Trends in Pop-up Retail:

Innovative Merchandising Driven by Flexible, Dependable Mobile Connectivity

White Paper

Overview

Once considered experimental merchandising for adventurous retailers and cashstrapped entrepreneurs, pop-up stores have become an established national phenomenon and a legitimate means of testing product, generating buzz, building brand awareness, and driving sales for big-name retailers and ambitious upstarts alike. Growth in mobile broadband technology is expanding the possibilities for a diverse array of applications for mobile pop-up. Furthermore, the "fly-by-night" qualities that might have characterized early pop-ups have now been supplanted by dependable, secure infrastructure solutions that put temporary retail locations on par with their more permanent counterparts.

This paper explores the pop-up retail phenomenon, outlines the challenges and obstacles to successful implementation, and discusses existing, rapid-deployment solutions for connecting pop-up locations with mission-critical retail applications and the cloud. The first part of the paper will address the business case for pursuing a pop-up strategy; the second part will consider technology implementation strategies that enable a rich and secure popup experience. "Mobile broadband technology is expanding the possibilities for a diverse array of applications for mobile pop-up."

A Brief History of Pop-Up Retail

Pop-up stores, also referred to as "flash retail," began sprouting up in cities in Europe and the U.S. circa 2003. The first generation of stores took on a consciously makeshift quality, often occupying vacant mall spaces and abandoned storefronts. A tumbling commercial real estate market, and soaring vacancy rates, accelerated the trend as accommodating landlords became more willing to negotiate short-term leases to help cover their mortgages.

Many retailers were quick to explore the popup merchandising concept:

 Target, a pop-up pioneer, showcased designer Isaac Mizrahi's women's clothing line in 2003 with a 1500 square-foot store in Rockefeller Center (New York City), which was open for five weeks. "Gap furnished a school bus with 60's themed apparel and accessories, utilizing the bus as a traveling pop-up store."

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- Online retailer Bluefly.com opened a brick-and-mortar store in New York, clearing out old stock in a temporary boutique.
- MTV partnered with Adidas, Levi's and Sony Ericsson, taking their pop-up stores all over Germany, stopping at cities for a week at a time and purveying limited edition apparel and high-tech items.
- Nike's Runner's Lounge in Vancouver lured runners with free massages, snacks, drinks, and the opportunity to test-drive a new line of running shoes.

Having discovered that consumers flock to and embrace the various manifestations of pop-up spaces, retailers have come to view the strategy as a legitimate and innovative means of connecting with customers and extending their brands. The latest iterations of pop-up reveal more elaborate displays, high-end signage, more sophisticated POS, advanced mobile commerce capabilities, and meaningful interactive experiences that enable useful conversations with customers.

Just how widespread is pop-up as an element of the marketing mix? Consider the blue-chip retailers that have integrated pop-up into their marketing and sales strategies: Toys "R" Us, American Eagle, Jack-in-the-Box's Munchie Mobile, Walmart, J.C. Penney, Macy's, Gucci, Ann Taylor, Lexus, and Proctor & Gamble, to name a few.

As the pop-up phenomenon has begun to mature, customer expectations for pop-up stores have grown. The novelty of the pop-up concept isn't necessarily going to drive traffic on its own; consumer affection for mobile devices and m-commerce means that they are demanding enhanced experiences and multiple modes of engagement in the context of a shopping environment even if it's temporary.



Places You Might Find a Pop-Up Store

Retailers and entrepreneurs are constantly coming up with novel ways of transforming temporary or mobile spaces into attention-getting retail locations.

- 1. Vacant space in malls or other commercial storefronts
- 2. Buses or other vehicles touring through various target or test markets
- 3. Farmer's markets
- 4. Charity events
- 5. Music and arts festivals and concerts
- 6. Sporting events, races, and fitness expos
- 7. Any highly trafficked area where passersby might notice a unique display
- 8. Recycled shipping containers (a practical and lockable pop-up)

Pop-up Retail: A Trend With Staying Power

Pop-up continues to drive innovation in the retail space and shows no signs of abating as a unique platform for both iconic brands and daring start-ups. There are several key opportunities that pop-up affords retailers:



