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As a global consulting firm founded and based in Asia, ABeam Consulting provides high value added consulting services that support clients in their efforts to achieve global expansion. ABeam consulting proposes best practices for each client based on an understanding of the market needs specific to individual industries and businesses as well as the differences in culture and business practices that mark specific countries and regions. ABeam is backed by a wealth of experience drawn from across all its service domains, ranging from corporate strategy to business innovation, IT development, operations, and maintenance. All told, ABeam Consulting is the ideal real-world partner for customers seeking to realize management-led transformation. This document reports on the state of ABeam Consulting today.
The rise of digital technologies has brought about a new world in which everything is interlinked via networks. Right now, humanity is in the midst of a paradigm shift, triggered by the digital revolution. For some companies, this shift may present a time of crisis or concern. Just as Amazon, an unrivaled leader of e-commerce, conquers the market for cloud infrastructure, or Tesla, the electric vehicle start-up, reshapes the very nature of competition in the automobile industry, other new, innovative, and “game-changing” companies continue to arrive from outside established industries, leading to “creative destruction”.

Paradigm shifts increase the probability that anyone can become a victor; companies that can provide new value will go on to become the de facto industry leaders. An age in which companies that can provide new...
values become the de facto industry leaders to lead, it is vital that companies independently create new products and services that threaten the very existence of their competitors. In other words, they must become game changers themselves before others arrive on the scene. Those who fail do so will be replaced in the blink of an eye by parties who have leveraged digital technologies to establish new business models.

Paradigm shifts have occurred in the past; the industrial revolution of the 19th century and the information revolution of the 20th century are just two examples. The fundamental difference between these past examples and the paradigm shift we are currently experiencing is the speed of change, which is being propelled forward by digital technologies. Companies that were small start-ups just a few years ago are now global giants whose influence expands around the world. Today’s speed of change—the temporal axis—is wholly different from the past.

In this day and age, companies must move quickly, always remaining a step ahead of their rivals to become the movers. This reality is, undoubtedly, a vital requirement for becoming an industry leader.

In recent years at ABeam Consulting, we have expended great energy on the creation of ABeam Cloud, an innovative platform that targets the needs and appeal of these early movers.

**ABeam Ecosystem, with ABeam Cloud at its core**

ABeam Cloud is a business innovation platform that supports business transformation via digitization (see page 20 for further details). At ABeam Consulting, we have partnered with multiple IT vendors and, as a result, have access to numerous cloud infrastructures and software. Via the cloud, we select and provide combinations of technologies that are optimized for the corporate transformations our customers desire.

We have personally verified the utility of all the technologies we offer. We consistently offer a full line-up of the latest versions, so our customers can use these technologies with peace of mind, at optimal costs, and with a minimal expenditure of time.

Corporate groups that implement ABeam Cloud will, with increasing speed, accumulate a variety of management information, customer information, and IoT data within their group in the form of digital data.

What can companies glean from this digital data? How will they link it to subsequent transformations?

To help companies answer these important questions, ABeam Digital provides analytics that utilize BI analyses as well as AI. ABeam Robotics program takes this process one step further, using robotics to link the results of ABeam Digital analytics to the optimization and automation of business processes. These unique facets of ABeam Ecosystem are interconnected and support digital transformations and business innovations.

ABeam Consulting’s Ecosystem provides more than mere technological support for our customers. ABeam’s consultants have high levels of specialized knowledge and possess rich experience across a variety of fields including management strategies, accounting and finance, HR strategies, and IT. Our consultants are also knowledgeable about the manufacturing and financial industries. Forming cross-organizational teams, our consultants take on the role of “Real Partners” to help our customers achieve transformations and innovations.

**Inter-company connections lead to significant increases in added value**

At ABeam Consulting, we intend to increase the value provided by our Ecosystem by having as many customers participate as possible. Using ABeam Ecosystem, our aim is to realize “Connected Enterprises”, through which companies become connected in a manner that exceeds current corporate boundaries.

Say, for example, that sensors are placed on a plant’s production lines; the resultant data can be gathered and stored on the cloud. The status of the production line can then be accessed instantaneously from any location, leading to immediate improvements in business processes. After the line’s status has been “visualized”, the data is then analyzed and can be used for immediate problem solving needs. This approach enables the plant to utilize its data in an objective manner, without relying on experience or intuition. Further, it contributes to improved operating ratios and even increased product quality. The effects are even greater if these results are shared among all bases, including those who are overseas. This practice can lead to significant advantages for a large number of partner companies.

ABeam Ecosystem, with ABeam Cloud at its core, is still in its infancy. However, through the participation of a large number of partner companies and customers, we intend to make this ecosystem more abundant and to use it for improving the corporate value of our customers.
IoT, AI, RPA… When the cloud connects digital technologies, companies enter the realm of digital transformation, transcending the effects of “creative destruction”.

Aiming to realize Connected Enterprises

Five viewpoints to guide companies to the age of digital transformation
1. Acquiring a new competitive advantage in order to prevail in the age of digital revolution

2. AI model management holds the key to the stage of full-scale implementation

3. The true value of rapidly increasing digital labor

4. Connecting entire organization to tackle competitive structures that are being destroyed

5. IoT contributes to solving problems in the workplace and energizes Japanese manufacturing
Acquiring a new competitive advantage in order to prevail in the age of digital revolution

The rapid advancement of digital technologies has led to the expansion of a digitally connected world. Shared digital values thereby created have ushered in an age of digital revolution, which is transforming human activities and work. In order to acquire a new competitive advantage and to prevail in the age of digital revolution, Masato Miyamaru, ABeam Consulting Strategy Business Unit Leader, says that companies must accelerate their use of digital values to resolve the jobs of their customers, while also enhancing their ability to reconstruct the value they provide to their customers.

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Masato Miyamaru began his career in the finance industry and was involved in a large number of structured finance and mergers and acquisitions. He then led the planning division, and later the strategy division, of a top financial institution. After serving as CFO at a boutique investment bank, Miyamaru joined ABeam Consulting in 2012. He established the new Strategy Business Sector; since 2014, he has managed the Strategy Business Unit. At present, he heads a strategy team of more than 130 employees.

How should companies set goals for engaging in digital transformation?

Google, Amazon, Facebook, Uber Technologies and other game changers continue to emerge, using digital values created through digitization. These tech leaders, are redefining both business models and the industries themselves. In the age of the digital revolution, existing players often find their own business are disrupted. While it is a period of great innovation and excitement, it is also an age of unprecedented competition for the companies involved.

“Digital values” can be defined as the “values that are created by connecting digitally”. Examples of digital values include the values generated when: (1) the cyber and physical worlds become digitally connected; (2) digitally connected data is stored on the web, leading to the realization of high-level recognition, predictions and execution; and (3) not only companies are digitally connected to each other but also when companies become digitally connected to individuals.

As a result, following of the rapid progress of digital technologies, we have seen a dramatic increase in the number of Japanese company executives wishing to leverage the effects of digitization to increase their competitive advantages. Others seek to realize digital transformations. When undertaking such projects, our first priority is to share the “goals” of engaging in a digital transformation with our customers, and only then do we strive to create value together.

Let me give you an example. Consider a company that aims to carry out a digital transformation in order to maintain and strengthen its existing competitive advantages.

In this case, the promotion of digitization would no doubt lead to prioritizing major improvements, not only in the company’s internal productivity and efficiency, but also in enhancements to existing
values. As I mentioned earlier, however, companies must remember that in the age of the digital revolution, their existing competitive advantages are constantly under threat of being wiped out by digital disruption. No matter how ably they refine this advantage, there is no way of knowing when or where destructive innovation will come from.

How, then, should companies establish their goals for digital transformation? At ABeam Consulting, we propose that the goal of digital transformation is “to acquire a new competitive advantage in order to prevail in the age of digital revolution”. By using digital values as a means to achieve transformation, companies can redefine the values they provide to their customers. And this process, I believe, is the essence of the digital transformation to which companies should aspire.

**Using ecosystems that accelerate digital transformation in order to reconstruct value propositions and acquire a new competitive advantage**

In order to prevail in the age of the digital revolution and acquire a new competitive advantage, how should companies engage in digital transformations?

As part of our Connected Enterprises concept, we offer ABeam Ecosystem, which enables companies to work together to co-create digitally connected values. By providing our own business innovation platform, we aim to roll out a digital transformation ecosystem that repeatedly creates new digital values for our digitally connected customers. Expanding this platform for co-creation allows the speed of value creation to be accelerated drastically, and enables continual efforts toward digital transformation that are not limited by our customers’ management resources or volume of experience.

At the same time, while using ABeam Ecosystem to support our customers’ digital transformations, we also encourage our customers to establish and embed a digital innovation ecosystem within their own corporate activities.

This internal ecosystem comprises: (1) the search and discovery of digital values; (2) the construction and formation of digital values; (3) a business model innovation process based on the provision of digital values; and (4) a digital value foundation (a digital transformation base), established by repeatedly executing the above steps 1 through 3.

During the innovation processes of steps 1 through 3, we systematize the utilization of the latest methodologies and approaches to creating innovation—such as design thinking and lean start-ups, as well as open innovation and corporate venture capital—according to our customers’ unique characteristics.

Additionally, while implementing the foundation (the digital transformation base) of step 4, we systematize various transformation methods for incorporating the innovation processes of steps 1 through 3 into the management system.

