The Analysis of Large High-tech Corporations' Governance: Taking Microsoft as an Example

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Abstract. Artificial intelligence (AI) is having an impact on the world, including economic development, transportation and productivity, and corporate management. This article is mainly based on the American multinational technology company Microsoft Corporation. The company's management, policy, salary, technological innovation, etc. have been studied. Through relevant investigation and research, the influence and development of artificial intelligence on enterprise management have been carried out in depth. For example, companies can promote the public interest by hiring professionals in various fields. The indirect impact of AI on the labor force has changed the development prospects of enterprises. In addition, the construction of artificial intelligence has found new social markets and opportunities for Microsoft. Microsoft hopes that artificial intelligence can solve some profit problems, but whether artificial intelligence can play a long-term value, there are doubts about whether there are bad factors. Why Microsoft hasn't been affected during COVID-19. The company has used special corporate governance during COVID-19.

Keywords: High-tech corporation, governance, AI.

1. Introduction

Global large high-tech corporations have undergone significant growth recently. The corporations have occupied large percentage of the market than competitive firms. The success of large high-tech corporations is worldwide and have influence on future growth of themselves. US large high-tech corporations contain the trait of typical high-tech corporation. They emphasize internal management when different committees within the firms decide the detailed policies of corporate governance [1]. US large high-tech corporations have similar top-level architecture. The top-level architecture includes Shareholders, Board of Directors, Executive officers, and managements. Many researchers have stated that corporate governance is tightly connected to the value of the firm, but little data is presented. This paper is an exploratory qualitative study of large high-tech corporations' governance. The paper aims to explore the output of corporate management, how large high-tech corporations can improve their governance policies, and AI's influence on high-tech companies.

2. Literature Review

Some company managers are developing two kinds of corporate policies to keep AI going. One is strategic objectives. The other is ethics guidelines. In order to avoid risks caused by Al to the interests of the company. The management of the company can establish departments for Al and break down policies into specific processes that can monitor and inspect AI work. It also supports the public good. In addition, the size of the workforce and the workers have an indirect effect. Some governance tools can be solved with a large workforce. As AI affects many fields, the development of AI stops, and the labor required will gradually become smaller.

In an AI-governed corporate structure, management can develop a corporate culture of the company's AI systems. For example, talents from various fields can be hired to ensure the quality of corporate management and promote the public interest. Talent doesn't have to worry about the company's management having an influence on them. Just consider the future impact and development on the management of AI for the company. In contrast, management's acceptance of employee input indirectly affects employee behavior toward AI. In addition, AI is gradually having an impact on companies in society.

Many companies will move from competing relationships to partnerships, which should be made up of management, workers and investors. Partners can affect the reputation of an AI company as their perceptions shift and a relationship of mutual interest is reached. In addition, insurance companies can use coercive means to act in the public interest, or they can be beneficial. By analyzing the impact of AI on society, the company policies can be changed. Many large companies, such as Microsoft and Google, which already have mature technologies. It is believed that AI can help their companies maximize profits and reduce costs, as well as benefit the environment and society. During the COVID-19, AI can help a lot, such as helping companies transform faster. The main problem is that AI helps ESG/CSR projects. Microsoft is highly focused on AI technology to find new economic and social opportunities, and they hope to solve social problems through AI.

