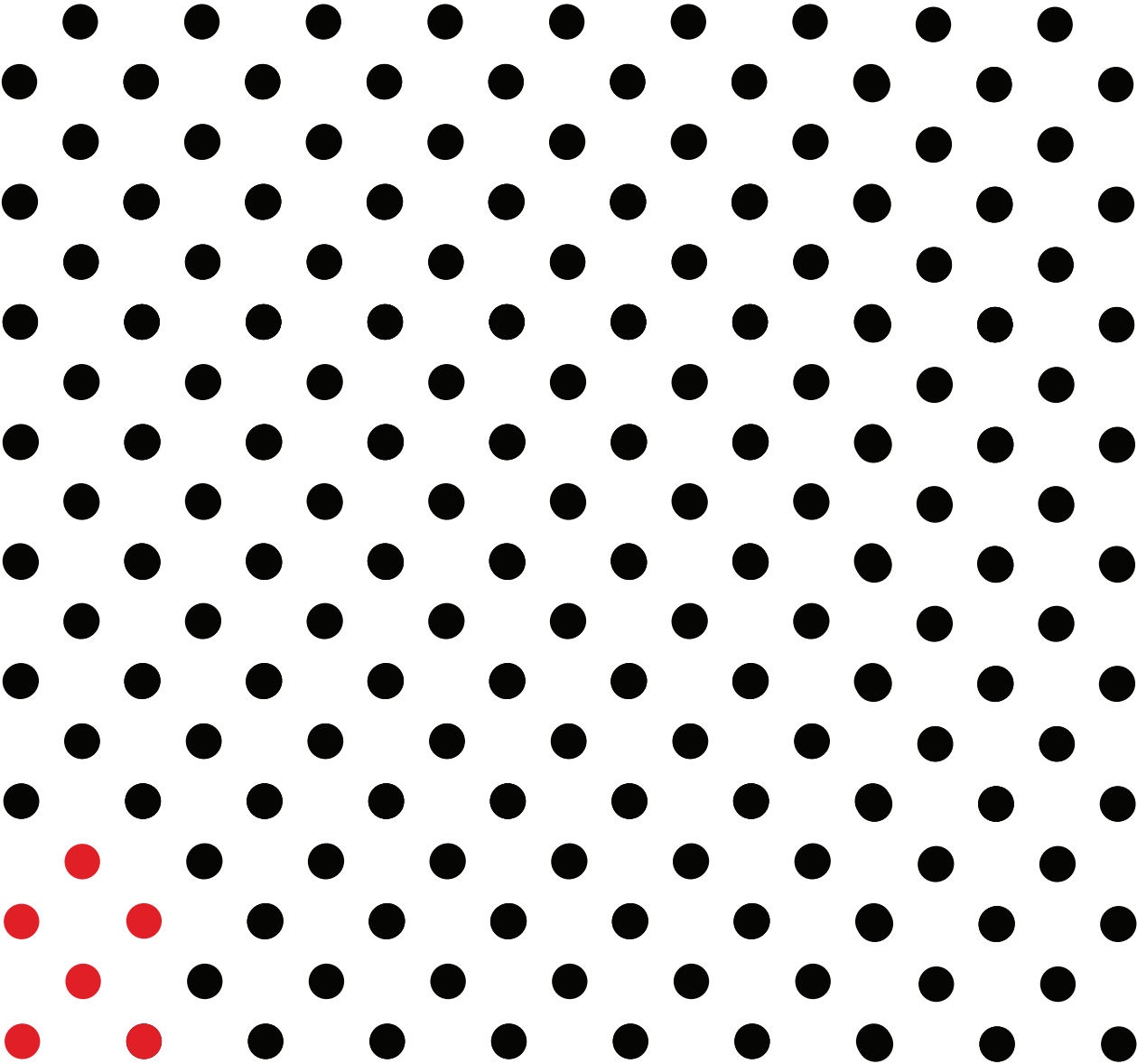


Nitori Japan



Case Study
Revision: 2
2017.12.20





End-User: NITORI
Industry: eCommerce/Retail Furniture

Partner: Okamura
Country: Japan
Year: 2013
Robots: 60
Bins: 29 381
Ports: 15

Storage and Fulfillment: Forget Everything You Have Done Previously

“Forget everything you have done previously,’ Toshiyuki Shirai was told when he became CEO of NITORI in May 2014. That advice, received from founder Akio Nitori, has become a guiding force in all aspects of the company’s operations. Such was the case when the rapidly growing omnichannel retailer struggled with increasing congestion in its conventional material handling system and decided to look for a fresh approach.