In order to incorporate these steps into the management process, we coordinate transformation programs related to governance, organization, and personnel systems. We establish methods for developing personnel training and internal processes that accelerate business model innovation. In doing so, we support the formation of internal ecosystems that co-create digital values.

At ABeam Consulting, we support the digital transformation of our customers in two ways. First, we co-create ecosystems that accelerate digital innovation within our customers’ corporate activities. Second, we connect these internal innovation ecosystems to external parties via ABeam Ecosystem. Through the expansion of these digital ecosystems, we contribute not only to the reconstruction of the value propositions of Japanese companies, but also to the acquisition of new competitive advantages.

**Everything begins with solving the jobs of our customers**

I believe that digital transformation is an activity that utilizes the destructive power of digital values to increase the success rate of innovations.

For this reason, when supporting the digital transformations of our customers, I stay aware of the idea that innovation begins with identifying and resolving the jobs that our customers want to be completed.

Clayton M. Christensen, a Harvard Business School professor and author of *The Innovator’s Dilemma*, first developed the idea of “jobs to be done”. In a later book, *Competing Against Luck*, Christensen defined jobs as “the progress that a customer desires to make in a particular circumstance”.

At ABeam Consulting, we also intend to use digital transformations to provide the progress our customers’ desires to make, thereby increasing the probability that their innovations succeed.
AI model management holds the key to the stage of full-scale implementation

AI is getting closer and closer to the stage of full-scale implementation. In terms of knowledge, not only does it continue to grow, but it also degenerates depending on environmental changes in the same way as a human brain. A major challenge for the future is to establish an approach to AI model management that maintains optimal conditions for each area of use by making continuous improvements through repeated learning or by replacing the AI model itself.

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Junichi Murozumi joined ABeam Consulting after working in system planning at a major financial institution and a foreign accounts consulting firm. He develops and deploys BI solutions using big data, IoT, digital technologies, and analytics. Additionally, he has taken part in a large number of projects; he is highly experienced in finance, industry, the service industry, and the wholesale industry. He is an IT coordinator, an IT strategist, and a system-auditing technician.

Because it is a cutting-edge field, we need to confirm the maturity status of AI technology

These days, not a day goes by without the media reporting about artificial intelligence. In the business field, for example, there are reports about the launch of AI prototype verifications as well as implementation in various fields, such as development, production, marketing, and personnel.

However, these reports also include those in which it is difficult to determine whether a firm is using real AI or simply deploying existing technologies and referring to them as AI.

We have also heard about cases in which the use of AI has been abandoned because things haven’t gone well as intended, particularly following a rushed initial proof of concept (PoC), in order not to fall behind in the application of AI. In such cases, the cause of the failure may be attributed to beginning PoC without a specific idea of how to incorporate AI into the company’s business.

Because AI is an evolving field that has not yet matured, it is necessary to monitor the technical status of AI, following the most advanced research findings from international societies and scholars. On that basis, I believe that the starting point is to thoroughly ascertain in which areas of the company’s business and which business processes AI can be used, as well as values that can be created from that use.

A time will come when companies will use hundreds and thousands of new AI models

AI is formed and trained by letting algorithms learn from vast amount of data.

Therefore, AI grows in completely different
However, no matter how highly precise the AI models formed, they will not be able to perform perpetually. As the environment in which they are placed changes, AI models will become unable to demonstrate their capabilities, and they will ultimately degenerate. In other words, environmental changes influence AI in the same way they influence humans.

For example, consider a case in which AI is used to predict the breakdown of manufacturing machinery. Now consider that the production line on which the machinery is placed changes. The same machinery, when placed in the factory in a different area, will change according to the temperature, humidity, and other aspects of the usage environment. The machinery operation status will change as well. That will cause a decline in the accuracy of breakdown prediction.

In other words, no matter how highly precise the AI models become, they will not be able to perform perpetually.

Therefore, it is necessary to monitor the performance of each AI model carefully, and if there is a decline in accuracy, the AI model must be improved through re-learning, and if it still does not achieve growth, subsequent measures must be taken to replace the AI model.

AI model management refers to the continuous repetition of the cycle of model construction, usage, evaluation, and re-learning (or replacement).

From an organizational perspective, another challenge is who should manage the AI model cycle. While there are various arguments in this regard, I personally believe that IT departments should manage systems related to business processes. Further, I believe that data science departments should manage AI related to business processes. Companies that have no data scientists need to either newly employ or train such people.

In the future, AI usage may expand to all areas of company business and business process fields. PoC should be carried out to discover the areas in which AI is to be implemented; and its projected effectiveness and return on investment should be determined, which will lead to the reform of business processes and system development. C-suite management executives, at the very least, must take responsibility for designing the road map to achieving that goal.

If AI usage is considered to be an important element in digital transformation, my theory at present is that the CDO (Chief Digital Officer) should take on that responsibility.
In Japanese, digital laborers are referred to as “virtual intellectual workers”, and they take on the standard business processes traditionally performed by desk workers. Robotic Process Automation (RPA) supports this digital labor. At ABeam Consulting, we have used digital labor internally since 2011 and some of our services are even available to customers. Until the summer of 2016, demand for digital labor in Japan was for two or three cases annually; however, demand has rapidly increased since then. A joint investigation between the RPA Association and ABeam Consulting, which took place during the first half of 2017, discovered that approximately 4,000 digital labor inquiries were made, clearly demonstrating the attention and interest it has been receiving.

For context, a rapidly aging society has resulted in a labor shortage and work reforms. As the number of available workers decreases, and long working hours are reassessed, it is necessary to enhance productivity by maximizing the use of limited labor and time in order to maintain global growth. Digital labor is a new solution that matches this societal need, which has also influenced the current and dramatic increase in both interest and usage.

The challenge for raising productivity with limited labor is the same for domestic and overseas companies alike. In overseas branch offices, there are often fewer employees than at the Japanese headquarters; however, there are still great expectations for digital labor. Certainly, growth will continue into the future. At ABeam Consulting, we have initiated multiple digital labor projects throughout Asia.
Human resources can be set aside in favor of more creative business processes by liberating them from simple tasks

At ABeam Consulting, we often receive questions about digital labor; for instance, “Aren’t the automation and optimization of processes the same thing as ERP?” Certainly, they are the same thing, if you only consider it from that angle. However, there are major differences in the implementation and improvements made by each.

First, the effects of ERP come from the mass migration of existing systems and processes, as evidenced by the phrase “big bang approach”. The ERP package combines both software and business processes into “business process best practices”, so it is defined by improvements according to the scale of implementation.

Digital labor can yield substantial outcomes for business processes, even when large-scale systemization is not an option. This is also true for complex business processes, in which human-performed processes remain even after system implementation. By migrating these processes to digital labor, companies can liberate their employees from simple tasks, so that they can put their energy toward more creative business processes like planning and strategy.

Conventional business process systems must match the business processes to the functions of the software, and fundamental business processes are often limited by the system. RPA matches the business processes and can also optimize the functions of the tool, so business processes can be digitized without changing the company’s way of working.

In recent years, digital labor has spread to a variety of industries and business situations. Results of a questionnaire conducted by ABeam Consulting revealed that, in addition to the finance industry, which has utilized digital labor extensively, there has also been a recent and rapid increase in the use of digital labor among the manufacturing and service industries. Given the direct connection between productivity and sales, there are inherent benefits to robotizing simple tasks.

Despite a strong belief that, generally speaking, digital labor involves back office tasks, the results of this questionnaire revealed an equal split between back office and front office tasks.

Front office tasks typically involve business processes, such as checking the sales of company products online and the real-time acquisition of exchange rates and market values. With such marketing tool uses, there is simply no comparison between humans and robots, at least in terms of the ability for each to gather and analyze information. Digital labor is not merely a tool for simple paperwork; it is an actual “worker”.

No human intervention is necessary for tasks performed by robots, so the benefits, in terms of information security and improved governance, should not be overlooked.

### Digital labor platforms that eliminate clerical task automation tools

The goal of digital labor is not the “complete automation of simple tasks”. If digital labor can exist and cooperate alongside the various departments and business processes within successful companies, it will exist as a major platform for business processes. This situation is known as a “digital labor platform”.

Currently, technologies such as AI appear all the time; to be sure, they appear frequently in the business world, but various services are now available via cloud technology as well. Digital labor will take on the role of connecting these services and company users. That is, by using a digital labor platform, companies will select and connect to the latest cloud services that suit their own business processes, which they can then return when they are no longer necessary. This life cycle for the selection, implementation, and disposal of services that suit the needs and changes in business will be realized by means of digital labor.

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<th>Example of digital labor implementation</th>
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<td>Daiwa House, a major residential construction firm, is improving white-collar business process productivity from even the early stages, with the aim of increasing competition. To this end, they have adopted the new function of RPA Technologies, Inc., known as “Device Automation”. ABeam Consulting worked as a partner in the implementation of this function on requirement definitions and development, and usage began in July 2017. The range of use for RPA includes “the promotion of work style reforms”, as well as improved internal controls, business processes, and compliance, as well as the optimization of financial accounting and information gathering. Among these tasks, with the “advancement of management”, a pioneering initiative is underway to robotize business processes for the formation of managerial accounting reports. Specifically, the goal is to gather and analyze SAP and ERP financial accounting data using RPA. Managers become free of simple the business processes so that they can focus on defining strategies and examining prototypes.</td>
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Example of digital labor implementation: Daiwa House Industry Co., Ltd.

