INTELLIGENCE IN. AMAZING OUT.

Intelligent Sales Assistant Hybrid Tablet PC Solution Improves In-Store Shopping Experience and Enhances Brand Engagement

EXECUTIVE SUMMARY

The digital age has put the consumer in the driver’s seat, and businesses are working hard to understand how this new dynamic could impact brand engagement. Empowered by “always-on” Internet connections and informed by the opinions of others, many consumers believe they are better informed than sales associates and would rather not engage them. As the balance of power shifts from business to consumer, brand optimization is more difficult because it’s harder to control the selling process in a predictable and planned way. As a result, the ability of brick-and-mortar retailers to influence consumers is trending lower and could ultimately decrease sales opportunities.

To solve this challenge, businesses can increase brand control by developing a holistic, synchronized, digital experience capable of building and sustaining 1:1 personal relationships with every single customer. One avenue is to equip sales associates with the Fujitsu Stylistic Q702 Hybrid Tablet PC, a smart mobile device capable of showing customers typical online information, as well as exclusive content that provides useful product information and raises brand awareness. As a result, customers benefit from a personalized experience, and businesses gain from more brand control and empowered sales associates.
KEY BUSINESS OBJECTIVES
Take advantage of advances in mobile computing to deliver a better shopping experience and increase sales assistant productivity.

WHO WILL BENEFIT FROM THIS SOLUTION
The Sales Assistant Tablet enables retailers to take advantage of advances in mobile computing to meet the demands of digitally-savvy consumers.

Consumers can learn more about products from well-informed showroom floor sales assistants who provide an improved shopping experience.

Retailers can get more productivity from sales assistants because consumers will find value in engaging a knowledgeable sales associate, who then is in a better position to make the sale.

MEETING NEW MARKET DEMAND
The retail industry is entering a second wave of wireless technology deployment, called mobile retail, which follows the widespread build-out of Wi-Fi hotspots by businesses seeking to provide customers an enhanced level of service. The end result will be a more connected retail environment, with mobile devices, like the Fujitsu Stylistic Q702 Hybrid Tablet PC, enabling customer-facing and store-operation functions anywhere on site. Customers will find an improved in-store experience, including faster checkout, real-time product information and better coordination between online and physical storefronts. Retail personnel can carry out operational tasks, such as checkout, and inventory and price lookup.

THE BUSINESS CHALLENGE
Increasingly, consumers walking into brick-and-mortar stores have already done their homework. They searched the Web for reviews and product information, and visited online shopping sites to compare prices. Smart phones in hand, they can jump on the store’s wireless network, giving them access to a wealth of information at their fingertips. However, the advent of the always-connected consumer is highlighting some major issues, including:

• Product Knowledge Gap: This digital-age phenomenon puts retail sales associates at a disadvantage because consumers are often more knowledgeable about products, minimizing the associate’s role in the selling process and casting a shadow on the retailer’s brand image.

“...This shift in consumer behavior is causing concern among retailers that they are being eliminated from the conversation. In fact, 61 percent of shoppers believe they have access to more information about products than store associates’ and 73 percent of those shoppers would prefer to use their smart phone rather than engage a store associate.”

• Under-powered Sales Associates: Smart phones and tablets are ubiquitous, with many sales associates personally owning more powerful computing devices than what they’re given to use at work. In fact, it should be no surprise that some sales associates are bringing their own devices to work to show customers online information.
Underscoring the importance of equipping sales associates with the latest technologies, Motorola Solutions paper, “What’s Driving Tomorrow’s Retail Experience?,” reported that “67 percent of shoppers cited a better experience in-store with associates and managers who use the latest mobile technologies.”

• **Inventory Distortion:** When customers can’t find what they’re looking for on the shelf, the next question is, “are there any in the back room?” It’s important to give customers a quick and accurate answer; and if the store is sold out, customers want to know if other stores have the merchandise or whether it can be shipped to them.

