BRANCH I.T. AS A CUSTOMER EXPERIENCE ASSET

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The strategic move towards an omni-channel customer experience takes different forms in different industries. For "bricks and mortar" retailers, it's about building a totally integrated customer experience that mixes in-store with on-line purchasing to redefine the customer experience. How that customer experience is finally fulfilled, either in store or via home delivery, is the customer's decision. For some sectors of the hospitality sector, for example hotels and restaurants, the act of consumption takes place at a physical location. Others in hospitality sectors, for example cafés and restaurants, are a mixture of the two models, with home delivery growing rapidly. The common element across all of these sectors, particularly for those who operate medium to large organizations with multiple branches, hotels or outlets, is the importance of the physical location in defining and differentiating the customer experience. And increasing, in-branch IT capability is the foundation on which customer experience strategy must be built.

For many experienced IT professionals, the idea of viewing branch IT as a key strategic asset and potential source of competitive advantage may seem a contradiction in terms. Historically, branch IT has been seen as a brake on the business, at best costing a disproportionate amount of time and effort to manage, and at worst restricting the ability of the business to implement innovative customer engagement strategies.

But there is a growing realization that the branch network must be better integrated into the IT estate, so that it can be better used to optimize the customer journey and leverage brand equity. Investment is required to achieve this, but, given the margin pressures of this sector, it must be achieved in a cost-effective manner.

Fortunately, new developments in cloud managed hybrid IT make this integration and development possible with a level of cost efficiency that opens up new opportunities for IT professionals to exploit.

THE OMNI-CHANNEL CHALLENGE

Omni-channel customer experience – the combination of face to face and on-line channels to deliver a differentiated customer experience - is on the radar for IT leaders across the retail and hospitality sectors today. The challenges are similar across the different sectors, but with important nuances in implementation and delivery.

Branch based retailers moved on-line many years ago, but are realizing that their major competitive asset – their branches – must be integrated with their mobile and on-line customer experience if that asset is to be leveraged to the full. This may involve using tablets for customer interaction and mobile payment, so that staff can get out from behind the counter to engage with the customer anywhere in the store. In addition, in-store interaction with shoppers' personal mobile devices, whether to make personalized immediate offers, or track purchasing behavior, offers the opportunity for even greater levels of service and convenience.

In the restaurant sector, leading chains are looking at better interaction with customers beyond mobile device based payment. This includes delivering time and price promises to customers via mobile devices. Take-out restaurants are now using beacons to identify pre-order customers as they arrive, and enhancing customer service through table based ordering and recommendation, based on past customer history.

In the hotel sector, omni-channel opportunities often lie in the realm of enhanced personalization of the customer interaction. These range from using mobile devices to deliver recommendations for services, such as spa bookings, room service, or concierge services, and then facilitating ease of order, to mobile based check in and check out, to loyalty based reward mechanisms.

As organizations seek to interact with their customers and clients in new ways, branches, hotels and outlets are an integral part of an omni-channel engagement model. And this requires the seamless integration of the customer journey across all platforms, including social, mobile and physical, which in turn requires the existence of a branch IT network that can support this journey.

THE NEW REQUIREMENTS FOR BRANCH I.T.

New omni-channel strategies cannot be supported by old branch IT solutions. Requirements have changed, and the IT solution must change to support them and to ensure a frictionless transactional process. Here are some of the key requirements which are causing IT professionals to reconsider their branch IT strategy:

• Advanced Applications

New advanced applications are required to support the new customer experiences. These new applications need to run across multiple device types and may rely heavily on advanced graphics and advanced payment mechanisms. Topical examples include location-based services using GPRS to track and push offers and information to customers via their mobile phones as they move around a store or sit down in a restaurant. These applications require a virtualized infrastructure that can efficiently, flexibly and reliably support multiple applications without inbuilt latency issues.

• Integrated Analytics

An omni-channel strategy requires that analytics are collected across all channels, and integrated to give a complete view of customer preferences and behavior. In-branch data collection is developing rapidly, with new advances such as RFID sensors, beacons, video, or any range of devices that collect and exchange data on people, products and objects, or the environment. These devices generate masses of data. There is an inherent need to store and analyze this data locally and in real time, with periodic communication and reporting to a centralized control point.