3. Analysis and Discussion

3.1. Director Compensation Policies

Board of Directors have power to appoint and fire CEOs in a firm. They can indirectly manage corporations through CEO. Documents have shown the compensation of directors in these four firms. Apple's total base salary of Directors is $350,000 consist of $100,000 in cash and $250,000 in RSUs [2]. Microsoft's total base salary of Directors is $325,000 consist of $125,000 in cash and $200,000 in RSUs [1]. Amazon's total base salary of Directors is roughly $318,000 in RSUs [3]. Adobe's total bases salary of Directors is $360,000 consist of $60,000 in cash and $300,000 in RSUs [4]. Amazon, Apple, and Adobe are in Microsoft's peer group. Microsoft's dollar value of director compensation is very close to other three firms. Hence, large high-tech corporations in the peer group have similar compensation for directors and other top-level members. The director compensation policies' purpose is to recruit the directors with the same level or higher qualities in the peer group, and to motivate directors to maximize the firm value. Some might state that director compensation policies have no real impact on a firm when most large high-tech corporations have similar compensation to companies in their peer groups. The data provided above can show that director compensation policies are important. The companies have similar compensation to compete with others. If the director compensation doesn’t have influence at all, then to maximize firm value, no firm will provide any compensation for directors. Microsoft's board is relatively busy. There are 11 directors who are also in other boards [1]. Only one director is not busy. The fraction of busy directors on the board for Microsoft is 91.7%. The high fraction of busy directors can benefit the firm based on previous research [5]. The board of directors at Microsoft are highly busy, experienced. Bill Gates who is the chairman of board and co-founder at Microsoft is famous. He guides Microsoft and makes it one of biggest tech companies worldwide. His superior ability as a director shouldn't be doubted. The quality of Microsoft's board is high. The output of director compensation is the quality of the board members.

3.2. Policies During Covid

3.2.1 Customer survey

From the perspective of product research, during the epidemic, under the national publicity, "health", "safety" and "quality" have gradually become the first factors for consumers to consider. Therefore, the top priority of product research is to understand the current consumer demand and consumption choices of consumers, after all, consumers' consumption behavior affects the future product development and design direction to a certain extent.

3.2.2 Reduction in operating costs

With the gradual embodiment and digestion of the negative impact of the epidemic, the demand side will inevitably face pressure on capital and income due to the response to the epidemic, which will have an impact on purchasing power, so enterprises must reduce operating costs to enhance competitiveness. At the same time, enterprises should strengthen supply chain management, reduce raw material costs by bonding with upstream suppliers, reduce manufacturing costs by lean production, improve the market competitiveness of products, and make long-term plans, thus bringing certain benefits to the economic development of enterprises.

3.2.3 Cash flow and profit income

If enterprises want to cope with the downward pressure of the economy, it is urgent to pay more attention to the stability of cash flow. Affected by the epidemic, in less than a month, companies such as brand Heilan Home have experienced huge pressure on cash flow. Therefore, enterprises need to adjust their financial strategies reasonably to ensure the stability of cash flow. At the same time, in the sales process, it is necessary to improve the business quality of the contract and improve the acceptance payment terms, and strengthen the payment collection efforts to ensure the positive cash flow of business activities. For cash flow, enterprises can further strengthen the forward-looking management and planning of the market, actively understand the trend of the market and the industry, tilt resources to the value market, value customers and value products, and pursue both cash flow and profit income, so as to ensure its stable development.

3.2.4. Competitor research

Various industries have been affected by the epidemic, while social production has slowed down and consumer behavior has declined, which has intensified the competition between enterprises. Therefore, in addition to understanding the needs of consumers, it is also necessary to conduct research on competitors to understand the marketing strategy and product promotion adopted by competitors during the epidemic, so as to achieve the purpose of understanding the market and competitors. After all, knowing the enemy is the only way to win. Once in the market competition at a disadvantage, it is possible to be opened up the gap, resulting in elimination.

3.2.5 Promotional activities

During the epidemic, in order to stabilize cash flow, many businesses often take promotional activities to return funds, and the discount will slowly return to normal after the epidemic is gradually stabilized. However, the epidemic has led to a decline in the income of some consumers and a reduction in disposable funds, so they prefer to buy more things with the same money in product selection. Therefore, research on promotion and service is also indispensable, which can increase profits.

For example, Ye Maozhong's brand Heilan Home, Heilan Home in February 28, 2023, new products all discount, hundreds of dollars of clothes as low as 29.9, full reduction, cost-effective, dissatisfied 7 days no reason to return, but also free freight insurance. Hundreds of answers to meet the needs of consumers, to "send charcoal in the snow", "send umbrellas in the rain", this is the most fundamental promotional strategy. That is to stimulate the potential needs of consumers in order to open the market of goods. Consumers may also surprise the publicity strategy to promote goods, in order to maintain profit growth.

