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# Innovative Unattended Points of Sale

The value proposition of self-service technologies has attracted the attention of the hospitality industry—containing the industry's traditionally high cost and heavy dependence on manual labor.

**T**he significant growth of online banking, shopping and customer service has arguably rendered the Internet the world's largest unattended point of sale. The popularity of airline ticketing kiosks, pay-at-the-pump options, ATM transactions and retail scanners also contribute to customers developing an affinity for this technology. Similarly, aspects of the hospitality industry landscape are becoming more populated with self-service technology applications capable of delivering products (food, beverage, toiletries and hotel room keys) and distributing services (room registration, folio settlement, Internet connectivity and office productivity software) to its guests. While property management system (PMS) interfaces have always included guest and non-guest operated devices, heightened interest in self-service technology applications are rapidly changing the business hotel environment. Hotels are implementing guest-operated kiosks designed to reduce wait times and improve front-office productivity while translating into a competitive advantage. Many properties are also installing unattended business centers in an attempt to satisfy guest demand for convenient office

workspace, with essential business equipment available 24 hours a day.

Although the hospitality industry was not an early adopter of unattended applications, the value proposition of self-service technologies has attracted its attention. The recent implementation of innovative unattended points of sale has helped contain the industry's traditionally high cost and heavy dependence on manual labor. Corresponding to the increased number of unattended points of sale, wireless communication networks and cashless transaction processing techniques are also being adopted at an unprecedented rate. This article focuses on advancements in automatic merchandising or vending applications (v-commerce) and potential impacts on products and services that promote guest loyalty in the hospitality marketplace.

## V-Commerce

As the labor market remains challenging, hospitality management needs to consider alternative product delivery methods to maintain acceptable levels of guest service and profitability. V-commerce, related to vending services, is the term used to describe the nearly unlimited range of unattended point-of-sale applications available for dispensing goods and services. V-commerce is capable of improving productivity, expanding operational services and represents a platform for attaining competitive advantage. E-commerce (online), m-commerce (mobile) and v-commerce (vending) have a common thread, in that all are reliant on self-service technology. Self-service technologies can represent a significant cost containment strategy for the historically labor-intensive hospitality industry while creating new revenue streams and promoting brand loyalty. As unattended points of sale become part of the mainstream of hospitality information system applications, management needs to remain cognizant of the associated opportunities and challenges. So long as the hospitality services labor market remains competitive, replacement of staff with unstaffed distribution technology appears more attractive.

## Self-Service Kiosks

Although self-check-in/check-out kiosks are being treated as an innovative product, the idea is not new. The original design and development of a self-check device began and ended in the early 1980s with the NCR 1810 terminal. The concept remained somewhat dormant until recently. The current configuration of a fully functional self-check kiosk includes guest identification, room assignment, keycard dispensing and account reconciliation. By inserting a credit card for identification, for example, a guest then

**HELP YOURSELF:** Self-service technology is changing the business hotel environment.

follows a set of on-screen instructions to complete the hotel's interactive check-in process. A self-service kiosk can assign a guestroom based on guest preference or a preprogrammed algorithm. The kiosk may also be capable of printing a property map and assigned room number. At the end of the stay, the self-check kiosk can be used for check out and printing or e-mailing of the receipt. Design technology includes a flexible wireless kiosk network that enables the device to be moveable, as needed.

Kiosk-based applications are designed to be intuitive and user-friendly. Steps involved in a typical kiosk-based check in include: 1) the guest swiping either a credit card, frequent stayer card or entering a reservation confirmation number; 2) the system uses the captured electronic data to retrieve the guest's reservation record; 3) the guest verifies and approves the record's contents; 4) the system assigns a guestroom and dispenses a keycard; 5) a receipt of the transaction is printed containing assigned room number and property map; 6) a welcome letter or alternate document may also be generated (CRM). It is important to note that a dispensed guestroom key can be specially encoded to include value-added amenities (e.g. concierge level access, spa or gym access) similar to how a front desk terminal includes such coding. The self-check out sequence is streamlined and includes folio accessing, confirmation of charges, account reconciliation and generation of a printed and/or e-mailed receipt.

Two additional kiosk-based application extensions will soon be introduced. One involves providing departing guests access to their preferred airline Web site to print a boarding pass; the second involves using the kiosk to access the guest's frequent stayer account for profile updating and account review.

For the past year several hotel companies (Hilton, Marriott, Carlson, Starwood and Hyatt) have experimented with self-check kiosks with very positive results. Two frequently cited gains were reduced check-in time for guests and lower cost per transaction for hotels. Tim Harvey, chief information officer for Hilton Hotels Corporation, said, "Today's frequent travelers are increasingly sophisticated technology users who have been using self-service technology, such as bank ATMs, for several years. This type of tech-savvy traveler will benefit from this alternative to the traditional hotel check in, particularly during peak hours." In addition to check in and check out, some self-service kiosks are able to print guest messages (communications), upgrade an assigned guestroom (upselling) or print in-house promotional coupons (marketing).

Despite the use of lead-through technology, hotel kiosks may present usability problems to guests that are technologically challenged or disabled. For this reason some hotel companies are placing a kiosk service agent (KSA), or kiosk concierge, nearby to ensure smooth and accurate transactions. This is no different than a supermarket assigning an experienced cashier to oversee customer-operated self-check-out scanners. The emphasis is on maintaining functionality and operational efficiency.

