

Ideas to Solutions



Introduction

The retail industry in the past few years has been a witness to an exponential rise, a recessionary downfall and a subsequent comeback. The industry today is thriving and has been recording new heights and opening up new business avenues and channels. The growth of the industry however has been plagued by several challenges. This whitepaper attempts to clarify these challenges, predominantly the IT challenges, by offering an understanding of cloud computing, and the business benefits it can bring.

IT Challenges in Retail Industry

Today's retail industry faces numerous IT challenges, prominent among which are:

- Inability in maintaining synergy between peak and off-peak computing capacities
- Nominal IT investments and an expectation of higher ROI from it
- Inefficiency and a lack of in-house IT expertise
- Proficient recycle of existing IT investments and the simultaneous revenue generation from it
- Lack of expertise in supporting hybrid and critical computing and IT services
- Streamlining of existing hardware, software and business systems

In addition to the aforementioned broad IT challenges, fluctuating dynamics of the retail industry also call for the implementation of robust IT solutions and systems. The retail industry is a continuously evolving industry which is currently witnessing significant growth buoyed by the introduction of novel strategies and technologies and the simultaneous emergence of new business channels. In this industry retailers persistently strive towards enhancing efficiency and minimizing expenses. However, changing lifestyle of consumers in addition to changes in consumer purchase behavior has resulted in cascading changes in the retail sector. With such changes and fluctuating market conditions in place, retailers are increasingly facing difficulties in managing their large application portfolios.

Management of application architecture and business environment is also becoming more and more complicated and expensive.

With a dynamically changing retail space, IT departments of retailers today are forced to support vertically-focused applications with overlapping functions. Further, in retail, packaged solutions lead to complications in information management due to the distributed nature of infrastructure and the presence of multiple architectures. The problem is further amplified as retailers continue to add new capabilities to their portfolio and simultaneously enter new market areas. As a result of all these, retailers find a tough time negotiating the challenges of IT complexity as well as managing IT enhancements.

Cloud Computing and the Retail Industry

Cloud computing, which is essentially infrastructure-as-a-service, can go a long way in mitigating several challenges faced by the retail industry today. Cloud computing allows users to access and use computing capabilities via the Internet, regardless of the physical location of the capabilities being accessed.

Cloud computing, which is still in its emergent stage, focuses primarily on the following key areas:

- Virtualization of Infrastructure and Services
- Automated Service Provisioning
- Flexible And On-Demand Scaling of Computing
- Fulltime Availability Of Services
- Enhanced Connectivity with Business Process Owners And End Users

Large sections of the retail industry are already implementing cloud solutions in their quest for sustenance and profit generation. Retailers today are not only implementing cloud-based solutions to enhance and support their critical business functions but to achieve higher profiles at both consumer and business ends. Cloud computing is unlike other technologies, which retailers have adopted over the years to sustain themselves. With cloud computing retailers can easily achieve margins and profits from lower investments and usage based pricing, which are two important characteristics synonymous with cloud computing.

Cloud solutions also offer retailers the flexibility to scale up or scale down business processes and functions in no time simultaneously supporting their existing IT environment and architecture, without disturbing the overall business framework. Such flexibility ensures retailers to focus more on IT deployments for everything from pop-up stores to more permanent expansions, in times of favorable market conditions. Additionally, it is frequently seen that in the retail space, both test and development environments are intermittently overlooked. Retailers incur substantial expense on the maintenance of these environments and as a cost cutting measure let such environments sit idle until next usage. However with cloud-based solutions retailers can strike a balance and ensure minimal expense with rapid automated provisioning and de-provisioning of services.

Further, in times of crisis, scaling down is just as easy and quick when business conditions change and a new approach is needed. Considering today's retail space, the adoption of cloud-based solutions and services offers the best and guaranteed way of generating quick ROI from new business initiatives as they necessitate less up-front capital investment in hardware, software and deployment. Retailers today operate in highly saturated and continuously fluctuating market conditions wherein retailers strive to make investments to suit their busiest operating times. Cloud solutions ensure retailers this with per-usage pricing, which enables them to use an application as per demand at any point of time thereby achieving savings and preventing loss during off peak times. Further, per usage pricing also enables retailers to alleviate IT expenditure from their overall budget line and ensure a sound internal financial ground for investment in other mission critical projects.