In order to answer inventory questions, sales associates typically have to walk to a point-of-sale (POS) terminal, often accompanied by the customer, to check the stock in the back room or to see whether other store locations have the merchandise on hand. In the meantime, customers may grow impatient and change their minds about the purchase. In contrast, a wireless device enables a sales associate to check inventory — anytime, anywhere — providing a more positive experience. In the case of out-of-stock items, they can offer customers different fulfillment options, like in-store pickup and ship-to-home.

Poor integration of retail systems across channels can make keeping an accurate, company-wide inventory count more difficult, especially when transactions cannot move seamlessly throughout the IT corporate infrastructure. This only magnifies a long-standing problem for retailers, that of inventory distortion, defined as the cost of lost sales resulting from out-of-stock merchandise plus the losses resulting from overstocks that must be deeply discounted in order to sell. According to the IHL Group, this combined annual cost is estimated at $818 billion, increasing by $50 billion in the last year.

• **Time-starved Customers:** Every retailer knows waiting in long checkout lines is the bane of customers, particularly those in a hurry. “In fact, 70 percent of U.S. consumers say they don’t have enough time to do all the things they need,” according to Chris Malta of WorldwideBrands.com. Retail personnel on the showroom floor — outfitted with mobile transaction systems — can capture sales at the point of decision and get customers on their way faster, compared to making customers stand in line at a checkout counter.

**SOLUTION OVERVIEW**

According to Gary Gilmer, partner at Clarity Consulting, the key to creating a mobile retail experience is transferring traditional POS functionality onto a wireless device in a manner that transforms the way sales assistants engage with customers. Whereas typical POS terminals are used after customers have made their purchase decisions, sales assistant devices are designed to help them make a decision before processing a transaction. Since each retailer is different, these solutions tend to require some level of customization, and this is where Clarity, an interactive design agency and custom software engineering firm, steps in.

Clarity, working with Intel, developed an intelligent sales assistant using the Fujitsu Stylistic Q702 Hybrid Tablet PC that can support all the functionality of a POS terminal and more. The tablet is based on an Intel® Core™ vPro™ processor, which delivers exceptional performance while power-saving features enable up to five hours of operation on a single charge. A second docking station battery can extend operation to 11 hours.
Key Criteria
Retailers who are investigating wireless sales assistants should consider the following:

- **User Interface:** A wireless sales assistant is touch-based, so applications must be designed differently than their POS terminal counterparts that are keyboard/mouse driven. Facilitating touch-based applications, Microsoft® Windows® 8 supports the standard finger gestures, like pinch-zoom, drags, taps and swipes, that users have grown accustomed to.

- **Search Everything:** Sales assistants need to be able to easily search for any information they need.

- **Sales Assistant Coordination:** Sales associates should have the ability to find someone else on the showroom floor that knows more about a product and then transfer support to the ‘expert’ associate, thus creating a seamless experience for customers. Unified communications software, such as Microsoft Lync,* allows retail employees to collaborate and connect in new ways, using Intel processor-based devices.
• **Customer Maps:** Tablets can show sales associates where customers are congregating and for how long, prompting them to offer help if another sales associate isn’t already there. This is possible with optical sensors placed throughout the store and anonymous viewer analytics (AVA), which also provides customer demographics information (e.g., age range, gender) that allows sales associates to be better prepared before approaching customers.

• **Gamification:** A growing trend in the retail industry is getting employees to participate in performance-based competitions, called games, designed to make the workplace more engaging and rewarding. For instance, a leading quick service restaurant chain motivates employees by displaying the speed at which they are servicing drive-through customers compared to workers at other stores in the vicinity.

• **Enterprise Integration:** Some tablets, especially those based on Intel® processors, integrate more simply into existing retail IT environments, making it easier to manage and support them in a multi-user environment. In contrast, some consumer tablets do not have an IT-friendly software distribution model (e.g., app store approval) and can’t limit application access (e.g., email) on a per user basis, among other integration issues.

