

Mr. Yoshio Oka spent close to 40 years with Toyota Motor Corporation in production management. He entered the company after spending several years in the Japan Self Defense Forces. Mr. Oka worked and managed many different areas of the company including Honsha, Motomachi, Kamigo, and Shimoyama plants. He also helped support start up activities at a variety of overseas plants as well. Most of his time was spent in engine related operations. Although retired he is still quite active as a consultant in Japan and most recently has been spending a lot of time in Russia.

Summary Notes from Interview with Mr. Yoshio Oka

TOPIC: Production Management, Toyota - July 31, 2006

Art:

Thank you for agreeing to spend some time together and answer some questions about TPS.

Mr. Oka:

Nice to see you again.

Art:

So tell me. Now that you are outside of Toyota and have been working with some different companies in your opinion what makes TPS work and what helps keep the company at a high level in manufacturing.

Mr. Oka:

I think there are a couple different dimensions to comment on off the top of my head. The first relates to the basics of the production process and the second relates to the development of people.

Art:

Perfect. Can you elaborate on each of those items?

Mr. Oka:

It seems to me a lot of companies want to buy their way to enhanced competitiveness by outsourcing components more and more and getting out of manufacturing. This approach to me is admitting that you can not manufacture competitively which is highly undesirable from a Toyota point of view.

Art:

For example?

Mr. Oka:

Toyota does careful analysis to determine which parts are made internally versus those purchased externally. Of course the percentage of parts procured from outside suppliers is much higher totaling perhaps 70%. However the remaining 30% that are made internally are very important and receive tremendous amount of detail and planning by the company.

Art:

That sounds counterintuitive or almost like reverse 80/20 thinking.

Mr. Oka:

Think of it this way. The parts that are out sourced are more commodity type items. We compete and obtain a fair amount of competitive advantage on the 30% that we make in-house since we can do those items more effectively than any one else. The remaining 70% are simpler items that can be purchased and made by many different suppliers. It is tough to get a long term competitive advantage from focusing on just those items as emphasis winds up being on purchasing and logistics. We of course take advantage of those areas also however we believe that on the 30% made internally we can create a further advantage that few companies can match long term.

Art:

Very interesting. How long has it been this way?

Mr. Oka:

For as long as I have been in the company this has been part of the manufacturing strategy. And the result is an incredible amount of attention put on the core parts of an automobile and certain processes. In the engine for example the cam shaft, crank shaft, cylinder head, cylinder block, connecting rod, piston, etc. The same is true in casting, forging, stamping, welding, and other areas also.

Everyone externally talks about Standardized Work like this is some great document but this is in reality one of the last documents that gets created around launch. Years before more important decisions and more precise documents get created in planning with engineering and technical details about the process, the tooling, the gages, the quality control items, etc. That is where we make a good process way up front.

Art:

Tom Harada made a similar point about emphasizing those as well. This also enables a fair amount of standardization in equipment?

Mr. Oka:

Yes. The product is always slightly changing but how we make it does not change all that much. For instance we always use the same equipment manufacturers on the engine side of the business such as Toyota Machine Works, Fujikoshi, Nippei Toyama, Komatsu, Fuji Kikai, Yasunaga, and our internal machine tool plant Teiho. Each one has a special area of expertise that we work with them to improve year after year to make a better production process. We have very reliable and proven processes after all these decades of work. This is a big difference that I see compared to companies I visit now.

Art:

Very good. Now let's shift gears and talk about the people development aspect you mentioned.

Mr. Oka:

One of the greatest strengths of a company like Toyota is they take people like me and convert them into successful leaders over time. Not everyone is going to be a manager but even people like me that enter without a college education still have a chance to advance from the shop floor to Team Leader, Group Leader, Foreman, Manager, etc. in production.

Art:

What is the chief benefit?

Mr. Oka:

There is a career path and chance to progress for those so inclined. Also the people that become managers in Toyota especially in Japan have tremendous knowledge of the production process since they have done it all before first hand. Employees or Team Leaders can't fool me for example when they talk about a problem and try to put the blame in someone else's court. Normally they don't even try since I know the process as well as they do and they know that. It helps to keep us focused on what we have to work on in our realm of control. I also command a lot of respect as a manager by my knowledge and capability not just positional hierarchy. It makes for a better a working relationship and team dynamic.

