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# Long-established Companies that challenge Digital Transformation (DX)

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# <Summary≻

- ◆ Many long-established companies are small and medium-sized, and have supported local economies and society while overcoming various changes in the business environment. Recently, however, the number of bankruptcies, suspension of operations, and dissolutions has been increasing. It is presumed that the business environment is severe due to the prolonged stagnation of regional economies, the difficulty of finding successors, and the new Coronavirus pandemic. As a means of surviving adversity, long-established companies are now working on digital transformation (DX).
- ♦ In this paper, I selected one company from each of five industries, namely, the inn and hotel industry, the sake brewing industry, the clothing retail industry, the construction industry, and the restaurant industry. From my analysis, Similarities can be confirmed not only in the introduction of digital technology, but also that (1) by reexamining business processes and staffing, the businesses were able to achieve an increase in added value by allocating the spare capacity generated by automation and rationalization into operations that can be carried out exclusively by humans, and that (2) integrating knowledge and information into data can be shared by all employees and used for various purposes.
- ◆ Furthermore, it was found that these companies all have nearly the same characteristics: (1) top management in these companies are aware of the company's management problems they face and have a strong will to transform themselves through digital technology, (2) employees in these companies are motivated to work, and (3) there are people in these companies who understand and take the lead in implementing IT and digital technology.

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♦ As you can see from these cases of long-established companies, DX is not something that only large companies can do. It is quite possible for SMEs to use digital technology to transform themselves to solve their own problems.

● This is a English version of "デジタルトランスフォーメーション(DX)に挑む老舗企業の実像" in JRI Research Focus (The original version is available at https://www.jri.co.jp/MediaLibrary/file/report/researchfocus/pdf/12291.pdf)

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## 1. Introduction

As a company that uses digital technology to develop its business with unprecedented freedom of thought, the first thing that comes to mind is startups (venture firms). Startups can do this because they're starting from scratch, so they can move quickly and easily without being tethered to past ties.

The opposite companies to startups are long-established companies. Although such companies have been able to survive for a long time due to their ability to adapt to changes in the environment, there is still a management attitude that has been handed down from generation to generation that emphasizes tradition, business partners and customers, and employees that have worked there for many years.

Against this background, there are now long-established SMEs that are actively using digital technology and changing business methods to achieve self-transformation and survive, in other words, those that engage in digital transformation (DX). This suggests that even the long-established companies, which tend to be considered the furthest away from digital technology, need to work with DX to survive.

In this paper, I will focus on these long-established companies and examine their specific initiatives and characteristics to provide a perspective on how SMEs engage in DX, which is a means of improving productivity.

## 2. Overview of long-established companies

Before talking about individual companies working on DX, let's take a look at the situation of longestablished companies in Japan.

## (1) Number and size of companies

According to a survey conducted by Teikoku Databank in 2018, there are approximately 33,000 long-established companies in Japan, which Teikoku Databank defines as "Companies with 100 years or more of business experience." This number is very large in the world. According to a survey by the Nikkei BP Consulting Anniversary Business Laboratory<sup>1</sup>, 41.3% of companies that have been in business for 100 years or more are Japanese companies, the largest number in the world.

Looking at long-established companies on an annual turnover basis, companies of less than 0.1 billion (100 million) yen account for approximately 13,000, or 41%, and

Table 1 Number of Long-established Companies by Annual Turnover (2018)

(Company,				
Annual Turnover	Number of Companies	Percentage of Total		
Less than 0.1 billion yen	13,786	41		
0.1 ~ 1 billion yen	12,986	39		
1 ~ 10 billion yen	4,919	15		
10 ~ 50 billion yen	1,000	3		
50 billion yen or more	568	2		
Total	33,259	100		

Source: Teikoku Databank "Fact-finding survey on the long-established company' (2019)"

companies of  $0.1 \sim 1$  billion yen account for nearly 13,000, or 39% (Table 1). Annual turnover of less than 1 billion yen amounts to 80%, showing that most of them are relatively small businesses.