• Speed of Action and Business Flexibility

Retail and hospitality outlets are increasingly dynamic environments. The days when customer promotions are static and not personalized are disappearing. We are now in an environment where offers and incentives need to be updated and pushed out to outlets frequently, quickly and effectively, along with all the supporting marketing materials and customer information. This either implies an untenable workload on distributed IT resources, or effective centralized management of distributed virtualized applications that can be spun up, modified, and spun down as the business demands.

And personalization often needs to take place in real time, with offers being presented to customers based on the analysis of their buying behavior during each visit to a retail or hospitality outlet. This requires powerful local analytics and recommendation delivery in next to real time.

• Cloud Integration

In order to deliver an end-to-end customer journey across all environments, in-branch IT needs to be integrated with capabilities resident in the public cloud. In many ways, it should be invisible to the consumer whether they are being served by local IT capability, or by cloud based applications.

• Local Data Storage Needs

In many cases, data must be stored and manipulated locally for policy, privacy or control reasons. The more data that is collected locally, be it from beacons, sensors, or other devices, the greater the requirement for efficient local storage.

• Data-heavy Apps that Can't Reliably Operate Over the Network

Some data-heavy applications must run locally to deliver the performance, responsiveness and reliability required. For instance, in-branch personalized design applications, where shoppers can specify room layouts, or smart mirrors for convenient clothes shopping, may be best served by on-site applications and servers that are coordinated on a scheduled and regular basis. Other examples in hospitality include real-time data pushed to customers' phones on meal delivery time/wait time which require on-premise infrastructure to work effectively. This is particularly the case when network connections do not deliver sufficient bandwidth or operate reliably enough to facilitate remote access to data-heavy cloud or centrally held applications.

• Consolidations of Network Functions

Network functions like firewalls, routers and WAN optimization have already been successfully virtualized. The benefits of consolidating network and IT functions on remote sites could deliver many benefits for the branch organization. In addition to the space saved in combining two, three or four physical technology boxes into one, there are power savings that lead to a reduction in CO2 emissions. It should also result in saving on infrastructure cost as multiple virtual software components running in the same server should cost less to acquire than separate appliances with separate management systems and separate support agreements.

MANAGING BRANCH I.T. COMPLEXITY

The first and natural reaction of many IT professionals when contemplating new branch IT requirements is to wonder how on earth they are going to support such advanced functionality, distributed across multiple sites, without any local support resource. Remote shops, restaurants and hotels already present a disproportionate IT support challenge, and the thought of moving from today's simple branch IT to the virtualized, hyper-converged infrastructure required for advanced local applications is worrying indeed, not least because many IT teams today do not have the staff and range of skills, nor the budget, to build, trial and deploy their own virtualized and managed branch infrastructure.

These concerns have led many to operate a cloud-first strategy, which affords many benefits, including a reduced emphasis on infrastructure and a greater focus on application and business process. However, a cloud-first strategy is not a cloud-only strategy. Many of the new and innovative applications (as well as most legacy ones) require IT infrastructure on the remote site. Consequently, although the public cloud has a significant role to play in branch IT, it does not support some of the most demanding business requirements of the omni-channel customer experience. This may feel somewhat ironic after all the effort spent to remove servers or reduce their footprint.

This is fueling demand for locally deployed advanced business applications and data storage. The challenge is to deliver state-of-the-art, often complex and usually dynamic IT to remote sites, centrally and efficiently managed, without the need for expensive on-site expertise, or without over-taxing already stretched centralized IT resources.

CLOUD MANAGED SERVER - NEW OPPORTUNITIES FOR BRANCH I.T.

So, if the public cloud isn't a panacea, and old on site solutions don't cut it in the new omni-channel model, and local support remains a defining issue, where does the retail or hospitality IT professional look for answers?

Two major and interconnected developments — hybrid cloud and hyper-convergence — are allowing us to redefine servers in a way that meets the needs of advanced in-branch IT capability without the advanced local IT skills.

