

How Digital Firm Go Diversification Evidence from Xiaomi

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ABSTRACT

A huge boost of digital technology has been witnessed in the modern civilization of human society. Nowadays, digital technology has already iterated to the fifth generation, 5G, and many digital enterprises come into sight and occupy an important position over the world. Moreover, after decades of development, digital enterprises must change their corporation positions to achieve long-term development. One way to achieve this goal is to adopt the strategy of digital diversification. This article focuses on the diversified process of Xiaomi Corporation (hereafter “Xiaomi”), a young and standard Chinese internet and tech enterprise, to analyse how it goes digital diversification successfully. We start the research by presenting the evolution path of Xiaomi and analyze its diversification strategies with the tool of BCG matrix. Suggestions are put forward for the future development of Xiaomi.

Keywords: digital firms, diversification strategy, Xiaomi, BCG matrix

1. INTRODUCTION

Digital firms grow rapidly and impact our business practice in a profound way. From Fortune Global 500, an annual ranking of the top 500 listed companies worldwide measured by revenue, twenty-eight companies are in the digital industry in 2010 [1]; until 2020, fifty-four companies are in that industry, about a double what it was a decade ago [2]. Digital firms are not influential for the increase of fortune but also lies in its market value. About 100 companies are digital enterprises, a fifth of the total, according to Brand Finance Global 500 2020, the list of most valuable brands in 2020, where six of the top ten companies are digital enterprises [3]. Moreover, China’s digital enterprises develop at a high speed in the past ten years. Only four companies are in the top 100 companies in China ranking by Fortune in 2010 [1], but twelve companies are in that ranking in 2020 [2]. The gap between the number of digital enterprises in Brand Finance Global 500 in 2010 and 2020 has widened-Thus, both the global and China’s digital economy and digital enterprises have developed rapidly in the past decade.

Moreover, many digital firms go through diversification to broaden their business landscape and

earn market share. To study the diversification transformation strategy of Chinese digital enterprises, Xiaomi is undoubtedly the most suitable one. Firstly, Xiaomi is one of the earliest digital enterprises first to diversify, back to 2013. Then, the influence of Xiaomi has a lot of clout in its field. According to the official website of Xiaomi, over 2000 offline stores are in China, distributed in 32 provinces of China. Besides offline stores, Xiaomi has flagship stores on China’s major e-commerce platforms, such as Tmall and JD, as well as its official website. The influence of Xiaomi is also recognized by international authorities. For example, the rank of Xiaomi in Fortune Global 500 in 2019, the first year the corporation floated on the stock market, is 468, and the second year the rank rose to 422 [4]. In addition, Xiaomi’s diversification was a success. As of March 2021, Xiaomi has a total of four categories in its product ecological chain and has staked in eight fields. The four categories are life consumables, mobile phone manufacture, intelligent hardware, and mobile phone perimeter. The companies that Xiaomi controlled involve communications, chip, technical services, electronic software, financial service, culture, game, and investment industries. The diversification strategy enables Xiaomi to establish itself in the market. This can be proved by the

corporation's assets. Even the whole world is affected by COVID-19 in 2020 and stay at the economic downturn, Xiaomi's "total revenue amounted to RMB72.2 billion, representing an increase of 34.5% year-over-year; adjusted net profit for the period was RMB4.1 billion, representing an increase of 18.9% year-over-year" for the third quarter of 2020 [5].

This article, taking Xiaomi as the research object, expounds on how a digital enterprise goes diversification. Firstly, we review the literature about diversification strategies and digital firms, for a holistic view of diversification literature and the concept of the digital firm. Secondly, we summarize the evaluation path of Xiaomi, to have a better view of how it has gone diversified. Thirdly, we use the BCG matrix tools to analyze the diversification strategies of Xiaomi. Fourthly, we put forward some advice for the future development of Xiaomi depending on the analysis at the end.