<sup>&</sup>lt;sup>1</sup> Nikkei BP Consulting Anniversary Business Laboratory "Japan ranks No. 1 in the world's longest-lived companies in terms of the number of companies established in 100 and 200"



(Company)

# (2) Industry by Subdivision

Similarly, according to a survey by the Teikoku Databank, looking at long-established companies by industry, the most common type of company is "office for rent," with 894 companies discontinuing their main business and leasing the space they operated to other companies (Table 2). Although this is different from the general image associated with the phrase "long-established company" it can be thought that such businesses tried to survive by changing their business conditions as their main business came out of step with the times. The second largest number of long-established companies is sake brewing industry, with 801 companies. It can be considered that sake brewing industry is the top of the industry of long-established companies that Source: Same as for Table 1

Table 2 Industry of the Long-established Companies (Subclassification) (2018)

		(Company)
Business Type		Number of Companies
1	Office for Rent	894
2	Sake brewing Industry	801
3	Inn and hotel business	618
4	Liquor Store	611
5	Retail Drapery and Cloth	568
6	Sales of Women's and Children's Clothing	535
7	Wood Construction Work	492
8	General Civil Engineering and Construction Work	479
9	Liquor Wholesaler	475
10	Civil Engineering Work	434

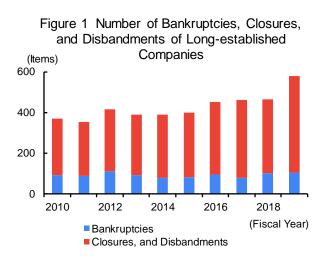
have continued in their main business. In the sake industry, "liquor store" ranked 4th, with 611 companies, and "liquor wholesaler" ranked 9th, with 475 companies. Among the top 10 industries and 5,707 companies, the sake industry includes 1,887 companies in total, demonstrating their strong presence as long-established companies. The number of inn and hotel business ranks as the 3rd largest, with 618 companies. Inns have existed for a long time and are scattered throughout Japan. Other industries with large number of companies are the clothing retail industry (568 kimono and cloth retailers, and 535 women's and children's clothing retailers) and the construction industry (492 wood construction companies, 479 general civil engineering and construction companies, and 434 civil engineering and construction companies).

# (3) Changes in long-established companies that have supported local economies and societies

These long-established companies have survived a variety of changes in the business environment. Behind this accomplishment, there are a clear vision such as a "Corporate Policy," a strong ability to adapt to changes in the environment, and strong brand power. The media often introduces major companies that manufacture and sell famous products as examples of long-established companies. However, it can be confirmed that many small and medium-sized companies are included, as well as many community-based type companies, as symbolized by the sake industry. Long-established companies do more than bring tax revenues and jobs to regions. In addition to support the local economies and societies by playing important roles in local economic organizations and by actively contributing to the management of shopping districts and traditional events such as festivals, long-established companies have also played a role as the "face" of the local community that residents are proud of as companies that represent the local community.

However, there has been a change in the attitude of long-established companies. According to a survey conducted by the Teikoku Databank<sup>2</sup>, the number of bankruptcies, closures, and disbandments of long-established companies has increased for 5 consecutive years since fiscal 2015; and in fiscal 2019 increased 24.5% from the previous year to 579, a record high in both number and rate of increase (Figure 1). During this period, the number of bankruptcies, closures, and disbandments of all companies was on the decline (Figure 2), suggesting that long-established companies are experiencing particularly severe business conditions.

This may indicate that the long-term stagnation of the local economy, the shortage of successors, labor shortages, and changes in customer needs have made it difficult for even long-established companies that are expected to excel in adaptability to survive. In FY 2020, the number of bankruptcies, closures, and disbandments is expected to increase even more than in FY 2019 due to the influence of new Coronavirus pandemic.



Source: Teikoku Databank, "The number of bankruptcies of long-established companies reached a record high of 579 nationwid".

Figure 2 Number of Bankruptcies, Closures, and Disbandments of All Companies (Items) 35,000 30,000 25,000 20,000 15,000 10,000 5,000 2010 2012 2014 2016 2018 (Fiscal Year) Bankruptcies Closures, and Disbandments

Source: Teikoku Databank "Nationwide ',Closures, and Disbandments' Trend Survey (2019)"

## (4) Selected Companies

In the face of adversity, a small but growing number of long-established companies are working on DX to survive. With reference to the distribution in (2), this paper examines DX initiatives by selecting 1 company from each of 4 industries having a large number of companies: the inn and hotel business, the sake brewing industry, the clothing retail industry, the construction industry, and the restaurant business as one of the service industries which accounts for approximately 10% of the overall industry classification.

