

SHAPING A BETTER FUTURE

Building Excellent Products and Building Professionals to achieve sustainable growth

Four officers from sales, production, purchasing and human resources participated in a panel discussion to talk about what JTEKT needed to aim for in terms of Building Excellent Products and Building Professionals in order for our company to survive amidst rapid changes in the business environment.



Managing Officer
Ueda

Executive Director
Sano

Senior Director
Kajima

Managing Officer
Okamoto

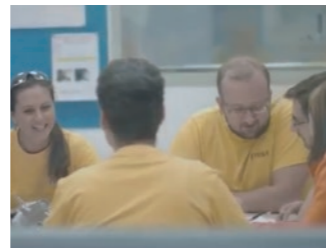
Environmental changes affecting JTEKT, the ideal vision JTEKT aims for

Moderator The business environment affecting JTEKT is changing significantly. Amidst such change, what is the ideal vision we need to aim for in order to ensure our ongoing survival as a company?

Ueda As was mentioned in the first half of this session, our business environment is undergoing significant changes, such as CASE and IoT (IoE) which are predicted to transform the automobile industry. Moreover, another defined issue is the 2025 Problem. In order to overcome these kinds of environmental changes, we need to gather the total abilities of all JTEKT employees and take a united stance more than ever more. To achieve this, we need to "sophisticate work styles of direct and indirect tasks" to "raise the standard of our professionals and shift to the front line" and ensure we can secure enough employees capable of engaging in work with high added-value. Moreover, from various perspectives, in order to identify and solve issues within JTEKT, we need to promote diversity in the

workplace to promote participation by not only women and senior citizens, but also foreign nationals. It is also essential that our professionals can think and act for themselves even without any instruction from the company.

Kajima Within Japan domestically, the 2025 Problem is a grave concern. China is facing a similar problem. Meanwhile, it seems that population increase trends in North America, ASEAN and India differ to those of Japan and China. JTEKT is a company with a global footprint. While responding to problems here in Japan goes without saying, we must also contemplate how we will aim for Building Excellent Products and Building Professionals by taking a global perspective.



Initiatives and outcomes to date

Moderator What kind of initiatives and outcomes exist relating to realization of our ideal vision not only in Japan but also on a global level?

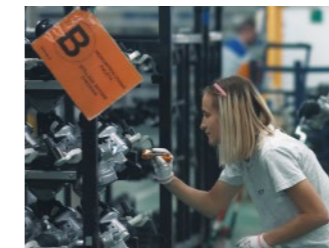
Sano On a production aspect, we have particularly focused efforts on responding to the declining birth rate and aging population problem in Japan. This problem has led to the secondary problems of a reduced work force on production lines and aging of workers engaging in production tasks, however JTEKT is responding to both of these with the automation and sophistication of equipment and utilization of diversity. To address the former problem, through automation including

utilization of IoE, we are pushing ahead with reform so that all workers can shift to work a step higher than what they were doing, i.e. some operators on the line shift to maintenance, some maintenance workers shift to technician work and so forth. We aim for this initiative to produce a certain level of outcomes by 2022. For the latter problem mentioned, we have launched a project called "S & W"(seniors and women), whereby we assign numerical values to the concrete tasks on the production shop floor that are "difficult" or "hard-to-do" for senior and female workers. We then also assign values to express the degree to which these tasks are either "difficult" or "hard-to-do". Although it is possible to generally visualize what tasks are

"difficult" or "hard-to-do" for seniors and women, it is not possible to express these in quantitative terms. By assigning numerical values to tasks we can assess in a concrete way the differences between seniors/female workers versus male workers.

Currently, we have begun allocating numerical values to work in Nara Plant as model cases and are slowly achieving the quantification of differences between senior/female workers and male workers. Moving forward, we will use the results to separate the two categories of "difficult" or "hard-to-do" tasks that need to be addressed with infrastructure/equipment modifications, etc. and "difficult" or "hard-to-do" tasks that need to be addressed with personnel training.

Kajima In the Sales & Marketing Headquarters, we have rolled out initiatives both in Japan and overseas. In Japan, we have promoted indirect work task reform in order to maintain and improve customer satisfaction as well as increase the efficiency of sales activities, even amidst a population decline. In concrete terms, this means we have focused efforts on the automation of indirect work tasks and multi-skill development enabling one person to attend to multiple work tasks, in order to shift sales personnel closer to the front line. We are gradually beginning to see results but we need to persevere with this initiative.