2. LITERATURE REVIEW

2.1. Diversification Strategies

In management, diversity has always been an important theme. For enterprises, the concept of diversity exists both in organization management and in the commodity market. The core of diversity comes from multiculturalism. Different groups of people have different cultural backgrounds and material conditions, so there are differences in needs [6]. The diversification strategies of different industries are different. This article focuses on the analysis of Xiaomi's product diversification strategy. The main diversification methods involved are vertical product differentiation and brand differentiation. In vertical differentiation, the company covers the market by providing product menus, by providing better quality products in higher-priced market segments and providing different prices and quality in other covered markets [7]. Davcik and Sharma [8] propose that brands can be transferred to new sub-brands or sub-brands through the premium and subsidiary value of existing solid brands, such as good quality or low prices. This is in line with Xiaomi's diversified smart home layout strategy.

Caminal [9] believes that the purpose of product diversification is to satisfy alternative consumers' preferences for products at a certain point in time and to satisfy individual consumers' tastes that change over time. For enterprises to get the best market response and profit, product diversification is also a necessary process. Under the effect of flexible market competition, companies will enter a dynamic product diversification model [10]. In order to maintain a company's competitiveness in the market and expand its market share, diversification becomes a development direction for most companies. To improve enterprises' core

competitiveness and productivity, generally speaking, enterprises carry out product diversification strategies by expanding new product categories. However, they also carry out diversification processes by refining existing products [11].

2.2. Digital Enterprise

Xiaomi is a mobile internet company from China. When investigating the types of Xiaomi companies, the author found differences in the definition of digitalization in Chinese and Western literature. In the article by Zakodaev et al. [12], digital enterprises are defined into two categories, 3.0 enterprises that assemble products in some machinery of existing companies, and 4.0 enterprises that are fully digitalized create digital products in smart factories. The main criterion for the distinction is unmanned and paperless production movements. As a company focused on smartphone manufacturing, it is difficult for Xiaomi to meet the above two definitions. However, in the majority of Chinese literature, Xiaomi's company is registered as a mobile Internet company, which provides software services such as Xiaomi Zhilian and physical mobile phones, which defines it as a digital enterprise.

In this article, the author will quote Yoo and Euchner [13] to point out that "digital technology has become part of the commodity". Most of Xiaomi's products have this attribute. Xiaomi uses mobile phones as the basis of its digital services, linking all smart products to the same platform for linkage. In the same article, Yoo and Euchner also cited the examples of iOS and apple to introduce the platform concept. Physical products are one and a half markets, while platforms are the other half of the market. The combination of products and services constitutes commodities. These companies that rely on the digital technology characteristics of real products to provide digital services are the definition of digital companies used in this article.

3. THE EVOLUTION PATH OF XIAOMI

On March 3rd, 2010, Xiaomi Technology Co. Ltd, leading by the serial entrepreneur Jun Lei and adhering to the corporation culture "just for funs", has been founded in Beijing, China. The core values of Xiaomi are faith and devotion, and the logo is "MI" which represents "mobile internet" as well as "mission impossible". In the next decade after its founding, Xiaomi devotes itself to "create remarkable hardware, software, and internet services for and with the help of our Mi fans" [14]. Currently, it positions itself as an internet company keeping the core in mobile phone, smart hardware, and IoT platform. It launches its products not only in mainland China but also in Taiwan, Hong Kong, other countries in Asia, Europe, and the Americas. Xiaomi is enlarging itself to become a global brand. Xiaomi's listing is an important event in the

years since it has been founded. On July 9th, 2018, Xiaomi Corporation has been listed on the stock main board of Hong Kong. It has created the largest tech IPO

in the history of Hong Kong Stock Exchange and, at that time, the third-largest global tech IPO in history.

