HR strategy in the digital age

Many companies around the world are facing challenges to recruit digital talent. If we cannot find the talent outside then we should build in-house. We investigated some cases of established companies and examined what actions are necessary to create in-house digital talent.

Competition for digital talents

Humanity on the planet continues to increase, and now about 7.5 billion people live here. However, many industries are still faced with talent shortages. Human resource acquisition has always been a task of mankind. However, the current "shortage of digital talent" is different from past talent shortage. Now we cannot solve it simply by gathering people, and we need high-quality talent with a deep knowledge of the latest technologies such as IoT, AI, RPA and 3D printing. Rather, simple labor is easily replaced by these technologies. Working talent will run short, but the number of unemployed people also increases - this situation is very ironic.

Lack of digital human resources is a common problem in the world

Such talent shortages are not limited to some countries only. According to Gartner, in 2020, 30% of the world's digital related jobs face a talent shortage. Also, Tech Republic magazine announced that 83% of the world's CIOs are beginning to recognize employment of digital human resources as a serious problem. What should we do to overcome this global talent shortfall and win the digital business?

Capabilities needed for digital talents

Knowledge is not enough

We believe that a digital talent is "a person who can use the knowledge of state-of-the-art technology to provide value to a company or customer." In other words, digital talent needs the ability to utilize technical expertise and skills and to add high value. There is also a high demand for human resources who only have knowledge learned in academic institutions, but that is not an ideal digital talent.

Patrick, who is the department head of people development support at NTUC (organization responsible for human resource development throughout Singapore) said true digital human resources need three "Cs" in addition to knowledge. They are Complex issue solving, Communication, Creativity. He said "Knowledge alone cannot convert technology or data into customer value, the ability to identify customers' problems and set solutions is mandatory. Also, communication skill is also required to persuade customers who are confused by the change to digital. Sometimes the solution must be ingenious in order to be satisfied with the surroundings." Dr. Sheela, Chief Data Scientist at Bosch, said, "The responsibilities of the data scientist is not to gather and graph the data cleanly, but to talk about its implications and solve customer problems." People who are familiar with technology only cannot conduct digital business.
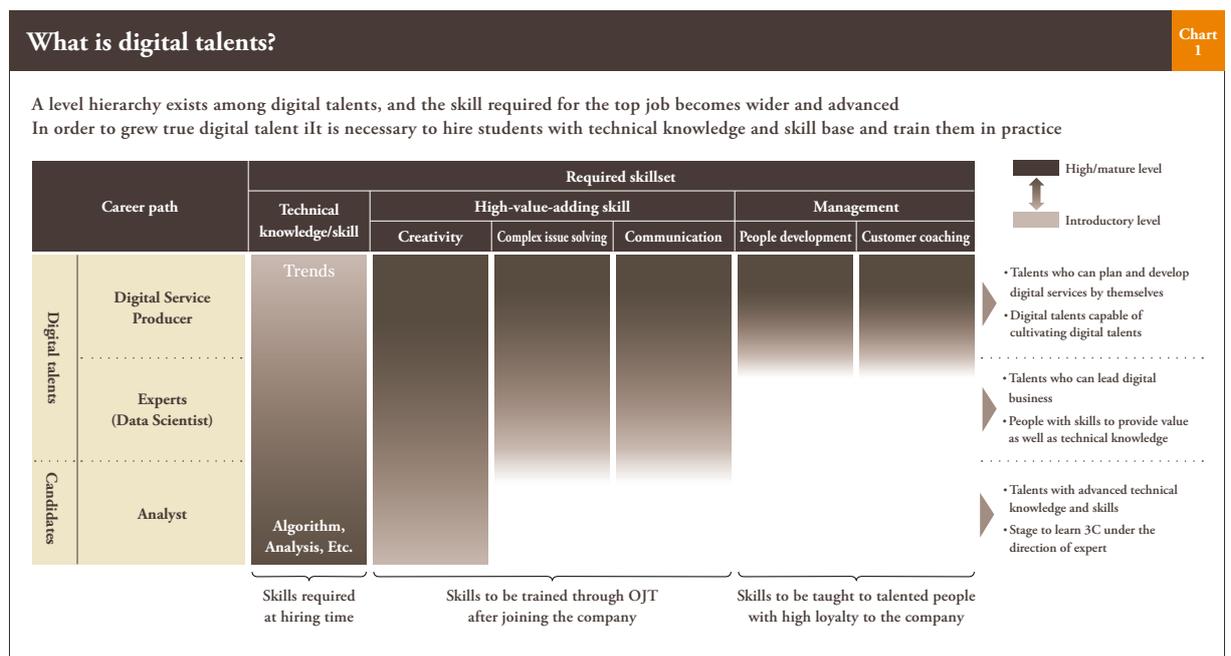
Nature of digital talents

No skill improvement, no survival

Among young people, particularly digital talents often have different work values. Charles, CEO of EdTech XGlobal, which manages education and technology events, said, "Digital talent sees career change as a growth step and the sense of belonging to the company is lower compared to the past."