Production of a managerial accounting report from SAP ERP financial accounting data: Daiwa House, a major residential construction firm, is improving white-collar business process productivity from even the early stages, with the aim of increasing competition. To this end, they have adopted the new function of RPA Technologies, Inc., known as “Device Automation”. ABeam Consulting worked as a partner in the implementation of this function on requirement definitions and development, and usage began in July 2017. The range of use for RPA includes “the promotion of work style reforms”, as well as improved internal controls, business processes, and compliance, as well as the optimization of financial accounting and information gathering. Among these tasks, with the “advancement of management”, a pioneering initiative is underway to robotize business processes for the formation of managerial accounting reports. Specifically, the goal is to gather and analyze SAP and ERP financial accounting data using RPA. Managers become free of simple the business processes so that they can focus on defining strategies and examining prototypes.
Connecting entire organization to tackle competitive structures that are being destroyed

Disruptors (creative destroyers) who construct business models in the era of digital transformation based on mobile technology, cloud, and social media are causing a major change in business competitive structures. In order to respond to these changes, organizations of the entire group must connect, and make stronger connections with customers.

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Akira Akaishi joined ABeam Consulting in 2000 after working at an integrated logistics company. He has contributed to a large number of projects aimed at improving supply chain management and business processes. Since 2002, Akaishi has engaged in projects to establish a global management infrastructure, including post-system implementation maintenance and operations. He was previously head of CPG Sector at the Production/Distribution Headquarters and head of Outsourcing Business Sector before assuming his current roles.

Now is the “Pre-digital transformation era”
Groups are not yet connected as a whole

Companies first fully introduced computers as a mission-critical system in the second half of the 1980s. At that time, systemization was progressing among separate frameworks for each business process, including purchasing systems, accounting systems, and sales systems. It was the era of “digitalization” in which analog processing switched to digital processing.

Since the second half of the 1990s, companies implemented digitalization by switching to entirely integrated frameworks such as ERP, which led to an era of working with frameworks with consistent business processes. However, while digitization may have connected single organizations, groups as a whole, including subsidiaries and affiliates, were not necessarily connected.

Since approximately 2010, companies have heralded the need for digital transformation (DX), which was when many companies first realized that they had not actually been properly digitalized or that the group as a whole was not connected.

For example, if products, accounting items, and other codes differ depending on the country where the business is deployed, the company cannot quickly and precisely understand the condition of stock or level of profit. Today, we live what one could characterize as the “Pre-digital transformation era”.

Meanwhile, if we look at the consumer environment, the era of the Internet was unveiled in the 2000s. High-speed communication network environments spread widely among individuals, and anyone, anywhere
Digital transformation will resolve the imperfections of digitalization due to the process of overseas expansion

One of the major reasons for the delay in digitalization and the embodiment of its imperfections is the progress of globalization.

Since the 1990s, the expansion of Japanese companies into other countries has accelerated. As the destination markets increased, production bases also increased. Deploying a system made in one country into another country led to the extension of various systems. Now we often hear that “before we knew it, counterfeit systems had mixed in with original systems, which led to the destruction of standardization and unity of codes”, and “while various companies became part of the group due to M&As, their frameworks were varied”. Either way, because of overseas expansion, many companies have become aware of the imperfections of digitalization.

When countries work according to different frameworks, even if one wants to check the figures by month or by week, the point of consolidation may be two or three weeks in advance. Of course, this makes quick decision-making difficult, and speed management is impossible.

So, what can be done? It is necessary to have a framework that integrates the same codes in the same system infrastructure. As such, we need to connect digitally. Then, when we are connected digitally worldwide, and digitalization is a reality, we can progress to the next stage, which is digital transformation. Japanese companies today need to reach this stage as quickly as possible.

However, the digital transformation stage is also the stage of disruption (creative destruction) that competes with speed management.

Emerging companies known as disruptors destroy conventional competitive structures, such as Uber Technologies, Airbnb, and, from Japan, Mercari. In the case of Mercari, it is the first Japanese venture company to become a unicorn company (unlisted venture companies that have a valuation of more than 1 billion dollars), which has already expanded to the United States. These companies have quickly taken over the market. Companies are requiring a rapidly accelerating speed of management.

The common theme among digital transformation era disruptors is the construction of a business model based on an environment in which mobile technology, cloud, and social media have existed since the founding of the company. This has rapidly accelerated their management speed and given them very strong connections with customers.

Companies can shift to digital transformation by connecting enterprise systems with cloud

So, then, what can companies that conduct regular business activities with conventional enterprise systems do to counteract the management speed and the strength of customer contacts of disruptors?

I believe the cloud is the answer to that. Even if one considers expanding or upgrading existing enterprise systems, it cannot keep up with digital transformation era management speed. However, with cloud infrastructures, companies can continuously provide the latest technologies and best practices, which is an astonishing cycle. Making full use of this enables management to compete with the speed of disruptors. Globally "connecting" enterprise systems using cloud is a major key to growth in the future.

The connection between the entire group that combines cloud with enterprise systems will be the competitive edge in the digital transformation stage in which speed management is required. After that, enterprise systems and consumers will be connected so that users can order individual products that they like, and the systems can immediately begin producing and shipping them. As such, the entire supply chain will move toward being connected.

In any case, I want to provide support so that even one more company can energetically move forward to the digital transformation era.
IoT contributes to solving problems in the workplace and energizes Japanese manufacturing

Japan, the manufacturing giant, has arrived at a major crossroads. As competition in global markets intensifies, how will Japan create new innovations to maintain its superiority? Is there a place for utilizing IoT (Internet of Things) to improve workplaces? In this way, based on the experience, knowledge and realizations gleaned from a variety of projects and demonstration experiments, we look for hints to help us rediscover the competitiveness of the Japanese manufacturing industry.

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Using ICT to strengthen manufacturing, package skills, and communicate them to global markets

Clearly, small and medium-sized businesses play an extremely important role in Japanese manufacturing. Examples abound of the patented technologies of small factories in Japanese towns supporting state-of-the-art equipment across the world. However, in order to prevail in competitive global markets, these factories will have to pool their strengths and further increase their competitiveness. Unfortunately, Japanese manufacturers—regardless of the scale of their companies—are not adept at making inter-company connections. Each manufacturer possesses its own creative technologies and knowhow, using this advantage to create highly unique products; the companies’ pride in their achievements frequently works to obstruct collaboration.

How can companies transform while continuing to take advantage of their individual qualities and strengths? In order to resolve such questions, the Industrial Value Chain Initiative (IVI) seeks to develop a Japanese reference model for the manufacturing industry that makes use of ICT (business process scenarios and platforms, etc.). IVI uses ICT to enable collaboration between companies that are participating on their own terms. It is a group that aims to develop new competitive strengths in the Japanese manufacturing industry, and counts approximately 200 companies among its members. These include manufacturers of all sizes, as well as IT vendors and consulting companies.

IVI not only provides reference models. Perhaps its most distinctive feature is that it conducts demonstration experiments at actual manufacturing workplaces, and ABeam Consulting has contributed as a support member to the promotion of genuine research and debate.

The noodle-making industry has seen significant benefits from these demonstration experiments in its attempts to carry out business process improvements using IoT, and in its efforts to find solutions to a variety of problems.

Manufacturers of noodle-making equipment are using IoT both to provide equipment that consistently produces higher-quality noodles and to carry out business
process improvements. They hope these improvements will help to increase the completeness of their noodle-making customers. If noodle manufacturers install equipment that facilitates the consistent production of high-quality noodles, they will be able to reduce losses and improve the quality of their products.

**Using IoT to gather and analyze data, identify quantitative facts, and improve business processes**

For the demonstration experiments, the noodle manufacturers attached new sensors to their production line equipment, and acquired a variety of data via equipment control devices. The data was gathered and stored on the cloud, and ABeam Consulting carried out consulting work using this data.

Analysis of the data focused on two areas: stable equipment operation and consistent product quality. Food manufacturers deal with organic materials such as flour and oil, and the condition of the ingredients is constantly changing according to the manufacturing environment. For this reason, it is difficult to homogenize the quality of their products. Previously, these manufacturers relied on the experience and intuition of their workers; using IoT, however, they were able to gather and analyze data in an objective manner, and work out the relationships between different quantitative measurement results. This enabled the food manufacturers to identify the causes of various problems, and also contributed to their resolution.

As far as stable equipment operation was concerned, for example, we analyzed the behavior of production line motors. Veteran workplace employees determined it took an hour for operating conditions to stabilize after the start of production; however, we were able to determine that it actually took two hours. Such analysis led to more stable equipment operation and contributed to the production of higher quality and more consistent products. We were able to demonstrate that this translated into business process improvements and therefore improved competitiveness.

**An attitude of improvement in the workplace and IoT combine to create a new Japanese manufacturing environment**

Through these demonstration experiments, we were able to use data to prove the effectiveness of business process improvements. More than this, however, we were able to show manufacturing sites the thinking processes and approaches that were necessary to handle problem resolution.

In the European and U.S. manufacturing industries, even if workers are not highly skilled, they still complete jobs when management tells them to “follow the manual”. In Japan, conversely, an approach to improvement has taken root in which employees strive to make the workplace better together. For this reason, rather than standardizing operations according to a manual, it is better for individuals to acquire both the ability to think and the skills to resolve problems themselves. When they encounter a new problem, they can then explore the best method for solving it immediately.

