

**APS 1012 – Management of Innovation in Engineering**

**Team Project Report:**

# **THE INNOVATION IN HUAWEI'S BUSINESS MODEL**



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## Executive Summary

The rapid rise of Huawei has generated a lot of attention and controversies in the media. Some people envy its success while others fear that it is the tool of the Chinese government. Yet, compared to the large number of reports on Huawei in the western media, there has not been as many academic researches being done on this company. What is the real secret behind the success of Huawei? What has the Chinese government done to help Huawei? What can western governments and companies learn from it? We want to answer these questions in this report.

### What is the secret behind the success of Huawei?

Our report is divided into three main parts, each addressing one question above. The first part will try to answer the secret behind the success of Huawei. We have further divided this part into three sub-parts, each addressing an innovation done by Huawei. They are project and service innovation, operational innovation, and business model innovation.

The paper begins with a discussion of project and service innovation, as this is the external projection of Huawei, where the general public forms its first impression of the company. This includes all the product and services Huawei has offered to individual customer, enterprise, and telecommunication companies. In this case, we have analyzed terminal device (smartphone), base stations, and artificial intelligence (AI) of Huawei. The key to the success of Huawei's product and service innovation appears to be its heavy emphasis and investment into research and development (R&D).

Next, we moved on to operational innovation. This deals with the internal organization of Huawei which is "obvious and structural", and other parties can quickly learn and try to implement these strategies in their own organizations. This includes the rotating CEO structure, which ensures both the stability (when the founder leaves) and diversity (everyone gets a chance to lead) of the company; employee shareholding, where most employees will benefit from the growth of the company; personal business commitment (PBC), where each employee will know what he or she needs to do for next year, and it will also be used to evaluate the job being done by the employee; Huawei university, which is used by Huawei to equip its employees with both technical and management skills, and also to do in-job training for managers who are seeking promotions.

The last part for the success of Huawei lies with its business model innovations. Compared to other companies, Huawei has indeed come up with some of its own unique business models, such as its unique company culture, financial system, and customer-centric management system. Under company culture, the paper discusses how Huawei has created an environment that encourages competition. For its financial system, we will talk about why Huawei does not want to be publicly listed, and how Huawei motivate its employees using employee shareholding system. Finally, we will also talk about how Huawei manages to establish good and stable relationships with its customers through the customer-centric management system.

### What has the Chinese government done to help Huawei?

This report will also try to address the concerns portrayed by most western medias, and addresses what the Chinese government has done to help Huawei succeed. We categorized the help from two different levels of Chinese government: the central government and the Shenzhen municipal government (where Huawei is located). The main help from the central government in Beijing is through the cheap loans given by the Chinese Development Bank (CDB) and its heavy emphasis on Science, Technology, Engineering, and Mathematics (STEM) education that produces many engineers in China. As for the Shenzhen municipal government, it provides financial support to Huawei in terms of Local-Government Financing Vehicle (LGFV), and manpower support in terms of Shenzhen Virtual University Park (SZVUP). It has also provided legal support to Huawei, but this has led to some controversies in China.

### What can western governments and companies learn from it?

There are two parts to this question. The first part is to compare and contrast Huawei with two North American companies: Apple and Blackberry, and discussing what can the latter two learn from the former. The second part is to compare and contrast the Chinese government with various levels of Canadian government, and what can the latter learned from the former. Both Huawei and Apple have employee training programs, but Huawei's system appears more extensive in terms of encouraging promotions and managerial skills development when compared to Apple. Huawei's system also emphasizes stricter discipline, and mandates repeated annual military training for all employees to build stronger teamwork. As for Blackberry, one reason attributed to its downfall was its high dependence on individual key personnel, where if that person left the company, it would lead to overall instability. On the other hand, the rotating CEO structure in Huawei ensured that even if one of the key personnel left (or got arrested), the position could be immediately replaced, and the company can continue to function business-as-usual.

On a government level, although the Canadian government does provide funding for start-ups, such as the Strategic Innovation Fund (SIF), the funding programs are typically one-time or short-term, and of much smaller scale. This can help firms and business get off the ground, but it may not keep the business or project running successfully. On the other hand, the Chinese government's support for Huawei is always long-term. Therefore, it is recommended that the Canadian government could look into providing long-term support to selective firms or businesses that are determined to have the greatest potential of contributing to the future economy and global market, in order to enable continued innovation.

### Other issues being addressed

After discussing about various innovations done by Huawei and the Chinese government, the final section of the report discusses two current issues of high relevance. The first is the U.S.-China rivalry on 5G dominance, which explains why the western countries, particularly the U.S., are so paranoid about Huawei. The second issue is about the various conspiracy theories surrounding the negative health impacts of 5G technology, such as the hypothesis of it causing COVID-19), and some preliminary scientific evidence is used to discuss and debunk some of the conspiracy theories in the last part of the report.