The starting point for the selection was that each company had to have been in business for around 100 years. In the case of the construction industry, however, while the number of companies established during the high economic growth period is overwhelmingly large, few companies had been established more than 100 years ago. Therefore, C Construction, which was established soon after the World War II and had 70 years of experience, was selected. In addition, outside of the clothing retail industry, products, services, and management

<sup>&</sup>lt;sup>2</sup>Teikoku Databank [2020] "The number of bankruptcies of long-established companies reached a record high of 579 nationwide, and bankruptcies of long-established companies occurred due to the rapid increase in the number of bankruptcies in the retail, wholesale and other distribution industries."



methods provided by the company were given external awards and evaluated objectively. With regard to the clothing retail industry, since it was not possible to identify companies that apply this category, Company B, which has been known to promote pre-emptive EC business in the manufacture and sale of custom-made suits since the mid-2010s, was selected. A summary of the five selected companies is shown in Table 3.

Table 3 Overview of long-established companies working on DX

Name	Location	Business Type	Establishment and Foundation	Employees Number of Parts	Awards and others
Ebiya	Mie Prefecture	Restaurant Business	1912	50	Awarded " Minister of Vitalizing Local Economy Award" at" the 3rd Japan Service Awards" and other awards
Motoyu Jinya	Kanagawa Prefecture	Inn and hotel business	1918	40	Awarded "Minister of Internal Affairs and Communications Award" at" the 2nd Japan Service Awards"
A Shuzo	Chugoku Region	Sake Brewing Industry	1860s	About 20	Won a prize at a Japanese sake contest.
Company B	Kanto Region	Clothing Retail Industry	1920s	About 300	
C. Construction	Kanto Region	Construction Industry	1950s	About 80	Awarded the Award for Advanced Efforts at Construction Sites

Source: Prepared by JRI from various materials

# 3. Case studies of DX initiatives by long-established companies

# (1) Restaurant business: Ebiya

Ebiya is a restaurant with about 50 employees (including part-time workers) that has been open for more than 100 years in Ise City, Mie Prefecture, home to the Ise Jingu Shrine, which draws more than a million visitors every year. The company has received many awards, including "Unique Business Model Awards" at "Great Company Awards 2019" from the Funai Foundation, and "Minister of Vitalizing Local Economy Award" at "the 3rd Japan Service Awards (2020)" from the Japan Productivity Center.

Ebiya is working on DX to improve business operations and management. When the former president's son-in-law, who had joined the company from a major IT company in 2012, changed his position from senior managing director to president, he started to work on DX. Based on the unified management of past data, including number of customers and order menus, external data, such as weather conditions, and the number of visitors as indicated by cameras installed outside the store, the mechanism was developed to estimate the number of customers per day and the order menu using machine learning, and purchase and order operations became automated.

This streamlining allowed employees to spend more time with customers, improving service quality and expanding the concept of original dishes using local ingredients. This resulted in improved reputation as a major gourmet site. The company also worked on sales promotions such as eye-catching storefront displays for passersby by analyzing the day's weather and historical data. A series of such efforts resulted in an increase in



the number of visitors and cost per customer. During the 6 years from 2012 to 2018, sales increased from 100 million yen to 480 million yen, and ordinary profit increased from 2 million yen to 20 million yen.

The company raised the salaries of its employees in response to improved company's performance. In addition, since it became possible to conduct long-term forecasts by predicting the number of visitors, employees were able to take two consecutive weeks of leave, thus enhancing employee welfare.

# (2) Inn and hotel business: Motoyu Jinya

Motoyu Jinya is a hot spring inn with 18 guest rooms and 40 employees, founded in Kanagawa Prefecture during the Taisho period. In 2018, the inn was awarded "Minister of Internal Affairs and Communications Award" at "the 2nd Japan Service Awards(2018)" from the Japan Productivity Center.

Motoyu Jinya worked on DX for the purpose of improving customer information management, business operations, and management. It was proposed and put into practice in 2009, when the current manager, who had worked for a major manufacturer, joined the company. A staff with experience as a system engineer and IT knowledge was appointed as the person in charge. Based on the cloud application platform of a major IT company, a cloud-based core system was independently developed and all operations were integrated. As a result, it became possible to unify management of the inn's information using IoT and grasp the management situation on a daily basis, reducing the work load of employees and increasing the amount time available for serving customers, thereby improving the quality of customer service.

In general, one of the most effective ways for the inn to increase their profitability is to build up the number of repeat customers. This is because such customers often make reservations directly with the inn without going through an agent, which incurs a fee. At Motoyu Jinya, information on whether customers are repeat customers was shared with all employees. As a result, employees who accept reservations by phone can thank repeat customers for their frequent stay. Alternatively, information about foods that repeat customers don't like was shared with the kitchen, allowing cooks to adjust and change the menu without asking customers. In this way, the business tried to increase the satisfaction of repeat customers and further develop their sense of affinity for Motoyu Jinya.

