Japanese Model of Supplier Development

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The supplier development was one important puzzle to be cracked for the quality revolution that was spearheaded by Japanese. But even more importantly, the bedrock of Japanese model of Supplier Development is Dr. Deming’s philosophy; the philosophy that used to seem counter intuitive before the quality revolution was realized. For instance, Dr. Deming stressed on sole supplier instead of multiple suppliers which are widely used as cushion in case any of them fails to deliver. Secondly, he reversed the nature of buyer and supplier relationship by portraying them as partners. When considered partners, gaining of one party at the expense of other and the resultant friction and dissatisfaction is uprooted in the system. Thirdly, he highlighted the importance of long term relationships with the suppliers and discarded the use of low pricing and bidding as the method of supplier selection. By studying this Japanese model of Supplier Development, I wanted to learn whether these seemingly counter intuitive principle of supplier management work. Most of the work below is derived from supplier development practices of Japanese automakers in general and Toyota and Honda in particular.

Ownership and Interdependence (Keiratsu)

For Japanese, Suppliers are too important to be left alone. So, Japanese Keiratsu follows a complex model of interdependence and ownership. Japanese automakers have minority stakes in most of their lead suppliers. This minority ownership gives Japanese automakers financial and administrative control to urge suppliers to tread on path of continuous improvement (Kaizan). Even different suppliers have each other’s ownership. So much so, that competing suppliers are sometimes jointly owned.

Knowledge Creation and Innovation

Japanese automakers know their suppliers as much as these suppliers know themselves. These automakers know the cost structure of their suppliers so that they can nurture mutually beneficial relationship so that they not only can ensure that the supplier getting a healthy return but also identify opportunities to cut these costs. The organizational boundaries across buyers and suppliers are blur because these automakers widely use cross-functional and cross-organizational teams to jointly solve problems. Guest Engineers Program, the program in which engineers of suppliers work in the facility of lead company and vice versa, in Japanese automakers is another way to achieve objective
of collectivism, team work and joint problem solving. The results of such initiatives is continuous improvement, knowledge creation and innovation.

Continuous Monitoring to Continuously Redress Problems

Unlike most fortune 1000 companies who send supplier report cards annually or bi-annually, Japanese automakers send them monthly. A typical report has six sections, quality, delivery, quantity delivered, performance history, incident report and comments (Liker & Choi, 2004). Comments section is used to communicate the overarching performance of the supplier. Japanese automakers expect their suppliers to meet targets on all the above mentioned metrics. If a supplier misses any of the metric, an immediate action is supposed to be taken. Immediate action means identifying, understanding and addressing root cause of the problem. If the supplier is unable to do so, the lead company comes to its rescue. However, the role of lead company is limited to problem identification; implementation of corrective measures is undertaken by the supplier itself.

Intensive Data Collection

Japanese automakers have delegated some of the product development to their suppliers. Data collection is the first step in product development. Toyota and Honda have created checklists with hundreds of measurable characteristics for each component (Liker & Choi, 2004). This intensive data collection and processing ignites the process of innovation and continuous improvement. If the supplier is not well versed with data collection they are there to help them out. Once the suppliers develop these data and design capabilities, they become more valuable to them than the low cost suppliers. But having said that, it does not mean that in Japanese supplier development methodology, innovation and cost cutting are contradictory targets, rather both of them go hand in hand and complement each other.

Joint Improvement Arrangements

Japanese automakers typically work with 2-3 suppliers for one category of product. They have pioneered many revolutionary approaches such as Toyota Production System and Lean. These approaches were implemented in their own facility and then transferred to their first tier suppliers. So, Japanese automakers act as showcase for these suppliers. This precisely is the reason that Japanese automakers such as Toyota and Honda became one of the most sought after buyers. For many suppliers development incentives outweigh financial incentives.

Just in Time (JIT)

Eighty percent of working capital is stuck in inventory. Signature Japanese signature Just in Time (JIT) not only saves working capital but even more importantly makes the supplier relationships more responsive, robust and transparent. However, implementation of Just in Time is solely dependent on supplier and for that matter their development to
the extent that buyers’ vulnerability spurs security and predictability across the supply chain.

Results

The Japanese model seems to be built on altruism, collectivism and relationship building but these foundations acts as a stepping stone to achieve hard core financial results and an unprecedented competitive advantage. According to Liker and Choi, Toyota and Honda brought down the manufacturing costs of Camry and Accord by about 25% during the 1990s. Still the two companies have appeared at the top of survey by Consumer Reports on initial quality and long term durability. While US automakers take two to three years to design new cars, Toyota and Honda have consistently been able to do so in 12-18 months. Honda’s best practice program has increased supplier productivity by about 50%, improved quality by 30%, and reduced cost by 7%. Typically, suppliers have to share 50% of the cost saving with Honda. On the other hand application of Toyota’s Lean System helped one of its exhaust system plant to reduce headcount by 39%, improved direct labor efficiency by 92%, eliminated $5 million of inventory, and reduced defects from 638 to 44 per million. (Liker & Choi, 2004)

Conclusion

Supplier Development is more of an art than a science. An art to create an impact without formal influence over one another in the supply chain; an art to generate financial results with all the sincerity, care and concern; an art to nurture long term relationships without compromising on short term incentives; an art to culture mutually beneficial relationships despite all the interdependence and an opportunity to gain at the expense of others. But it’s still a science; a science to generate the same result time and again by implementation of the Supplier Development initiatives. The same is the reason that SDP Methodology has been successful across different industries, geographies and firm sizes.

About the Author

Author is currently working in Prime Minister of Pakistan’s Reforms Program to turnaround Pakistan Post, the turnaround initiatives paid off when Pakistan Post registered 12 percent growth in revenue, highest in last more than two decades, and significantly slashed deficit. And is United Nations Development Program (UNDP) certified Consultant for Suppliers Development Program; holds an MBA from University of Oxford.

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