Market Insight: The Impact of Cloud Computing in Retail

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Retail, like virtually all other industries, is awash with stories about the emergence of cloud computing. Much has been written about the ability to remove cost or to greatly speed up implementations. However, the retail executive tends to be very sceptical of such claims. Early wins for SaaS initiatives are largely based on BI and analytics initiatives. However, these early efforts were not so much about developing a transformational approach to software as they were a way of getting proofs of concepts launched. Many of these proofs of concepts have now emerged as fully operational projects, while still operating in a SaaS model. From this small base, the industry could potentially greatly expand its use of the cloud, thereby creating opportunities for T&SPs and rattling long-standing software dynasties based on classic software licensing models.

Industry Drivers of Cloud Adoption

What are the major issues pushing retail decision makers toward cloud computing?

The key early successes for cloud-computing solutions in retail have been based around critical retail functionalities. To date, there's been a limited number of wins. Still, the future looks bright for cloud offerings. A recent Gartner survey indicated that by 2012, 19.7% of retailers expect to acquire the majority of their hardware and software assets through technology-as-a-service offerings. That's a significant level of increase from where retail is today.

The following is driving this growing interest in cloud:

- Rapid deployment of needed functionality — Whether it's a new mobile-commerce solution, new analytic packages or a Web-based planning tool, retail technologists understand that they need to enable needed functionality in weeks and months, not years.
- Lower-cost operating models — Few retail CIOs expect to see any significant increase in their IT budgets for the near future. But the pace of new IT initiatives to support rapidly evolving business models is actually accelerating, forcing retailers to re-evaluate how IT spending is allocated.
- Scalable across many locations — The emergence of mobile commerce and social media as a high-priority business initiative is driving more IT assets to the store. However, a Tier 1 retailer can have thousands of stores, making traditional software model far too expensive to maintain.
- Ability to use operation budget versus capital spending — One result of the "Great Recession" has been that virtually all capital expenditure (capex) spending has undergone tremendous scrutiny. Cloud-computing models can turn those capex projects into operations budget expenditures, allowing them to launch under much less scrutiny.

Impact on Vendor Product Managers or Vendor Marketing

Cloud computing offers retailers the ability to free themselves from the burden of crippling integration costs, legacy applications and speed to market with new functionality. That's clearly a very attractive message for an industry struggling to catch up to the sophistication of a typical customer, who will most likely have more computing power in his or her hands than the store associate serving them. However, retailers have a history of adopting technology very slowly and methodically. Product managers developing strategies for cloud solutions need to align their marketing messages to the key drivers outlined above. It's critical to understand that few are looking to pilot the next breakthrough technology rather preferring technology that has stabilized.
Industry Inhibitors to Cloud Deployment

The largest barrier to cloud adoption could very possibly be definitional. It is still early in the adoption cycle for cloud services in retail, but the industry is catching on fast. In the 2010 Gartner/RIS News retail sector survey, 24% of the respondents indicated interest in acquiring software via a SaaS model, while 11% indicated interest in cloud computing. The difference here is simply how one defines the cloud. Gartner considers SaaS to be a component of cloud services. Additional barriers to adoption of cloud computing in retail include:

- The risk-averse nature of the retail industry — Few retailers want to be early adopters of any technology. They perceive little value in taking those risks.
- Security — This is the major issue preventing large-scale adoption of cloud services in the retail sector. Many retailers still believe that shifting more data to the cloud will increase the risk of stolen information and other disruptions.
- No immediate perceived improvement in functionality — A major challenge getting infrastructure as a service (IaaS) and portfolio as a service (PaaS) pilot projects launched is that driving a cost containment strategy that doesn't provide an immediate improvement in a customer-facing application. Without a business unit champion that can tie these initiatives to improved customer experiences, they will have difficulty getting to the funding stage.
- Loss of perceived control over IT assets— Retailers have a historic aversion to giving up control of their IT assets. Unfortunately, cloud projects hit directly on this long-standing retail insecurity.

Impact on Vendor Product Managers or Vendor Marketing Executives

Given the massive amount of buzz that cloud computing has generated, product managers and marketing executives could believe the retail industry is ready to adopt cloud solutions on a widespread scale. That would be a mistake. Given the early nature of cloud computing in retail and the industry's conservative approach to technology adoption, the inhibitors will block a sale if not properly overcome. Technology and service providers need to create marketing messages and campaigns designed to overcome each of the inhibitors identified above. The inhibitors are initially stronger than the drivers.

The bottom line is that cost removal is an attractive story, but a perceived security flaw in the solution will eliminate any possible advantage. Retail executives, as a whole, are extremely risk-averse and are looking for a reason to say no to any new technology initiative. Sales strategies can and should have a dual focus. The business unit executive is strictly looking at functionality improvements. This group isn’t as risk-averse or as worried about security as the CIO. But without a champion in this group, no initiative can move forward. The IT team is worried about security and loss of control. Marketing messages need to be tailored to each group for success in retail.

Near-Term and Long-Term Opportunities for Cloud Computing in Retail

Which aspect of the cloud-computing market represents the most important areas of retail deployment?

Gartner sees three distinct aspects of cloud computing to be SaaS, IaaS and PaaS. All three can and, most likely, will ultimately impact the retail industry. But in retail, SaaS has taken hold as the other two struggle to gain significant mind share with business unit leaders as well as with CIOs. This is based on a classic retail adoption pattern of going after functionality that impacts customer experience rather than investments in non differentiating infrastructure. For IaaS and PaaS to catch on, there needs to be significant cost-reduction gains. If not, retailers will pass on these investments in lieu of more-promising opportunities in customer-facing initiatives or analytics tools that provide insights into senior retail executives.

To date the functionality retailers are looking for consists of merchandising, BI and e-commerce.
CONCLUSION
Product managers at T&SP firms have a unique opportunity to bring a set of innovative solutions to market at a time when retailers are ready to embrace new delivery systems. The key message for them to lead with is that cloud solutions offer speed to market with new functionality around retail processes such as merchandising, BI and workforce management. This way, critical support from business unit leaders can be obtained. Cost reduction is an important supporting strategy for the business case justification, but in most cases it will not be the dominant driver. Finally, security will be a key obstacle to overcome.