Healthcare Industry

White Paper
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Healthcare Industry Point of View

Key Trends and Challenges

Even before the global financial crisis hit, Healthcare is a competitive industry with unique challenges, where close to two thirds of industry participants were struggling with profitability. Many larger institutions tried to pare costs through mergers and acquisitions. They have found the cost savings due to surmised synergies were not as great as expected and their actions have served to increase competition. Other constraints on profitability include inefficient internal processes [Figure 1], staff shortages, increasing demand for broader services, and a lack of political will for fee increases.

[Figure 1] Main Root Causes of Hospital Patient Flow Problems

Healthcare institutions are searching for new method to contain costs. Some are beginning to look at simple, cost effective automation solutions to help manage sensitive medical information. By converting paper-based health records and medical images to electronic format, healthcare workers spend less time creating, filing and retrieving documents. Digitization also makes it easier to share information, reduces file storage and paper costs, and minimizes treatment mistakes by eliminating error-prone handwritten notes.

Privacy and security concerns become paramount when making health-related documents easier to access and process. Healthcare institutions require document solutions that not only ensure against external and internal security risk, but also comply with the nationally established Health Insurance Portability and Accountability Act (HIPAA).

**Document Workflows**

**[Figure 2] Document Workflows in Healthcare Institutions**

- **Strategic Service Offering**: Frontline healthcare workers need to share and access a wide range of service offering documents to help patients make choices about their health care provider.

- **Resource and Supply Chain Planning**: Due to the complex medical supply chain, Institutions relying on paper-based ordering systems and manual inventory management will inevitably incur inefficiencies and supply chain breakdowns. Central streamlined systems for purchasing and inventory management are essential.
• **Treatment and After-Care Support:** Healthcare organizations generate patient information about diagnosis, radiographic images, treatment, after-care, and many other aspects of care. Decentralized paper-based care documentation that is inaccessible across departments increases manual workloads and can threaten patient safety.

• **Patient Administration Service:** This is where patient demographic, treatment histories, and inquiry information are generated and managed. Services in this area can be improved with a well organized, and up to date, patient information system.

**Document Requirements**

Electronic Document Management Solution (EDMS) that facilitates efficiency, productivity and security across these operational workflows can help to promote cost reduction and increased patient satisfaction. Typical documentation solution requirements include:

> **Increased Productivity**

Converting paper-based documents to electronic formats, not only reduces printing, storage and management costs, but also promotes productivity. The Electronic Medical Record management (EMR) solution makes communications more efficient and reduces manual labor. Staff anywhere can access, view and print documents such as insurance claims, clinical tests, results and prescriptions.

> **Enhanced Patient Safety**

Since a large number of document updates occur during patient diagnosis, treatment and after care, Healthcare institutions are open to risk if versions are not rigorously tracked, maintained and organized. On-demand, up-to-date document templates and document version control must be robust in any new Electronic Document Management Solution (EDMS) for healthcare.
> Assured Privacy and Security

Sensitive medical documents require high levels of privacy and security, enforced by government through the Health Insurance Portability and Accountability Act (HIPAA).

To comply with the regulations,

- Health workers must be authenticated by the system when accessing or printing medical documents.
- Electronic Document Management Solution (EDMS) must build in encryption to prevent information theft and hacking.
- Any solution will also need to produce document access and update audit trails.
- Comprehensive back-up and disaster recovery functionality is also a necessity as documents, and their audit trails, must be stored for five years.

> Reduced Cost

Healthcare institutions can achieve cost reduction with the document management system by looking at initial hardware investment, ongoing system maintenance costs, printing costs, and the cost of consumables such as paper and toner. Electronic document management allows institutions to generate significant TCO savings by replacing resource- and cost-intensive paper-based processes. This is one of the top information technology trends in the industry.

Samsung’s Healthcare Industry Value Proposition

Through years of experience, Samsung has developed deep understanding and insight into the needs of the healthcare industry for powerful, yet cost-effective Electronic Document Management Solutions (EDMS). Our comprehensive Electronic Document Management Solutions (EDMS) reduce document processing, storage and printings costs, increase healthcare worker productivity, and improve patient satisfaction. We understand the importance and complexity of regulatory compliance, maintaining patient privacy and information security.
**Productivity Enhancement**

Our solutions provide cutting-edge, high-performance laser technology that will allow you to turn cumbersome, one-off paper-based processes into a streamlined electronic document management system.

They allow healthcare workers to easily create, process, and share documents ranging from purchase orders to medical records. Effective communication fosters greater productivity across the healthcare institution including administration, purchasing, nursing and physicians, pharmacy, as well as third-party agencies.

**Patient and Employee Satisfaction**

Samsung’s solutions help improve patient satisfaction by reducing the time it takes to process administrative, diagnostic and treatment information. Replacing manual, paper-based systems with online systems not only reduces human error introduced by manual documentation, but also allows staff to focus on higher level services that increase patient satisfaction and loyalty.

**Information Security and Regulatory Compliance**

Our Electronic Document Management Solution (EDMS) focuses on ease of access in a high security framework to help prevent the loss or misplacement of key patient documents. Proactive protection against privacy invasion, identity theft and hacking, and combined with secured communications, allow healthcare providers to comply with HIPAA regulatory requirements.
Print Cost Reduction

By converting paper-based documents into electronic information effectively, healthcare institutions will be able to save on document management costs. Physical document storage can be eliminated and better filing systems can eliminate manual document retrieval and re-filing costs.