In addition, introducing IoT devices such as monitors and sensors has made it possible for other employees to take charge of control of the open-air bath's temperature, while still maintaining a high level of detail. By establishing such a system, work that had previously been handled by 120 people, including part-timers, can now be handled by about 40 people through multitasking.

In addition to improving service, internal SNS, in which all employees at the front desk, guest rooms, restaurants, kitchens and sales offices participate, plays a role in improving internal communication. Communication is facilitated through reports sent by employees that are replied to by top management and executives, and by messages consisting of good examples of customer service which as praised by everyone as "Good!".

As a result, sales in 2008 were 300 million yen, and 450 million yen in 2016, and profit before tax increased to 120 million yen from a deficit of about 60 million yen. Along with these improvements in company's



performance, the company has also increased employee pay raises as well as the number of inn closing days to 2 days a week in 2014 and 3 days a week in 2016 to improve the employee leave system.

# (3) Sake brewing industry: A shuzo

A Shuzo was established at the beginning of the Meiji period and is currently managed by 10th generation managers. With about 20 employees, the company's sake won the gold prize at a prestigious sake contest.

DX's efforts at A Shuzo are aimed at saving labor in production (brewing). The taste of sake is greatly influenced by the fermentation of rice malt. Until now, the person in charge of rice malt production had to go to see the state of the rice malt every few hours, even during the night, which resulted in exhaustion. In cooperation with a local web development company and a public software research and development center, the company developed a sensor that can measure temperature and humidity and report the data through a smartphone application. This made it possible to grasp the temperature and humidity of rice malt in the brewery in real time without needing to go to the manufacturing site, greatly reducing the labor burden. This affords those in charge with more energy, allowing them to engage in product sales and marketing such as distributing videos of sake sales and sake brewing by the Internet.

By continuing to measure temperature and humidity with the sensor over several years, data on rice malt fermentation can be accumulated and sake quality can be verified by matching them with business records, which is expected to make it easier to pass on sake brewing know-how to successors in the future.

# (4) Clothing retailing industry: Company B

Company B, with about 300 employees, is headquartered in the Kanto region and handles everything from manufacturing to sales of custom-made suits. It was founded in the 1920s and has been in business for over 90 years. The current president is a fourth-generation president. He firstly worked for a major company just after graduating from university in the hope of succeeding his father in the near future, and actually took the position of president in the early 2010s.

Company B's approach to DX was to introduce CAD (automatic design system) and CAM (automatic cutting machine) in its own factory ahead of other companies, and to realize low-cost mass production of custom-made suits. The company has succeeded in selling custom-made suits at low prices, which had previously been expensive and difficult to purchase especially for young people.

Then, in order to improve the sales method for the suits, the company renewed the EC site and added a simulator function to show samples of colors and shapes through the monitor screen. This allows customers to choose the suit they like even while at home. So, if the customer can measure their size by themselves, or they are repeat customers, they don't need to go to the store. The company also builds a database of collected customer information and divides it into segments for efficient marketing.

These efforts are an example of "D2C (direct to consumer)" that has attracted the attention of many manufacturers in recent years, in which products are sold directly to consumers through their own sites on the



Internet. While making full use of the Internet in this way, the company allocates skilled workers for measurements at stores and sewing at factories to ensure the high quality of custom-made suits.

# (5) Construction industry: C Construction

C Construction is a general construction company that deals with public and private construction in the Kanto region. The current manager is a 3rd generation manager and the company was established in the 1950s, with a business history of about 70 years and a ranking as a long-established company in the industry with many companies established in the high economic growth period. With about 80 employees, the company has received an award recognizing companies that carry out construction using advanced digital technology.

C Construction strives to improve its in-house technology by introducing products that are not yet on the market. As part of this effort, the company is implementing an initiative commonly referred to as "smart construction." It uses drones, 3D laser scanners, and ICT construction equipment to automate and refine all construction tasks, including surveying, designing, and construction. For example, surveying is performed by drones rather than by people, construction objects are restored and reproduced in 3D by a computer, the amount of soil required for construction is automatically calculated, and design drawings are automatically created by computer.

