Using the Toughpad FZ-X1 as a terminal device with SAP’s enterprise resource planning system (ERP) to improve inventory work efficiency and promote rapid information sharing.

Mipox Corp., being committed to producing polishing films, has the lion’s share of the global market for polishers designed for hard disks and other precision apparatuses. Recently, the company has used technologies it developed over the years for general polishing purposes in the field of automobile products, showing robust growth in the global market as well as the Japanese market.

With expansion of its business domain and product lineup, this polishing products manufacturer introduced two systems: An enterprise resource planning system (ERP) from SAP, and a system that can be interconnected with handy terminal devices, developed by CRESCO e-Solution Co., Ltd. As a model that meets the requirements of these systems, Mipox has introduced the Panasonic Toughpad FZ-X1, a rugged, 5-inch handheld tablet, to achieve shorter inventory working hours and improve the efficiency of inventory work.

Background to introduction

With the aim of improving the efficiency of inventory work linked with SAP’s ERP system, Mipox decided to introduce Toughpad FZ-X1 on the suggestion of CRESCO e-Solution.

Mipox has 21 branch offices in 9 countries, including Japan, Malaysia, India, and Singapore, and more than 1,000 customer companies worldwide (as of August 2016). What makes the company distinct amid the drastically changing conditions of the global market is its “speed” capability. The company is always aiming to accommodate the diverse needs of its clients as swiftly as possible. To this end, it is striving to further improve the efficiency and the integration of business operations at its business bases, including overseas branch offices, by consolidating

Why Toughpad FZ-X1 was chosen

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<td>Handy terminal device that can be interconnected in real time with SAP’s system</td>
<td>Barcode reader with high scanning accuracy</td>
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the management of various data related to inventory and production control. President & CEO Jun Watanabe said, “As a solution to improving business efficiency, I concluded that it was necessary to apply information technologies to business operations. This resulted in our decision to introduce an ERP from SAP. The system, which has already been put into practice all over the world, is capable of consolidating the management of information via cloud solutions. This made the system ideal for Mipox, which has overseas branch offices.” The company introduced SAP’s ERP system in November 2014, and planned to begin incorporating it into its inventory work from March 2015. However, a problem occurred once the system was introduced: data transfer failures from terminal devices used at that time to handy barcode-reading terminal devices. Although several modifications were made to these devices, the problem could not be resolved. In the actual inventory work, the company thus had no choice but to mobilize many workers to implement all of the work manually, and it took about three days to complete. This was far from Mipox’s aim of achieving shorter working hours and improving the efficiency of business operations. The company urgently needed to find a system that was best suited for on-site application and could handle SAP’s ERP system properly and efficiently. Eventually it chose a system from CRESCO e-Solution Co., Ltd. The system, which can be interconnected with handy terminal devices, takes advantage of the mobile “Mobick” solution. Acting on the suggestion of CRESCO e-Solution, Mipox decided to adopt Panasonic Toughpad FZ-X1 tablet.

“The capability of being interconnected with SAP’s ERP system on a real-time basis was most needed for a terminal device to be used with the system. We believed that a combination of Toughpad FZ-X1 and the system that can be interconnected with handy terminal devices could enable data transfer on a real-time basis, which would assist us in saving a lot of time and labor. Toughpad FZ-X1 can be used as a barcode reader with high scanning accuracy, and features its excellent operability and expandability. Taking into account these elements, we introduced the tablet to facilitate the integration of business operations at all business bases in view of further business development in the future,” Watanabe said.

Introduction benefits

Total inventory working period could be cut from three days to two.

In preparation for inventory work scheduled for March 2016, Mipox placed an order with CRESCO e-Solution. Just two months later, CRESCO e-Solution completed setting up the environment that enables a system to be interconnected with handy terminal devices. The new system was put into practice, and Mipox carried out inventory work scheduled for two days. The entire production line was stopped as scheduled and the work was successfully completed without any problems. The company confidently predicts that for the next inventory work, the production-line stoppage period will be cut to only one day. The reason the company has successfully attained such concrete results is that data could be transferred to SAP’s ERP system on a real-time basis. The moment data is scanned with Toughpad FZ-X1’s barcode reader, it is transferred via wireless LAN network to SAP’s ERP system. This has made it easier for Mipox to identify reasons for the difference between actual inventory and inventory recorded on the system. The high scanning accuracy of the barcode reader has been greatly appreciated among on-site workers. “With conventional handy scanners, some measures need to be taken to read data properly, Watanabe said. In particular, the direction of the scanners needs to be changed according to the object, or the scanners need to be brought close. Toughpad FZ- X1, on the other hand, can scan data instantaneously even a short distance from the object, and can also scan a folded barcode on a bag. This helps us to efficiently carry out inventory work.”

In addition, Toughpad FZ-X1 is designed so that the user can operate it intuitively, like a smartphone. Anybody can therefore easily operate it without any confusion, to perform business operations promptly and accurately. The tablet has enabled Mipox to reduce its reliance on each employee’s capabilities. As a result, the company has achieved the integration of its business operations. Mipox’s overseas business bases will also introduce a system that can be interconnected with handy terminal devices and Toughpad-series tablets in the near future. Mipox continues to advance steadily toward the aim of integrating business operations and improving efficiency at all business bases.
Future outlook of using Toughpad FZ-X1

Mipox, where apps relating to customer management and sales support are widely used, will take advantage of the Toughpad FZ-X1 tablet’s camera function and use the tablet as an in-house communication device to revolutionize the manufacturing field.

Mipox decided to introduce Toughpad FZ-X1 as a barcode reader with a large display, assuming that the tablet would be applied only to inventory work. The company is now planning to incorporate the functions of inventories movement, storage bin management, and stock inquiry into the tablet to further improve the efficiency of business operations. Mipox, in which apps relating to customer management and sales support and SNS are widely used as an in-house communication tool, is actively engaged in promoting information sharing among staff. President & CEO Jun Watanabe said, “Toughpad FZ-X1 tablets are designed to be equipped with various systems and applications. The tablets can be used to revolutionize the way employees work in the manufacturing field.” Assume, for instance, that workers are required to share data in a factory/plant field where PCs cannot be used because the air is thick with dust. Toughpad tablets enable those workers to transfer data on the spot, eliminating the need to go out of their way to return to their office.

Toughpad FZ-X1 tablets are currently used to improve the efficiency of business operations and enhance in-house communication among staff. Watanabe, however, hopes application of Toughpad tablets will be broadened further and that the tablets will serve as a key element to revolutionizing the way employees work in the manufacturing field. Specifically, the tablet’s camera function is expected to be used to record and report on-site conditions, and the telephone function, over a wireless LAN network, to facilitate swift in-house communication.

“In the future, we would also like to use Toughpad FZ-X1 tablets as a global communication tool in the manufacturing field at our business bases, including overseas branch offices,” Watanabe said. The company plans to extend the functions of Toughpad FZ-X1 that it currently adopts in Japan. In Mipox, a revolution is already under way in how employees work: They are shifting their work style to one centered on Toughpad-series tablets. An ultra-thin, lightweight 4.7-inch handheld tablet “Toughpad FZ-N1,” for example, is actually introduced on site.