Overseas, the speed of business talks is increasing at a more rapid rate than Japan, therefore we focused on responding to that change. For the short term, we are proactively hiring overseas personnel who possess firsthand experience of the speed at which business is conducted overseas.

At the same time, in terms of a mid-to-long term strategy, we are increasing the number of young Japanese employees posted overseas with the aim of professional development so that they may come to understand this latest speediness in the business world and new values. To this end, we established a

system whereby it is easier for young employees to choose stationed posts within the professional development context and easier for rotation to occur between Japan and overseas bases. As a result, compared to before, I feel that more young employees are proactively putting their hand up and challenging themselves overseas.

Okamoto In the Purchasing Division, collaboration with the purchasing functions of our overseas subsidiaries is important, therefore we have held a Global Procurement Committee annually since 2004. We have to communicate with overseas purchasing members during this meeting, therefore we began accepting overseas employees at an early stage to achieve this goal. Interaction with our overseas colleagues is stimulating for us Japanese purchasing members. Particularly people from the EU and U.S. are not convinced regarding supplier evaluation and price valuation without solid rationale. I think having to explain this in a language other than Japanese is extremely good experience for our Japanese team members.

In terms of rotation also, we have created a mid-term rotation plan targeting young employees both in Japan and overseas and this is updated on an ongoing basis.

In terms of supplier management, there is an issue regarding successors. In order for JTEKT to sustain growth, it is essential that we continue doing business with competitive and trustworthy suppliers so I think it is important that we interview suppliers and ask them if there is anyway in which we can support this issue.

Ueda In the Human Resources Department, we have provided support to each headquarters. As has already been mentioned, we cooperate with each region to create a global human resources succession plan. Moreover, we are also concentrating on hiring foreign nationals. This includes not only people who can speak English, but also those from non-English speaking regions who speak Chinese, Spanish and Portuguese. We are promoting support for work task reforms in indirect divisions. Work task reforms require a long-term process

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whereby we must complete each step of work task hyojunka (visualization), work task standardization and reduction of work task time by utilizing IT. Rather than aim for major reforms from the outset, we place important on small yet definite outcomes such as utilizing RPA (the automation and increased efficiency of work tasks using robots) to shorten a task that conventionally took several hours to just 1 hour so that our shop floor members can sense the benefits of reducing work task time even a little. We think that it is first important for members to realize that if they do their best, their work load will get lighter. We are also promoting efforts to develop management-level

Issues to resolve to achieve our ideal vision

Moderator I have understood that each division is engaging in a variety of initiatives. What issues do you think JTEKT on the whole needs to resolve in order to achieve our ideal vision?

① Establishment of systematic personnel training

Sano To date, the general approach was "learning on the go" (OJT) but there was the issue of establishing systematic training that also incorporated Off-JT. To overcome this, the Production Engineering Headquarters has endeavored to establish systematic training based on JPS (JTEKT Production System) and we are currently incorporating this training to the rank-based training.

Meanwhile, we cannot neglect OJT. To deepen our understanding of logic, we believe it is important to learn theory at the same time as putting that theory into practice. This is why we run a training dojo called GPC (Global Production Center). This Center features a miniature production shop meaning that trainees can immediately put the theory they have learnt into practice. Through simultaneous learning of theory and practice, trainees are learning monozukuri concepts based on JPS and this is beginning to take root.

This initiative began two years ago and we are still promoting it for the development of professionals who will be the drivers of production.

Kaijima Training is also necessary for sales operations. Even in the Sales & Marketing Headquarters, there are many people who believe their way of doing things is best, but I think this needs to change. Through systematic training, people must first learn that there are many different ways of doing things, which is true of sales methods.

Sano As part of systematic training, one challenge that needs to be addressed immediately is the establishment of a training curriculum for the sophistication of the skilled workers' working styles. We are currently compiling a training curriculum

professionals. Under a scheme called JPBS (core personnel development scheme), four or five selected personnel form a team, study a new business and present the results to an audience comprising of directors. Previously, this had ended at the presentation stage, but now we ask the teams who present sound proposals to conduct concrete studies aimed at commercialization. This is being extremely effective as it is really helping participants strengthen their awareness of basic business management such as finance, even if it is not their field of specialty.

for line operators to shift to other fields and job types, however there was already a curriculum for line operators to shift to maintenance. Meanwhile, a curriculum for technicians involving shifts from maintenance personnel to process engineering and process engineering to production engineering is still incomplete. Currently, we are considering a curriculum in liaison with the Human Resources Department and we hope to complete this as soon as possible in order to commence theory and practical training based on a training curriculum.