If companies can combine IoT and other technologies with this capacity to independently think, act, and solve, and if workplaces are able to accelerate PDCA cycles from problem identification to resolution, then the Ministry of Economy, Trade and Industry’s proposed “Connected Industries” will come one-step closer to reality. We believe that Connected Industries is ideal approach to a new form of Japanese manufacturing.

The above demonstration experiments also gave rise to the notion of “best practices and manufacturing equipment for problem resolution”—in other words, the idea of a packaged solution that combines both “soft” and “hard” approaches. Manufacturers of noodle-making equipment are currently considering the possibility of providing this package to both domestic and overseas customers as a Japanese solution to manufacturing.

When talking about IoT, there is a tendency to focus solely on its ability to gather and analyze data in real time and to visualize results on dashboards. However, visualization by itself is not enough. The manufacturing industry must determine how it can identify value-generating information from these visualized results, and what sort of problems it will thereby resolve. At ABeam Consulting, we believe we can contribute significantly to successful use of PDCA cycles from problem identification to resolution.
Special Feature

Digital x Global
The meaning of present-day corporate management
Non-continuous developments instigated by “Digital x Global”
By generating business innovations, ABeam Cloud facilitates global competitiveness

Both technologies and market environments are evolving at an unprecedented pace. Consequently, companies need to continually make high-level strategic decisions in a speedy manner, and repeatedly come up with innovations. ABeam Cloud is gaining widespread attention as a platform that normalizes such business innovations. In this feature, the two proponents of business transformations driven by ABeam Cloud discuss strategies to make the most of the service.

Seizing the chance to win through “Global x Digital”
The value of Japanese companies as revealed by J-CSV

In recent years, advances in digitization have increased demand for unprecedentedly fast and accurate management decisions. How should Japanese companies define their goals? ABeam Consulting’s Ryusuke Sakuma spoke to Takashi Nawa, Adjunct Professor of the Graduate School of International Corporate Strategy at Hitotsubashi University, to find out more.

By generating business innovation, ABeam Cloud facilitates global competitiveness

Interest in sports continues to grow as we near the 2020 Olympic and Paralympic Games in Tokyo. However, sports in Japan has not yet been established as an industry, and data are important for creating new value that can overcome this situation. We spoke to Keiichi Kubota of ABeam Consulting about utilizing expertise and know-how in sports and data analytics.
Providing a one-stop solution for innovation

As global IT giants engage in fierce competition to develop cloud-related services, the world has entered an age in which start-up companies release new applications on a daily basis that leverage AI, IoT, and other technologies that operate on cloud platforms. Indeed, the advance of cloud technologies over the past few years has been astonishing.

The rise of digitization has led to the influence of technologies on market environments and vice-versa. As a result, both have undergone accelerated change. In order to cater to these changes swiftly and flexibly, utilization of the cloud has now become a matter of course.

Akira Akaishi, head of both Process & Technology Business Unit and Digital Transformation Business Unit, says, “Cloud services are continually applying the latest technologies, even when it comes to, say, memory or CPUs. Use of the cloud enables companies to establish environments that take advantage of such cutting-edge technologies. There is no doubt that the cloud is now a key element in the realization of digital transformation”.

By generating business innovation, ABeam Cloud facilitates global competitiveness

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Akira Akaishi

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Akira Akaishi joined ABeam Consulting in 2000 after working at an integrated logistics company. He has contributed to a large number of projects aimed at improving supply chain management and business processes. Since 2002, Akaishi has engaged in projects to establish a global management infrastructure, including post-system implementation maintenance and operations. He was head of CPG Sector at Production/Distribution Headquarters, as well as head of Outsourcing Business Sector before assuming his current roles.

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Shunichiro Yamamoto joined ABeam Consulting after working at an independent software house. He acts as an IT architect, and provides IT consulting services in a wide range of industries, including leasing companies, general trading companies, and automakers. For the last few years, Yamamoto has been a member of Competence Center. He is engaged in initiatives aimed at enabling companies to keep pace with the digital age; these include technical verification of the latest technologies, and training in the latest IT trends.
In the present day and age, the way in which companies internalize and elicit the greatest benefit from cloud platforms significantly influences their competitiveness.

Through ABeam Cloud, ABeam Consulting coordinates with domestic and overseas cloud service companies, and selects optimal cloud infrastructures for its customers. It provides a one-stop fully managed service that covers everything from software license management to maintenance and operation of the entire cloud.

Consultants research the latest technologies and applications from across the world, including Silicon Valley and Israel, and incorporate services that benefit users. Since it is difficult for companies to fund such services by themselves, ABeam Consulting’s establishment of up-to-date, optimal environments is encouraging.

Two of the major attractions of ABeam Cloud are the ability to use ABeam Method, a compilation of methods cultivated through consultations in a variety of industry types, and to use the template groups for a variety of industry types via the cloud.

Shunichiro Yamamoto, senior expert at Process & Technology Business Unit’s IT Management & Services Sector, explains: “ABeam Cloud provides customers with access to ERP templates for global production and sales, real estate, and other fields, as well as applications for a variety of business processes such as workforce management, subscription management, and supply and demand management. In addition, it enables customers to make use of digital platforms such as IoT and analytics. These services allow systems to be implemented more quickly, and enable customers to respond to changes in business environments quickly and flexibly”.

Cloud technologies are evolving on a daily basis. Consequently, companies struggle to ensure they have engineers who can keep pace with these technological changes. Furthermore, digitization has not just increased the rate of change; it has also resulted in the fusion of digital technologies with business models. Personnel that are familiar with both digital technologies and business strategies and processes are now indispensable, and the lack of such personnel is a cause of concern for many companies.
You can link domestic, on-premise mission-critical business systems with overseas business sites built upon ABeam Cloud services.

Akira Akaishi

Akaishi says with conviction, “At ABeam Consulting, we form teams of strategic consultants, consultants familiar with different industries and business processes, and IT consultants to help resolve the problems facing our customers. In order to extract maximum value from our business innovation platform, ABeam Cloud, we are strengthening the support provided by our teams”.

Establishing a global management infrastructure in a short time frame

As indicated by the call to “incorporate the growth of emerging markets”, from the start of the new millennium, Japanese companies accelerated overseas expansion to gain access to new markets. Regardless, many companies have not enjoyed the success they anticipated.

One possible cause is that these companies expanded globally before they had sufficiently developed their management infrastructures. In many cases, companies that expanded into multiple countries operated independent systems in each region. This meant they were unable to visualize fundamental management information on production, inventory, sales, or accounting. Even within one country, production, logistics, and sales data between a company’s business sites might be insufficiently coordinated. The company would therefore be unable to develop production and logistics systems optimized for its sales plans. Such examples are commonplace.

Regarding the above issues, Akaishi says, “In order to be able to accelerate local decision making, acquire new markets, and create new businesses, it is critical that companies establish a global management infrastructure”.

While companies recognize the veracity of this advice, since it is difficult for them to predict accurately how quickly their businesses will expand in new overseas markets, they are unable to make significant system investments. In addition, since human resources are limited at overseas subsidiaries, companies are frequently unable to dedicate sufficient personnel to their systems departments.

ABeam Cloud provides an answer for such issues: it requires minimal initial investment, caters flexibly to business expansion, and, because maintenance and operations are included, ABeam Cloud enables companies to maintain and operate their systems even with limited personnel.

“Global management infrastructure can also be described as infrastructure that enables PDCA (Plan-Do-Check-Act) cycles to be implemented on a global level”, says Yamamoto. “In addition to establishing shared global KPIs (Key Performance Indicators) for each employee class, business processes are executed according to rules and codes that have been standardized in line with these KPIs. These executed processes are then stored as business process results information, whereupon they can be visualized via business intelligence tools or linked to the ‘check’ and ‘act’ phases of the PDCA cycle. With ABeam Cloud, customers can implement such global management infrastructure in a short time frame”.

For example, ABeam Cloud templates contain business processes formulated via best practices taken from vast numbers of ABeam Consulting projects, standardized documents such as business process requirement definition documents and operation manuals, and add-on programs. By using these templates, ERP implementation projects that typically take between 12 and 18 months can be completed in just 4 to 7 months.

ABeam Cloud templates also incorporate add-on programs that cater to the specific requirements of various countries, such as tax systems and accounting systems. This is reassuring for companies aiming to expand globally.
Many companies are apprehensive of transferring domestic, large-scale mission-critical business systems to the cloud, even if they permit such moves for overseas business sites.

Akaishi advises: “Such concerns can be resolved through the establishment of a two-tier management infrastructure system. Domestic mission-critical business systems can remain on-premise or on private clouds, and still be linked to ABeam Cloud services used by overseas business sites”.

Nevertheless, a fully integrated global management infrastructure is undoubtedly more ideal. Yamamoto predicts that “In the near future, extreme standardization and optimization—including automation and the use of AI—will come to dominate the field of enterprise systems. Companies will also increasingly seek to differentiate themselves by raising investments in the so-called Systems of Insight and Systems of Innovation. These are fields that use deep insight and analysis—such as digital marketing and analytics—in order to directly expand sales”.