Policies during Covid-19 maintained the routine function of the firm, and members of the firm were safe from Covid [6]. Microsoft is one of the big corporations first start recommending employees to work online. Microsoft had a significant increase in users of teams, Xbox games, and other software under Microsoft [6]. During fiscal 2021, the actual performance still exceeded the target performance under the influence of Covid. The number of Xbox subscribers grew 37.48% [1]. Covid brought more subscribers when people spent more time at home. Microsoft successfully maintained the service of Xbox, and gained this increase of subscribers. Microsoft's policy of maintaining Xbox production and online service, including the maintenance of servers has contributed to the increase. "Apart from various obstacles faced by students during online learning, 81.2% of respondents hoped that learning process would be continue using Microsoft Teams during the pandemic" [7]. Teams are effective learning tool and liked by students during the pandemic. The result that teams, Xbox games and other software had increase proved the policy of online working was effective. The stock price during fiscal 2021 has went down in later 2021 because of Covid. Nevertheless, the increase sales of the software prove the success of Microsoft's Covid policy. The members of Microsoft worked online contributed to the success during Fiscal 2021. The output of internal management during Covid is the sale of products of the firm.

4. AI Systems

AI has helped people a lot in their lives, and the following table describes in which ways Microsoft has helped humans. As shown in Table 1, four experts gave different answers, which are helpful to human life, extreme climate, environment and medical treatment.

Table 1. Experts' studies about human and AI

Expert	Main finding
Kursat Ceylan	Co-founder of WeWalk (a smart cane that navigates and alerts visual impaired people during their route through haptic teedback)
Dr. Anshu Sharma	Co-founder of Seeds India (Through Al and satellite imagery, people in different regions are advised or now to act during a disaster, like flood)
Dr. Denise Hardest	Dr. Hardest found a way to use Al as a tool helping in the fight against plastics degrading in the oceans.
Hadas Bitran	Developed the Coronavirus Self-Checker Bot, at first it heloed reduce the number of EB visits, but then it was also used for finding plasma donors.

Artificial Intelligence has contributed to many enterprises because "because the automation that they can leverage is just as efficient no matter where it's running geographically" [8]. Automation is publicly seen as a basic technology now and many corporations have adopted automation from machine learning system. Artificial intelligence has existed without being discovered by the public. Therefore, AI systems are important to a firm's manufacturing and management.

Artificial Intelligence in Microsoft is building deep neutral network model [8]. The model learns by itself within the data provided. The self-learning process makes the AI powerful because AI can study everything provided and have expertise in many fields. Microsoft's AI systems learn Coronavirus and help people to analyze their symptoms during Covid-19 [9]. "As AI technology progresses, interpretation can detect and guide triage and treatment of patients with high suspicions of COVID-19 but negative initial PCR results" [10]. AI systems will be able to interpretation and treat negatively tested people who have certain symptoms of Covid. This ability also applies to different diseases in the world. Humans can't treat these people because they don't have the system to analyze those who are suspicious of having the disease. It is also difficult for humans to analyze patients' symptoms because the population of Covid patients are The AI systems collect data on Covid patients and provide medical experts a data base to research on Covid. For possible future diseases, Microsoft's AI system can also play a role in helping patients and collecting data. Keven Scott, the CTO at Microsoft says that Microsoft has considering generating low-cost healthcare and high-quality healthcare [8]. It is going to be achieved by using the AI systems because the AI systems can carry out the job better than a human when disease cases increase dramatically. General knowledge about Covid-19 that many countries experience a scarcity of doctors and nurses. The AI systems can deal with millions of patients every day as long as the servers of the AI are functioning normally. Microsoft can use its brand reputation to receive patients and help them with their AI systems.

Microsoft is working on AI systems to improve internal policy through AI systems. AI can analyze Microsoft's individual member contribution to the firm. Committees within Microsoft can consider AI results and provide a more accurate compensation policy based on members' contribution.

5. Conclusion

In this paper, the study mainly talks about some policies about how high-tech corporation improve. The study takes the policies of Apple, Amazon and other large companies as examples to explain how to make progress. Among them, the director compensation policy is the main focus, and how large companies attract high-quality talents depends on money. Pay is the capital that these large companies compete with, and if the pay on one firm's side is weak compared to other companies, most talents will choose other companies rather than this company. At the same time, if there is a major event in the world, policy also needs to change with the market, such as COVID-19.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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