Healthcare in IoT - Mobility and Tablet Computing

In this issue

Welcome 2
Tablet Solutions for Healthcare 3
Kore Mobile Workforce Automation Product and Service Offering 5
Mobile Healthcare Case Study 7
Research from Gartner: Delivering Business Value With a Digital Workplace 9
Welcome

When Apple first launched the Apple iPad in 2010, small and medium sized businesses were quick to adopt the use of tablets into their operations as a way to streamline their internal processes, increase automation, and enhance the customer experience.

Now, as the Internet of Things (IoT) continues to expand, more and more enterprises are also looking into ways to take advantage of tablet computing via a range of newly developed IoT applications. But unlike the SMB market, large enterprises face challenges of scale and support and thus have not been able to move as quickly.

This is due in large part to the added complexities of managing such challenges as Over-the-Air updates (OTA); Enterprise Mobility Management; Help and Break/Fix solutions; challenges that most of today’s IT teams are simply not staffed to support properly.

Healthcare companies face an even more complex challenge in launching tablets with their mobile workforces due to stringent HIPPA security requirements and, similarly to large enterprises, haven’t been as swift to adopt and benefit from the use of mobile tablet capabilities.

However, the many perks associated with the use of tablets – such as reducing costs, raising productivity, improving employee satisfaction, and, for healthcare companies, delivering exceptional patient care – is spurring demand.

And yet, the go-to-market challenges remain. Until now.

KORE has partnered with Apple on a complete, end-to-end solution designed to simplify deployments and serve as a single solution provider for IT Teams to outsource the management of their tablets and connectivity. This allows customers to retain flexibility in choosing a connected tablet solution that is tailored to fit the unique needs of their service offering.

Here is an example of a tablet solution for Healthcare.

Source: KORE
There are several key business problems in the Healthcare space today that are accelerating the adoption of various IoT and, more specifically, mobility solutions. Three key drivers of IoT in this industry are as follows:

1. The recent trend of massive public health expenditure is creating the need for healthcare providers to increase operational efficiencies in terms of time, equipment, inventory, and patient management in order to organically reduce costs.

2. The United States’ aging population and prevalence of chronic disease is requiring healthcare providers to perform an increasing number of home visits, more effectively ensure continuous monitoring of patient health, and provide physicians and individual caregivers with reliable patient data that can be easily accessed in mobile settings.

3. Lack of government funding and difficulty with patient retention is forcing healthcare providers to become more innovative and impactful with how they treat their patients, providing the most convenient care possible.

These business issues and industry pressures have resulted in a number of IoT solutions emerging across hospitals and other healthcare facilities nationwide, with applications such as “smart” hospital beds, mobile inventory scanners, and real-time equipment location services for larger, more expensive tools.
One of the most important areas, though, is in remote patient monitoring and home visit improvement.

Field healthcare service has long been considered an area where people find a high degree of meaning in their work, and the increased integration of mobile solutions into the workplace has the potential to bring an even higher degree of satisfaction to those who are working in the sector. At this point, most healthcare providers have incorporated some sort of PC or laptop solutions for providers to bring on the road, but, with that said, there are a number of complexities and inconveniences associated with traditional PC programs that are contributing to the tablet computing revolution in healthcare. At the highest level, a tablet-centric solution presents several built-in advantages:

1. **Connectivity** – with PC solutions, healthcare providers must depend on the availability of WiFi at the patient’s remote location. Assuming that a WiFi connection is even accessible, the question of security becomes critical as many WiFi networks do not meet the regulations for HIPAA compliance. Enabling tablets with secure, cellular connectivity eliminates these concerns.

2. **Convenience** – Tablet devices act as a single-point experience for the user. They do not require middleware or time-intensive integrations for software services and management. You simply load the necessary application, and go. Not to mention, tablets are much smaller, lighter, and easier to transport when providers are often carrying additional medical equipment.

3. **Control** – Unique to the device, tablets can be restricted to a very narrow application area for the intended use of the device. This allows for careful and intentional provisioning of permissions for specific applications on the tablet.

4. **Safety** – With cellular connectivity comes the enablement of GPS tracking capabilities on tablets. This feature not only reduces the chances of theft, but also provides an element of protection for providers who may have to travel to dangerous or unfamiliar neighborhoods.

Although these points present a significant case for the superiority of mobile tablet solutions, this summary is barely the tip of the iceberg when discussing the wealth of power, data security, and worker productivity that can be improved by implementing this category of highly robust service offering. As IoT innovations continue to evolve and improve, the versatility of these devices are designed to last and future-proof your business, guaranteeing both a competitive edge as well as an improved employee experience.

To learn more about tablet solutions in the workforce, [click here](#) to download our free e-book.

