by Emily Atkins Planning for business means planning for technology



Technology Trends Virtual Roundtable

integration was the byword when we convened a virtual roundtable with a number of technology-savvy members of Canada's supply chain management community and asked them for their opinions on the technology trends to watch. Our panelists emphasized the vital importance of having systems that communicate with all the functional areas of a business to permit accurate forecasting. They weren't just talking about enterprise planning software-they all highlighted the importance of planning the technology buy and implementation. When you are looking at implementing a system that will affect your entire organization, you had better do some serious planning before starting out.

What is your company doing to keep pace with changes in technologies? If you're not sure where you stand, read on - our panelists' answers are revealing, and may provide just the impetus you need to examine your own needs in the coming year or two.

Meet the panel

Murray Morgan is managing director of IBS Canada, the Toronto-based Canadian arm of IBS AB, the Swedish provider of integrated Web-enabled SCM software and services. Morgan has been working in the enterprise software field for more than 20 years. Jim Kilpatrick is a principal with Deloitte Consulting with a specialty in supply chain management. Marc Wulfraat is managing partner with KOM International in Montreal. Robert Gillelan is the president of the Toronto Chapter of the CRMA, and works with G2 Group's consulting team. Chaim Silberstein is the president of CS Consulting Associates Inc., a Toronto based consulting firm. He specializes in ERP, lean manufacturing, supply chain and

resource management and the application of the theory of constraints (TOC). **Ken Cowman** is familiar to MM&D readers as our Strategic Edge columnist. He is also managing director of PRONTO Software Canada. Garth Dean is general manager of Microsoft Business Solutions Canada.

MM&D would like to thank each panelist for taking the time to think about and answer our questions. We appreciate the obvious effort that went into taking part in our virtual roundtable.

Tech trends top 10

Step one in our virtual roundtable was to pose questions to our panelists by e-mail. We started by asking them to identify the coming technology trends in their area of expertise, and to explain which ones they thought would be the most influential.

Jim Kilpatrick: Contrary to popular belief, many companies have not yet completed their ERP implementations. The ERP system provides the transaction backbone and broad application footprint on which other technologies will integrate. Beyond the initial implementation effort, there is still a lot of work to be done in leveraging the system's capabilities, upgrading to the latest version, and developing strategies to extend and enhance this footprint. A second trend is the implementation of advanced functionality to the ERP solution. A third trend is the extension of processes to key trading partners. Fourth is supply chain performance management systems. And fifth is enhancing supply chain execution through warehouse management systems and transportation management systems.

The implementation of Supply Chain Planning systems is potentially the most influential on the future of supply chain management. Many companies have



Murray Morgan



Jim Kilpatrick

become very good at executing, but not many companies have become good at planning. The benefit of planning is that you are working smarter, not harder, and the business cases for improving supply chain planning can be very substantial. In addition, solid supply chain planning processes and systems across your company are a pre-requisite to effectively integrating your planning and collaboration process with key customers and suppliers, in a truly scalable and efficient manner.

Chaim Silberstein: My picks are: the application of systems and technology to enhance functional integration and increase the productivity of people; use of systems and technology to become lean, not mean; learning to do more with less; the application of technology to enable companies to compete across the entire supply chain; the use of technology and other tools and techniques to enhance time-based competition; using technology to create knowledge-based learning organizations; and, re-engineering the business to become Internet-centric. These trends are motivated by: increased competition from low-cost producing countries; the need to be able to handle change as a new business constant; the desire to obtain real benefits from investments made in systems and technologies in the past; and more sophisticated and demanding

Murray Morgan: The top trends will be: Software integration-too often companies are entering the same information in multiple software solutions to perform essentially one task. Data and user security-data is probably at its most vulnerable now. Many small to medium-sized companies have little or no security and run a risk of total loss of information or at least corrupted data. Securing the data, and ulti-



Chaim Silberstein





Marc Wulfraat

mately the users, can be a very time consuming, complex effort. PC-based solutions and their users are still a long way from the security measures that are already in place in the mid-range computer Systems like the IBM iSeries, but in reality, they need to come of age.