Art:

What does Toyota look for in your opinion in leaders in production?

Mr. Oka:

In my opinion it starts with attitude, etiquette, and workmanship in your first couple of years. The first line of supervision puts in a lot of time coaching these aspects, mentoring, and developing these traits in the Toyota Way. It all starts there from day one. Then after a few years people that display aptitude and interest have avenues to start contributing in ways beyond just their daily job. For example there is the suggestion system, there are QC circles, and small improvement projects in the team's realm of control. People that display this initiative in addition to the traits above usually become excellent Team Leaders. Then around the time you become Team Leader there is additional training in topics like Job Instruction, Standardized Work, Kaizen, Problem Solving, etc. We look for ability to perform all of these different things well in addition to managing people.

Art:

There have been outside trainers used in past such as Professors from different universities, Mr. Shigeo Shingo, and others over the years. What is your view on that sort of training and its influence on Toyota?

Mr. Oka:

Its influence was low and that was all basically stopped about 30 years ago for some very good reasons. First why spend money on outside trainers who want to just show up and lecture? I took their classes and it was not that useful I have a strong opinion about this from personal experience.

Art:

Tell me about it please.

Mr. Oka:

Did you know that for the past 30 years virtually all the skills and development training is done by internal people at Toyota from production? They are not from the outside and they are not from the training department. Of course we do all the on the job (OJT) instruction in production but we are also responsible for the teaching the classes on problem solving, standardized work, kaizen, problem solving, QC circles, and other topics.

Art:

Yes I do recall that and it is amazing. The education and training department does play a role however as they keep the material standardized and essentially train the trainers.

Mr. Oka:

Exactly. But after the trainers are created we are responsible for doing the instruction and not them or anyone from the outside.

Art:

What is the benefit?

Mr. Oka:

Teaching skill is one responsibility of a leader in Toyota. If you can't teach and develop people then who is going to respect you? You earn your position as a leader by accomplishment but also by teaching and developing people. The higher you go in the company the more important this is I believe.

Toyota structures training so that someone two levels above you is doing the teaching and the company has done this for over 30 years. When I was a Foreman I was doing training for Team Leaders for example. Managers taught classes for Group Leaders, etc. I believe this is very powerful.

Art:

What else about people development is useful or unique in Toyota?

Mr. Oka:

We establish challenging goals that really make people think. You are not told what, how, and why to do something with all the details filled in for you. That accomplishes nothing except building a culture of following orders and a bunch of “yes men”. You might be told to improve productivity in your area by 8% over a certain period of time. Or to reduce defects by 50% for example. But you are not told how to do it. You must think and plan for yourself. If you can do this it builds confidence and capability. You will also develop as a leader. If you can not think and plan well then you will struggle and not progress very far in the company. Toyota is very strict about this and evaluates performance accordingly. In this sense the strength of Toyota is its ability to “make people” and not just its productions system or making products.

Art:

Tell me about your consulting work these days? How do you approach it with clients?

Mr. Oka:

It depends upon the goal and the situation and discussion with the company. I don't have a set approach. It is not that simple but first you have to define a problem or need for improvement.

If the company does not have much internal skill we might opt for a kaizen team for a period of time say a year or so composed of one half of the team made up of people from production and a couple others from maintenance, engineering, or others. I think you have to do this initially in some cases to get started even if it is not good long term as the vehicle to drive change.

I also think you have to make a splash somewhere and really change the environment in terms of appearance of the area, workplace organization, cleanliness, etc. Tackle some of the problems in the area that have been ignored or allowed to fester for too long. “Muda” gets all the attention in books but you should also focus on “Mura” (un-level work loads) and “Muri” (over burden in work) as well. Make it so that everyone has to see and agree that this is easier and better. That is an important first step.

Art:

So you don't start off with a certain tool like mapping material flow, or standardized work, or something else?

Mr. Oka:

No. Those each have a specific niche use. Before that there is judgment skill involved to decide what is the problem and what must we fix. Is the problem on-time deliver, do we need to improve productivity by 30%, do we need to reduce scrap 50%, do we need to improve availability to 85%, etc. The problem and goal have to be made clear first. Then the method for

improvement or analysis can be determined. If you get that in the wrong order you'll just waste some time most likely.

Art:

I think that is some excellent advice. Thank you for your time and words of wisdom today.