These people work with their own "specialized functions/skills", not with "deep industry knowledge." For occupations that analyze information across the industry like a data scientist, staying in one industry can be a risk. To understand that digital talent may be always looking for job change as one of the action options is essential for working with digital talent.

Career path of digital talent

In addition to knowledge, digital talent needs business senses like 3C – he / she is, so to

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What is digital talents?

Chart 1

A level hierarchy exists among digital talents, and the skill required for the top job becomes wider and advanced
In order to grew true digital talent iIt is necessary to hire students with technical knowledge and skill base and train them in practice

Career path		Required skillset					
		Technical knowledge/skill	High-value-adding skill			Management	
			Creativity	Complex issue solving	Communication	People development	Customer coaching
Digital talents	Digital Service Producer	Trends					
	Experts (Data Scientist)						
Candidates	Analyst	Algorithm, Analysis, Etc.					

- High/mature level
- Introductory level

- Talents who can plan and develop digital services by themselves
- Digital talents capable of cultivating digital talents

- Talents who can lead digital business
- People with skills to provide value as well as technical knowledge

- Talents with advanced technical knowledge and skills
- Stage to learn 3C under the direction of expert

Skills required at hiring time | Skills to be trained through OJT after joining the company | Skills to be taught to talented people with high loyalty to the company

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speak, a champ. In addition to knowledge, digital talent needs business sense like 3C, they are, so to speak, a champion.

How to obtain digital talent

Mid-career recruitment for immediate fighting strength is a "high-risk and high-return

How can we acquire such ideal digital talent? Generally, it is difficult to master the problem solving skills and business sense described above without practical experience. Therefore, the earliest way seems like mid-career recruitment.

However, it is not easy for companies to harmonize with the mid-career talented personnel. In order to adopt such human resources, it is often necessary to offer higher salaries and incentives to them than employees who have been long-standing. One challenge is that existing employees are able to collaborate with such specially handled personnel without resistance. Even if they can invest in digital talent and hire them, they are living creatures who naturally consider changing jobs to survive through skill improvement. From the company point of view, there is always a leakage risk of human resources invested.

Digital talents can be developed

Again, mid-career hiring is at high risk. In the era of engineers' acquisition, there were many cases that the company could not make attractive offers to talented engineers, or engineers retired without making unfamiliarity with the organization's culture and customs. Now we would like to propose not only mid-career hiring at such risks but also training people to cultivate digital talents. We will introduce some approaches for that.

①Developing "employees" starts at school

Selection and development of extremely excellent digital talent begin from the time of the student days. Hart Research Inc., a leading British think tank, announced, "One of the capabilities that CEOs, human resources department chiefs,

university presidents want students to learn most from now is problem solving skills." Complex issue solving, which is one of 3C, is regarded as important for both companies and universities.

For example, IBM has provided university students a problem-solving program using design thinking to train and select talented students. The unique point is that it also offers that program to junior high school students. Professor Howard of SMU (Singapore Management University), a business university in Singapore, also said, "The company's approach to excellent students is accelerating." Junior high school students may be extreme examples, but contacting brand-oriented students and applying education before university education could be a useful tactic.

SMU frequently invites senior management of companies and holds group discussion events with the professors and students. In addition to networking, one of the aims is to improve 3C skills among students through discussion. The theme of the discussion is like "What kind of vision and business model is necessary for a university as digital technology spread?" In other words, the students are required to solve issues from the business management point of view. SMU students also commented that "there are a lot of learnings from discussions among professionals who I cannot talk about, I feel like I want to work under such excellent people." Therefore, it suggests the importance of bringing students into truly excellent talents before employment."

The big difference between students and social workers is "output." The output is whether the customer's problem is solved or not. When the student become a social worker, the possibility of switching this thought is not directly related to his/her educational background. Hart Research has announced that "only 25% of the students who have confidence in problem-solving skills have the ability and talent that is actually useful in the company." It tells the difficulty of acquiring that ability. First, in order to acquire rare excellent talent, the company practices training for students. Next, the company selects and attracts excellent talent at an earlier stage during the development course. These two points are the first step in cultivating digital talents.