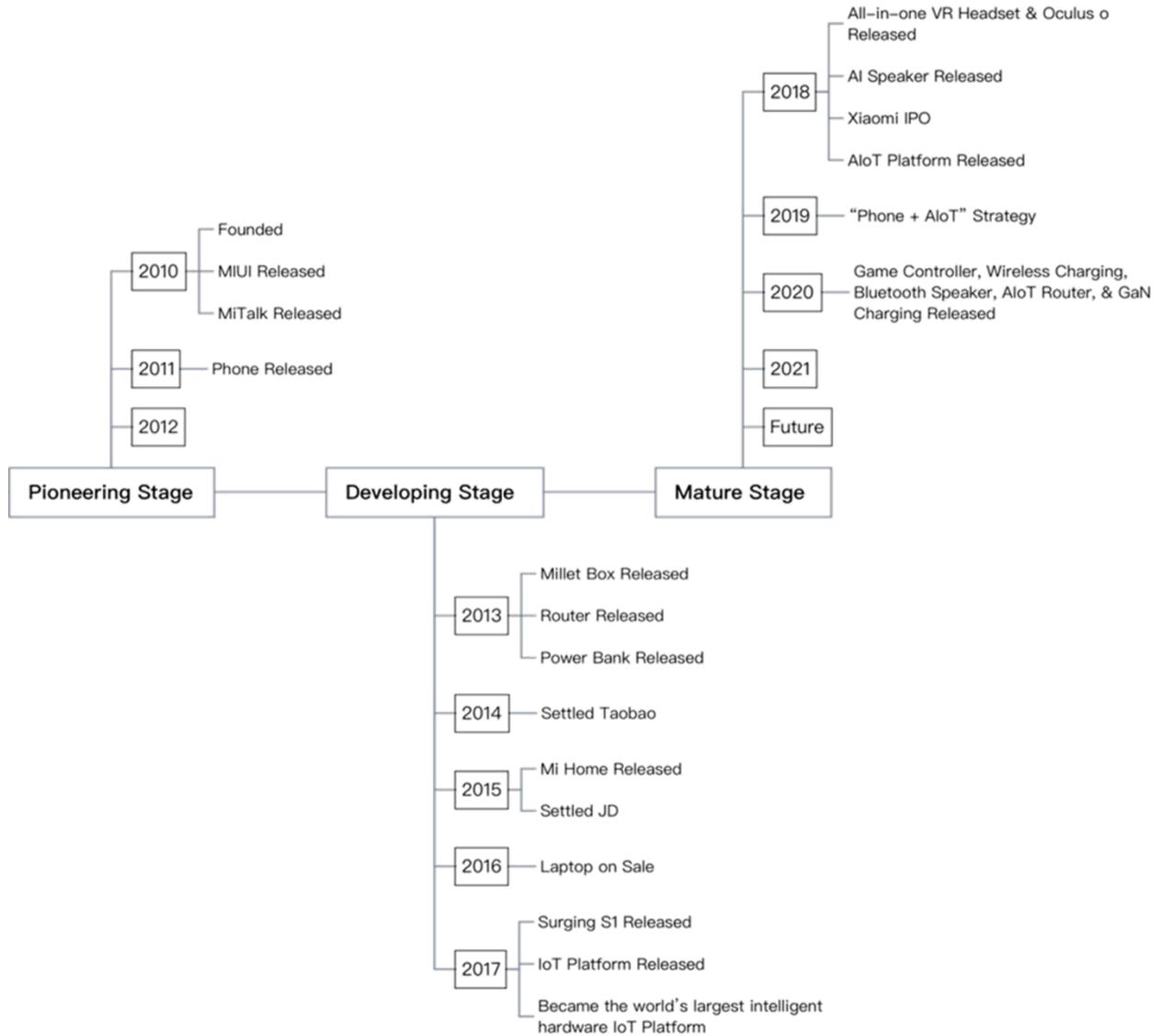


Figure 1. Three Stages of Xiaomi

3.1 Three Stages of Xiaomi

Looking at the evolution of Xiaomi, its operation can be divided into three stages---pioneer, development, and maturity---depending on the strategies and the core products. Figure 1 displays chronologically the stages, the core products, and the remarkable events of Xiaomi. For the first stage, pioneering stage, Xiaomi has focused its research and product promotions on the mobile phone industry; in the second stage, developing stage, Xiaomi has continued to launch mobile phones, as well as the products related to mobile phone and IoT at the same time; at the current stage of Xiaomi, mature stage, Xiaomi promotes mobile phone and AIoT as its main products.

3.1.1. Pioneering Stage

For the first three to four years, Xiaomi had put its focus around mobile phones. In those years, the strategy of Xiaomi was "triathlon", from applications to the operating system and finally to hardware, to create a complete chain for a mobile phone. Under this strategy, MIUI, MiTalk, and mobile phones were born, respectively representing internet, software, and mobile phone. MIUI, the operating system of Xiaomi, is the first product that the enterprise released. MiTalk is a chat application with the function of chat and voice call, for free.