---

*Source: KORE*
KORE Mobile Workforce Automation
Product and Service Offering

With over a decade of experience as a leading provider of IoT and M2M communications services, KORE has extensive knowledge of the Healthcare industry, enabling connected solutions ranging from cardiac monitoring devices, to pharmaceutical kiosk systems, to organ tracking and management services – just to name a few. By leveraging this mature industry expertise with traditional IoT capabilities and insights, KORE was able to identify a gap in service offering, resulting in the formation of a strategic partnership with Apple, Inc and the creation of a unique product and service offering designed to revolutionize the home healthcare experience.

THREE-TIER IPAD SERVICE OFFERING
SIMPLIFYING CHOICE

1. **KORE Connect – Single Point of Contact** – Professional Service providing connectivity and reactive break/fix support

   - Connectivity with your choice of any of our carrier partners (AT&T, Verizon, T-Mobile, Sprint, and international partners as well)
24x7x365 Trouble ticket creation and support

KORE’s award-winning connectivity management platform PRiSMPro

2. **KORE Deploy – Device Configuration and Deployment** – Complete managed deployment of applications and devices

   - Builds on the Connect service offer
   - KORE preloads your application
   - Full testing of application and connectivity
   - Custom kitting of device with training material
   - Break/Fix of devices offered in-house (send back to KORE, not to Apple)

3. **KORE Managed – Reduce Total Cost of Ownership** – Total mobility service solution

   - Complete offering that builds on KORE Connect and KORE Deploy

   - Mobile device management
   - Application management
   - Performance reporting
   - Software and security updates

---

**SERVICE DETAILS BY OFFERING**

<table>
<thead>
<tr>
<th>Day 1 Services</th>
<th>KORE Connect</th>
<th>KORE Deploy</th>
<th>KORE Managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Account Setup &amp; Design</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Initial Equipment Installation and Configuration</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 2 Services</th>
<th>KORE Connect</th>
<th>KORE Deploy</th>
<th>KORE Managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>24x7x365 Trouble Reporting</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>National Account Center</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>8x5 or 24x7 Service</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Coverage Option</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Usage Reporting &amp; Alerts</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Dedicated 1-800 Number</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

**Customer Care**

**Features**

- Connectivity
- SIM Management
- Device Staging & Kitting
- End-to-End Design
- Consulting
- Back-up & Configuration Management
- Operating System Patch Management
- Performance Enhancing Packages
- End User Helpdesk
- Security Updates
- Security Upgrades

**Optional Services**

- Device Certification
- End User Help Desk Support
- Mobile Device Management

Source: KORE
Mobile Healthcare Case Study

Background/Business Problem
In early 2016, KORE began working with one of the top providers of healthcare information technology, a firm servicing hospitals, physician practices, and extended care organizations. This industry leader recognized the value of empowering their client’s remote healthcare workers with the right technology and software tools to deliver smarter care as part of their Mobile Health Practitioner Solution.

They also knew that for their clients to effectively operate, their remote healthcare workers would need to be able to access and maintain a private host of sensitive patient data, including medical images and health records.

To effectively bring their Mobile Health Practitioner Solution to market, this firm needed to begin with a device that would provide an intuitive and immersive user experience, and ensure that clients were “always connected” while completing their rounds with patients outside of the practice or hospital. They concluded that versatility, usability, built-in data security for HIPAA compliance, and a form factor that does not distract were of utmost importance.

Cellular-enabled tablets stood out as the optimal choice.

However, given the complexity of all the moving parts – from tablet ordering, to carrier selection and connectivity provisioning, to device configuration and deployment, to customer service and helpdesk requirements – this Healthcare IT provider realized they could not practically manage this on their own.
They needed a single partner who could integrate a number of complicated pieces of technology and deliver the complete service offering. They reached out to KORE.

**Solution Overview**

KORE teamed up with Apple to provide a turnkey, managed tablet solution that could be customized based on the customers’ desired application. By combining and simplifying all of the necessary pieces of technology, KORE was able to utilize its IoT expertise to offer an iPad-based product and service combination covering all elements of the supply chain:

- **Connectivity and Device Procurement**
  - iPad Air 2 16GB model with WiFi and cellular capabilities
  - Provisioning of single, or multiple cellular carriers including AT&T, Verizon, Sprint, and T-Mobile with the ability to leverage KORE’s industry experience for selecting the correct carrier(s)
  - Case options with or without built-in keyboard
  - 24 hour device replacement service

- **Software Integration and Management**
  - Each device pre-loaded and configured with the mobile health iOS application
  - Ability to pre-load any additional applications that the clients’ customers’ may require (i.e. Office 365, Salesforce, etc)
  - Carrier services setup and tested prior to shipping
  - User instructions, handbooks, and FAQ pre-loaded on devices and included in shipments

- **Streamlined Order Process**
  1. Customer Signature
  2. Customer Checklist and Documentation completed
  3. Easy SKU selection for ordering
  4. Purchase Order and Documentation provided to KORE
  5. KORE configures, tests, and ships devices to customer

**Key Results**

With a managed tablet solution in place, KORE’s client is changing how clinicians practice medicine, enabling healthcare professionals to move more freely among dispersed patients, and ultimately producing better outcomes.

