Individual Report

For our project, we conducted research on the book "Unrelenting Innovation" written by Gerard J. Tellis. The book focused on looking into how and why some firms succeed at innovation, and why other firms fail. The book used many real-world companies as examples, such as Google and Apple. These are firms that have grown to be huge companies that are recognized around the world. It is fascinating to look back at the history of companies such as Apple and realize that at sometimes the company was at risk of complete failure. Through innovative thinking Styeve Jobs was able to revive Apple and make it one of the most successful companies on Earth. Apple is a company that took a risk and now is experiencing the results, which is the huge reward that can result be being right. Gerard also informs the reader about the failures within some large companies, such as General Electric and General Motors. In one example, Gerard explains how General Motors explored hydrogen fuel cells as an alternative to the fossil fuel powered internal combustion engine. It was the only renewable energy source GM researched at the time, and the project ultimately failed and was abandoned. The case study suggests that GM should have encouraged its engineers to take more risks, and they could have split into teams to drive innovation through internal competition.

Main book overview

Culture is everything when it comes to running a successful company. Apple was originally a company with very different culture than most firms and embraced creative thinking and innovation. When John Sculley took over from Steve Jobs, he tried to change the culture to a more bureaucratic and conventional hierarchy and business culture but then Apple began to experience more failure. Once Steve Jobs took over again, he changed Apple back to the way it was originally and from there the company grew into the trillion-dollar corporation it has grown into today.

Culture is a set of traits values, practices, and traditions that constitute the internal human working environment for employees. Creating a culture for innovation is extremely difficult, and there are different ways to achieve it. There are 3 required traits to foster innovation. They are willingness to cannibalize, embracing risk, and focusing on future markets. There are also three

practices that companies can attempt to internalize, even though it can be more difficult. They are providing incentives for enterprise, fostering internal markets, empowering innovation champions.

My part

For most our lives we are rewarded for doing good and punished for doing bad... but that system is not good for innovation!!! For example, if an idea fails the innovator should not be punished. Failure is just a learning experience. Companies in a capitalist market that foster innovation do not punish failed ideas, they instead prefer that the employee embrace the failure and learn from it. These companies incentivize their employees through many means. As stated in "Methodological Individualism, Capitalism and Economic Progress" by Serguey Braguinsky, (page 3) "in short, the capitalist organization creates conditions for the best people to work in the economic sector and creates incentives for them to then work really hard."

One way that firms encourage innovation is by offering perks encourages people to take the risk and be innovative. There are several examples of successful organizations and even countries that accept failure and even encourage it to promote learning. The philosophy at Google is "fail early, fail often, move on" (page 145). Only innovators that admit failure continue to be invested in! From this culture, Google has generated many successful ideas and products that have been wildly successful in the market. An example of a country that promotes innovation is Israel, which is considered one of the best countries in the world to start a venture and it sees one of the highest rates of success. Failed entrepreneurs are forgiven and invested in again, and the result is that failed entrepreneurs have a 20% chance of succeeding their second time. (page 147).

For a market to promote innovation, there have to be some characteristics that exist. There are four essential characteristics of markets must be in place to encourage innovation in the economy. They are a forum for choice, a forum for competitive offers, a forum for exchange, and a forum for information exchange (Page 181). This is directly linked to our readings about capitalism vs. socialism because capitalism offers more choice and competitive offers and encourages innovation much more than socialist or planned economies.

Innovation is risky, which is why bureaucracies are precise and predictable (page 178) and are afraid of failure. The reason most firms fail is that they either do not have a healthy mix of innovation and bureaucracy, or they do not innovate at all. One example is the story of Tony Fadell, the father of the iPod. He left Phillips to go to Apple, because they did not embrace his innovative idea. Apple embraced his idea and developed the iPod which became a huge success. Entrepreneurs are innovators who are constantly thinking up new and better ways to produce goods and services. A firm that wants to keep its innovative employees needs to compensate much more than the employee would find by branching out on their own or moving to a better company.

Some of the personal research I have done is about Elon Musk and his rise to success with all his companies. I wanted to add my personal research as an updated example to the book, because it is a great example of how a man willing to take risks and embrace innovation has become one of the most well-known billionaires. Elon Musk originally helped build the system that became PayPal and faced much discouragement and was told that virtual monetary transactions would never be a success and that there was too much risk in sending money online. However, Musk believed in his product and for years he worked harder than everyone to write the code and build the software. After many ups and downs, he finally hit it big when PayPal was sold to eBay. He became a millionaire overnight, and for a while he partied and celebrated. But instead of spending the rest of his life living off his fortune, he decided to invest into building his own rocket company. Again, he faced much opposition and was warned by many people that entering the aerospace industry was a waste of time and money because it was controlled by two or three big players that kept out any competition. However, Musk had several new and innovative ideas to combat the large bureaucratically controlled industry. He first brought engineers and fabricators together in the same space and placed the desks of the engineers on the assembly floor, so they could be involved with the fabrication process. This dramatically improved communication and immediately Musk was a step above the other corporations because he increased the effectiveness of his teams. Then Musk began to think about more innovative ways that he could make his mark in the space industry, and soon they developed the reusable rocket. Musk also demanded that everything be made in house, giving the company another advantage over the other corporations. Musk had cut costs dramatically by manufacturing parts in house.

Now rockets could be built cheaper, and they could be built faster because the company wouldn't be relying on third party manufacturers. Now all Musk needed was to get his company the attention it needed, so he pulled off some elaborate stunts. After many tests the Falcon rocket had its first successful launch and SpaceX became a sensation in the aerospace industry. Now there was a competitor that was still small but posed a threat to the rest of the industry. Within a decade, SpaceX earned major contracts to fly missions for NASA and other large companies that needed satellites and supplies shipped out of the atmosphere.

During the success of SpaceX, Musk became involved in a small electric car company that was starting to fail. He brought his engineers to the company and soon they were developing an improved electric car that they could market to the luxury class. After bringing in specialists from top companies around the world Musk had once again developed a company that started out small in an industry full of giant behemoths, and he managed to create his own success by being different and thinking innovatively. Tesla manufactures most of its components in house and incorporates technology into their cars like the rest of the world has never seen. Now, no matter what other competitor car companies do to try and compete Tesla is eons ahead because it is still small enough where it can easily change strategy, and it still maintains its innovative culture.

Today Musk has invested into many other companies such as Solar City, The Boring Company, and Neuralink. Each company has brought innovative ideas to its respective industry, and Musk has made a big risk on investing in each company. However, it has all proven to be successful so far.