In this stage, Xiaomi had accumulated enough cash flow, high-quality human resources, good reputation and

stable production and sales channels. It would fight its way into the mobile market.

3.1.2. Developing Stage

At the end of 2013, starting with the Mi Box and Mi TV, Xiaomi had formally proclaimed the transformation from a digital enterprise to a diversified enterprise. This stage was the process of “investment + incubation”. Via investing in entrepreneurial firms, Xiaomi launched the products developed by those firms on Xiaomi’s platform. In the following years, the corporation released camera, bracelet, air purifier, water purifier, and other intelligent hardware products, becoming one of the earliest companies producing a series of IoT smart home hard products. While laying out the IoT, Xiaomi developed mobile phones and the MIUI system within its own company. Not only that, but it had also made microfilms.

Xiaomi had laid out a long chain from hardware design, software development, e-commerce operation to customer service and peripheral products, which is quite a pattern of vertical integration of e-commerce. At the current stage, the blueprint of Xiaomi was through the launching of one or two series of mobile phone products to ensure the leading position in the market, then engaging in portable Wi-Fi and headset, then releasing new mobile phones, and at the same time accessing to the internet set-top box and internet television market.

3.1.3. Mature Stage

In the early of 2019, Xiaomi held its MIDC 2019 Developer Conference. The chairman Jun Lei said at the start of the conference that the company plans to launch more than 10 5G mobile phones in 2020. At the same time, under the guidance of the two-engine strategy of "mobile phone + AIoT", the core of Xiaomi’s strategy for the next five years, Xiaomi would continue to promote the next generation of "5G+ AIOT" super internet to become a part of people's life.

4. XIAOMI’S DIVERSIFICATION STRATEGIES ANALYSIS: THE USE OF BCG MATRIX

Xiaomi’s diversification is not only a strategic action of its leader – Jun Lei’s decision, but also depends on the outer environment for the following reasons. Firstly, in recent years, China’s smart phone business has gradually become saturated so that it is difficult for Xiaomi to seize a large market share in the world. Therefore, for Xiaomi, if it wants to obtain higher profits, it cannot only develop its mobile phone business but also expand its “IoT + smart phone” business to win the opportunity in the upcoming 5G and IoE era. Secondly, Xiaomi could convert many lifeless industries without paying too much money and too much supervision. Besides this, as long as

Xiaomi follows the cost-effectiveness vs. excellent design vs. intelligent Internet of Things, it could gain a good reputation and build a stronger and more interoperable Internet of Things.

Before using BCG matrix to analyze two extremely important stages (“developing stage” and “distributing stage”) of Xiaomi, it is necessary to explain the reasons why authors intend to divide Xiaomi’s diversification practices into two stages during the time from 2013 to 2020. The developing stage is from Year 2013 to 2017, in which Xiaomi has focused on deploying the Internet of Things ecosystem. During this stage, Xiaomi has continued to invest in more than 60 companies to build its own “bamboo forest ecology” to improve its own Internet of Things system and has launched a lot of new IoT related products from 2013 to 2017, for example, in 2017, it has invested and incubated more than 70 companies and launched products like Mi Band and Mi Air Purifier. Xiaomi has officially come to the market and come up with the concept of “AIoT + mobile phone” in 2018. The distributing stage is from Year 2018 to now. By making analysis on the 2018 and 2019-year financial statements of Xiaomi, it has achieved great success in the IoT related products, for example, AI audio has achieved over 38.8 million monthly active users and Xiao Ai has become one of the most active artificial intelligence voice interaction platforms in mainland China. Therefore, the strategic objective of Xiaomi is to release new products build its “bamboo forest ecology” and occupy this new potential IoT market in the developing stage as soon as possible. However, after Xiaomi has occupied a certain market share in 2018, it began to compare its products with other brands through customer feedback from 2018 to now, such as Huawei. It has come to make changes and efforts in product technology, not only making progress in the diversification, but also focusing on improving product quality and customer experience.

