FUJITSU

Field Innovation Case Study – Beisia Co., Ltd.

Reforming the cashier operation and the merchandising (MD) process, with the aim of improving customer satisfaction and increasing profit

Challenges

- Employee training and application of the system were not adequate, resulting in long queues at check-out counters.
- Standardization of the MD process was needed in order to continuously grow the business.
- Sales analysis and store layout needed to be reexamined in order to increase profit.

Results

- By fully utilizing a cashier operation planning system and sharing the need for awareness of "not making customers wait," congestion rates were reduced to 20% or less.
- Visualization of current work processes made it possible to identify issues and to plan solutions.
- Sales were increased by approximately 12% by improving the issues of a store's product rotation, shortages and planogram.

Beisia Co., Ltd., a retail business company operating mainly in the Kanto region surrounding Tokyo, introduced Field Innovation in order to improve customer satisfaction. The Field Innovators (Flers) worked with them to improve cashier operation and succeeded in shortening the check-out waiting time. They also implemented the standardization of the MD process and enlarge the analysis and application of sales data, which are resulting in increased store profit.

Investigating the root cause

Beisia worked to improve the cashier operation to realize the idea of "not making customers wait."

Beisia operates stores in a variety of forms, including Beisia Super Center, Beisia Supermarket and Beisia Mart, and continues to respond to the wide range of consumer needs. Their policy since their establishment has been the "three satisfactions:" "customer satisfaction," "business partner satisfaction" and "employee satisfaction." Of the three, "customer satisfaction" is the most important matter affecting the core part of their business activities, and therefore they have always made efforts to ensure employees provide friendly service throughout all the stores.

However, as the business grew new problems arose that needed to be solved. "An especially urgent problem was the check-out waiting queues. Beisia Super Center provides basic needs (food, clothing and home accessories) all on one floor and the number of items that each customer purchases are large. Therefore, in order to reduce the wait time of our customers in queues, we have introduced cashier planning system with which we can plan the number of cashier (POS) to open and the number of staff to allocate. I have always questioned why we could not handle this problem well when we should have been able to according to the plan," said Kenji Shigeta, General Manager of Retail Research Institute.

Originally, Beisia had the goal of "1+2," which means the number of customers waiting behind one customer in the check-out process must be two or less. Mr. Shigeta explained, "Not making our customers wait for the check-out is an important point in improving customer satisfaction. We had strong comments from our customers as well, so this problem needed to be solved as soon as possible."

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General Manager of
Retail Research Institute
Corporate Executive of
Beisia, Co., Ltd.

Ms. Rie Horikawa
Leader of System Planning
Head Office Group 1
Beisia, Co., Ltd.

Mr. Yasushi Yoshimoto
Manager of
Sales Management Division
Beisia, Co., Ltd.

Making the cashier operation visible

Investigating the actual conditions of the check-out process and finding the causes of long check-out queues

In order to find solutions for their challenges, they looked to Field Innovation for assistance. Mr.

Customer Profile

Beisia, Co., Ltd.

Headquarter	900 Kamesato-machi, Maebashi City, Gunma
Establishment	November, 1996
Capital	3,099,500,000 yen
Number of Employees	1,326 employees in addition 9,082 full-time, part-time and temporary employees (As of the end of February 2015)
URL	http://www.beisia.co.jp/english/index_english.html

Beisia operates two main types of stores, Super Centers that carry daily necessities, and Supermarkets that specialize in food, in Tokyo and 13 prefectures. They operate various types of stores to meet the needs of each area.

Shigeta explained the reason, "I felt that 'Changing employees' awareness of issues' and 'Reforming the work process and ICT all together' were critical, so I decided to adopt Field Innovation to train employees who work on site so that they have the skills to actively engage in improvement and reform."