Other Usage Models

The Fujitsu Stylistic Q702 Hybrid Tablet PC gives retail personnel the ultimate flexibility, whether used for managing inventory, running a kiosk, browsing the Web, connecting to social media, line busting or other things. The tablet is based on an Intel Core vPro processor, which delivers exceptional performance while power-saving features enable all-day operation on a single charge.4
For specialty stores, the Stylistic Q702 Hybrid Tablet PC offers the convenience and economy of a multi-function device; and for large chains, it enables sales assistants to give customers the information they want from anywhere in the store. The device, pictured in Figure 1, can operate as a laptop with full keyboards, useful for a self-service kiosk or to a sales associate running a complex transaction. Serving another role, it functions as a tablet, providing sales associates a large, bright, 11.6-inch screen and full mobility. The display also supports pen input, which can speed up transaction processing.

The Stylistic Q702 Hybrid Tablet PC is capable of serving several roles in the retail environment, including those shown in Figure 2.

Overcoming Challenges
This sales assistance hybrid tablet PC helps address several challenges facing retailers by:

• Empowering sales associates with instant access to online product reviews and corporate selling presentations.
  > The hybrid tablet PC enables sales associates to have the same, if not more, product information at their fingertips than customers.

• Personalizing the in-store retail experience.
  > The digital age provides new avenues for brand optimization by creating opportunities to increase brand awareness and establish 1:1 personal relationships with consumers.

Price Lookup
Attach a scanner to the tablet to let sales assistants and customers look up prices

Inventory
Carry out inventory operations, whether on the floor or in the stockroom

Consultative Selling
Stand next to customers and show them product comparisons

Checkout
Mount the tablet to the counter, execute POS functions, and undock when desired

Self Service
Use the tablet to run a self-service kiosk that provides information and plays ads

Line Busting
Check out customers while they are waiting in line

Figure 1. Fujitsu Stylistic Q702 Hybrid Tablet PC: Laptop and Tablet Usage Models

Figure 2. Common Usage Models
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- Providing accurate, corporate-wide inventory information.
  - Sales associates will be able to quickly inform customers about product availability and process their orders on the spot, whether fulfilled locally or by another location. A single view of inventory helps retailers minimize inventory distortion.

- Allowing showroom floor sales associates to carry out transactions with customers face-to-face.
  - Customers in a hurry will appreciate the convenience and time-savings when a sales associate with a mobile device can complete their transactions quickly.

Technology
Tablet Designed for Mobility and Usability
Covering all the bases, the Stylistic Q702 Hybrid Tablet PC was engineered with portability, mobility, battery life and usability in mind. It’s a lightweight tablet, approximately 1.9 pounds, which makes it easy to carry around. All the standard wireless connectivity options are available: Wi-Fi (802.11 a/b/g/n) and Bluetooth®. The energy-efficient Intel Core vPro processor works all day - up to 11 hours of battery life with a second keyboard docking station battery.

The anti-glare screen employs the latest IPS (In-Plane Switching) display technology to deliver wide viewing angles and color accuracy, both horizontal and vertical. The technology allows customers to view content from practically anywhere they’re standing when the tablet is used for line-busting, consultative selling or in a kiosk.

Productivity Features
Designed from the ground up with the key features businesses demand, the Stylistic Q702 Hybrid Tablet PC comes with enterprise-friendly Microsoft® Windows® 8 Professional and is easily deployed in corporate environments. The system is capable of running multiple applications simultaneously, such as retail back office or Microsoft Office®. Retailers can utilize their existing Windows applications, making it relatively easy to train personnel since most are already familiar with the interface.

Intel and Microsoft have over 30 years of experience in delivering innovative computing solutions and have continued their collaboration with Windows 8 to enable new experiences for users, enhanced benefits for IT and business professionals, as well as to open up additional opportunities for developers around the world. As a result, the Fujitsu Stylistic Q702 Hybrid Tablet PC can easily be integrated into an existing IT network.