“When Japanese companies move mission-critical business systems to the cloud”, says Akaishi, “the use of multiple, independently developed add-on systems often creates a bottle-neck. We can use ABeam Cloud to cater to such cases by linking their mission-critical business systems and add-on systems over the cloud”.

Cloud-based ERP software is typically updated once a year. Vast resources can be required to verify whether add-on systems are able to operate problem-free within this updated software environment. Akaishi notes: “With regard to the various templates and add-on programs that are already incorporated into ABeam Cloud, we guarantee they will work without issue on the latest versions”. Software updates are only released to ABeam Cloud customers after ABeam Consulting’s dedicated operational guarantee team has been able to verify that its templates and add-on programs operate problem-free on the latest versions.

In order to increase the value of using ABeam Cloud still further, ABeam Cloud Portal continues to be developed. ABeam Cloud Portal is a strategic portal site aimed at strengthening customer engagement, and comprises news media, service catalogues, and integrated application portals.

“We want our customers to use ABeam Cloud Portal as an entrance to their daily business processes”, says Akaishi. “Let us take the example of an employee who logs in via mobile devices on his commute. He is alerted to the fact that there is likely to be a shortage of some product so, when he arrives at work, he can then check the status of the relevant orders. If necessary, he can also immediately place an order. This is the sort of scenario we have in mind”.

Systems that instantly react to events such as orders, product stocking, and new customer registrations are called event-driven systems. ABeam Cloud Portal enables not only systems but also business processes to be event-driven. This has the potential to minimize both loss of business opportunities and wasted work.

ABeam Cloud Portal allows customers to sample services and to sign up for additional services. In the future, there are plans to introduce case studies of companies that use ABeam Cloud, to report the latest industry trends, and to transmit other forms of information.

Going forward, ABeam Consulting will continue to adopt various technologies and applications, and further evolve ABeam Cloud as a management infrastructure that supports corporate business activities and the creation of innovation.

ABeam Cloud enables rapid responses to changes in business environments.

Shunichiro Yamamoto
Returning to the inner nature of things and reexamining own values

Sakuma: In response to global trends, Japanese companies have recently begun to engage in digitalization that focuses on the enhancement of existing company strengths. Specifically, these companies have leveraged the use of robots to improve productivity, for example, as well as other forms of optimization. However, digital disruption is a frequent occurrence in the present day and age. Therefore, I believe it is necessary to go a step further and consider how digitalization can generate new markets. What do you think?

Nawa: While digitalization is certainly an important change to the external environment, it is a question of “how”. Japanese companies must first consider the essential “what”—in other words, what their ambitions are and what they want to do. It has become increasingly commonplace for companies to shorten the project timelines to keep pace with global change. However, one of the great strengths of Japanese companies is their ability to think and plan long-term. It is vital that companies not only look ahead 10 or 30 years, but 100 years into the future.

Sakuma: Companies that latch onto superficial trends will lose their ability to see the bigger picture as digitalization itself becomes the goal. The companies with which I work often tell me they want to establish a digital strategy or use digitization to generate some sort of innovation. In such cases, I have the opportunity to ask these companies what it is they ultimately want to achieve. My impression is that many Japanese companies face the very sort of issues you pointed out.

Nawa: Indeed. No matter how far digitalization advances, analogue is not reduced to zero. The original form of input is analogue, which is an important aspect since it is a point of human contact. To fuse digital and analogue successfully, it is vital for companies to understand the situation, which entails a sort of artisanal sensuousness. Through years of experience, Japanese companies have cultivated a multi-faceted understanding. This requires the insight to decipher human movements and psychology, so it is not a skill that one can acquire quickly.

Sakuma: Are you saying that this is an area in which Japanese companies specialize?

Nawa: When I speak to digital giants, such as Google or Facebook, it turns out that the people they value most are not those in STEM (science, technology, engineering and mathematics) fields. Rather, somewhat unexpectedly, they value people in the humanities. Experts in ethics, sociology, psychology, and similar fields drive these companies because they have expressed that sort of “humanness” in their respective forms of digital. Companies that become ensnared in digital issues, while
neglecting the crucial analogue elements, miss the bigger picture.

**Sakuma:** On the other hand, what hinders the growth of Japanese companies?

**Nawa:** Globalization. English is the common language, which is problematic for the Japanese. It also takes time for companies to establish management methods that work overseas. Many Japanese companies recognize these weaknesses and try to overcome them. I personally believe that Japanese companies should attempt to have their unique values acknowledged globally. Otherwise, they will be unable to compete with local companies, even if they establish a local workforce. Why do people work for Uniqlo and Denso? It is because they value their Japanese specificity and management. Unless Japanese companies return to their essential values, they will not succeed in globalization.

**Sakuma:** Therefore, much like digitalization, globalization requires an essential ambition in terms of management. I provide support to Japanese companies that seek to establish and strengthen globalized management systems. However, I find they place too great an emphasis on shared service centers, ERP systems, and other “hard” elements of globally standardized systems, organizations, and business processes. At ABeam Consulting, we take care to ask our customers about their “soft” elements—the values that are unique to their companies—and create opportunities to discuss them in detail.

**Nawa:** I think one could say the same thing about innovation. The Japanese tend to equate innovation with technology, but this is a mistake. Business model innovations are also a splendid form of innovation, as evidenced by Apple, which is by no means a technological pioneer. However, since it has an outstanding human insight and aesthetic sense, even after Steve Jobs passed away, it has retained its competitive advantage in the field of easy-to-use interfaces. Yet, Apple still moves into the future as a model of innovation. This is simply a way of praising the qualities that make Apple unique.

**Sakuma:** Does that mean Japanese companies ought to be more conscious of the qualities that make them unique? This links to the topic of the following section, but an increasing number of Japanese companies have interest in engaging with new fields due to societal problems. However, I get the impression that these companies continue to understand societal problems—themes that contribute to improvements in working styles or businesses that contribute to an aging society—in a stereotypical and heteronomous manner.

**Nawa:** Yes, I agree. Instead of being caught up in using the latest buzzwords, I believe that the key to staying up to date with the latest trends lies in returning to true essence and reviewing values.

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**SPECIAL TALK**

**win through “Global x Digital” companies as revealed by J-CSV**

Demand for unprecedentedly fast and accurate management ABeam Consulting’s Ryusuke Sakuma spoke to Takashi Nawa, Corporate Strategy at Hitotsubashi University, to find out more.

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**Ryusuke Sakuma**

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Ryusuke Sakuma joined ABeam Consulting in 2002. He engages in management consulting, including company-wide transformation for the manufacturing, electric power, and transportation industries, as well as general trading companies and public bodies. And he also engages in leading “Corporate Sustainability Management” service.
Seek QoX, which heightens corporate value by resolving societal problems

Sakuma: You are a proponent of J-CSV. I believe this is an extremely important method of preventing companies from being swept up by the latest trends, and enables them to really anchor themselves and consider the sort of company they want to become. Can you explain the significance of pursuing both societal value and economic value?

Nawa: If we accept that resolving societal problems is an essential element that heightens a company’s value, then such an understanding is important. Michael Porter’s CSV focuses on a relief model for the poor. He proposes creating businesses that satisfy the sort of physiological needs that impinge on life or death, which are the lowest strata in Maslow’s hierarchy of needs. This notion is an important theme and is one that Japanese companies cannot avoid, particularly if they plan to enter markets in emerging countries. However, these emerging countries will eventually become growth societies.

For a better idea of what a growth society is, we can look back to 20th century Japan, when an economy of desire was established that aimed to realize material abundance. Now, in the 21st century, Japan is a mature society. Before he died, Maslow defined a sixth level of need, the need for “self-transcendence”. This is the phase in which people desire to be of benefit to society. From this perspective, one may perceive Porter’s social values as being too simplistic. Given that Japan is a developed country that is facing major challenges, J-CSV proposes that the high-order needs being currently under exploration in Japan have the greatest utility.

Sakuma: John Mackey wrote in his Conscious Capitalism that the ultimate human needs of “beauty”, “health”, and “justice” lead to societal value. However, companies have a duty to maintain a balance between profitability and social conscience. On which specific societal problems do you think Japanese companies should focus?

Nawa: Health, or, more accurately, “wellness” rather than “health”. Physical health is of course important; however, initiatives that target emotional aspects of health—such as reasons for living, or a sense of belonging—are also crucial. One of the characteristics of the Japanese is that, despite being unsuited to extraordinary activities such as cruising around the Mediterranean in a leisurely manner, they are adept at realizing a high-quality everyday life. Companies ought to realize that, from a global perspective, there is societal value in this high quality everyday life that is so natural for the Japanese.

Sakuma: Not excessively luxurious, clean, with a good balance of food, clothing and shelter, a sense of values that encourages an emotional response to things with a delicate sensibility—it seems likely that such a lifestyle could generate products and services that satisfy a higher order of need. Can you give an example of a successful Japanese company from a J-CSV perspective?

Nawa: Let us take MUJI as an example. As you know, MUJI seeks to realize an unostentatious wabi-sabi aesthetic, which encourages simplicity and silence, and whose products have found favor not only in Japan, but also across the world. MUJI’s new initiative, “Found MUJI”, takes daily necessities that are full of folk wisdom, identifies their core concepts, combines these concepts with their own values, and uses the process to generate new products. This hybrid blend of Japanese and Western tastes is something that the Japanese have excelled at for some time. Japanese elements are not overbearing, nor is there too great a focus on the Western. Such balance requires great skill, and this skill will undoubtedly become a major asset for Japanese companies as they seek to globalize.

