



Case Study



Use of Mobile Computing Devices in Pharmaceutical R&D Labs

Overview

Region: United States
Industry: Pharmaceutical

Customer Profile

In order to discover and develop new solutions, a major U.S.-based pharmaceutical company relies on its innovative R&D, which continually researches and tests new pharmaceuticals, biologics and medical devices. There are a few specialty labs which have designated either clean rooms or restricted access facilities where special tests are handled. The equipment used in these rooms is regularly sterilized and disinfected between tests or if removed from the room.

Business Situation

The pharmaceutical company realized it was time to reevaluate and update the lab technicians' data capture methods. The company began the search for a new, tablet-based mobile computing solution to create efficiencies, reduce costs and help streamline the overall R&D process.

Solution

Starting with just one Motion® C5 Tablet PC, the company quickly implemented additional units at the request of the lab technicians. After a year of successful use, the company expanded the tablet implementation to include the J3500 Tablet PC due to the device's ample screen size.

Benefits

- Saved an enormous amount of space
- Easy to use and maintain
- Access to real-time information
- Almost completely eradicated the need for paper
- Simplified verification process
- Saved costs associated with using paper

"With the elimination of paper we are saving a lot of money on the cost of the paper itself as well as the tools to decontaminate it, and we no longer have to worry about storing or potentially misplacing it."

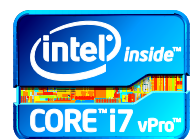
Company representative, major U.S.-based pharmaceutical company

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Starting with just one [Motion® C5 Tablet PC](#), the company quickly implemented additional units at the request of the lab technicians. After a year of successful use, the company expanded the tablet implementation to include the [J3500 Tablet PC](#) due to the device's ample screen size.

Immediately, the pharmaceutical company found that the tablets saved an enormous amount of space as compared to the desktops and were easy to use and maintain. Stored in wall-mounted docking stations in the labs, the tablets are always accessible and the battery life means reliability is never an issue.

The lab technicians now depend on the Motion Tablet PCs as a way to collect data, access forms and support the overall testing process. Running essential lab tools and programs, such as electronic lab notebooks (ELN) and laboratory information management systems (LIMS), the tablets provide technicians with access to information in real time and have almost completely eradicated the need for paper.





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Overview

In order to discover and develop new solutions, a major U.S.-based pharmaceutical company relies on its innovative R&D, which continually researches and tests new pharmaceuticals, biologics and medical devices. There are a few specialty labs which have designated either clean rooms or restricted access facilities where special tests are handled. The equipment used in these rooms is regularly sterilized and disinfected between tests or if removed from the room.

Challenge

Previously, lab technicians working in the specialty labs relied on large desktop computers to collect and analyze data as well as access reports. The desktops were encased in aluminum for sanitation purposes and placed on top of stainless steel carts. Lab technicians found the solution to be extremely cumbersome as the carts were heavy, took up much-needed space and could only be moved as far as the power cords would allow.

Furthermore, the lab technicians were still required to use paper forms and records, which had to be sterilized every time they were brought in and taken out of the labs. Sterilization of these forms required special tools, solutions and processes which were time consuming and costly. To comply with regulatory standards, the forms and records also had to be filed and stored, taking up additional space and resources.

The pharmaceutical company realized it was time to reevaluate and update the lab technicians’ data capture methods. The company began the search for a new, tablet-based mobile computing solution to create efficiencies, reduce costs and help streamline the overall R&D process.

Because of the specific lab environment, the company’s top priority was the tablet’s ability to be disinfected as well as sealed against dust and water. This need made the use of consumer tablets absolutely impossible in a laboratory environment as they cannot be sanitized to the required level. Keeping in mind the needs to prevent cross-contaminations or release of harmful compounds to outside of the labs, it was essential that the company select a device that could withstand rigorous disinfection.

Solution

No stranger to performing diligent and thorough research, the pharmaceutical company took it upon itself to find the right device.

“We found [Motion Computing®](#) right from the start,” said the Company representative. “We were aware of several vendors, but Motion was the right fit because of the tablets’ ability to withstand extreme disinfection, for the Windows®-based operating system and the high level of performance.”

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“The Motion Tablet PCs easily adapted to the labs’ different workflows, and the fact that the tablets ran Windows was a big advantage,” said the Company representative. “Not only are the tablets compatible with our in-house software, but security is a huge factor for us as we deal with very sensitive information on a daily basis, and it’s one less thing we have to worry about.”

Results

Immediately, the pharmaceutical company found that the tablets saved an enormous amount of space as compared to the desktops and were easy to use and maintain. Stored in wall-mounted docking stations in the labs, the tablets are always accessible and the battery life means reliability is never an issue.

“The lab technicians enjoy the hot-swap battery feature since it allows them to use the tablets all day without having to worry about charging,” said the Company representative. “And if anything was to happen to one of the tablets, there is always a backup tablet available.”

The lab technicians now depend on the Motion Tablet PCs as a way to collect data, access forms and support the overall testing process. Running essential lab tools and programs, such as electronic lab notebooks (ELN) and laboratory information management systems (LIMS), the tablets provide technicians with access to information in real time and have almost completely eradicated the need for paper.

For example, lab technicians use a form based ELN-like solution to capture all information during the testing period, including everything from the potency of a drug to its microbiology. Technicians are able to easily access the forms via the tablets, capture the data and immediately upload it to a database.

“The Motion Tablet PCs have enhanced efficiency, communication and the collection and flow of information, which helps our R&D develop new solutions to meet unmet needs.”

If the lab technicians need to discuss a report or review information, instead of crowding around a piece of paper, they dock the tablet and use the Bluetooth® connection to project onto a large monitor, which is located outside of the room and can be viewed through a large window.

The Motion Tablet PCs' integrated digitizer pens are also proving extremely beneficial when navigating through the relatively small tablet screens. When a lab technician fills form out, the system requires them to enter their name and password – a much easier process with the integrated digitizer pens. The Company representative also notes that now with the ability to fill out documents electronically, the verification process is much easier.

“With the elimination of paper we are saving a lot of money on the cost of the paper itself as well as the tools to decontaminate it, and we no longer have to worry about storing or potentially misplacing it,” he said. “Paper-based processes are also less secure and more prone to error as handwriting can be incorrectly interpreted during transcription or a paper could get lost in the shuffle from the labs to storage.”

The company is also finding another of the tablets' integrated features particularly useful. The barcode scanner helps the lab technicians document, track and handle testing samples. It's as simple as scanning the barcode to know when the sample was manufactured, when it was delivered and what it's used for. All relevant information is able to be pulled up right on the tablet PC at a moment's notice.

Conclusion

The pharmaceutical company plans to increase its use of Motion Tablet PCs and looks forward to taking on new projects and discovering new functionalities.

“Our R&D is the driving force behind our innovative products, and we have equipped them with the tools to help them succeed as well as and increase productivity and employee satisfaction,” said the Company representative. “The Motion Tablet PCs have enhanced efficiency, communication and the collection and flow of information, which helps our R&D develop new solutions to meet unmet needs.”

