SUPPLY CHAIN DIGITALIZATION

IT MANAGEMENT CHALLENGES

By IMD Professor Ralf Seifert, with Richard Markoff
The digitalization of supply chains is happening quickly. Much of the attention is centered on innovations like cloud computing, software-as-a-service (SaaS), and advanced analytics. But there is another aspect to this rapidly-changing landscape: companies must rethink their IT management approaches, from their purchasing strategy, to the interaction between IT and business processes.

The expanding vendor ecosystem

Just a few years ago, most IT purchasing functions relied on a handful of large vendors to manage their IT supply chain solutions. The most prominent example would be SAP, of course, which offers a complete suite of functionalities, even to large and diverse companies. Depending on the company's priorities and its competitive advantage, SAP would usually be complemented with a management execution system (MES), or warehouse management solution (WMS), supplied by a niche IT vendor with an attractive product.

There are many advantages to consolidating vendors. Firstly, focusing spend increases penetration into the vendors’ customer base, and creates leverage for price negotiations. Secondly, companies can influence the development priorities of vendors; rather than modifying the core vendor product to suit their needs, a company’s needs can be integrated into the next version of the vendor’s core package. There are also significant technical considerations. Fewer vendors and solution packages are conducive to fewer servers, interfaces, and data incompatibility issues. This leads to lighter IT infrastructure, which lowers the cost of maintaining, deploying and enhancing a suite of supply chain solutions.

Not everyone is fully satisfied with this model, however. Users — the business functions which use the solutions operationally — inevitably must compromise. A minimalist approach to IT, and using SAP for most functions, usually means foregoing specialized, niche applications which are tailor-made for specific functions. For example, production functions typically prefer smaller vendors which offer packages which are uniquely-designed for MES; they would argue it better suits their specific needs: improved material flow on the shop floor, or improved tracking of equipment efficiency. Distribution teams may feel the same way. Quality service teams, too, may agree, as they seek superior traceability.

But digitalization is changing that dynamic rapidly. The functionalities associated with digitalization are coming online too quickly for the large, one-stop-shops like SAP. The expectations of omni-channel have brought to market order management systems and distribution solutions, which are designed to manage the complexity and demands of working with ecommerce fulfilment specialists, front-end systems, and the data needed to power CRM. Another example is the end-to-end supply chain visibility and optimization, data and demand integration capabilities, which provide optimization and traceability. Even if the large ERP vendors are offering services in these areas, the speed of evolution is such that they are skeleton solutions when compared with innovators. Companies are under pressure to expand their vendor base, and it is coming not just from users, but from the fact that companies must adapt their business models to meet new expectations.

Companies with functions like IT management, purchasing and business process, are adopting a range of practices as they try to adapt. One vertically-integrated energy company is taking an interesting approach. It understands that it must adapt and move away from trying to limit the IT vendor ecosystem. To manage the transition, the leaders of the business functions have agreed on a core of 15-20% of business functions that the company considers to be its competitive advantage. These are the functions that warrant the increased complexity and cost to support smaller, specialized digitalization vendors.

The remaining functions are not necessarily condemned to settling for the pre-packaged ERP options. These processes are transitioning to what the company considers the "industry standard" solution: the most common, readily available, reasonable tradeoff between niche player and price/complexity. The company works with influencers like Gartner and industry groups to determine the industry standard solution for each business function. This combination of industry standard and targeted, niche leaders is forming the company's roadmap for the future. The IT purchasing function is now rethinking its sourcing approach. Rather than looking at the raw spend they used to have with large ERP players, they may now use the fact that they are a large customer for a smaller vendor (though with less raw spend) to try to influence the vendor development roadmap.
There was understandable resistance at first. No one likes to be thought of as not working in a function that is a competitive advantage. One of the keys to succeeding in an approach like this is full engagement and support from senior management. A disciplined, consistent message, and adherence to the policy is needed.

Rethinking the role of IT

One large, multi-national consumer goods company realized that adapting new vendor digitalization solutions required rethinking the way the company’s support center was organized. It wasn’t enough to have business process owners and an IT function that was accountable for solution delivery, training and improvement, to provide requirements and expectations. They found that the IT teams lacked the business expertise to appreciate the potential benefits offered by new vendor solutions, and the business process owners were often too consumed by other responsibilities and not sufficiently exposed to supply chain digitalization. To address this, they created a new function, the Supply Chain Digitalization Director, to help bring IT, and the business process owners, together to discover the possibility of new innovations, and explore their impact on both business practices and IT management.

Another major consumer goods company is also embracing the IT management changes brought on by digitalization. The rapid expansion of powerful niche tools has led the company to realize it had put too much emphasis on process automation, and not enough on the user. In response, the company is not only actively deploying best-in-breed digital solutions, but building central cockpits so that the user has the best of both worlds: niche tools that allow them to benefit from exciting new IT solutions, but with a central portal from which to move freely between tools. For example, a customer care representative can use the cockpit to move from the order management B2B portal, to the CRM tool, to chat with a customer, then to the ERP to see the orders in treatment, and finally to the TMS to check order delivery status. A demand planner may have the most powerful, collaborative planning platform to work with customers, and easily move to the integrated data management tool to change a planning parameter. Indeed, this company has embraced the digital future so much, that it uses crowdsourcing and social media to allow its community to propose solution enhancements, and to vote for their favorites.

However, both companies said that tension still exists between user desire for specialized vendor offerings for their function, and the IT imperatives for managing complexity of data, and interfaces and maintenance.

Takeaways

The possibilities made possible by the digitalization of supply chains are dizzying. It is an exciting time to work in the field and be part of a genuine revolution in how companies plan, source, make and deliver their goods. But companies must rethink much of their internal IT management:

- The vendor ecosystem and cost management expectations of support solutions
- What business processes merit attention: new frontiers cannot be pushed everywhere at once
- How new IT vendors are identified and selected, with buy-in from all functions
- How to bring it all together to control complexity for the user

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