

MESSAGE

Total Seamless Solutions Using Products, OT, and IT to Assist Industry in the New Normal Era

Using Digital Technologies to Connect Workplaces, Management, and Supply Chains

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Requirements of Industry in the New Normal Era

The worldwide spread of COVID-19 has greatly altered the values of people and society at large. Industry is seeing

many companies moving toward digitalization, and digital transformation is making rapid strides.

Three concrete changes have been taking place. The first concerns safety. As working remotely becomes increasingly common, companies are being called on to ensure both employee safety and work efficiency.

The second concrete change is about resilience. Global supply chain disruptions have shut down production activities in many cases, creating the need to strike a balance between handling risks such as redundant management resources and capital efficiency.

The third concrete change is in how companies are responding to market changes. Rapid business decisions need to be made in response to changes in user needs such as a rise in e-commerce generated by consumers confined to their homes and the expansion of the pharmaceutical and medical fields.

So, what sort of management approaches should companies be using in this “new normal” era during and after COVID-19 pandemic? I feel that an increasingly important role is going to be played by management approaches that give companies sustained growth through total optimization that connects “boundary” issues between workplaces, management, and supply chains.

Total Seamless Solutions for Resolving “Boundary” Issues

The February 2020 Edition of *Hitachi Review* is entitled “Industrial Products for Total Seamless Solutions: Creating Customer Value with Industrial Products.” The article is entitled “Adopting a ‘Product-out’ Approach to Manufacturing that Draws on Combined OT and IT Expertise.” It discusses the importance of facing the changing market and creating innovative products that make the most of Hitachi’s strengths.

Hitachi’s Industry Sector is the company’s trend-setting sector that works in the industrial field. Half of its revenues come from products, and the other half from operational technology (OT) and IT solutions. This issue looks at some of the innovative solutions the sector has created by drawing on Hitachi’s workplace knowledge and experience in the manufacturing and distribution industries.

Companies have been moving toward specialization and targeted business approaches to respond to recent advances in technology, diversifying manufacturing workplaces and rapid structural changes in the world at large. At the same time, customer workplaces use methods created by individual departments over countless hours, resulting in many partially optimized individual operations and business areas being left over unintentionally.

When factories built with the latest digital technology seek to expand their operations, various management issues can arise between the workplace and management or the supply chain. For example, management methods that still rely on old systems or manual processes can remain, or large in-progress or time-based losses can arise between optimized systems. These issues often remain unresolved even when identified. This failure can be the result of organizational or authority-related problems, or an inability to devise approaches to solutions. These gaps between operations and companies impede total optimization. I call them “boundary” issues.

Solving these issues is one of the key roles of Hitachi’s Industry Sector, which has forged its identity over many years of working closely with manufacturing workplaces, the sector also has extensive OT experience along with a successful track record in the latest areas of digital technology and IT. The method it uses to solve “boundary” issues

is to provide total seamless solutions that enable total optimization by using the latest digital technologies to connect physical space and cyber space.

To go beyond partial optimization, companies often need to rid themselves of their preconceived notions or fixed ideas. NEXPERIENCE is the collaborative creation approach used by Hitachi’s Lumada. It can be used to extract and reveal “boundary” issues through third-party views and concepts of total optimization.

Hitachi’s Industry Sector excels at digital solutions that touch on several of the key areas for the new normal era during and after COVID-19 pandemic—planning, quality, automation, and human-machine-material-method (4M) data. By providing total seamless solutions centered on these areas, Hitachi is aiming to maximize the economic value from a management perspective, while helping to improve social and environmental value.

Augmenting Hitachi’s Robotic SI Business as a Way to Seamlessly Connect Workplace and Management

The Industry Sector is anticipating high growth in the markets for robotic system integration (SI) and automation due to ongoing growth in demand for automation. This growth is the result of factors such as the chronic labor shortages that Japan faces as experienced workers retire, production technology staff dwindle, and labor costs soar. The spread of COVID-19 should also further stimulate the trend toward automation and unmanned operation.

In 2019, Hitachi’s Industry Sector acquired robotic SI providers JR Automation in the USA and KEC Corporation in Japan. The aim of these acquisitions is to augment the company’s ability to respond to “boundary” issues. Robotic SI is an area in which massive amounts of data come together as a result of the trend toward labor saving and automation. By providing total seamless solutions centered on the robotic SI area, Hitachi is aiming to create major refinements in manufacturing sites through comprehensive connections from workplace to management.

This issue presents the work being done by Hitachi’s Industry Sector, focusing on the Industry & Distribution Business Unit responsible for providing OT and IT solutions. Reader feedback is welcome.