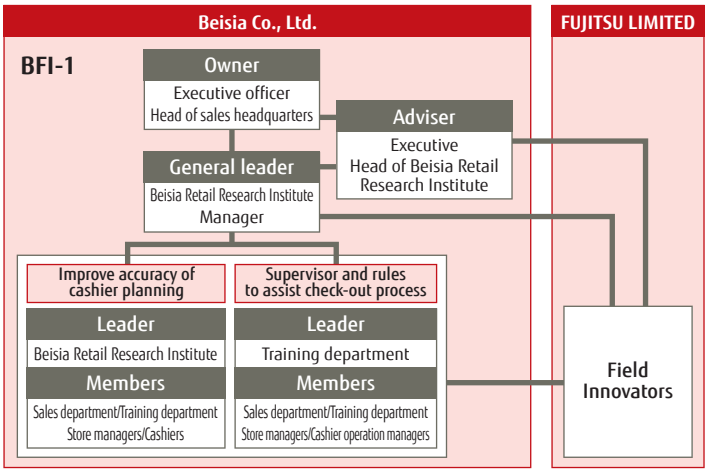
Beisia named the activity Beisia Field Innovation (BFI) and worked on the projects. The first one (BFI-1) was to solve the previously mentioned issue of long check-out queues.

First, FIers interviewed the person in charge of the cashier operations of each store. What emerged from the interviews was the role of the supervisor who stands in front of cashiers to manage the entire check-out operation in the store.

Ms. Rie Horikawa, Leader of Beisia System Planning Head Office Group1, said: "Headquarters has been leading and encouraging the allocation of supervisors for some time. In some stores, the guidance offered by the supervisor around actual check-out lanes is contributing to the reduction in check-out queues. We had received compliments from our customers as well, so we thought the effective allocation of supervisors would be strength."

However, opinions expressed in the interviews from those at the actual site were a little different. Comments included: "Supervisors have nothing to do. They should be allocated to a cashier position" and "I cannot explain clearly what the role of a supervisor is." The fact that supervisors were not properly utilized became clear. Therefore, FIers looked to making the cashier operation visible in order to clarify the actual situation. They set up seven video cameras in front of cashiers to record the actual situation of check-out queues and the number of open cashiers and observed supervisor's work on site and recorded their actions minute by minute.

■The project structure



Driven mainly by the Beisia Retail Research Institute, which are responsible for the ICT environment of the group, related departments including stores, sales department and training department were assigned to work together to improve work process.

Facts found

The fact that checkouts were not opened as planned became clear

The video and data taken by the cameras and from actual observations were surprising for the project members. "I thought I knew the situation, but I had never imagined check-out queues were this long. Actual videos and numerical data are very convincing. It made me feel strongly that we could not let this happen, we could have done something before this happened," said Ms. Horikawa.

After the cashier operations were made visible, it was discovered that cashiers were not opened as planned and additional cashiers were not opened soon enough. It also became clear that stores with shorter check-out queues had a supervisor standing in front of the cashiers, while stores with longer check-out queues had a supervisor who was rarely standing in front of the cashiers because he/she had other duties as well and was spending most of their time on service counter operations.

Furthermore, the fact that the cashier operation planning system was not utilized frequently enough was also an issue.

Mr. Shigeta said: "However excellent a system is, it cannot be effective without the awareness of its importance by users. In order to utilize the cashier operation planning system better, we need to make employees on site aware of its importance. The FIers' work in visualizing the cashier operation was an important step for this."

■Facts started to become visible from the videos

Videos shot with cameras positioned in front of cashiers were used as training materials in the study session for cashier operation managers. The roles of the supervisor were discussed based on these.

Defining 5 major roles of the supervisor

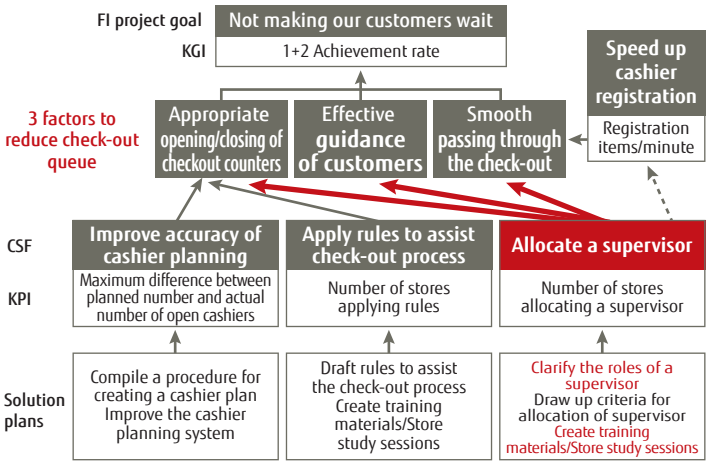
Appropriate opening/closing of checkout counters, providing guidance for customers and smooth passage through the check-out lane were points to improve

Based on the results made clear by the FIers' work, Beisia held a discussion to plan a solution. Three points were determined as necessary in order to ensure that customers did not have to wait too long: "appropriate opening/closing of checkout counters," "effective guidance for customers" and "smooth passing through the check-out lane." Beisia considered concrete plans for solutions for each of them.