②Aim for "learning environment" rather than "educational environment

Even if a company selects students and starts training at an early stage, they will not automatically become digital talents. At the time of entry, the depth and utilization of knowledge has not yet reached the practical level in business. In order to transform the new employees into digital talents, a company must prepare an environment where they can continue the growth cycle for employees. However, the company is not an academic institution, and there is a limit to just keep on providing education. Margarita, a professor at the IE Business School, says, "It is now required to create an environment where employees can "learn" independently, instead of the one that gives employees "education" from the company."

How can we create such independent learning environment?

Foster learning culture and stimulate growth motivation
～ Question Based Learning ～

Many social workers are busy with their day-to-day work, and it is not easy to take time to study, much less a habit. Now, Question Based Learning (QBL) is gaining popularity. Previously, a method to attend daily learning contents for several minutes became popular, and it was said to be micro learning. QBL is its new version. In addition to unilateral explanations and selective tests as in conventional lectures, the students are asked questions and answer in free-form format. This learning helps not only to receive information on a daily basis, but also to form a habit that employees think of themselves. Jonathan, CEO of Absolute Collective, a startup providing QBL services in Singapore, said, "The core of this approach is to help build habits of learning and thinking. It is necessary for all human beings to have the ability to independently think in the digital business era." While simple tasks are being replaced by robots and AIs, it is essential to habituate using brains.

Approaches and cases of cultivating digital talents

Chart 2

It is necessary to foster learning culture throughout the company, make good use of their knowledge, and learn how to provide values during business execution know-how for high-value-added

		Training areas and needs	Cases of advanced companies and BayCurrent projects
	Fostering learning culture	·Input (learning) is indispensable for growth, but a small number of people study outside the place of education ·However, in order to cultivate and keep digital talents with diverse skills and high motivation in the company, it is necessary to create an environment where employees can grow by forming an autonomous learning culture	**Aboslute Collective's QBL(Question Based Learning)** ·The habit of learning is formed by delivering a question every day to smartphones etc. ·It is not a simple selective answer but a free description that makes students think about and contributes to fostering a learning culture
Learning advanced business execution skills	Acquisition and improvementof problem solving skills	·Now as the business becomes more complex, it is worthwhile to solve "problems" of customers and markets using digital technology ·Because providing simple tools and data does not lead to intrinsic value, digital talents need to have correct problem solving thinking	**Problem Solving Training** ·Participants can understood the 7-step approach to problem solving ·In addition, the participants practiced the way of thinking in training and had an image applied to current work
	Step up from manager to management	·Because immature technology talent sticks to their own knowledge and skills, there is a case when value to the customer is not fully considered ·To bring high value, it is vital to raise the viewpoint up to the management level and to acquire ability to draw customer's ideal shape from the viewpoint	**Practical training on management viewpoint for R&D department** ·Executive staff at R&D department reconstructed future development themes by comparing their management policy and current research topics ·In addition, the participants discussed with the members at their departments, and practiced the division strategy planning and agreement formulation, so that they experienced the position as management
	Master of advanced skills through work experience	·Even if talents understand the skills, it is not easy for them to apply then to daily work ·In order to break away from past methods and to apply skills to actual work, it is necessary to continue giving appropriate feedback	**Training for enhancing sales skills for global sales teams** ·Sales leaders from each country conducted research on customer issues using hypotheses and issue solving ·BayCurrent regularly reviewed practical status and refined problem solving capability on field by providing feedback to salesreps

The most important "problem-solving skill"

What is a problem-solving skill? We define "ability to answer questions that have never been solved". Specifically, even if it is a task in an industry or a field where the company does not have knowledge or experience, the ability can derive strategy based on the hypothesis and arms persuasive power with logical thinking. BayCurrent has methodologized the basic problem solving and conducted its training. The first step is deep understanding of the issue (identifying ⇒ structuring ⇒ narrowing down). Next is planning strategy based on hypothetical thought (solution hypothesis building ⇒ analysis ⇒ review of solution). The last is communication to put the strategy in action. By repeating this flow, problem solving progresses. This skill can not be learned immediately. Even if you understand the above way of doing things, speed and quality are not polished without day-to-day practice. However, it is essential to have a foundation to look back on when problem solving does not go well.

Also, among the three Cs mentioned above, Complex issue solving is a core skill to strengthen other Communication and Creativity. One of the important things in Communication is to understand the problem (interests) of the partner and talk with convincing words. Ability to build a hypothesis from a unique point of view and to tell stories to enhance their interests (storytelling skills) is a kind of Creativity.