② Further strengthening of global diversity

Kaijima As a company with a global footprint, JTEKT promotes a policy of leaving important overseas posts up to non-Japanese members including people from the region where the relevant operations base is located, however I believe our approach to management at our Japan headquarters also needs to change. Beyond 2025, it will no doubt be even more difficult to run headquarters primarily with Japanese nationals considering the growing seriousness of the declining birth rate and aging society. Furthermore, business will become more globalized therefore, I believe, a change is needed whereby outstanding foreign professionals are included in JTEKT's management-related decision-making along with Japanese members more than ever before.

For example, even in regards to work task reform, I'd like to see the standardization of work tasks performed in Japan then the global deployment thereof. When standardizing work tasks in Japan, it is important that we not only see things from Japan's perspective, but also consider whether or not the content would be accepted globally. It is extremely important that we hire outstanding foreign professionals who foster such a perspective at our Japan headquarters and reflect their opinion in decision-making.

Okamatsu I think this issue also applies to purchasing operations. We are already allocating foreign nationals to our domestic

purchasing tasks. Meanwhile, many important posts at our overseas subsidiaries are occupied by Japanese expatriates and it is difficult for outstanding foreign professionals to acquire such posts. Furthermore, personnel interaction between overseas bases is limited. As the purchasing function, I'd like to see purchasing members from overseas subsidiaries assigned to management posts in Japan's procurement divisions by around 2025. To achieve this, I want to properly establish a training system inclusive of management. Unless we start immediately, I don't believe we will produce results by 2025.

Kaijima If this can be accomplished, I think members in the

Future policy and ambitions for each headquarters in order to realize JTEKT's ideal vision

Moderator Broadly-speaking, two issues were raised. What sort of initiatives will be promoted by each headquarters this period to address these?

Kaijima For the sales divisions, it is important that we develop professionals with broad points of view, including an understanding of the speed of business transactions and culture in overseas regions. To achieve this, it is important that we strengthen our hiring of outstanding overseas professionals, but we must also work on raising the standard of our Japanese personnel simultaneously. This period, in addition to personnel interaction with overseas subsidiaries, we will promote interaction with group companies where each employee has a high work load and responsibilities.

Sano Within Japan, we are steadily progressing with automation and other countermeasures for the declining birth rate/aging population issue. Meanwhile, measures such as automation at our overseas plants, which account for over half of our net sales, are insufficient. We will strengthen our development of professionals who can instruct the automation and sophistication of Building Excellent Products.

Okamatsu In 2025, employees who are now in their thirties will be the primary driving force of our company, therefore increasing

In closing,

Moderator Managing Officer Ueda, could I ask you to wrap up this discussion, please?

Ueda Addressing the 2025 Problem will give our company fundamental strength. I also believe there is a need to create a system that can address issues beyond 2025.

overseas bases will realize that they have an opportunity to work in Japan if they try hard, which will attract more outstanding professionals to our domestic bases.

In terms of sales operations also, there are more overseas personnel with practical capabilities than there are in Japan. We are currently contemplating the timing at which we should launch such an initiative.

Ueda We understand that succession plans including overseas personnel are important for the Personnel Department as well. From here on, we will collaborate with the related divisions in order to execute such plans.

the speed at which these employees make decisions is important for JTEKT's future, I believe. We are currently considering a training system for this reason.

Furthermore, we will promptly study visualization of needs for supplier business continuity as well as JTEKT's support in accordance with this.

Ueda As the human resources function, it is important that we first systematically organize what is being done or attempted in business and function aspects, then create systems as a company, therefore we will continue liaising with each headquarters.

Future issues	Initiatives
Response to the 2025 Problem	<ul style="list-style-type: none"> Active participation of senior/female workers Indirect work task reform/multi-skill development Automation of Building Excellent Products Development of professionals who can provide instruction to achieve sophistication and organization of a training system Support for supplier business continuity
Building Excellent Products and Building Professionals on a global perspective	<ul style="list-style-type: none"> Hiring of foreign nationals Establishment of a systematic personnel training system Vitalization of rotation between Japan and overseas bases Strengthened development of next-generation, management professionals on a global level

For this reason, the creation of systems and mechanisms is important but I believe the key point is to consider matters as simply as possible. I think if we implement countermeasures to the challenges we face at an early stage, we can overcome the 2025 Problem and continue sustainable growth beyond this.