Ms. Horikawa explained: "For opening/closing checkout counters, we will improve the accuracy of cashier operation planning by encouraging better use of the cashier operation planning system. We will also determine the rules of opening additional cashiers and have a supervisor instruct the opening and closing of them. The second point, which is the guidance for customers, must be always handled by the supervisor. The support that a cashier needs for the third point, which is the smooth passing through the check-out lane, is also a task for the supervisor. Allocating a supervisor is important and therefore we made concrete solution plans including clarifying the role of the supervisor, making study materials to pass on to all the stores and holding a study session at each store."

As for clarifying the roles of the supervisor we had a discussion with cashier operation managers (20 people) from each store in the form of a study session. We used the materials that we made

■Project to reduce check-out queue



The key points were narrowed down to: "appropriate opening/closing of checkout counters," "effective guidance for customers" and "smooth passing through the check-out lane." Concrete plans for solutions for each of them were put into practice.

with the videos and the images of the check-out process taken during that phase to visualize the issue. The participants actively expressed the points they noticed and their opinions on the image showing the long check-out queues, which led to a conclusion that "This would not happen if a supervisor were allocated. This position is necessary indeed." We then continued to discuss matters and identified what the supervisor should actually do. As a result, we were able to define five duties: "Guidance for customers," "Assistance to customers," "Opening and closing of checkout counters," "Supporting cashiers" and "Organizing the area around cashiers" as the 5 major roles of the supervisor.

Ms. Horikawa reported: "There were opinions that said 'I don't know what to do standing in front of the cashiers,' so it was very good that we were able to systematize and document the roles clearly. Cashier operation managers that participated in the session can now train their store staff with confidence."

Furthermore, the training department of Beisia also participated in the actual in-store training phase. We videotaped the actions of the supervisor at a model store and gave a lecture using the video material. We also published a series of articles in the internal newsletter featuring the project to make people aware of the roles of the supervisor.

Thanks to these solution plans, we have succeeded in solving the issue of long check out queues. In some stores, the achievement rate of "1+2" went up from around 73% to 81% and the cashier planning system was used about twice as frequently as before. Many customer voices speaking highly of the work of the supervisor started to be heard by mystery shoppers at multiple stores.

■Instore staff training by the training department

Training department started in-store training

The training department also participated in training the store staff. The trainers used videos showing how experts work as a training material, and noted the significance of the project throughout the company by running a series featuring the project in the internal newsletter.

Starting the reform of the MD process

Working to make the current work process visible before constructing the next MD system

After seeing these positive outcomes of BFI-1, Beisia started working on the next project. The theme of BFI-2, the second phase, is the visualization and sorting out issues of the MD process from buying products to selling them.

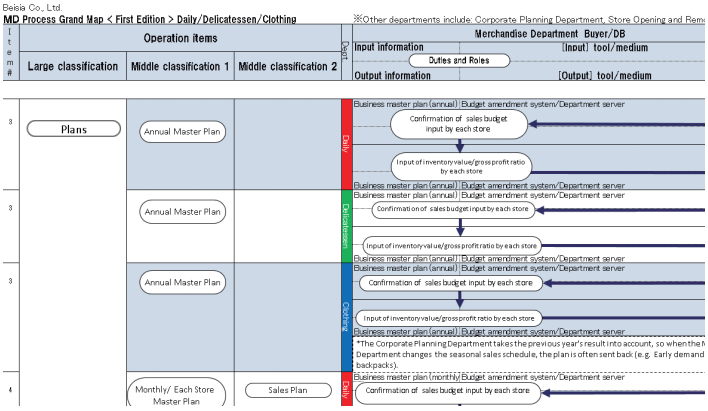
Mr. Shigeta outlined the background to the new project: "We have been proceeding with the reconstruction project of the next MD system. The previous MD process was largely dependent on the skills of each buyer and the company-level organization of documents was not provided. Standardizing the work process itself and improving the process are essential in order to continue to grow in the future. Therefore, in BFI-2, we decided to make the current situation visible and identify issues before reconstructing the MD system."