Hybrid cloud allows organizations to choose what IT functionality remains locally on site and what is delivered from the cloud. With hybrid cloud, you have a server on your site, but it exists as a private cloud integrated with the public cloud and managed through the cloud. It's a server that sits on the site with all the advantages of control and responsiveness. But it doesn't require any manual intervention: It is always kept up to date, right-sized and secure through the cloud by experts.

Hyper-convergence is now migrating to the smaller site. It's an architecture that tightly integrates compute, storage, virtualization and other IT functions into a single appliance, based on industry-standard hardware. It's like bringing the benefits of the cloud to the premises, with flexible and expandable capability easily available without expensive and complex IT projects being required.

This brings significant cost and flexibility benefits, resulting in advanced functionality for remote branch IT, and is much easier to commission and support.

These technologies come together in Cloud Managed Servers. With Cloud Managed Servers, capacity can be put back on-site at a low cost with a high SLA. By using Cloud Managed Servers based on a hyper-converged software platform, organizations can obtain their own flexible cloud on site without compromise. When combined with a cloud-first strategy, this provides an excellent base for running the business and experimenting with new applications to enhance the customer experience.

Cloud Managed Servers control all the infrastructure of the server, including hardware, firmware, virtualization and management. It manages compliance, security and is kept current 24/7. It takes responsibility for cloud service integration, backup and disaster recovery. It also manages all the standard workloads like Active Directory, File and Print Server. The Cloud Managed Server provides the Infrastructure-as-a-Service (IaaS) virtual machines that a central cloud would provide, except they are on site. This enables the business to choose which applications to run as well as where they run, without worries of latency, performance or reliability.

In effect, Cloud Managed Servers provide an advanced in-branch infrastructure which can be integrated with the on-line presence to deliver an omni-channel customer experience. And this can be achieved without complexity, and without the need for local, on-site branch expertize, or regular and costly site visits from the central IT function.

THE NEW NORM

There is a need to invest in the on-site, local IT needed to deliver an “any-channel” complete customer experience, maximize brand leverage and differentiate customer offerings, while making the purchasing experience as frictionless as possible.

In-branch IT investment should take account of the emerging need to collect, store and analyze customer data at the remote edge of a network to enable unique customer interaction.

The fundamental shift in cost-effective, high-functionality, local IT delivered by Cloud Managed Servers is a game-changer in the world of the omni-channel customer experience. They offer new opportunities for IT professionals to deliver advanced branch application capability, integrated with on-line and cloud based channels, and a less complex IT infrastructure without the need for extensive distributed IT expertise. There is growing acceptance among thought leaders that this approach will become the new norm in this rapidly expanding arena.

ABOUT SAGENET

SageNet designs, implements, manages and protects fast, secure and reliable networks that empower organizations to achieve their core business objectives.

SageNet's integrated network infrastructure, dedicated personnel and innovative products and services suite have set the standard for Managed Network Services. Combining longstanding traditions of industry leadership, innovation and a passionate commitment to customer support, SageNet manages communications at more than 160,000 locations. The company's customer base represents many of the nation's leading retail, healthcare, financial and energy companies, as well as public utilities, state lotteries and government agencies.

Today's SageNet offers a uniquely broad and deep understanding of local and wide area network technologies and leading-edge cybersecurity solutions, all backed by a nationwide field service organization and three 24/7 U.S.-based Network and Security Operations Centers.

Headquartered in Tulsa, SageNet also has regional offices in Washington, D.C., Atlanta, Chicago and Philadelphia.

ABOUT HPE

Hewlett Packard Enterprise is an industry leading technology company that enables customers to go further, faster. With the industry's most comprehensive portfolio, spanning the cloud to the data center to workplace applications, our technology and services help customers around the world make IT more efficient, more productive and more secure.

ABOUT ZYNSTRA

Zynstra is a software company, formed by experienced technology and business entrepreneurs. We have a track record in creating enterprise grade software, and delivering it into successful operation inside some of the most complex and rigorous IT organizations in the world.

Our experience has shown us how to delight our customers - with a single-minded focus on how software can help them grow and save them money. Zynstra are the winners of the 2015 IT Industry Awards for infrastructure innovation of the year.