to the operating level, as opposed to doing it at the executive level. This has helped reduce the resistance to change, especially for operational efficiency projects.

Sometimes it is effective to take operational improvement projects along with the mandatory corporate requirements. At ArcelorMittal, IT took advantage of SOX compliance initiatives to promote IT standards and streamline processes. IT also helped with managing the disparity in the IT infrastructure.

Finally IT should move beyond being an order taker and should identify growth opportunities that will challenge the business to realize IT's full potential.

Summary

Takeaways from the summit included lessons about devising and executing strategies to cut costs and drive efficiency, growth and profitability. Participants also considered the advantages of communication to strengthen the business-IT partnership — even of having a dedicated IT marketing function to educate others about the complexity of the technology function. By the summit's conclusion, participants gained an appreciation for how many of their challenges where shared by others, and how their peers leveraged different approaches to solve similar problems. The Spring Dialogue provided a highly constructive environment for executives to freely discuss the challenges and gain understanding of how others in the room have addressed those challenges.

About the Kellogg School

The Kellogg School of Management at Northwestern University was founded in 1908 and is widely recognized as a global leader in graduate business education, drawing MBA students from more than 50 countries on six continents. In 2006, *Business Week* magazine ranked the Kellogg School the number one graduate school of business for marketing and the number three school, overall, in the United States. Since the biennial survey began in 1988, the Kellogg School has been ranked number one overall, five times. To learn more, visit www.kellogg.northwestern.edu.

About the Center for Research in Technology & Innovation

Founded by McCormick Tribune Professor of Technology Mohan Sawhney in June 2001, the Center for Research in Technology & Innovation (CRTI) at the Kellogg School of Management plays a pivotal role in defining, understanding, and solving challenges facing managers in driving business innovation and maximizing the value of their technology and intellectual assets. The center studies technology's role in improving business performance, promoting organizational effectiveness, driving innovation and creating competitive advantage. Top faculty members address management challenges using a breadth of professional and academic expertise, offering a synthesis of these perspectives in their research and teaching. The teachings of CRTI faculty members have global impact via the Kellogg School's executive MBA partner programs in North America, Europe, the Middle East and Asia. To learn more. www.kellogg.northwestern.edu/research/tech/

Author Biographies

Mark Jeffery is the Director of Technology Initiatives in the Center for Research in Technology and Innovation at the Kellogg School of Management. His research, teaching, and consulting focuses on enterprise performance management, unlocking business value from marketing and IT, and customer relationship management (CRM) strategy and execution. Mark has an active research program at Kellogg and has recently surveyed 252 Fortune 1000 firms on strategic marketing performance management, capturing \$53 billion of marketing spend. He has also previously surveyed 179 Fortune 1000 firms and 44 Federal Government agencies on IT management best practices, capturing \$70 billion of IT spend.

Mark directs multiple Kellogg executive programs including *Managing Customer Relationships for Profit* and *Driving Strategic Value from IT*. He also teaches in custom executive programs at organizations including Microsoft, DuPont, Sony, Nissan, Phillips, and the CIA. In 2008 Mark launched the Kellogg Technology Network, an intense knowledge sharing forum for CIO/CTO and VP level executives. He has more than 30 publications in scientific and technology journals, and three book chapters including the chapter on return on investment analysis in the forthcoming Wiley 2008 Handbook of Technology Management.

Mark holds a Ph.D. in theoretical physics from Drexel University (1991) and an MBA from the Kellogg School of Management (2001).

Manoj Rana is a research associate with the Center for Research in Technology & Innovation. Manoj is the Deputy Chief Technology Officer (CTO) of Blackwell Consulting Services and a freelance consultant. With more than 13 years of IT and consulting experience, he is responsible for the IT strategy and product roadmap for Blackwell's clients in the financial, insurance and consumer packaged goods industries. In this role, Manoj strives to expand Blackwell's portfolio to include business process management (BPM), business intelligence and enterprise Web 2.0 solutions.

Manoj's expertise lies in streamlining business operations and business transformation through BPM and implementing new business architectures. He has focused recently on measuring, documenting and demonstrating the business value of IT through a number of client projects including modifying the claims processing procedures and streamlining customer service processes for healthcare companies.