We first examined the work of the buyers in the merchandise department, which performs the major part of the MD work. Mr. Yasushi Yoshimoto, Sales Management Division manager of Beisia, said: "We conducted thorough interviews with buyers with the support of FIers, asking them about the details of their duties, input and output information of related departments, and of each duty they perform and the tools they use. We then compiled them to make a complete picture called 'the MD process grand map'."

With the completion of this MD process grand map, the overall picture of the MD process became visible. For the major duties in the picture, core employees, including Mr. Yoshimoto, took the lead in creating the workflow chart. "By organizing the workflow and the information used, it has become easier to understand where and what the issues are. Learning the method and the idea of visualization became a great asset in continuing improvement and reform by ourselves in the future," said Mr. Yoshimoto.

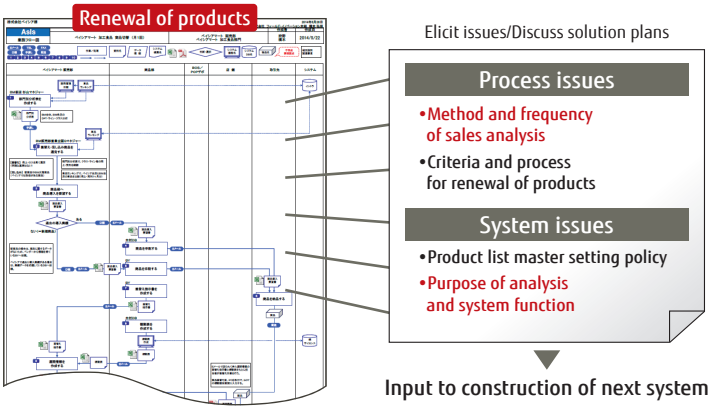
During the process of visualization, a variety of issues became clear such as some roles being overburdened. Surprisingly, 98% of the buyers felt the analysis and the use of sales data were insufficient. "We have introduced a system including sales analysis, but it was not to the point where everyone would use it every time in the work process. Increasing sales is an extremely crucial theme for retailers, so we decided to work on the sales analysis next, which would be in line with the theme," Mr. Shigeta said.

■Creating an MD process grand map



A comprehensive interview was conducted with each buyer in the merchandise department, asking the details of their duties and the information they use. The results of the interviews were correlated to create a MD process grand map showing the entire MD work process.

■Identify work process and system issues



For the work processes especially important for the business, the project members created a workflow chart. Doing so enabled them to discuss the current issues and solution plans appropriately.

Succeeded in increasing store sales

Investigating the current sales analysis situation to make a more effective arrangement of the store

In BFI-3, which continued on from BFI-2, we worked to investigate and improve the current situation of the sales analysis, targeting Beisia's small footprint stores, called Beisia Mart, to make it more effective in terms of business.

Mr. Yoshimoto explained: "To increase store sales, having an attractive selection of products, preventing opportunity loss, and planning optimum planograms are important. So we worked on three points, 'increasing the rotation of store's products,' 'eliminating shortages on the shelf' and 'increasing the improvement of planograms'."

For BFI-3, FIers selected the sweets corner as the target to reform. This is because in the sweets corner a large-scale renewal of products was conducted only twice a year, and items that were not selling as expected were sometimes left on the shelf and took the space for half a year. We emphasized the basics of the arrangement of store front operation, which is switching these types of products with best-selling products promptly to increase profit.

With the workflow chart, we verified the current sales analysis method and its usage. We also

reviewed a variety of information including the sales data for each product and analyzed them for each category. As a result of clarifying the points for improvement, based on these analyses, in order to decide which products were selling and which were not selling in a timely manner and reconsidering the current criteria for this process, we increased the frequency of the renewal of product placement by about 39%.

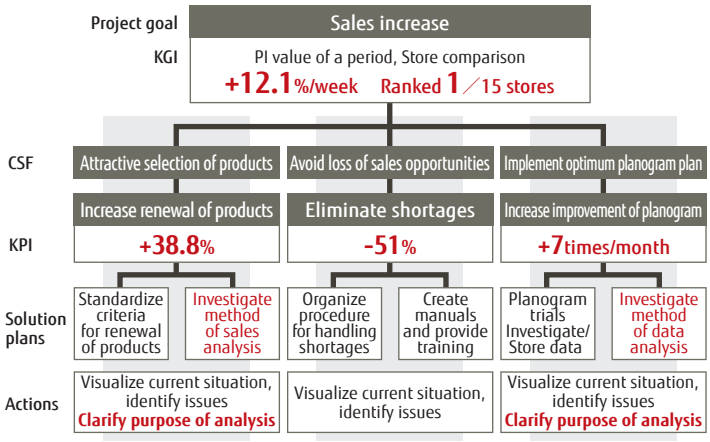
Mr. Yoshimoto continued: "For the issue of shortages on the shelf, which is the second point, we performed a thorough investigation into its cause. As a result, we found problems in the operation of the automated ordering system and by improving this we were able to reduce shortages from occurring by 51%."

