

My External Mindset Recommendations Vol. 5

External mindset as a professional production engineer

- SVP Takafumi Arai

(This article is partially edited from the content article of our internal "External mindset site".)

In this series of articles, we hear from executives and employees who are working with an external mindset and give us tips that we can use, such as how to maintain that mindset. This issue is an interview with Takafumi Arai, SVP of the Production Division.

Mr. Arai refers to himself as a “professional production engineer.” Since joining Nissan Motor, he has spent nearly 30 years as an engineer in production engineering for engine assembly. Even though he is a corporate officer for JATCO now, he apparently asked the general managers of his division, “Can you keep me informed about that project you're in charge of? I don't mind if you treat me as a regular assembly engineer.” Here, Mr. Arai, a production technology expert, shares his thoughts on an external mindset.

Volunteered for assignment to Mexico

A major turning point in my career was when I volunteered to be transferred to Nissan Mexicana at the age of 29. I think this can be called having an external mindset. As a professional production engineer, I wanted to test my abilities overseas, and since my seniors had also been posted to Mexico, I volunteered to my manager. Usually, people in their mid-thirties are to be transferred overseas, as they would be in charge of the entire production. I was 29 years old at the time, and thinking about it now, I really appreciate manager's decision to let me go.

In Mexico, my boss was the plant manager. In Japan, the reporting line consisted of the assistant manager, manager, general manager, and plant manager, so I did not have much responsibility in making my decisions. But in Mexico, the responsibility was much different, and I had to take responsibility for all decisions except for those made by the plant manager. Feeling a big pressure and a strong sense of fulfillment, I had to bring out all of my abilities, which I had not been able to do before. I think these experiences have led to my growth.



Transfer student mindset

I don't like to work in the same place for a long time. Maybe it's because I changed elementary schools three times and junior high schools twice. I was in the production engineering division, but my workplace changed every three years or so. Without it, there is no stimulation. I have the urge to change something. It takes about three years to come up with a new proposal, give it shape, and make it effective. However, after five years, I start to worry that I get so used to the workplace, I don't come up with new wisdom, and I'll just linger on maintaining the status quo.

The difficult part about changing workplaces was how to fit in and understand each other in the workplace first. It would be difficult for people in the workplace to accept my proposal if I suddenly started suggesting it. The first step was to spend a year or so to get into their shoes and building a relationship of trust. After that, it was better to work with them to figure out how to change the organization and the work for the better. Just like the saying, "Slow and steady wins the race".

This is a bit off topic, but I feel sorry that they can't have a celebration party of their projects due to COVID-19 right now. Project members are usually rushed and

complained about all the time, but they can't achieve an emotional closure and have to move on to the next project. I love a celebration party. The members of each department involved will praise each other. Deepen their understanding of each other. Wouldn't we like to have such an opportunity? In Mexico? This event is even more important than in Japan.

Look outward with the eyes of an expert

As a production engineer, I think it is important to see with the eyes of an expert when obtaining information from the outside. When you visit an equipment manufacturer or see the equipment of a competitor or a company in a different field at an exhibition, if you do not see with the eyes of an expert, you will not be able to realize the philosophy and thinking behind the equipment. Then you cannot learn. In order to develop the eyes of an expert, for example, I think it is necessary to write specifications by oneself after considering the principles and structure in detail, rather than just throwing it to the equipment manufacturer when installing a production line. That's what I've been doing, and that's what I've been asking. I think this also applies to people in departments other than production engineering.

There is one story that made me happy when I came to JATCO. In a previous project in Nissan, there was an issue that if the engine production line, which was planned for small volume production, was started up in the same way as a normal line, the capital investment would be too high to make it profitable. So, referring to the production methods of tire manufacturers, we worked on "flexible technology" (technology that allows a single piece of equipment to perform multiple tasks) to increase the versatility of the equipment and "high-speed transfer technology" to shorten production time. These technologies were not realized due to changes in the project preconditions, but when I joined JATCO, I learned that JATCO had already introduced this "flexible technology." At the time, as a production engineer of engine assembly, I felt frustrated that they had realized it before me, but at the same time was happy, as there was colleagues at JATCO who saw the value in equipment flexibility and implemented it.



Incorporate the results of an external mindset into our company

I would like to talk about what I consider to be the challenges of an external mindset. That is how to incorporate the obtained information into the company. Raising awareness of an external mindset and gathering lots of information from the outside does not make sense on its own. The important thing is to take the information obtained through an external mindset, adapt it to JATCO's culture, and use it in a useful way.

I feel that I have yet to do a good job in this regard. Simply suggesting or instructing the workplace on new things or what we have learned will not work. Once we have made a suggestion, I believe that we should get involved in the process and think about it together until it is realized.

Credentials expand our world

I have several certifications, including a first-class small vessel pilot license and a second-class marine special radio operator. My wife, on the other hand, is even better, and in addition to ships and radios, she has about 20 other certifications, including an organizational storage advisor and a breadmeister (a certification that teaches people

how to make bread). I used to compete with my wife for a while, but now I am completely outnumbered in terms of certifications. No matter which certification we get, it will give us a chance to learn about a new world and get a lot of inspiration. This is one of my personal external mindsets.