For Shirai, the new leader of Japan’s furniture and home furnishings retail juggernaut, Nitori’s approach continues to epitomise NITORI’s corporate culture. He writes that “It’s a question of rejecting the status quo, viewing every hardship as an opportunity, and changing how we do things so that we can take on new challenges. The corporate culture has always been the driving force behind NITORI’s growth until now, and will always be in the future.”

Quibbling with the results is hard. NITORI reached its first landmark of 100 stores and ¥100 billion in sales in 2003, and in that same year, it set more bold targets: 1,000 retail locations and ¥1 trillion in sales by 2022 and 3,000 stores and ¥3 trillion in sales by 2032. Growth has been rapid. The chain now operates over 470 retail locations, including 27 in Taiwan, 5 in the U.S. and 11 in China. In 2016 it recorded its 30th straight year of revenue and profit growth - a record for a Japanese company.

Growing out of Kawasaki City

While NITORI has been rapidly expanding its number of retail locations and overall volume, it has also been increasing its e-commerce product listings. And like other retailers who have added e-commerce offerings, NITORI began to suffer the constraints of congestion. The storage racking system at its distribution centre in Kawasaki City couldn't keep pace with the company's growth.

Then, in September 2014, NITORI attended the Logis-Tech Tokyo show, one of Asia's premier material handling and logistics trade shows. Company decision-makers discovered AutoStore, displayed by Okamura, AutoStore's Japanese distributor. AutoStore provides an elegant solution to warehouse congestion associated with e-commerce growth and inadequate space, featuring industry-leading storage density and energy efficiency. It allows operators to dramatically increase their warehouse space utilisation while also boosting fulfilment productivity.

AutoStore's storage configuration consists of tightly stacked bins in a dense aluminium storage grid. Bins are retrieved by battery-powered robots and brought to carousel port operators, who utilise a Pick to Light system to fill orders. As order picker travel time is eliminated in this Goods to Person approach, fulfilment speed is vastly superior to that of conventional order selection. The company also considered another automation solution, but it offered only half the cube utilisation of AutoStore.

As part of their due diligence, NITORI officials travelled to Europe in July 2015 to visit AutoStore installations at XXL in Norway and L-Shop in Germany. AutoStore was determined to be the best option. Aside from offering the best storage density among warehouse automation options, NITORI appreciated its flexibility, scalability and ease of use.

Simplicity and Scalability

AutoStore is extremely flexible. It can be installed in existing warehouses, as long as the floor is flat. It can be adapted to use in facilities of irregular shapes and various heights, while spikes in volume can be addressed by adding more robots to meet peak needs. Space permitting, operators can expand system capacity by adding to the grid without disrupting daily operations. Ease of use is another critical consideration, made possible by an ergonomic design that allows operators to work comfortably without excessive reaching or bending, and guided by the Pick to Light technology.

NOTORI's AutoStore system has now been in operation since February 2016, featuring 60 robots, 15 carousel ports, 29381 bins. Okamura describes the installation as "Overwhelmingly superior regarding storage efficiency, especially small e-commerce products." Aside from dramatically improved space utilisation, over 4 times improvement in productivity thanks to the Goods to Person approach. And due to the flexibility provided by having 60 robots, AutoStore does not need to stop if a particular robot breaks. Additionally, Okamura, which provides site maintenance, receives service notification when maintenance is required, enabling it to effect repairs before a robot breaks or needs to be replaced.

Okamura states that NITORI is happy with AutoStore and would recommend it to others. The system is stable and works fine. They couldn't imagine using any other system than AutoStore.

Okamura describes the installation as

“Overwhelmingly superior regarding storage efficiency, especially small e-commerce products.”



AutoStore

AutoStore AS

Stokkastrandvegen 85

5578 Nedre Vats, NO

Tel: +47 52 76 35 00