Basically, if the automated ordering system was functioning correctly, proper orders should have always been placed. However, because there were points to improve in the accuracy of the stock data and the conditions for ordering, necessary products were not refilled sometimes. Mr. Shigeta said: "By working further on this project, we were able to find typical patterns that caused shortages. We can now prevent shortages by simply checking some items and we are now starting to apply this method to other products, too."

In improving planogram, which is the third point, we made sure we followed the basics again such as changing the allocation of products to make it easy to find them and expanding the space for best-selling products based on the sales analysis data. Mr. Yoshimoto said: "I appreciate the Flers' comment that said 'You have private-brand products that won a famous food-related award, but they are not displayed in a golden zone of the shelf.' There are many points that we don't notice with our own eyes, so a third person's viewpoint was useful to make the improvement."

These outcomes have also led to an increase in sales, which was the goal of the projects. The sales position of the product that was targeted in the plan went up to second from sixth in ranking. Also the value of Purchase Index (PI), which is the product purchase index per 1,000 people that pass through the check-out, improved by about 12% as a weekly value, and the growth rate was the highest of all the 15 Beisia Mart stores at that time.

■The overall action picture and the result of BFI-3



We worked on three solution plans: "increasing the rotation of store's products," "eliminating shortages on the shelf" and "improving planogram," and succeeded in increasing the sales of targeted products.

Continuing to take action by ourselves

Taking action by ourselves for improvement and reform using Field Innovation methods learned from these projects

Beisia is continuing the BFI projects and creating its own solution plans. "For example, headquarters have been working on managing the planogram of products for the "aisle-end" displays, which are the most prominent displays in the store. This will enable us to analyze the sale of the products and the effect of the sales plan across all stores, and we should be able to use this to improve merchandise strategy and store strategy," said Mr. Yoshimoto.

Visualization using a workflow chart, a method learned in BFI-2, is being utilized to improve everyday work process. Mr. Yoshimoto continued: "When all the necessary POP items for the store renewal didn't arrive on the designated date we made a workflow chart and found out the cause. The chart clearly shows the reason the problem occurred, so it was easy to convince people when telling them their actions needed to be adjusted." The project has also largely contributed to making the PDCA (Plan, Do, Check, Action) process work more effectively, which is indispensable for the MD process.

The awareness and the atmosphere of the members who participated in the projects have greatly changed compared to before. "There were many staff members who wanted to resolve the issue of long check out queues and everyone was happy that they were able to improve the situation together with the stores and the training department. Personally, I feel that I have gained a variety of skills through the experience of these projects. I am very grateful to the support from the Flers," said Ms. Horikawa with a smile.

Mr. Shigeta commented: "I would like to spread this Field Innovation method of improvement and reform throughout the company to people other than project members in the future, with the aim of raising standards and establishing a culture of continuous improvement. Our challenge to reform people's attitudes, processes and ICT together–including the construction of the next MD system–is ongoing, so we are looking forward to receiving continuous support from Fujitsu. "

Field Innovators

Throughout the project

We felt the spirit of Beisia as a company that places "Pursuing and realizing customer satisfaction" as the top priority in the first FI project, which started with its goal of "Not making our customers wait in queue for check-out. The action for improvement starts from here." The projects continued on to the "MD process" and the "Sales analysis and attractive shop development," which means that the projects proceeded Customer Satisfaction (CS)/Customers first and then the MD/Main business. We Flers have always placed importance on the understandings of the people working on site by visualizing their actions and creating opportunities to cooperate each others, but the biggest success factor was Beisia's robust stance in considering its customers as the first priority. We hope we created a complete experience with Beisia, aiming at overall optimization from the perspective of people, process and ICT, connecting the company's spirit and the actual worksite.

From left, Tetsuo Sakakibara, Hirokazu Umezawa, Hiroaki Hashimoto, Yasushi Umezawa

Field Innovation

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