These efforts contribute to address the shortage of skilled workers and saving labor. The introduction of construction machines capable of automatic control at construction sites has made it possible for inexperienced workers to take charge of operations that previously required skilled workers. This has led to shortening of the construction period. For example, for surveying the construction site, what would normally take 1 week to complete can be completed in 15 minutes by using a drone.

## (6) Case Summary

The five cases discussed in this chapter are summarized in Table 4. These five companies vary in their objectives, methods, and technology for adopting DX, but I would like to point out the following two points that they have in common.

## ① Increase in high-value-added operations

In addition to introducing digital technology, long-established companies reexamed their business processes and staffing. They were able to increase added value by allocating the spare capacity generated by automation and rationalization into operations that can be carried out exclusively by humans.

Ebiya, the restaurant company, for example, has increased their opportunities for customer service and hospitality and improved the quality of their service by using the surplus energy generated from the reduction of food preparation. Motoyu Jinya, the inn company, has also reduced the number of jobs in its backyard by centralizing information and using the Internet of Things (IoT), while increasing the amount of time staff spend serving customers. A shuzo, the Brewery company, was able to strengthen its marketing along with its labor-



saving brewing. Company B, the clothing retailer, is trying to achieve both high quality and low cost by using CAD and CAM, while leaving skilled workers in charge of measuring and sewing.

Table 4 Examples of Business Reform through Digitization

	Ebiya	Motoyu Jinya	A Shuzo	Company B	C. Construction
Purpose	Business operations and management	Customer information management, business operations, management	Brewing	Mass production of products at low cost Improved sales methods	General construction (Survey, design and construction)
Technology	Machine learning (ML)	Cloud, Sensor	Sensor	CAD/CAM Internet (e-commerce site)	Drones, 3D laser scanners, ICT construction equipment
Transformation Method	Based on past data, such as the number of customers and order menus, as well as weather data, a system that uses machine learning to estimate daily order menus and the number of customers per hour has been introduced.	Integrate information equipment to develop and integrate customer data. Integrated management of inhouse information using IoT such as sensors. This allows employees to multitask.	The temperature and humidity of rice malt in the brewery are monitored 24 hours a day using an application on the employee's smartphone, reducing the administrative burden.	Mass production of custom-made suits at low cost by introducing CAD/CAM. We renewed our ecommerce site to improve our sales methods. By adding a simulator function that shows samples through a monitor screen, customers can order from home.	Using drones for surveying and ICT construction equipment that can be automatically controlled for construction.
Achievements	Time spent on customer service improved service quality. In the 6 years from 2012 to 2018, sales increased from 100 million yen to 480 million yen, and ordinary income increased from 2 million yen to 20 million yen.	Reduce employee workload and improve customer service. As a result, sales in 2008 rose from 300 million yen to 450 million yen in 2016, and pretax profit rose from a deficit of 60 million yen to 120 million yen.	' '	While CAD and CAM are used, skilled workers take care of sizing and sewing to achieve both high quality and low cost.	Contributing to the reduction of labor and measures to address the shortage of skilled workers, as well as the improvement of construction accuracy. In addition, the construction period has been shortened.

# ② Digitization and use of "experience and intuition"

In SMEs including long-established companies, there are limited human resources and few opportunities for personnel changes, so knowledge accumulated by each individual is present in the form of "years of experience" or "experience intuition," and therefore tend to be personal ones and not able to be passed down to other people. In addition, the building a strong division of labor tends to make it more difficult than for major companies to implement initiatives such as standardizing work and reviewing systems. The companies selected in this paper use sensors and integrated systems to centralize knowledge and information, collect it as data, and share what was formerly personal information with all employees. For example, with the help of data, Ebiya is now able to accurately predict the number of visitors and order menu items that previously relied on experience and intuition. At Motoyu Jinya, knowledge that was difficult to hand over and share as a dependent has become sharable through the use of data. A Shuzo, the Brewery company, believes that by accumulating sensor data and business records, it will be possible to verify the quality of its sake and use it to develop human resources involved in



sake brewing. And finally, in the past, C Construction company required skilled workers, but even inexperienced workers can now take charge.

Once information is digitized, it can be processed and used in a variety of ways. Once you have a customer database, you can do marketing based on it. Company B, the clothing retailer, divides its customers into several segments for efficient sales promotion.

# 4. Common characteristics of long-established companies working on DX

Why did the five companies achieve success with DX? Three common features are described below.

