Special Feature Article

The Frontline of Recruitment and Training of Human Resources at Parts Manufacturers
~Measures to overcome chronic human resource shortages~

Automobile parts manufacturers are busy securing the next generation of technology leaders in the fields of electrification and intelligence. In particular, there is high demand for science and engineering and information technology personnel in other industries, and the competition for recruitment is fierce. In order to win out, each company is appealing to job seekers with new recruitment activities and new bases that pursue a comfortable working environment. On the other hand, some companies are starting to review their education systems in order to make full use of their internal human resources. In this article, we take a look at the front lines of human resource recruitment and development at each company.

Corporate Recruitment Trends and Measures to Secure Human Resources

The sophistication of automobiles is progressing rapidly in both hardware and software, with electrification, automated driving, and software-defined vehicles (SDVs). In order to keep up with this, it is essential to advance the sophistication of automobile parts and technology, and there is a high demand for engineers to support this, but looking at the recruitment situation at each company, it is clear that they are struggling.

According to a survey conducted by Nikkan Jidosha Shimbun targeting major automobile parts manufacturers, 36% of companies responded that they had secured the number of science and technology-related personnel and digital personnel they had planned to hire for the spring of 2025, or more than they had planned, which is significantly less than half. On the other hand, companies that responded that they had secured fewer than they had planned accounted for 64%.

In the survey, there were many comments saying that “it is difficult to secure mechanical and electrical engineers”, even among engineers. The need for mechanical and electrical engineers is high due to the increasing popularity of electric vehicles and the increasing use of electronics and electrical equipment in vehicles, and companies are starting new initiatives to attract interest.

TOYOTA INDUSTRIES CORPORATION is strengthening its PR to job-

hunting students through internships and software events aimed at securing human resources in the electronics and electrical fields. Musashi Seimitsu Industry Co., Ltd. seems to be achieving results by appealing its new business and evoking an image of being able to play an active role in the company, “leading to the securing of human resources”.

The hurdle of securing digital talent with expertise in software development is also high. Job seekers are mainly employed by IT companies, and with various companies now promoting digital transformation (DX), they are in high demand.

In addition to their own efforts to go digital, automobile parts manufacturers also need digital talent to develop things like SDVs. Astemo, Ltd. (Representative Director, President & CEO: Kohei Takeuchi, Chiyoda-ku, Tokyo) is opening a development base for cutting-edge technology in Shibuya, where a wide range of IT companies are gathered, from venture businesses to Google Japan G.K., the IT giant. Astemo Ltd. promotes its open design and comfortable working environment to attract and secure engineers and other talent.

JVCKENWOOD Corporation has established a new building, “Hybrid Center,” at “Value Creation Square (VCS)” (Kanagawa-ku, Yokohama City) which integrates the functions of three business sites and the head office. The office area has introduced a free-address system(office system where employees are free to change desk), and also features distinctive spaces such as “Collaboration Space”, which encourages interaction between employees, and “JKC Plaza”, a plaza where employees can frankly discuss things. By providing places where employees can work hard together, they aim to improve the skills and abilities of all its employees.

They promote flexible working styles that are not limited to working at business locations such as home offices. The appeal of these working environments are explained in virtual tours and internships for new graduates, with the aim of attracting talented individuals, including those with soft skills.

Some parts manufacturers are also focusing on engineers outside of metropolitan areas. NIPPON SEIKI CO., LTD., a major manufacturer of head-up displays (HUD), has been opening software development bases in regional areas such as Niigata, Akita and Iwate one after another. They establish a system to respond to engineers who wish to find employment locally due to family circumstances such as nursing care, and connect them with job opportunities. In addition, by providing a secure working environment, they reduce declines in

work motivation and retention rates.

ALPS ALPINE CO., LTD. has opened a new R&D building at "Sendai Development Center (Furukawa)" (Osaki City, Miyagi), near Furukawa Station on the Tohoku Shinkansen Line, to appeal to hardware and software engineers. They are utilizing a new building where engineers can conduct research and development in an open environment to attract young engineers by targeting students of some universities in the Tohoku region with which it has signed cooperation agreements.

Murata Manufacturing Co., Ltd. is working in partnership with educational institutions. They have launched a digital human resources development project in collaboration with Kyoto Prefectural Otokuni High School (Principal: Masaki Hashinaga, Nagaokakyo City, Kyoto) and Nagaokakyo City (Mayor: Kengo Nakakoji). The project will provide an online curriculum for students in the science and mathematics course, covering advanced technologies related to artificial intelligence (AI) and data science.

Against the backdrop of children's declining interest in science and the shortage of IT personnel, they are also working on “home-delivery lectures” for nearby schools, which will also help to secure future human resources. Toyo Tire Corporation has concluded a comprehensive five-year partnership agreement with Doshisha University, and will collaborate in the fields of research and development, including next-generation tire technology, human resources development and exchange. This “Doshisha-Toyo Tire Partnership Project” will also promote the expansion of internship student acceptance and the establishment of programs that allow employees to study at the university.

