

Applying Universal Design Elements to the Workplace

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INTRODUCTION

Creativity is required in a manufacturing industry and Subaru is working hard to create a workplace where the attributes of all employees can be harnessed to enhance our company's creativity. Subaru wants a diverse work force. To accomplish this goal, we are making efforts to build a barrier free workplace. Barrier free does not only refer to the physical structures in the workplace, but also the mindset of all workers. Barriers don't just prevent the disabled from contributing fully to a company, they also prevent women and the elderly from contributing fully. At Subaru, we are continually making efforts to eliminate all barriers by applying universal design elements, not only to our products, but to our workplace as well.

DIVERSITY IS THE KEY TO BRINGING THE COMPANY CONTINUOUS GROWTH

Fuji Heavy Industries, Ltd. makes Subaru cars, as well as airplane components, helicopters and electric generators. We employ a total of 14500 people. The Gunma automobile division, where I work, employs 8500 people.

In the automobile industry the parts are very big and heavy and the assembly line moves very quickly. Because of this, the workforce in the automobile industry has been traditionally dominated by men.

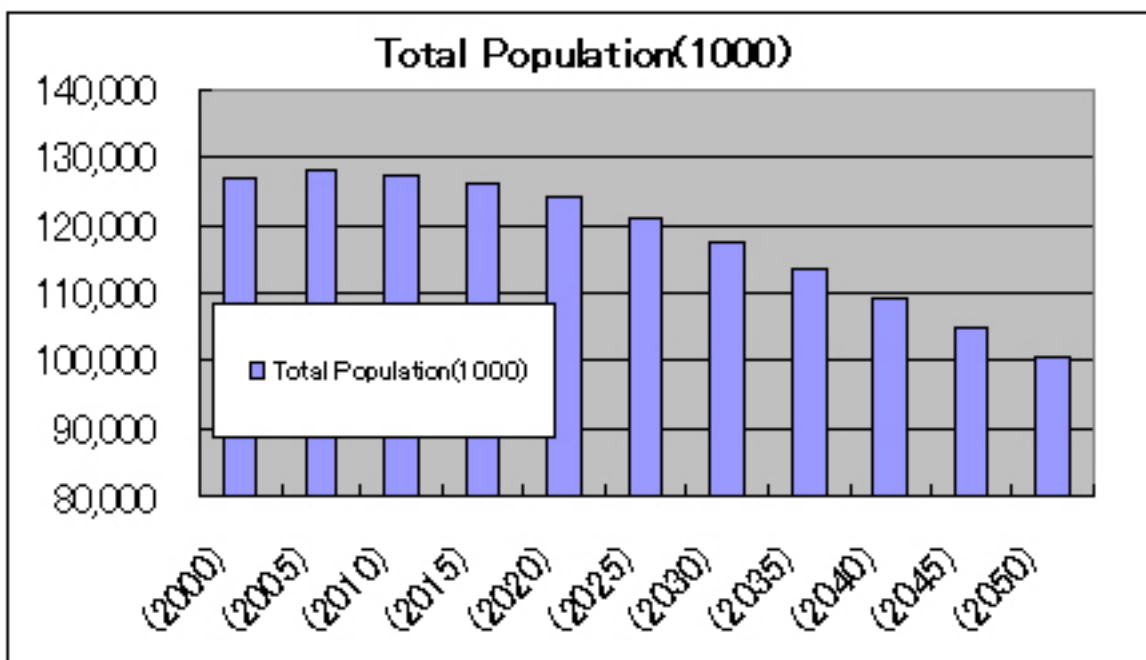
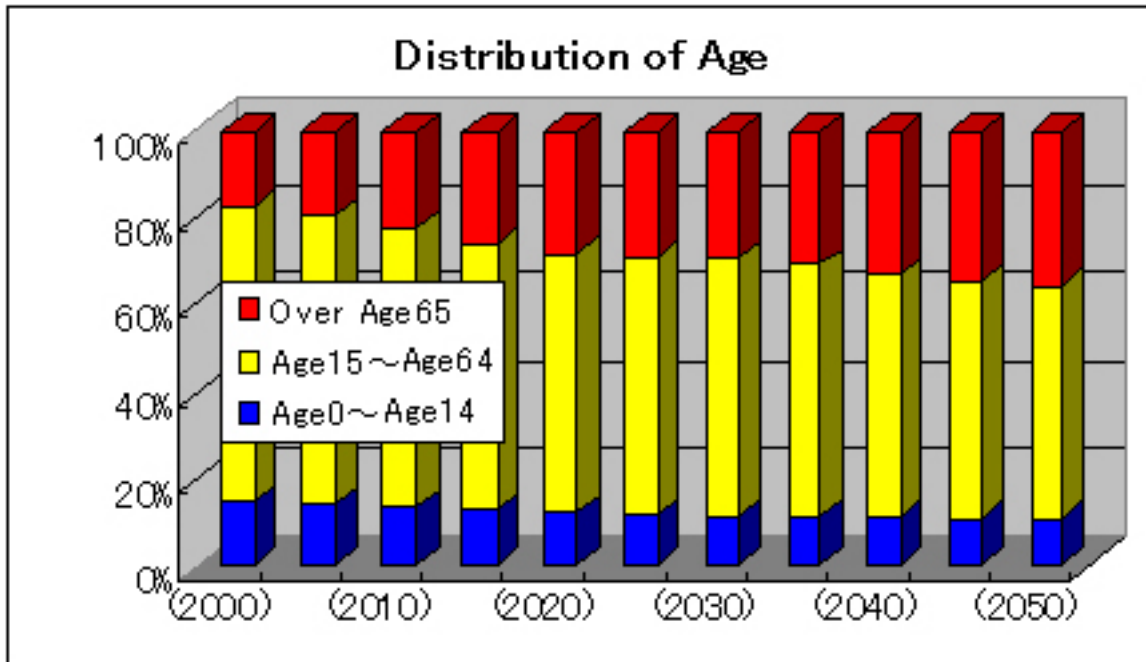
As with all industries, the focus is on providing a high quality product at the lowest possible price. Various improvements are always being made in order to raise productivity. In this atmosphere employees are always required to achieve high performance.