- 1. Target a niche audience
- 2. Test new products, concepts, and markets and gain valuable consumer insights with relatively little investment
- 3. Generate buzz and create a memorable visual spectacle
- 4. Tap into "massclusivity" and pique consumer curiosity with elements of surprise, trendiness, and "get it while it lasts" urgency
- 5. Utilize an economic alternative to full-scale retail set-up
- 6. Unload old inventory
- 7. Aggressively market merchandise around a finite period of time, season, or holiday
- 8. Create a learning center for customers

The Challenges of Pop-Up Retail:

Given the fleeting nature of these mobile retail outlets, it isn't realistic or practical to invest anywhere near the same amount of IT resources or energy in setting up a pop-up store as you would with a primary or central retail location. In fact, given that most pop-ups, by their very nature, plan to "go out of business" almost as soon as they get up and running, speed and simplicity are of the essence when it comes to deploying the technology infrastructure necessary to power such a store's operations.

"Even a temporary outage and suspension of POS service at a pop-up location could represent significant losses" Nevertheless, cutting corners or trading reliability or advanced capabilities for affordability and rapid deployment is fraught with risks. Namely, pop-ups typically drive high-volume bursts of demand and purchasing activity over short periods of time. They often spearhead customer engagement and represent the first impression of the overall brand.

Even a temporary outage and suspension of POS service at a pop-up location could represent significant losses in revenue and customer retention due to frustration and abandonment. Such sales, in a temporary location and as part of a short-term exclusive offer, are unlikely to be recovered.

In a traditional retail environment, risks can be mitigated by substantial investments in broadband—including failover solutions—and hardware. And yet such expenses can be cost-prohibitive for a pop-up site.

Expenses can escalate in a hurry when providers charge a premium for short-term (month-to-month) service contracts, if they're even available at all. And costly hardware may not always be justified if the store's closure is imminent.

Some pop-up operations may attempt to piggyback off of any Internet connection they can find, giving up control of a key element of a successful retail operation. In addition to relinquishing any control over reliability, such an approach forecloses the opportunity to provide both a public WiFi network and a secure internal network for the store.

Finally, retailers must consider the potential costs of training employees on a system that is not merely replicated from the primary retail presence. New configurations of POS, voice, and data systems in a pop-up site can require additional training and support for existing employees who may be temporarily redeployed from the primary store location.

Retail Pop-Up Technology: A Checklist

Due to the diverse range of pop-up options and objectives, there is no single, prototypical pop-up site. A more technologically advanced site might include the following elements:

1) Router

Ideally, the router will provide strong security measures that allow it to be part of a PCI compliant solution. It should be able to provide strong WiFi security, VPN endpoint connectivity and network segmentation to protect credit card data going across the network while providing connectivity for multiple applications including POS card swipers, public and private WiFi, web cameras, VoIP phones, printers and more.

2) POS card swiper and application

Numerous solutions are available currently, including the free entry-level Square application or Intuit's business-grade GoPayment (partnered with Verizon Wireless), which offer affordable plans for swiping and processing customer credit card transactions. Apple mobile products—an iPad, iPhone, and even an iPod Touch—are becoming increasingly seen in lieu of cash registers at pop-up locations.



3) Public and private WiFi networks

Having employees and credit card transactions operate securely on a separate network from the public network that customers use is critical.

4) IP web camera

Surveillance and loss protection can be performed on the spot or remotely at a central head quarters over the Internet. Cisco's Small Business Wireless-G IP Camera offers two way audio and the ability to pan and tilt the camera. The Keebox IPC1000WI Wireless N Day/Night Internet Camera enables night vision surveillance in the event that the pop-up infrastructure needs to be left overnight.

5) VoIP phone

With the exception of having employees use their own or company-provided mobile phones, this is the only phone option that makes sense for a short term retail outlet, allowing a phone number and IP phone to be instantaneously ported and installed from one pop-up site to the next, without switching or installation costs.

6) Web-based point-of-sale (POS) and inventory management provider

Many retailers are abandoning a server-based set-up for a cloud approach turning mobile tablets like Apple's iPad into POS devices. In addition to Square and Intuit's GoPayment applications, examples of web-based POS include POSLavu and ShopKeep.com.

7) Mobile and tablet devices

Retailers are beginning to harness the potential of these devices, for POS transactions (as a replacement for a cash register) as well as for enabling salespeople or self-serve kiosks to look up answers to customer questions or check on product availability.



8) Receipt printer

Although most mobile commerce POS applications can deliver receipts via email, some customers will want a paper copy at the time of purchase. The WiFi enabled Star TSP 650 Series: TSP651 Receipt Printer is one such example.

