



Customer **profile**

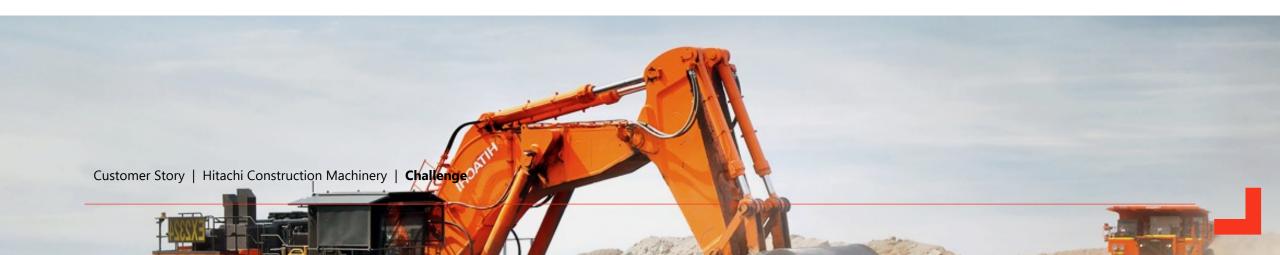
Hitachi Construction Machinery Co., Ltd. [Hitachi], which manufactures, sells, and rents construction machinery, accounts for about 80% of its sales overseas. Until the 1980s, the main focus was on exporting from domestic production bases. In the 1990s, it shifted to "local production," where overseas production bases were established. From the 2000s to the 2010s, overseas business has grown significantly.

Since the 1990s, Hitachi has continued to expand its production and sales activities overseas. In the 2000s, Hitachi's operations in overseas markets expanded rapidly. Now, based on its CONNECT TOGETHER 2019 mid-term business plan, Hitachi has shifted its focus from new-vehicle sales to after-sales service and plans to transform its corporate culture to become more adaptable to change.

Strengthening after-sales globally and transforming into an adaptable corporate culture

In 2016, alongside this initiative and as it came time to update its enterprise resource planning (ERP), Hitachi began to examine the possibility of "global system integration," a goal it had never been able to achieve in the past. This time, Hitachi turned to cloud-based services as the optimal solution for achieving its goal. For its platform, Hitachi chose A365, a management solution finetuned to industry needs. For its platform, A365 uses Microsoft Dynamics 365 Finance and Operations, an evolution of the accomplished Dynamics AX on-premises ERP. Now, focusing on trends in the global construction machinery industry, Hitachi has moved forward with a new revolution under its mid-term business plan, CONNECT TOGETHER 2019.

This plan represents an enrichment of Hitachi's value chain. Given the company's business environment—trending toward diminished investment and lengthier periods of service for construction machinery—Hitachi transitioned away from a business model centered on the sales of new machinery, which had so far composed the overwhelming majority of its sales, to focus on rentals, sales of used equipment, and after-sales services such as parts refurbishing. By doing so, Hitachi began to improve its profitability and efficiency and to evolve a stronger corporate structure.





Takayuki Onaka, Head of the Global Solutions Development Department in the IT Promotion Office at Hitachi's Business Management General Headquarters, explains, "With rentals, the hurdles to investment for consumers are lower. For example, all the costs involved with the rental can be included in expenses. We've offered rentals and used equipment sales in Japan previously, but many of our locations overseas didn't. By changing our attitudes here, our goal is to make our operations around the globe more profitable and transform ourselves into a strongly adaptable company."

As part of this initiative, a project was launched by Hitachi to integrate and unify the global ERP systems through cloud services. Hitachi's objective in integrating its ERPs was to streamline transactions and adjust inventory for construction machinery and parts between overseas companies and enable everything from information collection to information analysis to be transmitted to its Japanese headquarters in near-real time. A365, which leverages Microsoft Dynamics 365 for Finance and Operations as a platform, was selected as the "best cloud service" to meet this goal.

The only cloud service equipped with the functions needed for **Hitachi's transformation as standard**

Mr. Onaka rates A365 as, "an ERP that's an excellent fit for our needs in the vehicle and construction machinery industry. It contains a full set of functions we can use out of the box in almost all areas of our business, from sales of construction machinery to after-sales service, rentals, and accounting. Furthermore, our construction machinery can be traced piece by piece, and we can manage, in detail, information such as a unit's maintenance record and earnings.

Managing that information in other firms' ERPs required costly customization. Plus, the user interface for Dynamics 365 is similar to that of Microsoft Office, which we're quite familiar with. The user-friendliness was another selling point." Despite the rave reviews for Dynamics 365 and A365, Hitachi initially considered a plan where it would first introduce an on-premises version, see how things went as it expanded its installation base to other outlets, and gradually shift to the cloud. In fact, in the first half of 2016, when Hitachi was first considering Dynamics 365, a cloud version of A365 hadn't yet been released; instead, Hitachi based its evaluation on an on-premises product, Dynamics AX 2012.