More companies are focusing on utilizing internal human resources

Some companies are revising their training programs for young employees to enable them to pursue diverse careers after joining the company. UNIVANCE CORPORATION has adopted a public training program that respects autonomy for its prospective employees. Ashimori Industry Co., Ltd. has also introduced e-learning, which is more flexible in terms of time and other aspects. They have adopted a “prospective employee first” approach that values the intentions and freedom of prospective employees who are highly motivated to find employment. Some companies, like UNIPRES CORPORATION, have also started to provide welfare services that prospective employees can use.

Many students say that “when choosing a company, I consider what kind of

career path it will offer me.” (H-One Co.,Ltd.), so it is also effective to show career plans after being employed. KYOWA LEATHER CLOTH CO., LTD. has revised their new employee training program to include content that will enable young employees to play an active role at an early stage, and TPR Co., Ltd. has expanded the scope of English-language training for new hires, which had previously been offered to university graduates, to include junior college and high school graduates. At the same time, they started an in-house open recruitment system and an overseas trainee system, creating a system that allows employees to expand their careers on their own after joining the company, not just through company personnel.

Due to the declining birthrate in Japan, there are limits to what can be achieved through new recruitment alone, so many companies are focusing on “reskilling” for all ages. NTN Corporation is conducting courses and training programs on AI literacy and the use of digital tools to develop human resources with AI-related skills. Aichi Steel Corporation is providing DX-related training for all employees. Bridgestone Corporation has significantly expanded its basic DX training, and launched its “100-day digital training” program last year. At TSUBAKIMOTO CHAIN CO., they are making sure that there are benefits for those undergoing reskilling, such as by expanding the license bonus for employees who have obtained information-related qualifications.

Mitsubishi Electric Corporation established "the DX Innovation Academy" in April 2025 to develop DX human resources and create new businesses. They are aiming to create a “circular digital engineering” system that will contribute to solving social issues, while collecting and analyzing data obtained from customers using its proprietary digital platform “Serendie”. By the end of 2030, they aim to secure 20,000 people across the group as core personnel. Based on this, the academy provides the group with a place to learn where they can intensively acquire the necessary skills, knowledge, and mindset and put them into practice.

Aisan Industry Co., Ltd. sends human resources trained in-house to automobile manufacturers, parts manufacturers, battery manufacturers, and other companies to gain experience. After returning, they plan to utilize them as immediate assets in the module (composite parts) and systemization of battery-related components. They launched a secondment program in April 2023. Also, they plan to train over 100 engineers by 2025.

DENSO CORPORATION, which has formed a comprehensive partnership

with NTT DATA Group Corporation in the field of automobile software, will develop a system for training advanced software personnel at both companies, standardize definitions and technical standards, and deploy them in the automobile industry. DENSO CORPORATION plans to double the number of software engineers to 18,000 by 2030, compared to 2023. The partnership with NTT DATA Group Corporation is part of efforts to strengthen SDV development.

Senior human resources are also attracting attention. In a survey by Nikkan Jidosha Shimbun, AISIN CORPORATION, TOYOTA BOSHOKU CORPORATION, Bosch Corporation, Akebono Brake Industry Co., Ltd., YOROZU CORPORATION, NIPPON SEIKI CO., LTD., NITTAN Corporation and others responded that they were reviewing their re-employment systems or considering improving the treatment of senior human resources. Toyoda Gosei Co., Ltd. has extended the retirement age from 60 to 65. KOITO MANUFACTURING CO., LTD. aims to introduce a reemployment system that allows employees to work until the age of 70. KASAI KOGYO Co., Ltd. is also promoting support for continued employment for those aged 65 and over. Senior employees with high levels of expertise can also be used for technology transfer and training of younger staff, so by putting in place systems, they are securing a pool of human resources.

Senior workers are highly motivated to work, and according to a survey of around 400 middle-aged and senior workers (aged 50-70) in the manufacturing industry conducted by CADDi, Inc. (Represented by Yushiro Kato, Taito-ku, Tokyo), developing software for the manufacturing industry, around 70% of respondents were keen to acquire DX-related skills. With an eye toward the DX era, it seems that many people want to acquire specialized skills so that they can continue working even after retirement.

Many companies are actively recruiting former employees who have left the company. Diamond Electric Holdings Co., Ltd. and MinebeaMitsumi Inc. have introduced job return programs and are promoting the reemployment of retired employees. H-ONE Co., Ltd. introduced an internal job transfer system as a measure to prevent employee turnover and has established a system that allows employee preferences to be reflected as much as possible.

With the advent of advanced digital technologies such as AI and high-performance robots capable of coordinating with humans, automation is gradually spreading in development and production sites. However, the core of the system is still the abilities and skills of “the people” working there. In particular, tasks that

require novelty and creativity demand even greater human effort. In the midst of a difficult hiring environment, it is necessary to recruit not only young people but also diverse talent and provide them with opportunities to play an active role. In addition, each company needs to create and reaffirm a workplace environment that respects diversity, as well as labor conditions and systems that support employees.