*Source: KORE*
Delivering business value from a digital workplace requires a multidisciplinary strategy addressing people, process and technology. Our Special Report pulls together the latest research on using a digital workplace to boost workforce agility and engagement.

**Analysis**

The digital workplace is a business strategy to boost employee engagement and agility through a more consumerized work environment. The idea is that substantial business value can be created by exploiting and encouraging employee digital dexterity, which is critical for three primary reasons:

1. Most jobs now require substantial use of technology, and the digital component of labor is growing all the time.

2. Many organizations are pivoting to a digital business model, requiring large parts of the employee base to adroitly participate in the digital business value chain.

3. It is increasingly obvious that the ability to quickly exploit emerging technology will be a significant source of competitive advantage as technology evolution accelerates along with business cycles.

One of the best ways to foster digital dexterity in the workplace is to more fully embrace the technology that employees use in their personal lives. These consumerized services make it easier for employees to learn and exploit existing and emerging technologies through, for example, the use of apps, user experience design services, embedded social tools, and self- and community support options.
This pivot to a more consumerized work environment can boost employee engagement by facilitating greater ability to meet challenges from a rapidly changing work environment. Work changes include the rise of smart machines, the broader use of a freelance workforce, flatter organization models pushing decision making to the edge, more dynamic (as opposed to routine) work, and the need to frequently switch roles and responsibilities. Engaged employees are more likely to embrace these changes, which are critical to continuing business success.

Organizations, therefore, have a great opportunity to use technology investments to promote employee engagement. The links between engagement and technology include:

- Enabling employee-friendly work-life balance through an anytime/anywhere computing infrastructure
- Supplying new ways of recognizing employee contributions through a content and collaboration infrastructure that is more open and more social
- Promoting continuous learning and skills acquisition through a concerted effort to teach digital literacies
- Improving health and safety with wellness programs, immersive technologies and Internet of Things (IoT) networks
- Increasing transparency and trust by changing the default content and process working mechanisms from private to public
- Boosting individual and team agility through more choice in devices and apps, and a focus on easy-to-use analytics

The digital workplace is a multifaceted endeavor involving many parts of the IT organization, as well as other business units including human resources, corporate communications and facilities management. The breadth of the digital workplace can be seen in this multidisciplinary collection of new research, with highlights listed below.

**Research Highlights**

At the heart of the digital workplace is digital dexterity, which is a core employee cognitive ability and social practice to drive digital business success. Digital workplace leaders should assess their organization’s digital dexterity against projected requirements, and implement a strategy to attract the optimum mix of talent.

We recommend that digital workplace leaders explore the use of strategic workforce planning services to more closely tie digital dexterity to business requirements. Workforce planning has traditionally been used exclusively by the HR group. HR can also contribute to digital workplace success by rethinking how employee performance reviews are conducted.

One of the critical elements of digital literacy is the democratization of analytics, which can greatly improve business insight, transparency and results. The move to a culture that embraces data-driven decisions, however, requires a long-term plan. Organizations can also promote agility through the use of citizen development.
One critical digital literacy is the requirement to make more employees customer-focused, which can ease the transition to digital business. Leaders of digital workplace initiatives can connect employee engagement to customer experience in ways that have a positive effect on both.

One of the most critical digital literacies is the ability to willingly and quickly embrace new technologies, some of the more important of which are smart machines, IoT and virtual personal assistants.

A digital workplace roadmap highlights the order to reach important milestones along three tracks: people (aiming at engaged employees); process (aiming at responsive management practices and governance); and technology (reimagining workplace capabilities). IT leaders should use this roadmap to plan their digital workplace strategy.

Digital-literate employees are more empowered to exploit IT services of their own choosing. Rather than rigidly requiring a standard build and device types, digital workplace leaders increasingly are open to more heterogeneity in endpoint devices and apps.

Mobility is one of the key enablers of the digital workplace, but deciding what apps to write and what apps not to write requires combining knowledge from three areas: digital literacies, technology choice and business issues.

Digital literacies require a new approach to IT infrastructure, ranging from security to application integration to identity and access management.

Finally, one of the keys to business success from the digital workplace is the ability to exploit emerging technologies coming from the consumer space for competitive advantage.

Gartner Research Note G00290493, Matthew W. Cain, Mike Gotta, 28 August 2015
Contact us

For more information contact us at:

www.korewireless.com
info@korewireless.com