The ease of using software and hardware enterprise software solutions do not evolve overnight. Although probably rewritten to newer standards, many functions and features take years of development. New features and functionality usually come at the cost of additional complexity. On one hand, customers are demanding more comprehensive solutions, but on the other hand they don't want to have to hire a consultant to help them configure the new solutions

To find the right balance is not an easy task, but by adopting pre-configured industry settings and tables, the users should find these complex solutions much more user friendly. Wireless technology although in use by larger companies for a number of years, the cost to the small and medium businesses is starting to drop significantly, thus enabling the smaller companies to take advantage of this technology.

The most influential of these will probably be software integration. Businesses need to be able to rely on information flowing across all aspects of their accounting and supply chain solutions. Software integration will provide business with the greatest ROI in the shortest time-span.

Marc Wulfraat: Supply chain management technology investments that enable real bottom line results will continue to dominate technology investments over the next several years. Manufacturers, wholesalers/



Robert Gillelan

distributors and retailers all seek to improve service levels, inventory turnover, productivity efficiency and planning/forecasting.

Manufacturers will invest in supply chain solutions that optimize resource planning and asset utilization (i.e. buildings and equipment). Manufacturers are particularly interested in accurately tracking and predicting customer demand patterns to adjust the flow of goods more precisely.

Robert Gillelan: The trends in Customer Relationship Management (CRM) technology that will have the most impact in the near future are embedded CRM components and Microsoft's new CRM offering. Embedded CRM is CRM software and customer data that has been integrated into another business application, corporate portal or company performance dashboard. As a technology development, embedded CRM should provide the best return on investment because of the way the technology improves workflow across areas not traditionally used to CRM. Not all departments, shipping for example, need all the functionality of the main CRM application, but they would need access to the customer data and the work they perform as a part of the customer's purchasing lifecycle needs to be tracked.

Ken Cowman: First, and definitely the most influential, is the enabling of management by exception technology such as Digital Dashboards. Managers do not have the time to sift through multiple printed reports to discover how well their Key Performance Indicators (KPI) are doing.

Second: XML Reporting. This enables "drilldown" abilities to discover what the data elements are behind a summary report and allows those who need to know where the information came from.

Third: Effective use of integration engines to allow complementary product to be enabled in a cost-effective and timely manner. Technology organizations are being driven to deliver more for less.

Garth Dean: Connectivity is likely the most influential trend in CRM, as it will change the way companies interact with their customers and business partners. It will continue to spur the development of new solutions that help businesses take advantage of the full power of the Internet through Web services. Web-based portals will become increasingly important in helping users throughout a company access the business information and processes they need to do their work. Other trends to watch include: integration; CRM customized to the needs of specific vertical industries; and CRM services tailored for smaller companies.

The benefits of adopting new technologies

Our second question was what benefits will accrue to companies that adopt the selected technologies. Silberstein says the benefits will enable companies to use technology to compete more efficiently and at a lower cost; shorten the decision to

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implementation lead-time, while allowing quick response to changing circumstances; and enhance the employee's quality of life, and create an environment in which people feel free and willing to develop and contribute to their company's success.

Kilpatrick looked at it from the point of view of satisfying customers, which, he says, is largely influenced by supply chain management. For example, the ability to ensure that the right product is in the right place at the right time requires that the company develop an accurate forecast and then execute to that forecast, including appropriate buffers for uncertain events. Therefore, investing in supply chain management technologies, combined with the proper changes to processes and organizational structure, can have a profound impact on a company's profitability, return on assets and customer satisfaction.

According to Morgan, a feature-rich and easy-to-use, fully integrated enterprise software solution running on a secure hardware environment can easily become the most important investment a business can make. By adding an advanced technology like a wireless network, flexibility, productivity and accuracy will be benefits that will allow the business to expand rapidly, all the while meeting customer demands with little or no disruption.

Dean also emphasizes that CRM systems improve business productivity by helping salespeople and customer service representatives perform their jobs more effectively. Management, sales and service teams get up-to-date information to make informed, agile business decisions.

