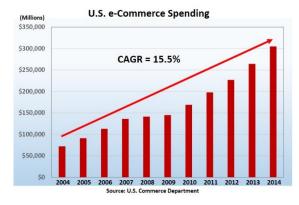## Revitalizing Retail with Wireless Technology

Welcome again to *Straight Talk*, one of the ways Coranet shares perspectives on important issues and opportunities in business communications.

Few would dispute that the Internet has profoundly changed the world we live in – whether in terms of instant access to information, global connectedness to virtual communities of like-minded individuals, or the near-endless supply of digital content and entertainment.

In addition to evolving the way we work, socialize, create and share information, the Internet has also brought about major changes in consumer buying behavior. The launch of Amazon.com in 1995 marked the beginning of a growing preference for on-line purchasing – a shift that many in the traditional retail sector are still coping with some 20 years later.

Although significant consumer spending still occurs through the physical brick-and-mortar business model, e-commerce sales have shown steady growth at the expense of traditional retailers. *Forrester Research* estimates that annual e-commerce spending in the U.S. is expected to reach $370 billion by 2017. Putting this into perspective, this amount of consumer spending would historically have utilized about 925 *million* square feet of store floor space that now is no longer needed.

U.S. e-Commerce Spending
(Millions)
CAGR = 15.5%
Source: U.S. Commerce Department

Changing Expectations for the Purchase Experience

In 2015, management consulting firm *Accenture* conducted a study of the purchasing attitudes of 1,000 U.S. consumers. In a somewhat surprising outcome, the study found that the overwhelming majority would *actually like* to continue store-based purchasing. There was a catch, however, in that digitally savvy consumers – baby boomers and millennials in particular – expect that in return for their business, merchants will deliver a 'personalized' in-store shopping experience.

While some expectations around personalization understandably differ from individual to individual, the Accenture study clearly identified the top two experiences that in-store purchasers are seeking – both of which occur through the shopper's mobile device:

- **Real-time notification of in-store promotions and offers**

- **On-the-spot suggestions for complimentary and alternative products**

In a companion 2015 study of 2,000 supply-side executives, Accenture found that the move toward increased customer personalization had already become a business priority, with well over half of the participants reporting improved financials from their personalization initiatives.

81% Indicated that providing a personalized experience is one of their top 3 customer relationship priorities

60% Have already seen a positive ROI from their personalization efforts

It's clear that delivering on these consumer expectations is a win-win. For purchasers, it means an engaging in-store experience that is tailored to their specific needs and preferences. For the retailer, it presents an opportunity to increase per-visit spending while also building customer loyalty and competitive differentiation.

Retail Fights Back with a Ready-now Solution

The bottom-line recommendations from the Accenture study were straightforward – in order to compete with on-line alternatives, companies that depend on in-person transactions must embrace new business models for personalization, and then implement them through carefully selected technology.
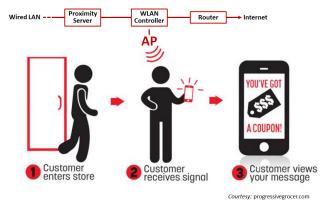
Here at Coranet, the findings and recommendations of the Accenture studies ring true, with many of our clients in retail as well as branch banking having already encountered the expectations for greater personalization with their own end customers.

Once business leadership decides to move in this direction, the ability to deliver personalized in-store transactions involves several enabling technologies. The first are mobile devices, which continue to experience explosive growth both in the U.S. as well as around the world. In a recent market study conducted by Cisco Systems, the number of on-the-go individuals using smartphones and other mobile devices is expected to grow from 4.8 billion at the end of 2015, to 5.5 billion (or nearly 70% of the world's population) by the end of the decade.

The second key technology enabler is the rapidly evolving area of *Proximity Marketing* solutions (also referred to as *Location-based Marketing*). Proximity Marketing makes use of specialized server-based software that is able to create individualized content to be sent to a shopper's mobile device when they are in or near the store.

The final essential technology that's needed for personalization is a *Wireless Local Area Network (WLAN)*; also commonly known as a Wi-Fi or in-building wireless network. WLANs are a very versatile technology that can not only enable proximity marketing for shoppers, but can also deliver secure wireless Internet access for store employees, management and visitors.

Courtesy: progressivegrocer.com

WLANs communicate with mobile devices through the use of radio frequency (RF) transmissions. The most visible component in a WLAN is the (typically) ceiling-mounted *Access Point (AP)*, which is responsible for actually sending the personalized information to the shopper's mobile device. Since a typical wireless network utilizes multiple Access Points, a *WLAN Controller* is used to manage and coordinate all of the APs.

With active personalization deployments by big name retailers like Target, Macy's and Wal-Mart, and strong backing from industry heavyweights like Coca-Cola, Procter & Gamble and Kraft Foods, Proximity Marketing solutions are helping fuel business spending on WLANs that is dramatically outpacing the overall growth of IT budgets by a 3x factor.

Key Considerations When Implementing Wireless Solutions

As highly specialized technologies, the engineering and deployment of WLAN-enabled Proximity Marketing solutions are likely to fall beyond the technical skills of most IT departments. Since many business communications providers may also lack the necessary wireless experience and competencies, the careful selection of a technology partner is essential to the success of your wireless initiative.

Should you decide to move forward with the deployment of a new wireless network or expansion of an existing WLAN, we have found that the following checklist can be very useful in helping ensure a successful outcome.

First Things First   As with any sound business investment decision, don't short-cut your upfront needs analysis. Key factors to consider include the intended areas of indoor/outdoor wireless coverage, the mix of data/voice/video traffic that the WLAN will need to carry, the number of simultaneous wireless users, and expectations around future expansion in your wireless footprint and carrying capacity.

The All-Important Site Survey   Once your basic requirements are clear, the critical next step is to perform a physical assessment of the actual location. A properly conducted survey will determine the number and preliminary placement of APs, as well as identify the presence of physical obstructions or nearby wireless systems that might introduce radio interference.

The findings from the initial site survey form the critical underpinning for a wireless network design that will deliver high reliability and performance. Consider the site survey step as an absolute 'must do'. One additional caution: beware of any provider that says a site survey can be adequately performed remotely using modeling software – *insist on an on-site assessment*.

Validation Assessment   Also referred to as a post-deployment site survey, this step takes place after the wireless network has been fully implemented. Like the initial survey, the validation assessment is a 'must do' since it will confirm that your WLAN design is actually delivering the expected coverage, connectivity and capacity. Should any deficiencies be detected, the survey will provide the necessary performance details to accelerate your troubleshooting and optimization efforts.

One last thought: In previous *Straight Talks*, we have addressed the growing problem of cybercrime and the critical importance of well-thought-through and properly executed security measures. Just as with wired LANs, the protection of information over wireless networks is an absolute mandate. Be sure to make wireless security a top priority when planning and designing your solution.

Thank you for joining me in our brief discussion on the ways that wireless technology can be used to revitalize businesses that depend on in-person transactions. If this short overview has intrigued you or brings additional questions to mind, we would enjoy continuing the discussion. Please direct any questions or comments to questions@coranet.com.

Margaret