Sakuma: Using unique Japanese perspectives and standards to rediscover values cultivated around the world, then mixing in something extra and offering them as something new. This approach appears to be a method for achieving continuity and expansiveness.

Nawa: In my book, CSV Management Strategies (Toyo Keizai Inc.), I discuss the Quality of X (QoX). According to this theory, Japanese companies are extremely persistent in their pursuit of quality, and this persistence...
is one of their strengths.

To be sure, an accurate translation of the English word “quality” is not “hinshitsu” (“product quality”) but “shitsu” (“quality” in the broader sense). Of course, services also require this quality of “X”. To take the example of Uniqlo, this “X” is life. Uniqlo’s “life wear” concept tries to answer the question, “What type of everyday clothing makes people’s lifestyles richer and more comfortable?” Uniqlo is well suited to a mature, sustainable 21st-century society that desires individualized comfort. A clear line separates Uniqlo from ZARA, H&M, and other fast-fashion brands that are symbols of the 20th-century economy of desire.

How can Japanese companies achieve success in the current competitive climate?

Sakuma: You have explained the strengths of Japanese companies in detail. I also believe that Japanese companies excel at hybridization, incorporating best practices from around the world, adding their own unique elements, thereby establishing and cementing their competitive advantage. At ABeam Consulting, we are proud to have been supporting so many companies and helped them to enhance their strengths. What, then, do you believe the weaknesses of Japanese companies to be?

Nawa: This is something that Michael Porter has pointed out for a long time, but Japanese companies lack a sufficient sense of scale. They use artisanship to execute high-quality work, but they lack the force to generate de facto global standards. They are sustainable, but not scalable. Japanese multinationals possess qualities that enable them to compete on a global level; they ought to investigate how to recreate these qualities and expand them to other businesses.

If it is difficult to achieve this through a purely Japanese workforce, they ought to combine with expat from China and India, which will force them to expand and reproduce their unique qualities.

Sakuma: Since these companies possess outstanding qualities, they ought to be more ambitious—is that correct?

Nawa: Yes. Even if they are capable of expanding from 1 to 10, they lack the strength to expand even further, from 10 to 100. They lack the ability to design business models. Even if companies make good, high-quality products, unless they have the strength to monetize these products, they will never be able to escape the mishmash state of being a small or medium-size business. In such instances, they must enroll the services of consultants, such as yourself, and increase their knowledge.

Sakuma: Yes, Japanese companies are not good at managing while bragging and gaining the sympathy of the markets.

Nawa: In order to do this, they must first recognize their own qualities. There is an unimaginable power in the focus on quality of the Japanese, and their values have the ability to elicit sympathies on a global scale. Instead of retreating into their shells, Japanese companies ought to communicate these qualities and values with confidence. Now is not the time to praise good deeds in secret with an islander’s mentality. If the Japanese cannot think things through and achieves the breakthroughs on their own, they ought to involve foreigners and consultants, and undertake objective reexaminations. I believe it is essential for Japanese companies to be more aware of diversity.

Sakuma: In summary, then, for Japanese companies to achieve success in the current competitive climate, they must avoid getting caught up in the latest trends. Instead, they should adopt long-term views and clarify their ambitions and the sort of company they want to become.

Further, they ought to utilize their ingenuity and ability to create hybrids—their greatest strengths—and pursue a uniquely Japanese QoX.

However, Japanese companies should beware of executing only sustainable, high quality work; instead, in order to overcome the challenges of scalability—one of their weaknesses—they must increase communications, involve diverse parties, and strive both to solve societal problems and to generate economic value.

Professor Nawa, thank you for your thought-provoking and valuable contributions.
By generating business innovation, ABeam Cloud facilitates global competitiveness

Interest in sports continues to grow as we near the 2020 Olympic and Paralympic Games in Tokyo. However, sports in Japan has not yet been established as an industry, and data are important for creating new value that can overcome this situation. We spoke to Keiichi Kubota of ABeam Consulting about utilizing expertise and know-how in sports and data analytics.

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Kubota joined ABeam Consulting in 2004, bringing with him considerable experience from his work in foreign consulting firms. Kubota is experienced in consulting for business strategic planning, process improvement, and system implementation support, primarily in the realm of public organizations. Particularly, he is well versed in the medical and sport industries.

It is possible to create new value with the use of data

ABeam’s new position for the “Sports & Entertainment Sector” was established in April 2017. Until now, consulting and other services were available for certain projects connected to sports, but we are ready to grow in the sports industry by making good use of the expertise and know-how developed in each area of the ABeam Consulting business and applying them in more diverse and versatile ways. An interdisciplinary team composed of specialists from various industries and service lines is available to provide consulting services.

We began our focus on sports in 2013, when news became public that Tokyo would host the Olympics and Paralympics in 2020. We recognized that there would be a great interest in sports, so we established a task force and gained experience while evaluating the best ways...
The word “sports” holds a positive connotation. Sports can move people, give them courage, and inspire dreams. We believe the thriving development of the sports industry plays an important role in energizing Japan and creating a more vibrant society.

The development of sports as a business is the key to its success. However, Japan still lags in that regard, since many stakeholders simply do not understand their customers.

Customers in the sports industry are “people who play” (players), “people who watch” (spectators), and “people who support” (managers and coaches, etc.). Generally speaking, there are four stakeholder groups involved, surrounding the customers: (1) the teams and leagues to which players, managers, and coaches belong; (2) the stadiums and arenas where the games are played; (3) private companies that supply sporting goods and televise games; and (4) governments that provide political support. It is important that these stakeholders grasp the needs of the players, spectators, and managers. When the sports industry as a whole works together to provide products and services that meet those needs, customer satisfaction will increase, profits will be made, and the sports industry will develop.

Data are required to grasp those needs. By ascertaining and using data, customers and stakeholders can build a close connection and create new value in the sports industry.

### What data is being gathered and why?

The current focus is on player-related data. Recently, with the development of sensors, more players use highly-precise, wearable devices that make it easier to collect a variety of data. However, the problem is determining which perspective to take when analyzing that data and how to best make use of it. Without a purpose, these data are little more than numbers.

At ABeam Consulting, we had the experience of analyzing the physical data of players from a professional sports team. From the data, it was possible to ascertain common characteristics of top players.

Using these data, amateur players who have the potential to become professionals can be discovered earlier, and, with elite training, the collective strength of the team can increase. In terms of development, if the results of the analyses revealed that children who run the fastest eat rice for breakfast, then we can use that information to create new sources of income by proposing promotional planning to food manufacturers, for example.

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*Japan Sport Council*
As another example, data from a soccer team from the top league in France were analyzed to identify the causes of player injuries. Injuries during matches and in training were analyzed through data mining and the factors that cause injuries were determined to include pitch condition, match schedules, body weight, and exercise tolerance.

The results of the analyses clearly indicated that: (1) injuries during training are closely linked to coaching methods, (2) the probability of being injured in a losing match is twice as high as in a winning match, and (3) the risk of injury depends on the degree of exercise tolerance in the three days prior to the date of the injury.

Using data to understand what causes injuries makes it easier to promote specific discussions about their prevention, thereby reducing the risk of injury. In fact, this process resulted in the frequency of player injuries on this particular team.

**Balanced investments in the entire sports industry are critical**

It is not only the players who want to make use of data. Data usage is also important for club teams, sports facilities, and corporate sponsors, as it leads to new business opportunities and effective activities.

In professional sports, it goes without saying that winning is important. In terms of making a profit as a team, however, it is doubtful that winning is the most important thing. Strong teams have more fans and teams with more fans make greater profits from entrance fees and merchandise sales, for example. However, when reviewing the entire league, a very small number of such winning teams exist. Although all teams do their best to win, most do not earn fans by virtue of their strength. In one sense, whether one wins is up to luck. Therefore, is it right to think that teams can earn money by spending a lot of money on good players?

Consider that Manchester United FC is involved in the finance business, with credit cards, insurance, and mortgages and its aim is to ensure a continuous and stable income, regardless of whether the team wins or loses. Rather than investing in probability of winning, they invest in a marketing strategy that ensures a stable income. In other words, it is important to build a team that can make money, even if it doesn’t win. To earn money, it is important to make balanced investments in players as well as marketing.

The ideals of sponsors are also important in the sound development of the sports industry. Companies become sponsors to increase sales of their products or services. Sometimes, they also want to support the players and the team, but this is not a sustainable activity. It is important to make the most out of the merits of being a corporate sponsor.

To do so, companies cannot simply pay the sponsor’s fee. “Activation” is necessary in order to promote sponsorship. At ABeam Consulting, we work to improve performance using player and team data, but we are also involved in activation to showcase the capabilities of data analysis to the media. Naturally, this activation requires additional costs, not only for the labor of the consultants who perform the analyses, but also for the cost of media exposure.

Sometimes it is said that one should spend 1.5–2 times the cost of the sponsor fee on activation. Depending on the case, of course, a win-win relationship will likely develop with the sports industry, in which companies can enjoy the benefits of providing sponsorship, and thereby continuing the sponsorship.

**Concepts needed in order for businesses to make money**

To build a sustainable situation in which stakeholders make money by developing the sports industry, it is important to know what to do in order to earn money. However, new initiatives from this perspective seem still lacking.