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Takayuki Onaka

General Manager, Hitachi Construction Machinery Business Management Division Masahiro Ban, Deputy Department Manager of the IDMS Promotion Group within the IT Strategy Center Global Solutions Promotion Department at IT Promotion HQ, thinks back on that time: "It was clear that a cloud version was the way to go if we wanted a speedy introduction and expansion of the ERP to locations all over the world. However, at the time, there weren't any examples yet in the Hitachi Group of using cloud services for ERPs.

There was much we had to examine—whether extremely important data uploaded to the cloud would remain confidential; whether long-term use of such a system would produce errors—and there were certainly things that baffled us." However, Hitachi soon shook off those doubts and decided to implement Dynamics 365 and A365 were, as Mr. Ban put it, "the most rational and advantageous options.

One big thing that changed the landscape was a rash of ransomware attacks in 2017. Cyber attacks are constantly evolving, and the difficulty of maintaining security by ourselves really hit home. Microsoft, on the other hand, really has a handle on cloud services—it earned the very first Cyber Security Gold Mark ICS Gold Mark In Japan. Thanks to these security certifications—and all the conversations we had with Microsoft Japan and their partner companies such as Annata—all the worries that served as the basis for our confusion were swept away."

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Masahiro Ban

Deputy Department Manager, Hitachi Construction Machinery IT Promotion Division

Achieving data-driven management **at a global scale**

Now, Mr. Onaka and Mr. Ban agree: their decision to move all at once to a global cloudbased ERP solution was no mistake. "Before, our sense of speed was entirely different. For example, even when we introduced Dynamics 365 and A365 in the Netherlands upon the launch of rental and leasing services there, the expansion was complete in three months: six weeks for the workshop beforehand and six weeks for development. This is a far cry from the age when it took increments of one to two years to get everything 100 percent ready, from defining requirements to creating and expanding the system.

We realized that we were now in an age when we could instantaneously test a cloud service that was a 'good-enough fit' at our business and improve it rapidly to create a service that was a better fit for our work. Also, after the system was installed, we always had access to the latest in functionality and security. There was no worrying about our system becoming obsolete over time. Proceeding with an instant changeover to the cloud was the right decision."



Mr. Onaka continues, saying, "Our cloud changeover gave us the environment we had always wanted but could never before achieve. Starting in the '90s, as our company's business became more global, visualizing management resources for the entire group, including our overseas sales agents, became a long-term challenge. As a solution, we introduced a package from France in 2005 to integrate our overseas ERP systems, but the burden of the process, from installing and expanding the program throughout the world to using and maintaining it, was too great, and certain details didn't go well. It's different now, though: we're able to connect with our SI partners around the globe, confident that we're all using the same system environment, and we're able to advance our ERP integration with a minimal burden." Currently, Hitachi's global expansion of Dynamics 365 and A365 is moving forward step by step.

After ERP integration, measures such as connecting with Microsoft's self-service business intelligence tool, Power BI, and being able to analyze and use the data collected by Dynamics 365 and A365 as needed will contribute to speedy, data-driven management. Mr. Onaka and his colleagues also have high hopes for accelerating Hitachi's transformation through the rapid application of data on a global scale. Mr. Ban says, "Before, it took a tremendous effort from our headquarters in Japan to aggregate and analyze data from around the world. Since 1997, we'd had a mix of ERPs made from scratch to suit the needs of individual countries and the customized French package, and it was tough— no one understood how much time or effort it took to collect data. In the future, we expect that no matter when headquarters sends out a request from data, there'll be no problem: we'll be able to respond in real time."





Smooth information circulation on a **global scale accelerates change at Hitachi**

Mr. Onaka emphasizes that in the future, the use of Dynamics 365 and A365 will, "revitalize global communication. The global expansion of the system is proceeding with cooperation from our partners around the world. Both Microsoft and Annata have points of contact across the globe, so cooperation has been smooth, and the support we're receiving is tailored to circumstances in each individual nation. We're able to optimize the system for our business in each country without sacrificing Hitachi's governance—that's a huge advantage. Before, our company had dispatched engineers from Japan to build systems around the world and then handled collective data usage and maintenance in Japan.

This not only placed an extraordinary burden on us but was inefficient, as support for these activities could be offered only on Japan time. Now, though, we can collaborate with our partners without any hassle, no matter where they are on the globe, and can be certain we're using the same environment. This has enabled us to proceed with the expansion of the Dynamics 365 and A365 installation project. System information and data for business support are also all circulating smoothly, and we're seeing revitalized communication on a global scale. This is a huge change for us."

Cloud conversation of mission-critical systems through Azure

Hitachi's introduction of Dynamics 365 and A365 is moving forward smoothly and is expected to complete in 2022. Mr. Onaka also reports that preparations have been made for other Hitachi systems to join its ERP on the cloud. "At Hitachi, we're now moving forward with transferring business systems throughout the group to the cloud. We at Hitachi plan to move not just our ERP but also our other information analysis systems—and more—to the cloud via the Microsoft Azure platform. Taking the connection between Dynamics 365 and our information analysis systems to the next level will accelerate our internal transformation and speed of business. We're also preparing a system to provide support for this huge project, centered on Hitachi Solutions, the Hitachi Group's SI firm. We're also in close communication with Microsoft Japan and Annata, and we expect to see even better results."