It should be noted that implementation of cloud-based solutions do not necessarily eliminate the need for integrating such applications with existing IT architecture. However, the expanded availability and features of such solutions ensure enhanced flexibility and a faster time to market for retailers. With cloud-based solutions in place, IT departments of retailers can particularly focus on scaling up support for a new venture in less time in comparison to conventional application architectures. Further, with speedy deployment capabilities, retailers can enter into new territories and expand their market presence. As a result cloud solutions offer retailers that extra bit of luxury to experiment in new areas or unfamiliar markets as the expense involved from an IT standpoint in installing architecture is substantially less. Low investments also ensure minimal losses as retailers can easily pull out from non-profitable areas or wrap up businesses if a marketing program does not bear the desired results.

Retail functions that completely align with cloud computing include the following:

- Analytical business functions related to merchandising which require a varying range of computing power. Cloud solutions can help such business functions in benefit by ensuring storage as well as server virtualization.
- Back office functions of stores running on desktops. Such functions can easily benefit from Cloud solutions, which can alleviate costs from desktop virtualization.
- Processing card based payment channels. Clearance and settlement of card-based payment in retail can be migrated to the cloud for ensuring privacy and compliance with PCI-DSS.
- Development and testing of new retail applications. Cloud solutions can ensure robustness of new applications in retail, which can be developed and tested from an infrastructure-as-a-service.

Working Effectively with Cloud Computing

Cloud solutions and services can go a long way in alleviating some of the major IT challenges faced by the retail industry today. However, retailers need to carefully judge their requirements when adopting cloud computing techniques, solutions and services to suit their IT needs and business functions. Retailers should take a phased approach towards the adoption cloud computing, with one phase complementing the other. Retailers also need to keep in mind that the initial phase should ensure them capability and capacity establishment so that the subsequent phases ensure viability. The first phase should also lay emphasis on those cloud characteristics such as virtualization and automation for re-provisioning of existing technologies. Retailers should accurately judge their cloud readiness by identifying and prioritizing cloud initiatives so that pain areas can be catered to first.

Retailers also should compare the benefits of cloud solutions with those of conventional dedicated services before deciding on adopting cloud. Retailers need to carefully evaluate the software services provided by application service providers (ASPs) compared to the software services that are available on the cloud.

Conclusion

In simple terms cloud computing can completely turn around the dynamics of today's retail industry by substantially reducing IT expenditure while simultaneously managing both new and existing systems. Cloud computing can also help retailers simplify the complexity of IT infrastructure, data volume and computing capacities as they go exploring new business models or adding new business capabilities to their portfolio.

All in all, **Cloud computing ensures retailers an array of benefits; however, they should not only evaluate cloud computing as a viable solution for minimizing operational expenses but also as a solution for simplifying business processes and collaboration with partners and suppliers.**

About Xavient Digital, powered by TELUS International

- Headquartered in Simi Valley, CA, Xavient Digital, powered by TELUS International (Formerly Xavient Information Systems), is a leading provider of global IT and engineering services and solutions. Since its inception in 2002, Xavient has grown to be a tier-one IT Professional Services and Solutions provider for telecommunication, broadcasting, manufacturing, retail, and healthcare companies.
- It is the preferred transformation partner across product and vendor evaluation; business process re-engineering; outsourcing and off-shoring; product implementation; custom solution development and IT professional services for several Fortune 1000 companies.
- Xavient leverages its proven expertise in Global Delivery Models with centers of excellence in Application Development, QA & Testing, Managed IT Infrastructure services and IT Application & Production environment.



Our Locations

Corporate Location

CALIFORNIA

2125, Suite. B, Madera Rd
Simi Valley, CA 93065
Main Line: 1.805.955.4111
Fax Line: 1.805.955.4144

CANADA

2 Robert Speck Parkway
Suite 750, Mississauga
ON L4Z 1H8
Phone: 1.905.361.9816

GEORGIA

2 Ravinia Drive
Suite 500
Atlanta, GA 30346
Main Line: 1.678.801.9966

VIRGINIA

13800 Coppermine Rd,
Herndon, VA 20171

COLORADO

9800, Mount Pyramid Court
Suite 400
Englewood, CO 80112
Main Line: 1.303.900.0700

WASHINGTON

800, Bellevue Way NE
Suite 400
Bellevue, WA 98004
Main Line: 1.425.442.6629

NOIDA

54, and 24 NSEZ, Phase II
Noida – 201305, U.P. (India)
Main Line: 91.120.4743000,
91.120.4532000

BANGALORE

First Floor, Ittina Design Center,
Plot No. 380, 3rd Block,
16th Main Road, Koramangala,
Bangalore-560034