Historical Research: Kiichiro Toyoda Diamond Alexander University of Denver – Morgridge College of Education

Born in Japan in 1894, Kiichiro Toyoda was born to an inventor father and was surrounded by innovation, design, and manufacturing from an early age. Toyoda lived in housing that was a part of his father's factory sites and was familiar with the way machinery worked intuitively because of this early exposure. Most of his life occurred during very marked and sometimes tumultuous times in history, spanning everything from the industrial revolution to the Great Depression and World War II. Toyoda experienced each of these historical seasons and continued to innovate through it all. Just before falling ill and suddenly passing away, Kiichiro Toyoda was continuing to innovate beyond automobiles in the event the business did not continue to be successful. It is that spirit of innovation and improvement that has characterized him as a management icon and is the primary discussion of this brief.

Kiichiro Toyoda founded the Toyota Motor Company in 1937 upon his father's existing automatic loom company (History.com). Sakichi Toyoda, Kiichiro's father, was called "Japan's Thomas Edison" for his prolific inventions and dedication to continuously improving upon them. The senior Toyoda even funded invention competitions on topics such as electric battery creation with updated capabilities. This is the environment Kiichiro Toyoda grew up in and that influenced his life. Beginning by building upon his father's sketches and ideas for an automatic loom, Kiichiro Toyoda traveled abroad to research and study what was being done in the US and Europe. Toyoda focused on improving the quality of product created by the looms, allowing the machine to auto-detect issues, and reducing human error, earning him multiple patents both individually and corporately.

After a large earthquake hit Tokyo, badly damaging the rail system there, US automobiles were imported to Japan by the Tokyo Municipal Electric Bureau to help alleviate the pressure and rescue people. This was made possible due to US auto manufacturers massproduction style of manufacturing and fast turnaround of three months as compared to European manufacturers' turnaround of six months. According to the Toyota Motor Company, "This event made many people realize the practical public role and convenience that automobiles, previously regarded as a luxury item, could offer" (75 Years of Toyota). This resulted in both Ford and General Motors establishing automobile plants in Japan, forcing the country to reevaluate its domestic automobile industry. With this climate, Kiichiro innovates as before and founds the Toyota Motor Company, becoming its first president.

Toyoda borrowed space and resources to start an automobile division within his father's loom company to test its viability and potential for success. This was the basis of his nowfamous "Just-in-Time" management philosophy. Morgan Witzel writes about this in the book "Fifty Key Figures in Management,":

> "The practice of just-in-time production, in which each component is produced as it is needed...stemmed originally from a simple lack of resources. Before the establishment of the Toyota Motor Company, Kiichiro was quite literally borrowing space and resources for his car project from the parent weaving company, which could not afford to support him with large investment...According to legend, Kiichiro hung a large banner reading 'Just In Time' over the shop floor, reminding workers that they must not produce components until the assembly line crews actually asked for them...And that, in essence, remains the philosophy behind just-in-time management today. The system helps to eliminate waste and keep down costs by maintaining, in effect, zero inventories" (2003, p. 256).

The definition in "Business: the Ultimate Resource" also includes the premise that "all activities in the production process [be] geared to adding value for the customer" (J. Law, 2011). Toyoda was constantly focusing on keeping the company "lean," as this philosophy is often referred to in modern times and making a product that was excellent according to customer standards.

Another key component of Toyoda's exemplary management standards is related to the concept of kaizen, which is most often understood to mean "continuous improvement," and the philosophy of total quality management (TQM). According to Witzel, kaizen and just-in-time manufacturing were central to Toyoda's management style because they needed to pursue "lean" manufacturing in order to compete with American companies on price since their company did not have the mass inventory of those companies (Witzel, 2003). Additionally, Japanese products were not viewed as being high-quality so Toyoda focused on quality improvement of their products. The Toyota Motor Global Company website writes that Kiichiro Toyoda's commitment to "the basic concepts of TQM and problem solving as well as kaizen (continuous improvement) through creative innovation spread throughout the company and took root, contributing to higher product quality and work quality at all levels and ranks and improving the vitality of individuals and organizations" (75 Years of Toyota).

While a global automobile manufacturer and a local public library may seem as dissimilar as two organizations can be, management principles are uncannily applicable to a wide variety of fields and practices. In my analysis, there are a few areas where libraries across their different sectors can benefit from Kiichiro's legacy. "Just-in-Time" can be applied to collection development and reference services. For example, the library at Johnson and Wales-Denver campus is a small academic library catering primarily to students studying culinary, pastry, nutrition, and hospitality. They do have a small popular books section that they essentially "lease" from a company called Brodart. This allows them to save space by not having an ever growing collection of non-academic books that students may or may not want in the future and allows for constant iteration as books are swapped and replaced based on student

preference and checkout frequency. In a public library, I feel that the "Book-A-Librarian" service fits this management philosophy as it focuses on customer satisfaction through one-on-one attention and convenient scheduling, as well as providing the reference help as needed, freeing up librarians to work on other tasks rather than only sitting at one reference desk for hours on end. The concept of kaizen can be applied to the library setting by instituting systems for suggestion-making with regards to the management of the library and staff management as well, i.e., an online comment box/form, etc. Additionally, managers can work to foster an environment of continual improvement and innovation among their staff, increasing organization buy-in for a customer-focused approach that incorporates usability, user experience design, and continuous assessment.

Unfortunately, Kiichiro Toyoda died at the age of 57 due to a sudden brain hemorrhage shortly before he was to regain his position as President of the Toyota Motor Company and really see his influence make the impact it would on the Company in later years. As Witzel (2003) writes, Kiichiro "proved it was possible to challenge entrenched global competitors through attention to quality and aggressive marketing...Few production managers today do not work with tools and concepts devised and implemented by Toyoda Kiichiro" (p. 257). Surpassing General Motors as the largest seller of automobiles in 2008 (History.com), Toyota Motor Company would not be the global leader it is today without the innovation of Kiichiro Toyoda. While few things may seem as dissimilar as a local public library and a global automobile corporation, Toyoda's commitment to continuous improvement and organizationwide quality standards is a model that libraries could greatly benefit from.

Sources

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