### Web-Based Check In

Although wireless lobby kiosks have proven successful, often handling in excess of 15 percent of the check-in volume, the high cost of development and installation are often mentioned as major concerns. The next step in hotel self-service applications, and a comparatively low-cost alternative to kiosks, is Web-hosted check in (similar to airline check in). Hilton and Carlson, in the midst of planning Web site check in, are expected to configure the application to allow online, remote check in from several days to several hours prior to the destination property's check-in time on the date of arrival. Since online check in has been effective

for the airline industry, hotels are hopeful a similar application will help reduce the number of no shows (as commitment is firm before arrival) and accelerate the on-premises arrival and room allocation process at the front desk (the guest exchanges Web-generated paperwork for a room keycard and hotel information packet). Web-based hotel check in, described as "online, not in line" could be available within the next several months.

### Business Centers

Originally, hotels created in-house business centers as a means of reducing the burden on front desk staff in response to guest requests for photocopying and fax services. For many years hotels supported staffed business centers that operated during normal business hours, not necessarily guest-preferred hours, at a financial loss. Today, hotel business centers can be configured as guest self-service to the point no hotel staffing is required. Select hotels now offer an on-premises, 24-hour unattended business center featuring a variety of office equipment and services.

As business travelers seek more sophisticated services in hotel workspaces, technological amenities tend to attract guests and may foster brand loyalty. The business center becomes an around the clock revenue center featuring credit card (and often debit card) readers attached to hardware and linked to accessible application software. Mark Lewis, director of operations at the Denver Renaissance Hotel said, "The main advantage for the unattended business center is the savings related to manpower to staff the center, and the 24-hour access for the guest. The biggest challenge is service or help when there is a problem with the equipment, or a guest's inability to work the equipment."

Most business centers are designed to act as stand-alone operations requiring minimal maintenance and attention by hotel staff. Business centers typically levy charges on a per use, per minute or per page basis. Business center applications often are touchscreen-based and may be multilingual. Credit card transactions, which dominate the market, are typically authorized in real time. In addition to major credit card usage, it is possible to add the capability to accept bank debit cards, prepaid debit cards and guestroom keycards. It is important to note that although guestroom keycard authorization, which leads to folio posting, is available vendors warn that implementation may be cumbersome given non-standard PMS interface requirements. Service menu prices are usually posted on the equipment and a receipt is generated for each transaction.

A hotel business center provides guests with an office environment, replete with essential business amenities, in a turnkey format. To access the resources of a business center, the guest typically swipes a card on the reader attached to the component resource. For example, to gain access to an available PC, the guest may activate the computer by swiping the

#### Business Center Products/Services

- 1 PC workstations
- 2 Internet connectivity
- 3 Document printing and reproduction
- 4 Fax transmission
- 5 Packaging and postal services
- 6 Use of business productivity software
- 7 Office and PC supplies
- 8 Link to remote operations

reader mounted on the computer with a credit card. For photocopying service the card is swiped through the reader on the copier, and so on. Hotels desiring a business center have basically three options: construct and own all aspects of the center; lease and operate all aspects of the center; or profit share with an outside vendor that operates the center. By far the most preferred option is profit sharing. Profit sharing involves the hotel receiving a guaranteed percent of profits, against a predetermined monthly minimum.

For example, the first \$500 generated by the center may belong to the business center supplier with all remaining dollars being shared 50/50 with the hotel. This approach allows the hotel to focus on its core business without requiring a significant cash investment. Most business centers are designed based on a space saver template. Representative business center services include: PC workstations, Internet connectivity, document printing and reproduction equipment, office/PC supplies, fax transmission, packaging and postal services and use of business productivity software.

In a typical profit-sharing relationship, the hardware, software and netware are provided by a specialty vendor (for example, USA Technologies or STSN) and the hotel is responsible for providing the space, electricity, Internet connectivity and telephone lines. This cooperative arrangement usually forms the basis for a cost-effective business model. Business center success appears to be linked to four "s" words: speed, service, support and security.

### Remote Facilities

Some hotel business center vendors also provide online access to a remote facility for advanced

application engineering, printing, collating, presentation media or related capabilities. For example, USA Technologies, provider of Business Express Center, has extended the concept by offering a unique linkage between its in-hotel center and a neighborhood FedEx Kinko's. The link provides access to a host

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of FedEx Kinko's services which otherwise would be difficult to duplicate at the hotel. For example, guests can develop a business document in the business center and electronically transport it to a local FedEx Kinko's for presentation enhancement, high resolution reproduction, special binding, collating or large quantity processing.

### Future Applications

The trend toward self-service technologies raises many interesting possibilities. How about unattended breakfast monitoring and/or controlled delivery mechanisms for budget hotels? Or the automated dispensing of extra pillows and towels authorized remotely from the front desk? Or a fully functional self-service lobby gift shop? As the

potential for these and other guest service applications become apparent, innovative unattended point-of-sale solutions are likely to emerge.

The hospitality industry faces a challenging labor market. A sudden adoption of self-service technologies and unattended points of sale have changed the environment. There are a number of evolving services including self-check kiosks and unstaffed business centers. Numerous hotel companies have implemented self-check kiosks with the intent of reducing line time, managing front desk traffic, providing a more paperless process and enhancing guest satisfaction. Hotel kiosks are capable of registering guests, assigning rooms, dispensing room keys and printing receipts.

Perhaps the most attractive and fast growing automated guest service is an unattended business center. A guest self-service center can provide around the clock access to a variety of business services including PCs, fax machines, printers and copiers and Internet access. An effective business center design usually involves the hotel providing a dedicated space, electricity, Internet access and telephone lines. In exchange a business machine provider can place the related equipment in the space to form a profit-sharing arrangement. Credit card initiation of office resources controls access while ensuring payment for services rendered. Traditionally considered high touch, hotels that attract business travelers are now posturing for a different label... high tech.

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"...Well, hey...look at that...a martini kiosk!...These guys really ARE cutting edge."