4.1. Xiaomi’s diversification strategy in the developing stage (2013-2017)

Table 1. The BCG matrix analysis of developing stage business

Star: Xiaomi Mix Mobile phone/ Red Mi mobile phone	Question: Xiaomi Notebook/ Xiaomi TV/ Xiaomi Bluetooth Speaker/ Xiaomi Bluetooth Headset/ Xiaomi Power Strip/ Water Purifier/ Air Cleaner
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Cash Cow: Xiaomi mobile phone/ Xiaomi box/ Xiaomi piston headset/ Xiaomi mobile power/ Xiaomi router	Dog: Xiaomi mobile phone2/ Xiaomi mobile phone1/ Xiaomi mobile phone 2A
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4.1.1. Star

RedMi mobile phone and Xiaomi Mix phone were both newly released or launched products of Xiaomi in the developing stage, which had the potential for rapid development. Based on information from the third-party websites, Redmi mobile phone and Xiaomi Mix mobile phone had high sales and high market growth rates, for example, the Redmi mobile phone won the first single product sales in 2016 and the Xiaomi Mix mobile phones had over 300 million sales volumes when it first launched in 2017.

4.1.2. Cow

As old mobile phones were released before, previous Xiaomi mobile phones did not have a high market share like new mobile phones. But due to the excellent performance recognized by consumers and lower price than the latest mobile phone types, these kinds of mobile phones could provide a stable source of cash. Similarly, the IoT products produced by Xiaomi during the developing period did not increase as much as before but provided stable sales volume for Xiaomi, for example, Xiaomi’s Piston headset sales have reached 13 billion which was an extremely high sales volume in 2015.

4.1.3. Question

IoT products of Xiaomi launched these products in the early stage of building the IoT ecosystem. The main release time of these products is concentrated between Year 2016 and 2017. At this time, Xiaomi was focusing on building its own Internet of Things ecosystem, cooperating with more than 200 companies to build Products with the Xiaomi trademark. However, the technology of these products is not ???, so there are still certain problems. There is a lot of room for market growth, but the share is not as high as Xiaomi and Redmi phones. These products of Xiaomi are launched in the early developing stage of diversification strategy. As soon as the products are launched, the sales of several types were very high. Although the sales growth was very high, such as the sales of Xiaomi TV and Bluetooth headsets, the market share was not as high as the sales growth. As a result, these products are problematic products. Xiaomi should continue to innovate in technology for such products.

4.1.4. Dog

These types of product have very low sales during the developing stage of Xiaomi and the market share were also very low in the mobile phone market. For example, the first mobile phone of Xiaomi to Xiaomi 1, was once the highest sales product of Xiaomi, but until at the end of 2017, Xiaomi mobile phone 6 has been released. The previous generations of Xiaomi mobile phones are being eliminated by the mobile phone market and consumers.

4.2. Xiaomi’s diversification strategy in the distributing stage (2018-2020)

Table 2. The BCG matrix analysis of distributing stage business

Star: Xiaomi 10 mobile phone/ Xiaomi ice-sealed cooling back clip/ Black Shark custom double-wing gamepad/ vertical air-cooled wireless charging/ Xiaomi wireless Bluetooth charging Bluetooth speaker/ Xiaomi AIoT router/ Xiaomi GaN charging head.etc	Question: Xiaomi notebook/ Xiaomi Mix phone
Cow: Redmi mobile phone series / previous Xiaomi mobile phone series / Xiaomi box / Piston headset / mobile power / router	Dog: Xiaomi mobile phones that no longer appear on the market

4.2.1. Star

In the distributing stage, the star products of Xiaomi are IoT products and daily necessities. These kinds of products have high sales and high growth rates in the market. As Xiaomi’s research and development costs have increased year by year, IoT products will gradually become Xiaomi’s new development direction. Xiaomi will invest more in IoT products companies in the future, making IoT and daily necessities as a cash cow. According to the financial statement in 2018, Xiaomi’s IoT product revenue increased by 189% year-on-year. Based on another financial statement in 2019, the revenue of IoT products and consumer goods has reached 62.1 billion yuan, which also has the greatest increase growth rate (41.7%) among all kinds of products of Xiaomi. IoT and the daily necessities of Xiaomi have become the star product with the highest sales in the market.