Barcode Scanning and Credit Card Reader
The full high-definition rear-facing camera (1920 x 1080 pixels) with autofocus enables sales assistants to scan bar codes, make video calls to customers, or to capture images that can be used to create planograms (e.g., shelf layouts). The hybrid tablet PC also interfaces to a variety of retail peripherals, including a magnetic strip reader (MSR) for credit card payment and an external bar code scanner.

Retail Hardened
Built tough, the screen is made of chemically-strengthened glass and has Corning® Gorilla® Glass coating for increased durability and damage resistance, enabling it to withstand tough retail environments. The computer uses Intel® Solid-State Drives that offer better performance and reliability than traditional hard drives.

Data and Theft Protection
Retailers can include an optional Trusted Platform Module (TPM), which facilitates hardware-based, full disk encryption and device to device authentication. The computer has an integrated biometric fingerprint sensor that protects against unauthorized users.

Moreover, Intel® Anti-Theft Technology (Intel® AT) helps keep the Stylistic Q702 Hybrid Tablet PC safe and secure in the event that it’s ever lost or stolen. It can be locked down automatically or by remote command in order to safeguard a retailer’s corporate assets and confidential information. If the computer is recovered, entering a reactivation code will quickly return it to normal operation. This is especially important for small businesses without IT resources.

Power-Optimized
Remarkably power efficient, the Intel Core vPro processor enables the Stylistic Q702 Hybrid Tablet PC to deliver high performance and extended battery life at the same time. Part of the credit goes to ground-breaking power management, which conserves energy by turning off unused portions of the processor whenever possible. This is enabled through Enhanced Intel SpeedStep® Technology and Idle States. Other power savings come from integrating the memory controller and a 3D graphics engine on the processor. Boosting performance when needed with Intel® Turbo Boost Technology, the Intel® processor can perform multiple POS tasks simultaneously, like executing transactions and playing advertising on the customer display at the same time.
Remote Display
The view on the tablet can also be shown on an additional monitor, so customers don’t have to look over the sales assistant’s shoulder to see the tablet. This feature is supported by Intel® Wireless Display (WiDi), which is incorporated in the Fujitsu Stylistic Q702 Hybrid Tablet PC.

Anonymous Viewer Analytics (AVA)
Intel® Audience Impression Metrics Suite (Intel® AIM Suite) adds powerful data collection and audience measurement tools to a network of vending machines. By providing valuable metrics that were previously unavailable, vending operators can better understand audience characteristics such as actual impressions, length of impressions, potential audience size, and gender and age range demographics.

Advanced Remote Management
The Stylistic Q702 Hybrid Tablet PC incorporates Intel® vPro™ Technology, meaning it incorporates a number of Intel technologies, including:

- Intel® Active Management Technology (Intel AMT)³
  - offers breakthrough remote management and energy saving capabilities
- Intel® Trusted Execution Technology (Intel® TXT)⁶
  - supplies additional security protection over software solutions
- Intel® Virtualization Technology (Intel® VT)⁷
  - improves the efficiency and security of virtualized environments

Together these technologies deliver unprecedented hardware support for advanced management functions, comprehensive security protection and software integration – enabling solutions that are reliable, trusted and cost-effective.

The Stylistic Q702 Hybrid Tablet PC takes remote management to a new level with Intel AMT, which allows retail IT to fix a wider range of systems issues, even when the operating system is down. For example, it’s possible to repair corrupted drivers, application software or the operating system for a non-responsive retail system that won’t run or boot. This can be done on an Intel vPro technology-enabled system through a capability called out-of-band (OOB) management, which works over Ethernet and Wi-Fi networks.

This out-of-band link employs a dedicated manageability engine, which enables control over non-functioning systems. In contrast, most traditional remote management consoles use an in-band link that requires the system to perform networking functions – in other words, have a working operating system, CPU and network drivers. When a system fails, the in-band approach has the drawback of relying on the continued operation of many system components, significantly limiting the types of problems or failures that can be fixed remotely.