CradlePoint: Pop-Up Retail Connectivity Solutions

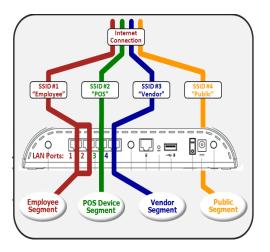
Integrated with a 3G/4G modem, CradlePoint products enable retailers to set up shop anywhere a cellular signal is available, providing the most connectivity options and bandwidth for a potentially broad array of retail application needs.

With CradlePoint routers, a fully equipped mobile pop-up outlet can tap into adequate bandwidth to be used for multiple purposes relatively quickly, following three easy set-up procedures.

1) Network segmentation

To serve the wide variety of needs and applications even within a small pop-up location, CradlePoint's Series 3 routers provide advanced and flexible functionality including the ability to divide the router network into a number of segments. Through network segmentation, you can specify the individual networks each router interface is part of with no communication between each of those networks. An example of network segmentation is:

Employee: Interfaces (LAN 1, 2: wireless SSID: CORP-NET)
POS: Interfaces (LAN 3)
Vendor: Interfaces (LAN 4)
Public: Interfaces (wireless SSID: GUEST-NET)



In this instance, different segments of your corporate network can handle VOIP, POS, and web camera applications, allowing for a guest wireless network to be segmented apart.

Taking this scenario further, you would create additional Ethernet Port Groups for each network that you want configured. By default, two port groups are already configured: LAN and WAN.

Next, you associate the Ethernet port group with a network. You can then also change the IP settings. The router informs you, upon making changes, if the setting was applied successfully. Additional configurations can be made to the individual IP networks to differentiate them.

Network segmentation is not just limited to creating primary and guest networks. You can also create networks for specific applications like VoIP and video surveillance. For larger scale switching, ports and network segments can be configured with VLAN tagging to create VLANs across multiple switches.

2) Port Forwarding

This requires a special, straightforward configuration in the router that opens up ports that can then be used for VoIP telephony. To open ports through your router, you start by connecting to the router via Ethernet or WiFi and logging into the router's admin pages. In the network settings (firewall), you can add a new rule to the port forwarding rules. You name and describe the rule; select the port you want open or name a range of ports; select the specific client that requires the port; specify the port you want open; and finally set the appropriate protocol for the open port.

3) VPN Set-up

For larger retailers, this will likely be a necessary step, as the interface between a pop-up POS transaction and your corporate network (including access to an inventory management application) will need to be locked down with a VPN connection.

Using two CradlePoint ARC MBR1400 devices, one at the pop-up location and the other within your company's primary site, you can quickly and easily configure a secure tunnel between the two sites. The tunnel is created by simply establishing and entering a static IP address and a private network address range for each, and then a secret password shared by both. Once the settings are entered for both ends of the tunnel, you initialize the tunnel by pinging from one end of the tunnel to the other.

Alternatively, using the same CradlePoint devices, you can configure a secure tunnel using dynamic IPs and a dynamic domain service. In this instance, you would need to have the dynamic DNS domain names and private network address ranges for each end, as well as a secret password shared by both.

The CradlePoint Advantage

CradlePoint is the leading provider of 3G/4G network router solutions providing business-grade, secure connectivity from 3G and 4G networks to distributed enterprise, small business and mobile customers. CradlePoint solutions provide uncompromised mobile broadband performance while delivering proven network system interoperability. CradlePoint's broad family of high-performance routers are designed for deployment in mission-critical applications that require 24/7 connectivity. With both integrated wireless WAN and non-integrated versions, the solutions are ideal for distributed operations and emerging industries that require either remote connectivity or multi-WAN redundancy.

Powered by its WiPipe[™] technology, CradlePoint's non-integrated routing solutions incorporate the ability to drive over 300 commercially available USB and ExpressCard modems, allowing for prototyping, pre-production and production rollouts in locations worldwide with reliability and uniformity. Additionally, CradlePoint's powerful WiPipe Central Management Software allows enterprises the ability to easily monitor, manage, and maintain all endpoints in their distributed system running on different networks from a single location.

To take the first step in learning more about highly reliable and versatile connectivity for pop-up retail, contact +1.855.813.3385 or <u>routersales@cradlepoint.com</u>.