In the production area, each workload is estimated and all waste is eliminated, so that each worker is working at maximum efficiency.

Traditionally, these factors have led to male workers greatly outnumbering female workers. This in turn has led to a new problem. Manufacturing lines are designed by men to be operated by men. On this kind of manufacturing line, women, elderly and disabled people will be considered less productive than young men.

Currently, the demographics of Japan are changing. As you can see in the graphs below, the population of Japan is decreasing, and the ratio of elderly people is increasing

(National Institute of population and Social Security Research, 2002). In this environment, it is risky to continue with a male dominated work force. A male dominated workforce will be difficult to maintain in the future. A diverse work force is the way forward to greater stability.



In addition, a diverse work force leads to more ideas which in turn leads to a better product. A diverse work force also gives our company greater awareness of the changing fashions and helps our company adapt more quickly to the changing environment. In short, a diverse work force leads to greater flexibility and creativity.

EMPLOYMENT LAW IN JAPAN

The Equal Employment Opportunity Law was revised in 1998. Before this revision, women were not allowed to work after midnight. Revision to this law has allowed Subaru to hire more female production staff, so the number of females at Subaru is increasing. However, with this change we have had to make many other practical changes such as building more female restrooms and locker rooms.

Adding more females to the workforce has had unintended benefits. Manufacturing lines have been adjusted to reduce workload and this has led to better working conditions for all Subaru staff. In addition, we have found that many women outperform men in certain tasks such as vehicle inspection.

Regarding employment of disabled persons in Japan, the law put into place in 1976 has a 1.8% quota for disabled staff.

The essence of this law is the full normalization of the disabled into society.

In my company, there was some resistance to this law five years ago because our workplace was very far from being barrier free. At that time, we had one of the lowest disabled employment rates out of all other automobile manufacturers. Now, I am happy to report, we have one of the best.

Our improvement started in 2000 when a project team was formed in the company called Universal Project. We focused on removing physical barriers. With these barriers removed, we could increase our recruiting of disabled staff.

Our project team came up with the idea that if all barriers are removed, all workers are equally efficient. For example, a nearsighted man cannot work efficiently without glasses. If we give him glasses, he can work efficiently. We needed to decide how to give all workers the tools that they needed to work efficiently.

This initial approach led to many improvements in the physical structure of the workplace and many physical barriers were removed.

However, after receiving feedback from disabled staff, we realized that there was another barrier in our workplace – the mindset of all employees -- disabled staff were treated differently.

Since that time, we have been working on this mindset barrier and are actively trying to integrate disabled staff into the different sections in our company. Disabled staff are not all in one section. They are distributed throughout the company. And this has led to relationship building between all workers, disabled and not disabled.

As an example of relationship building, the greatest problem in employing a

hearing-impaired person is communication, and in order to solve the problem, we installed white boards and emergency signal lamps in each of these workers sections as needed. All workers on the team are responsible for making the work area barrier free for their team member.

In addition, we provide sign language classes to supervisors to allow them to communicate with their staff more openly and spontaneously. The instructor of these classes is the hearing-impaired staff member.

We not only employ hearing-impaired staff, but also physically disabled staff. And the barrier-free zones for these staff are constantly being expanded in our company, from section to section. We continuously listen to the feedback of our wheelchair users, and continuously make improvements based on their feedback.



Improving the workplace for wheelchair users improves the workplace for everyone. Healthy workers that are suddenly affected by illness or injury can continue working because of the barrier free environment.

As an example of overcoming mindset barriers, one hearing-impaired staff member was assigned to the development section. We were very concerned about this assignment, but many people in his office voluntarily bought books on sign language and busily prepared for his arrival. As this worker was unable to speak, his supervisor was concerned because in the development section lots of communication is required.

However, the supervisor was pleasantly surprised in their first meeting when all

team members introduced themselves. The hearing-impaired staff member had also prepared an introduction. His personal profile was written on a piece of paper and he held it up for everyone on his team to see. The fears of everyone, including the supervisor's, were released. With good nature and with patience, they could communicate after all.

If barriers are removed, all workers are equally efficient. In addition, by removing barriers diversity is brought into the company and throughout the company.

CONCLUSION

Through these activities we were able to double our disabled work force, from 63 people five years ago to 112 people now. Barrier free not only refers to the infrastructure, but also to the mindset of all staff. In the beginning we were mostly concerned about the concrete structures, but now our focus is changing to the mindset of all staff. In the beginning we thought that hiring disabled staff mostly required money, but now we realize that hiring disabled staff leads to enlightenment. To improve the mindset company wide, we are making efforts to not put all disabled people in one work area, but to add them to sections throughout the company.

Applying universal design to the workplace has enhanced our company's creativity, made our workplace more diverse and has made the working atmosphere much more lively.

REFERENCES

National Institute of population and Social Security Research. 2002. "Population Projections for Japan:2001-2050 ". <http://www.ipss.go.jp/English/ppfj02/top.html>