For retailers looking for assistance in deploying the capabilities discussed in this solution blueprint, the Intel® Retail Solutions Partner Network comprises industry-leading vendors with expertise in many key areas, including hardware, software, content creation, deployment and networking.
EMPOWERING A NEW WORLD OF RETAIL INNOVATION

The retail industry is in the midst of a dramatic information revolution that is laying the groundwork for new consumer experiences, enhanced productivity, reduced inventory distortion and brand optimization. Intel is addressing this transformation with the Intel® Intelligent Systems Framework, a set of interoperable solutions designed to facilitate connecting, managing and securing devices in a consistent and scalable manner.

What can emerging intelligent retail systems do? Imagine an intelligent store where incoming weather data indicates a severe storm approaching. The store’s digital signs and kiosks immediately begin promoting items commonly purchased during storms, like umbrellas, and prices are adjusted to reflect the predicted increase in demand. Price updates are transmitted to electronic shelf labels and the back office. Data from checkout confirms umbrella sales are increasing, causing immediate alerts to the stockroom. The store’s warehouses and key suppliers send shipments to replenish the shelves.

The Intel Intelligent Systems Framework helps simplify the deployment of intelligent systems and enables retail OEMs to shift their investments from achieving interoperability to unlocking the value of data. The framework features fundamental capabilities, delivered by components that address connectivity, manageability and security, including software and middleware from Wind River® and McAfee®.

For more information, visit www.intel.com/content/www/us/en/embedded/intelligent-systems.html.

SUMMARY

Introducing a tablet based on the Intel Core vPro processor and integrating it into the retail software environment can deliver an enhanced shopping experience and raise sales assistant productivity. This multi-function device is ideal for both specialty stores and large retail chains, given it can be used as a laptop, self-service station or tablet. In a retail setting, the device can play eye-catching content that heightens brand awareness and enables sales associates to increase brand engagement.

RESOURCES

Intel® Retail Solutions Partner Network
Redefining what’s possible, leading solution providers have come together to address the specific needs of retailers, whether it’s consulting, content creation and management, retail systems, hardware customization, deployment support, network management or cloud-based services. The Intel® Retail Solutions Partner Network provides one-stop shopping for cutting-edge technologies that deliver new consumer experiences, enhanced productivity, reduced inventory distortion, brand optimization and more. To learn more, visit intel.com/retailsolutions.

For information about Clarity Consulting, visit http://www.claritycon.com.

1HL Group Report: $818 Billion Lost Annually in Global Retail “Inventory Distortion”; 2012.


3 The operating time estimate is based on a four cell battery. Battery operating time will vary depending on the type of content being captured or played, usage conditions such as screen and flash settings, as well as environmental factors such as temperature. As the battery ages, anticipate lower operating duration.

4 Intel® Active Management Technology (Intel® AMT) requires the platform to have an Intel AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. With regards to netbooks, Intel AMT may not be available or certain capabilities may be limited over a host OS-based VPN or when connecting wirelessly, on battery power, sleeping, hibernating or powered off. For more information, see http://www.intel.com/technology/manage/iamt.

5 Intel® Trusted Execution Technology (Intel® TXT) requires a computer system with Intel® Virtualization Technology (Intel® VT), an Intel TXT-enabled processor, chipset, BIOS, Authenticated Code Modules and an Intel TXT-compatible measured launched environment (MLE). The MLE could consist of a virtual machine monitor, an OS or an application. In addition, Intel TXT requires the system to contain a TPM v1.2, as defined by the Trusted Computing Group and specific software for some uses. For more information, see http://www.intel.com/technology/security.

6 Intel® Virtualization Technology (Intel® VT) requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM), and for some uses, certain platform software enabled for it. Functionality, performance, or other benefits will vary depending on hardware and software configurations and may require a BIOS update. Software applications may not be compatible with all operating systems. Please check with your application vendor.

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