4.2.2. Cow

This kind of products of Xiaomi has gradually existed in a mature market and occupied a relatively large market share. However, the market gradually became saturated, these kinds of products did not have a high growth rate compared with the previous products, such as Xiaomi routers and power banks, etc. Since it was launched in the developing stage, it has occupied a large market share, for example, the Xiaomi mobile power bank has been widely praised by consumers since 2013 and its sales volume exceeded 100 million yuan in 2019.

4.2.3. Question

The Xiaomi Mix phone launched by Xiaomi is a high-end mobile phone model. However, when it was first launched in 2017, the sales of Xiaomi Mix 1 were very high. Since Huawei and other mobile phone manufacturers have also launched similar high-end business models in 2018, the sales and growth rates of Xiaomi Mix series are affected. Inferior to other mobile phone manufacturers, sales of Xiaomi Mix mobile phone series are affected, for example, the sales of Xiaomi MIX2s are significantly lower than the same type of Huawei and vivo models in the same period on T-mall platform in 2018.

Although Xiaomi achieved the top sales of various Xiaomi notebooks on Double Eleven in 2019, the market share of Xiaomi notebook is lower than before, for example, using the sales data Huawei to make a contrast with Xiaomi notebook. According to data in the first quarter of this year, Huawei's notebook computer shipments were 550,000 units, with a market share of 16.9%, ranking second only to Lenovo in the domestic PC market. Xiaomi's notebook computer shipments are 160,000 units, and the market share is only 5%, which is less than one-third of Huawei's. Xiaomi notebook series become question products in the distributing stage.

4.2.4. Dog

Xiaomi has launched a lot of mobile phone products in the developing and distributing stage from 2013 to now, such as Xiaomi mobile phone 3. The previous generations of Redmi phones and some IoT products have been updated. The sales of previous Xiaomi mobile phones are very low, and the previous mobile phone sales growth rate is close to 0. Hence, products that no longer appear on the market are the dog-type product of Xiaomi.

5. CONCLUSIONS AND IMPLICATIONS

This article summarizes the development of the history and diversification strategy of Xiaomi in the past ten years. It uses the Boston matrix to analyze the existing business types of Xiaomi to estimate the effectiveness and market potential of Xiaomi's diversification strategy.

The purpose of the research is to explore the successful driving factors of Xiaomi's diversified transformation and give other companies, especially companies in similar industries with Xiaomi, some thinking.

The most critical part of Xiaomi's diversification strategy is that Xiaomi will rapidly build a hardware ecosystem through investment and value co-creation with start-up companies. This method reduces the cost of the design link in the manufacturing chain to a lower level, allowing Xiaomi to occupy the market with many different types of products quickly. The advantage is that it can spread the product line horizontally and occupy different types of markets. The disadvantage is that there may be too many homogenized products. Other companies need to consider whether the market's competitive environment already has products with the exact positioning when implementing horizontal strategies like Xiaomi.

Xiaomi's fan culture also provides a driving force for the success of Xiaomi's diversification strategy. The phenomenon of discussion and community culture brought about by Xiaomi's fan circle has enabled Xiaomi to quickly produce products that meet customer needs and optimize products based on customer feedback in a timely manner. This adds a high degree of stickiness to the relationship between Xiaomi's customer base and the company and reduces the possible loss of customers during the diversification strategy transformation. The phenomenon of Xiaomi's fan culture has also brought long-term stable cash inflows to the company. Xiaomi's fan culture cannot be fully copied, so other companies should not imitate it. However, the cultural atmosphere between Xiaomi and consumers can be simulated by other companies. A good communication atmosphere can allow brands to form "fans" similar to Xiaomi. The idol effect it brings will increase consumers' loyalty to the brand and enhance the brand value.

As the Chinese smartphone market is gradually becoming saturated, a market related to the development of the Internet of Things have become the next stage's primary competitive one. For Xiaomi, the early deployment of IoT-related industries in its strategic diversification strategy will help Xiaomi gain a significant advantage in the next competition. It can be seen from the Boston matrix analysis that Xiaomi has always placed its most significant mobile phone business in two business positions, which not only guarantees its own cash inflow at this stage but also reacts in advance to future market development trends. This method allows Xiaomi to seize the market in advance and modify the product promptly based on market reactions, without affecting most businesses' cash inflows. While ensuring that the existing cash cow business is not affected, the market's advanced layout can help companies better adapt to the future market.

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