# (1) Management's awareness of problems and strong commitment to transform

First, top management is aware of the company's management problems and works with a strong will to resolve them. In general, with the background of corporate culture that places importance on tradition, it is difficult for managers of long-established companies to recognize the fact that their management methods remain outdated in many cases, and they do not consider using digital technology to carry out business reforms. In this regard, the managers of three companies, namely the restaurant company Ebiya, the inn company Motoyu Jinya, and the clothing retailer Company B, had worked for other companies before taking office, and based on their experiences there, they objectively recognized the company's problems and had some knowledge of the possibilities of digital technology. Therefore, it is thought that these managers were able to implement DX together with the strong will while avoiding getting caught up in conservatism of long-established companies.

However, the experience of management in other companies is not a prerequisite for DX's success. It is important for managers to be aware of management problems and recognize what is needed to resolve them. DX itself can be implemented with advice from third parties<sup>3</sup> and support from IT system vendors. [\*] In order for managers to be aware of their own challenges and have the will to change, they can actively create opportunities for interaction with people from various industries and from outside their own communities, and they can always extend their antenna to grasp the latest developments. By doing so, they are able to get an objective and relative view of their company and obtain ideas for change.

# (2) Improving employee motivation

Second, success with DX increases employee motivation.

Specifically, we are trying to activate communication between employees as well as between managers and employees. Motoyu Jinya, the inn company, has established an in-house SNS in which all employees participate, and it is actively used. When communication is activated, a sense of unity as one organization is created and it is thought that this enhances momentum for company-wide reform.

<sup>&</sup>lt;sup>3</sup> Examples of third parties who advice include "IT Coordinator". The IT Coordinator is a public qualification established in 2001 by the Ministry of International Trade and Industry (currently the Ministry of Economy, Trade and Industry), which is given to persons who possess the knowledge to provide advice and support for using IT for management from the standpoint of the manager, and about 6,500 people are registered in Japan at present.



After the success of DX has been established, we try to improve the working conditions of employees. Ebiya, the restaurant company, offered employees a pay raise after their successful change and is working to improve employee benefits such as having continuous vacations. Motoyu Jinya has also improved the working conditions of its employees by increasing the number of closed days of its inns to 3 days a week, in addition to increasing salaries. Improvement of working conditions is an important opportunity for employees to directly realize that DX is meaningful, and it is also effective in improving their motivation to work.

# (3) People in the companies who understand IT and digital technology

Finally, there are people in the companies who understand IT and digital technology and take the lead in implementing it. When introducing digital technology<sup>4</sup>, IT companies often lack practical knowledge. For this reason, companies working on DX will need IT personnel who can connect digital technology with business practices. At Motoyu Jinya, the inn company, that developed its own system, an employee with experience as a system engineer took on such a task.

However, it is conceivable that SMEs would not be able to develop or hire IT personnel due to a shortage of human resources. Therefore, one effective solution is to acquire IT literacy by one executive. IT Knowledge has become as important as financial knowledge, such as accounting, and legal knowledge, such as contracts, in corporate management, and executives need to have at least a basic level of IT knowledge. At present, basic knowledge can be acquired in a short period of time, regardless of time or place, through intensive courses online. If well-versed executives can acquire IT knowledge, they will be able to work with external partners on more effective DX.

# 5. Conclusion

At present, raising the productivity of SMEs is an important issue in Japan, and DX, which is business innovation using digital technology, is cited as one means of doing so.

However, many companies (not limited to small- and medium-sized companies) have not gone beyond changing existing mechanisms and have simply adopted digital technology. Even if some cost savings are realized, DX cannot be expected to lead to significant productivity improvements or dramatic service improvements.

The five long-established companies examined in this paper have not only introduced digital technology, but have also carried out business reforms such as (1) reexamining business processes and staffing, and allocating the spare capacity generated by automation and rationalization into operations that can be carried out exclusively by humans; and (2) integrating knowledge and information into data can be shared by all employees and used for various purposes. This is DX that improves productivity and services, which in turn creates added value unique to a company.

<sup>&</sup>lt;sup>4</sup> Ebiya, the restaurant company, has enlisted companies that specialize in data analysis to help it make accurate guest predictions. At Motoyu Jinya, the inn company, a major IT company, which has a cloud application platform on which cloud-based mission-critical systems are based, cooperates in system development.



Even these long-established SMEs, which are often seen as being the furthest away from digital technology, have made great performance in using DX to survive the shakeout wave. It is clear from these examples that DX is by no means restricted to large companies. Whether it is a small or medium-sized company or a company with a long history, it is quite possible to transform a business by using digital technology with the will of management and the cooperation of employees.



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