Strengthen management viewpoint and strengthen the ability to output

One of the traps that technology talent is likely to fall is the lack of thinking about value proposition. Technical talents are often confident in their own technical knowledge and skills and often develop and propose products and services without considering what value they bring.

In order to avoid such a situation, it is necessary to raise their eyes to the management's view. It is required to think deeply about whether their thoughts and judgments really lead to customer value. As an example, we had our project implemented for executives of the R &

D department that faced difficulty leading to commercialization of researched technology. In this training, first of all, they reviewed their research and development theme. In addition to their own management strategies, market environment and recent trends, they themselves truly redesigned themes considering whether their theme is truly correct. They repeated the discussions with their department members on reviewed directions, and selected the final research themes of their own department, and drew up business / execution plans by themselves. By considering our department as a company and undergoing a series of business development processes, we could strengthen problem solving skills leading people with a hypothesis-oriented approach. Furthermore, if we can have a management perspective on a daily basis, even daily newspapers and chats make a habit of thinking about implications to yourself and customers. Especially in the rapidly changing digital businesses, it is important to have a managerial perspective from day to day in order to keep thinking the output.

"Real fight" training for skill acquisition

Although the above-mentioned training is also a practical training and workshop, it is also important to refine the skills at the field ("Gemba"). In order to "acquire" what you have learned, you have to learn through real practice. However, what is important for skill acquisition is whether adequate feedback is given. Even if employees try to practice in the fumbling, it is not clear what is good or bad. No timely feedback based on facts by reviewers, nobody will be able to master skills.

In order to speed up the first rise, it is also effective to involve people outside the company. As one example in Chart 2, there is an increasing number of "joint-fight projects", such as projects where our consultants work together with sales leaders from all over the world to conduct real client strategies. In the era when the business environment changes faster than in the past, there is an increasing need to train excellent personnel in the short term.

Destroy the culture of "Training is relaxing."

However, especially in Japanese companies, cultures that considers training as a "place to rest" are likely to spread. Of course, participants' attitudes should also be improved. For example, a training company for corporations says, "When we conduct training at a foreign-affiliated company, the seat will fill up from the front, but for Japanese companies, the seats tend to be buried from behind. In addition, there are many active questions and answers if foreign-funded, and many people come to talk personally after the end, but there are many people who return immediately after training as Japanese companies." It seems to be true that there are many employees who are passively working on training. Anyway, it is difficult for organizations and employees to grow without consciousness to learn. If the above-mentioned atmosphere is prevalent, you should begin organization reform to change cultures soon.

For surviving in today's digital competition

Even if we can train digital talents over time in the future, we cannot ignore the current digital business. How can we win business today with the digital human resources candidates in the process of growth?

Fight as an organization instead of individual talent

In order to fight with the digital talents who are still developing, it is only to supplement the shortage with organizational strength. For example, sales and engineers who have been in contact with customers should identify customer issues and create hypotheses of solutions together with digital talents. On the other hand, mental resistance often occurs when young digital talent suggests major change like digital transformation. Therefore, seniors should support them. Digital business is not the responsibility of digital team only. You have to fight as a team.

Collaboration rather than division of labor

At that time, the fundamental mind must be a collaboration where all members cooperate, not division of labor. In order to raise Complex issue solving and Creativity required in digital business, it is essential that various people bring various ideas. Separating responsibilities on a task basis, it is impossible to create high added value by bringing ideas. Beyond each other's responsibilities, it is necessary for each person to think and interact with each other (harmonization). Three Cs are not good skills only for digital talents. In order to survive the digital age, we must bear in mind that they are the abilities that all employees should aim for.

Collaboration rather than division of labor

A few years ago, it was said that "CEO must become CTO (Chief Technology Officer)". The technologies such as cloud, big data, IoT became the source of new business and service, so it was essential to be familiar with technology to make business decisions.

Now the digital business is at its best. "The CEO must become a CLO (Chief Learning Officer)," said Charles, CEO of EdTech XGlobal. "As technology evolves, it is inevitable that current work and business value will change. In order to respond to such change, all companies have to renew the human resources who are the company's blood. To that end, the CEO should establish an future state of the talent and career path."

Human society has become enriched through the use of technology. But now, people without growth will be defeated by that technology. Every company should strengthen culture and environment of people development as early as possible. Otherwise, highly motivated talent leaves the company first. And that will lead to the decline of the company.

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