For Cowman, implementing technology to facilitate MBE will assist in the

continuous improvement process, and allow the enterprise to be managed more effectively by quickly identifying issues before they get out of control.

Wulfraat believes that the benefits will vary by sector, with manufacturers looking for gains in resource planning and asset utilization, while distributors will look for solutions to enable trading partner compliance and better turnover, and retailers will invest in technologies that will optimize service by tracking consumer patterns.

How to prepare?

When we asked what preparations were required, the answer was a resounding: Do your homework! The key to preparedness is having detailed knowledge of your area of the business—how it works and what outside influences affect it.

Silberstein says take the time to do the hard thinking, the strategic planning—don't just fight fires as they start—and never stop communicating the new vision for the organization in a language that is meaningful to all employees. Morgan suggests that managers should fully document all policies and procedures within their departments, to avoid being caught off guard trying to defend procedures with little or no backup as to why the department does what it does in any particular circumstance.

Similarly, for Kilpatrick, the key is to ensure that new technologies are installed on a foundation of integrated and efficient practices. Companies should develop a solid roadmap for how the management of the supply chain will evolve so that investments in new technologies build on one another.

Gillelan believes the best preparation

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Ken Cowman

is to have a comprehensive customer strategy. Managers should know who their most profitable and most loyal customers are, as well as segmenting them by their likelihood of buying from someone else. Knowing costs is also vital, he asserts, for any ROI to be calculated. If activity costs are not documented ahead of time, there is no possibility of determining the cost benefits and performance value of any new technology implemented.

Cowman and Dean agree that it's vital for managers to educate themselves on the information technologies available. Dean suggests focusing on the aspect of connectivity when considering software, while Cowman says look at how IT can help with management by exception.

Watch out for pitfalls

Our final question to the panel was what pitfalls should managers watch out for when selecting technologies to adopt. As with any business project, the adoption of new technology can be fraught with dangers that threaten an eventual ROI. While our panel hit on a variety of areas, there was wide agreement on a select few. Several panelists warned managers about employees' fear of change. If a technology project is not properly explained, and staff taught how to use it, then it is doomed, if not to failure, then at least to underutilization. In the same vein, Dean mentioned that the complexity of the project is a factor in its success, and also in management's ability to get employees to adapt to the new technology.

Two panelists, Cowman and Silberstein, discussed the importance of accuracy in data collected and used. Decisions are only as good as the data upon which they are based, so be sure that the data collection processes used are sound and implemented correctly.





Garth Dean

Wulfraat focused on ensuring that poor or inefficient processes be corrected before any decisions are made to invest in new technology. "No technology solution is a silver bullet if it ends up automating bad processes, or becoming highly customized, or if associates are not properly trained on the software," he says.

As a corollary to Wulfraat's line, both Silberstein and Gillelan stressed the importance of formulating an overall supply chain strategy that will allow the company to ensure its technology investments are targeted at the right opportunities at the right time. "Companies that view these projects as technology projects only will not make the necessary other changes to their business processes or their organization to sustain the benefits, Gillelan says.

Somewhat surprisingly, cost was mentioned only once. And yet with new technology projects eating up vast budgets, and sometimes failing, this is surely a pitfall that must not be overlooked.

Lesson learned: think strategically

If planning is the key to successful implementation of new technology, then strategic thinking is the foundation upon which that planning rests. Over and over, our panel talked about the importance of having and sharing--the vision of what the technology is supposed to accomplish. To see that big picture, the first step must be to step back, get away from the details and look at the entire playing field. Where does the company want to be? What are the objectives for the next few years, not months?

Once this hard thinking is done, then you can move closer and look at the interactions among processes that will make or break your supply chain's operations. Inserting technology into the operation must be a means to an end, not the end itself. Our panelists worked on the assumption that the objective is to introduce efficiencies into the supply chain. This is why integration is so important-if the different functional areas of an organization can communicate with each other, sharing data in a timely fashion, then the whole organization will run more smoothly, generating cost savings, better customer relationships, and ultimately a healthier bottom line.

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