Samsung helps healthcare institutions optimize their print systems in a cost-effective manner through cost competitive hardware and consumable supplies tailored for the healthcare business. Managed Print Service allows institutions to gain control over costs.

Samsung’s Healthcare Industry Offerings

Samsung engineers reliable, high-quality hardware and software solutions, designing custom systems based on the needs of each organization. Our collaborative, responsive service module delivers real value to customers.

Productivity and Satisfaction Improvement

Convenience and Ease of Use

Samsung helps healthcare institutions to enhance productivity by managing large volumes of paper documents in digitized form. A hardcopy scan can be transformed into various formats, including .tif, .jpg, .pdf and delivered to any destination, using fax, printer, OCR, e-mail or any enterprise application. Samsung’s “Scan to USB” enables you to transmit scanned documents and receive e-mail directly to any USB device. You can register an email address, scan a document, and then share hard copy reports by emailing them to multiple recipients.

Healthcare professionals can conveniently index, search, and categorize documents, and collaborate across diverse information technology and communications platforms. The system allows administration, accounting, and any other departments to securely access, update, share, and store any document [Figure 3].
For optimal convenience, Samsung’s flexible and versatile Universal Print Driver allows the installation and utilization of most PDL printers and multifunction devices by other manufacturers. In addition, our solution allows you to monitor and diagnose multiple devices remotely and control from a single point.

For small-to-mid size healthcare institutions who seek to optimize its printing cost with minimized service fees, Samsung provides convenient device functions, allowing you to maintain devices by themselves easily. As an example, Samsung copiers are competitively convenient to operate with functions such as easy-to-install drum/toner cartridge and easy pull-in/pull-out finisher and fax module, according to your needs.

**Compatibility and Flexibility**

Samsung engineers compatibility with printing features using Citrix and SAP, as well as with IPv6 / IPSEC. Our inter-changeable toner cartridges and other supplies let you manage printers easily and effectively from single vendor.
[Figure 4] Cerner Millennium Certification and Meditech Compatible: Provide business environment capable products with certification

Samsung’s powerful and flexible platform, partnered with relevant third-party expertise, is able to satisfy various business requirements through streamlining administrative process; securing device/network/applications access; and tracking prints/copies/scans/faxes.

Responsive Service Plans

The Samsung implementation team offers hardware and software customization and system design as well as legacy system integration services. We minimize the costs of ongoing maintenance services by setting a fixed fee for each, so you can phase in the service you require and plan costs in advance. Typical options include service-level agreement changes, parts-only warranties, extended warranties, onsite or call center service; local provider service, equipment pick-up and delivery, in-house escalation and next-business-day service.

Innovative, Durable Hardware

For years, Samsung’s multifunction printers have led the way in innovation and cost reduction. They have received reviews that place them time and time in the “Best Quality in terms of Performance and Innovation” for reliability, multi-tasking capabilities and productivity and efficiency improvements. Samsung has been continuously awarded “Pick of the Year” by BLI, and is consistently a “Better Buys for Business” Editor’s Choice.

Security and Privacy Protection

Samsung’s diverse product lines are engineered with privacy and security as a paramount consideration.

Security Features for Regulatory Compliance

Samsung’s unique security features eliminate vulnerabilities to malicious attacks and to protect sensitive information (e.g., patient medical records). Samsung’s key regulation compliance features for healthcare industry are as follows: user authentication and authorization for document access control; security audit log for inspection; and enhanced network security for key records transmission.

Image Overwrite Feature

Image Overwrite Feature as follows;

User information created during copying, printing, network scanning, scanning to e-mail, or scanning to server processes is immediately recorded on the MFP’s hard drive. To secure this information, the MFP software implements an image overwrite function to erase image data. The MFP software performs three overwrite passes of the data using the methods defined in Department of Defense (DoD) 5200.28-M.

- Related Solutions with Software : SyncThru™ Web Service UI (Device Management)

Cost Optimization

In a comparative study performed by Buyers Laboratory Inc. (BLI), the leading source for unbiased and reliable intelligence for the imaging industry, Samsung copiers and supplies outperformed others in reliability, multi-tasking capability, and productivity and efficiency. BLI confirmed Samsung as provider-of-choice for lowest-cost management options.

Samsung’s Managed Print Service (MPS) consolidates on-site printers, MFPs, copiers and fax fleet management with a variety of flexible options, from basic cost-per-page contracts to comprehensive service engagements. A convenient, metrics dashboard provides complete visibility into all network device usage so that printer, fax, scanning and copying can be monitored and measured from anywhere. Using Samsung’s Managed Print Service (MPS) programs, institutions typically save 10 to 30 percent in total cost of ownership.
In addition, real-time monitoring of toner outage or printer malfunctions enables device maintenance management, while Samsung’s CounThru™ 2 Enterprise analysis report shows usage and billing information by print type, paper size and color selection [Figure 5].

[Figure 5] CounThru™ 2 Enterprise:
Remotely monitoring and management of device usage

Samsung’s S.T.A.R. Program is a free service, created in partnership with FedEx, to encourage companies to take responsibility for keeping the environment clean. Since 2005, it has set a new industry benchmark for cartridge return plans. Under the program, Samsung collects empty print cartridges, safely recycles them, converting them into useful materials and thereby ensuring they are not incinerated or sent to landfills.

[Figure 6] Samsung Green Practice

- Related Solutions with Software : CounThru™ 2 Enterprise Managed Print Solution