In Japan, stadiums and arenas are functional 365 days a year for soccer or 30 days a year for basketball. It is important to know how the space can be utilized on this perspective seem still lacking.

In Japan, stadiums and arenas are scheduled for construction in about 20 places by 2025, resulting in a construction rush. The construction of stadiums and arenas, in many cases, follows the procedure of: (1) determining a location, (2) deciding on a building, and (3) considering its management. However, one should ideally consider management beginning with initial discussions, specifically what type of customer each area will attract, in what ways the stadium or arena should attract customers and, based on these determinations, what kind of building and equipment should be constructed. For that reason, it is important to have a system in which private real estate development, corporations, and entertainment businesses are involved from conception of the idea.

Stadiums and arenas are functional 365 days a year, but there will be matches on only 20 days a year for soccer or 30 days a year for basketball. It is important to know how the space can be utilized on the remaining 330 days. It makes no sense to design and construct a building and put its management in the hands of a private company without first considering how it will be used year-round.

Private companies provide management services to make money, so if the building is to be used primarily for music events throughout the year, the building’s design should be optimized for that intent by installing suitable sound equipment, for example. It is necessary to establish a concept to incorporate design strategies from the outset. Therefore, an ecosystem that connects the strong points of all of the players in the sports industry is vital.
Transforming the world of sports by the power of data analysis

At ABeam Consulting, we now work on initiatives that will transform sports through the use of data ourselves. For the first time in Japan, “SAP Sailing-Solutions” has been implemented to the “Team ABeam” sailing team, which is used to design optimal courses by gathering wave and wind information, in addition to tracking information via sensors in real time. The results of such data usage are limited to certain competitions in Japan, but the power of data analysis is being leveraged with the aim of winning medals at the Tokyo Olympic Games.

The management company of soccer player Keisuke Honda, “HONDA ESTILO”, supports coach and player training and strengthening school business. In the sports industry, the attention is on player data management, but there is little interest in coach data management. ABeam Consulting has developed a coach talent management system in order to train school coaches.

We have established a coach evaluation system to implement experiments with the aim of raising quality. In a project with the REAL RACING Super Formula racing team, we are currently pursuing the idea of improving acceleration through the analysis of machine data. In the racing industry, engineers are highly literate with regard to data, so we can quickly implement various initiatives. We anticipate that the initiative between REAL RACING and ABeam Consulting will lead to a revolution in the Japanese race industry and we want to do our best to make that happen.

We are also analyzing and using data to increase the performance of Japan’s first Indy 500 Champion, Takuma Sato, who we have sponsored since April 2017. Although initiatives to transform sports via innovative data analyses are still underway, there lies substantial potential in this area. We want the Sports & Entertainment sector to play a leading role in the development of the sports industry through the proactive use of such pioneering methods.
Shenzhen, the Red Silicon Valley, may be the epicenter of a new industrial revolution

High-tech industries, such as electronics and Internet services, continue to cluster in Shenzhen, a city of ultra-rapid transformation in China. Because of proactive support for entrepreneurs by the government and huge companies alike, Shenzhen continues to gain international attention from global entrepreneurs and investors as being the “Red Silicon Valley”, where high-tech ventures are born. However, in Japan, there are few opportunities to learn about this growth, and few businesspeople are aware of just what Shenzhen has become. We visited the city and spoke to ABeam Consulting staff and other interested parties in order to bring you up to speed.
China, as reported by the Japanese media, does not convey its true transformation

Over the last 30 years, China has achieved the fastest growth rate in the world, expanding, on average, more than 10% per year. However, in the last three years, China’s GDP has decelerated to a growth rate of 6-7%. Certain media outlets report considerable negative information about the Chinese economy, such as a sudden increase in labor costs, concerns over a real-estate bubble, and a possible end to the shopping sprees of Chinese tourists in Japan.

According to Yosuke Nakano, who oversees business in China for ABeam Consulting, “Despite reports, the Chinese economy is actually developing with incredible vigor. The focus tends to be on the deceleration of the GDP growth rate, which is slower than before, but the growth rate in Japan is 1%. China is actually maintaining a growth rate many times larger than Japan’s. Growing China is an attractive market for Japanese companies. Despite various conflicts arising from cultural differences, Japanese companies should push past this challenge and advance into China”.

For many Japanese companies, China is a “global factory”, where progress has been made mainly in labor-intensive manufacturing industries. However, with the loss of cost-competitiveness resulting from rising labor costs, the Chinese government has rid itself of the conventional manufacturing industry. Instead, the nation has shifted its resources toward industries with greater return values, thereby prompting advancement. As Nakano notes, “Among global companies, there are cases in which cutting-edge factories have been constructed in China. As the Chinese economy and Chinese companies continue to transform, Japanese companies also need to change their way of conducting business in the Chinese market”.

“Certainly, there are issues in China in terms of product quality, for example. However, it might be hasty to make judgments based solely on a single perception. There is something amazing ahead. China is now a place where it is possible to overcome these noted troubles and risks; the Chinese will then move onto the next stage and those who are unable to keep pace will be left behind. That’s what I have felt since living in China”, says Nakano.

Shenzhen, the “Red Silicon Valley”, where high-tech ventures spring up

Shenzhen, located in the Guangdong Province in
the south of China, shows just how quickly China continues to transform. Few tourists would travel to this special economic zone that neighbors Hong Kong. Yet, this area, known as the Red Silicon Valley, where high-tech ventures are on the rise, attract a great deal of attention from global entrepreneurs, engineers, and investors alike.

In the Nanshan District of Shenzhen, a new landmark appeared in a seemingly futuristic area that attracts both finance and high-tech companies. This landmark, the new Headquarters for the net services company, “Tencent”, is approximately 250 meters high and was constructed at a cost of 1.8 billion yuan (approximately 30 billion yen). The building features a 50-story South Tower and a 39-story North Tower. Tencent’s unique design, which permits access between the two towers, is rather conspicuous, standing out even in this architecturally innovative area. Currently, 960 million people* use the Chinese version of LINE “WeChat”, provided by Tencent. The mobile electronic payment service, “WeChat Payment”, enjoys an approximately one-third share in China. Tencent, which joins Apple and Microsoft among the world’s top 10 biggest companies, boasts market capitalization that exceeds 40 trillion yen.* Tencent is an unquestionable IT giant from Shenzhen.

While walking down the streets of Shenzhen, it is difficult not to notice the orange and yellow bicycles on each side, the shared bicycles by Mobike and Ofo, respectively. Users remove bike locks by scanning the 2D barcode with a smartphone, and provide payment through e-pay services, such as WeChat Payment. China now has more advanced e-payment options by smartphone than Japan. In addition to bike-sharing, people can use electronic money for taxis, restaurants, convenience store purchases, and even market stalls and tips. Even without carrying around cash, it is possible to do anything, from eating and shopping to moving around on transport, demonstrating that we live in a truly cashless society.

Junichiro Maeda, Managing Director of ABeam Consulting (Shenzhen), has resided in Shenzhen for three and a half years. He recalled, “In recent years, mobile electronic payment and sharing services have rapidly developed. In Shenzhen, however, things change more rapidly than in Japan. The sources of this speed are the freedom from being overly constrained by regulations and the energy of businesspeople seizing opportunities the moment they arise. I once thought it was inconvenient to live in Shenzhen, but now I find it inconvenient when I return to Japan on business”.

Shenzhen has a lively high-tech industry for electronics and Internet services, and young people from all over China come here to look for work and
business opportunities. Just 30 years ago, Shenzhen was a small fishing village with a population of 20,000. Today, people from all over China flock to this massive city, which boasts a population of more than 11 million people. The average resident is in his or her early 30s. As Maeda tells us, “There are many young people, so there is obviously a lot of energy, but I was surprised by how quickly everyone adapts to change with vigor and curiosity. If everyone does the same thing, life will not change. Many young people today have great aspirations and feel they cannot advance or reach the next stage without taking risks. The young people of Shenzhen are full of an independent spirit and a desire to invest. I feel they have a different energy than that of young Japanese people”.

Shenzhen has the highest GDP per capita in China, even exceeding that of Beijing, Shanghai and Guangzhou. The city is bursting with people who are rich beyond measure. Along the main roads, there are more luxury foreign automobiles than one would expect to see in Tokyo, despite the fact that they cost two or three times more than in Japan because of the tariff system. After being in Shenzhen for only a few hours, negative opinions of the Chinese economy dissipate. Unless we look straight at the reality of what is happening here, Japan will really be “left behind” by China, in the words of Nakano.

How Shenzhen transformed into Red Silicon Valley

How did a small fishing village become a “global factory” and then came to be known as the “Red Silicon Valley”? Maeda gives three reasons.

The first is “industry infrastructure”. In the 1980s, Shenzhen became a special economic zone due to the “reform and opening-up policy”. The city began by developing mainly electronic devices, and many factories remain in the surrounding areas. A supply chain was constructed, in which it is said, “Any part for any mobile phone could be delivered within four hours”. In the Huaqiangbei Electronics Market in Futian, Shenzhen, also known as the “world’s largest electronics market”, there are more than 10,000 electronics stalls visited by buyers from China and overseas. In addition to electronic products, it is amazing to see smartphones, 3D printers, and other electronic devices lined up in such a narrow space. Start-up corporations use these products to make prototypes.

The second reason Maeda gives is the venture mindset. As previously noted, the average resident in Shenzhen is in his or her early 30s, and young people come here from all over China, so there is a lively atmosphere of residents who come with a great desire for investments and business. Global technology companies, such as Tencent, DJI (one of the largest drone companies in the world), and Huawei (one of the world’s largest smartphone and communications equipment companies), are headquartered in Shenzhen. The city has come to be synonymous with start-up companies.

The third reason Maeda offers for Shenzhen’s growth into the “Red Silicon Valley” is government support. In 2015, Premier Li Keqiang announced the overarching “Made in China 2025” initiative. Additionally, with the slogans “Internet Plus” and “Mass Entrepreneurship and Innovation”, the government began to demonstrate its proactive support of start-up companies.

It is important to note that this support comes not only from the government, but also from existing companies. Currently, “maker spaces” have been established all over China and that there is a huge “maker movement”. The term “maker” refers to entrepreneurs in China; “maker spaces” are areas provided as workspaces and supply chains for entrepreneurs. They are similar to the facilities that support entrepreneurs in Japan, such as “DMM. make AKIBA”. The government and corporations alike continue to invest in both makers and in maker spaces. Makers concentrate on product development and
the creation of prototypes. They facilitate business establishment using these facilities, as well as the supply, distribution, and sales networks in maker spaces. This approach has sped up in recent years, which is why Shenzhen came to be known as the “Red Silicon Valley”, where high-tech ventures are on the rise.

**Japanese companies looking to cooperate with Shenzhen start-up companies**

Until around 2000, the main Japanese companies entering Shenzhen were automated office equipment manufacturers. Maeda has a real sense of change. “The labor-intensive manufacturing industry originally came here looking for low-cost and abundant workers who could work on final assembly and other operations. In the 2000s, a noticeable influx of high-tech companies working in semiconductors and smartphone parts arrived. Today, we are seeing the rise of parts suppliers for Huawei and DJI as well as local high-tech companies”. As well as this, some Japanese global companies are starting to look at incorporating the idea of Shenzhen high-tech ventures and start-up companies into their product development.

Following the Senkaku Islands dispute of 2012, Japanese companies began to withdraw from China. However, we cannot discuss the growth of Japan without looking to the massive market offered by China. Nakano insists that now is the time to reconsider entering China, particularly Shenzhen. “Recently, I think that China and the U.S. have become very similar. Political systems might seem polarized, but the countries share a common sense of speed with regard to change and an enterprising spirit. First of all, they both make great efforts in the face of risk. If they fail, they have the sense that it’s okay as long as they succeed next time. However, in Japan, not even a single mistake is forgiven. It takes considerable time and money to bring the success rate to 100%. China could make huge strides before we’re even aware of it”. Nakano says that Japanese companies should seriously consider how they can incorporate China, which is transforming at an ultra-high speed, into their own growth.

A Beam Consulting (Shenzhen) was founded in November 2016. Prior to that, it specialized in outsourcing services for the Brother Industries model factory for supporting overseas factories as a subsidiary of ABeam Systems. Its corporate reorganization from manufacturing support to a consulting firm lined up with the rapid growth of Shenzhen, the “Red Silicon Valley” that is undergoing rapid growth as the source of a new industrial revolution.

“The Shenzhen office does not operate alone, but coordinates with the Shanghai office and three global development centers (GDC) to provide total support for the entry of Japanese companies by utilizing the strengths of each base. We are continuing to engage in gathering information and conducting analysis about the Red Silicon Valley”, Nakano enthuses.

A Beam Consulting provides Japan-quality consulting services not only to Japanese companies but also to non-Japanese local companies. Talking about these characteristics and strengths, Shenzhen office Vice General Manager Kane Qian says, “The strong point of ABeam Consulting is that we manage the transformation of the client’s business processes and fix them in place afterward. Many Chinese companies have grown quickly, but as they have a short history with many M&As over a short time, often the group’s business administration cannot keep up. Our unique competitive edge is that we enter such companies, conduct business process innovation, then plan the ideals for the company and fix the system”.

Nakano sums up by saying, “the strength of our company is that we provide services with hospitality and meet seriously with the client on-site, resulting in long-term, win-win relationships. This is what we want to do in China too. Just like our clients, we ourselves want to take the next step as a global company in order to become a consulting firm that helps companies with locations around the world”.

**Kane Qian**

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Shenzhen Clou Electronics Co., Ltd., a client of ABeam Consulting, is a machinery manufacturer involved in the development, manufacture, and sales of electronic automation devices and measurement instruments. It began as a family business in 1996 and became a listed company in 2007. We talked to the Executive Vice-President of the company, Yuzhen Yan, a witness of the rapid growth in Shenzhen.

—Since the reform and opening up policy in China in 1978, there has been rapid economic growth. As a listed company, how do you view economic development in China?

The Chinese economy has developed rapidly over the last few decades, and our company has also benefited from that. Although growth has temporarily slowed, we think that the future is bright. The Chinese government has a slogan of “mass entrepreneurship and innovation”, and is promoting innovation through business start-ups.

As a high-tech company, we have the same direction as the government, so we are confident about the future. Along with economic growth, people’s incomes are rising more than before, and more consumers are looking for better products and services. By developing and providing new products and services for them, companies will be able to keep on growing.

—You started as a family business, and now you are listed on the Shenzhen stock exchange. What was your key to success?

Since the company was established, we have focused on providing innovative products and services. This was before the government started to talk about innovation. Another factor is that we are able to grasp market opportunities. In order to do that, we recognize the importance of improving the administrative capabilities of corporate management. In business administration, cutting-edge information systems are put to use, leading to corporate development.

—Shenzhen is called the “Red Silicon Valley”, as many high-tech companies have gathered here. Why do you think that is?

In the 1980s, Shenzhen was designated as a special economic zone by Deng Xiaoping, and it developed as a base where raw materials could be procured from overseas for product manufacturing and export. With the participation in the World Trade Organization (WTO) in 2001, this model fell into decline. Facing unprecedented difficulties during the global financial crisis of 2008, both the country and Shenzhen made a major shift in direction from manufacturing industry subcontracting to the development of the high-tech industry. Due to various policies that urged start-ups and investment in the high-tech field, young entrepreneurs appeared in numbers, and the industry developed in fields such as the IoT, AI, and VR.

—Why did you choose ABeam Consulting as a partner for business process improvement?

When selecting a partner, we made a comparison of consulting companies in China and Hong Kong, but the one who had knowledge of the industry and most understood the targets of the business process improvement project was ABeam Consulting. After starting the project, we felt secure because what was needed was “visualized” at each stage. System implementation led to the achievement of the first target, which was the stable operation of business processes, and fine tuning was able to be handled by the in-house IT team. In the future, this will be developed throughout our group companies. We are grateful for your continued support.
The Shenzhen of Today

Evidence | The Rise of Venture Companies

Shenzhen, the Red Silicon Valley, has an ecosystem where venture companies rise up one after another to lead the future. This is backed by the strength of the government, local authorities, and companies. When visiting support facilities known as “maker spaces”, young entrepreneurs from China and other countries are noticeable.

Nanshan, Shenzhen. This area is in the southwest of Shenzhen and possesses an international character that connects to Hong Kong. It is a hub for finance and high-tech companies, and over the last few years, it has seen increasing numbers of start-up companies as well as organizations and companies that support “makers”. The Shenzhen Bay Venture Plaza is one such place. “Makers” refers to entrepreneurs, and facilities for starting a business are referred to as “maker spaces”. In Shenzhen, the government, local authorities and companies are investing in makers and maker spaces, which has established an environment that supports makers and facilitates the development of start-up companies.

We visited x.factory, operated by Chaihuo Makerspace, the most famous maker space in China, to talk to the Director of Operations, Wayne Lin. Chaihuo Makerspace is a non-profit organization established in 2012 by Seeed Studio. It operates by means such as third-party funding, membership fees, event participation fees, and rent income. x.factory provides makers with workspace and equipment, and holds the Maker Faire Shenzhen once a year to create sales opportunities. x.factory is a new facility that was completed in March 2017. Lin says that his role is “to spread the culture of maker spaces”. Currently, more than 50 entrepreneurs and potential entrepreneurs use this unique building, approximately one third of which are users from other countries, including some members from Japan.

There are three conditions for people to join the facility. Members must 1) have a skill; 2) have a project underway; and 3) have some understanding of how to use the tools provided. Rather than students, most members are engineers. “They come here with a specific plan after working in companies and acquiring skills”.

The members make prototypes by freely using metal and wood processing machinery, 3D printers, and so on. In addition to the processing machinery, it is also possible to use electronic circuit boards provided by Seeed Studio to develop hardware. Some of the members who met here have developed new products together. Chaihuo Makerspace and its parent company Seeed Studio also provide proactive support. In some cases, they have connected members with local companies in Shenzhen as well as global companies to commercialize their prototypes.

The spread of the maker space culture that began with Seeed Studio has formed an ecosystem for venture establishment in Shenzhen, which draws in young ambitious entrepreneurs and potential entrepreneurs from China and other countries. Japanese member Kenichi Arai, who moved from Beijing to Shenzhen, says “Maker spaces are spreading from Shenzhen to other places, but they do not have such complete facilities as x.factory. Shenzhen is an attractive city because it is so easy to start a business here”.

Wayne Lin
Director of Operations
Chaihuo Makerspace x.factory