



COMPARATIVE ANALYSIS OF HUAWEI'S STRATEGY: FROM THE US BAN TO NEW MARKET OPPORTUNITIES

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Abstract

This paper focuses on analysing Huawei's strategy from one year prior to the US-imposed bans until 1 June 2024. The topic's relevance lies in assessing how large technology companies adapt to global challenges, particularly in the face of sanctions, technological restrictions, and emerging market conditions. The main objective of the research is to examine Huawei's strategic decisions, notably its entry into new markets (India, Africa, Europe), product diversification, and technological innovations. The tasks include a comparative analysis of approaches to different regions, assessing the impact of sanctions on the company's operations, and evaluating its adaptation strategies. To achieve these goals, comparative analysis, critical review of sources, and statistical data were employed. The article also examines the impact of technological restrictions and reputational challenges on the company's market position and Huawei's competitive struggle with other global industry leaders, such as Samsung and Apple. The research allows conclusions to be drawn regarding the appropriateness of Huawei's decisions in the context of external constraints and the prospects for the company's further development.

Keywords

Huawei, Market entry strategy, Technological restrictions, Innovations, Reputational challenges, Competitiveness, Market diversification.

Problem statement

Huawei, one of the leading technology manufacturers in the world, faced significant challenges after imposing restrictions on its operations in the United States. The ban on supplying its products and technologies to the US and revoking its license to use Google services considerably impacted Huawei's business. This necessitated a review of the company's strategy and searching for new opportunities in emerging markets such as India, Africa, and Europe. Given these circumstances, it is essential to examine how Huawei has adapted to the new conditions and what changes have occurred in its strategy.

Relevance of the chosen topic

The study of Huawei's strategy is highly relevant in the modern global market, where political and economic restrictions can significantly affect the operations of large international companies. Analysing Huawei's

adaptation methods to the challenges posed by the ban will provide insights into how technology companies can remain competitive in the face of increasing risks. It also has implications for the study of international management and practices that other companies can employ in similar situations.

Analysis of recent research and publications

Numerous academic papers have emerged that have analysed Huawei's strategy under restrictions in recent years. Research published in Google Scholar highlights the importance of technological innovation and adaptation to new market conditions. Statistical data from the UN and Statista indicate the growing demand for technology in India and Africa, making Huawei promising in these regions. At the same time, studies point to reputational risks associated with the company's operations in Western countries, emphasising the need for a strategic approach to entering new markets.

Purpose of the article

This research aims to evaluate how Huawei has adapted to global challenges, particularly the ban on its operations in the United States. The tasks of the article include analysing strategies for entering new markets in India, Africa, and Europe, as well as assessing the technological constraints and reputational issues the company has faced.

Presentation of the main research material and results obtained

By 2019, Huawei was leading in the global smartphone and telecommunications equipment market. The company expanded its presence across various continents, mainly Europe, Asia, and Africa. Thanks to innovative technologies and competitive prices, Huawei became the second-largest smartphone manufacturer globally, second only to Samsung and surpassing Apple (Counterpoint Research, 2019). The company's success was driven by significant investments in research and development (R&D), allowing it to introduce new technologies faster than its competitors.

By 2019, Huawei had emerged as a frontrunner in the telecommunications equipment market, actively shaping the evolution of 4G networks and gearing up for the 5 G revolution. This strategic positioning made Huawei a pivotal force in the development of global telecommunications infrastructure, particularly in emerging economies (Gartner, 2019).

One of Huawei's most significant technological achievements was the introduction of innovative solutions in 5G technology. The company invested billions of dollars in research and development (R&D), particularly developing new communication standards. In 2019, Huawei held one of the world's largest portfolios of 5G patents (European Patent Office, 2019). This gave the company a strategic advantage in the global market, especially in countries actively implementing new communication standards.

Huawei's ascendancy in the 5G arena was significantly bolstered by its partnerships with numerous global telecom operators. It emerged as a key supplier of 5G equipment for many countries in Europe, Asia, and Africa (GSMA, 2020). However, this strong market position also led to political tensions, particularly in its relations with the United States, which became one of the factors contributing to the imposition of sanctions.

Before the sanctions, Huawei had been actively trying to establish a foothold in the US market, where local and South Korean manufacturers such as Apple and Samsung dominated. The partnership with Google allowed the company to use the Android operating system for its smartphones, a crucial factor in its global success. However, due to political and economic restrictions, Huawei remained relatively closed to the US market. Despite its significant technological potential and aggressive expansion strategies, Huawei could not secure a significant market share in the US because of numerous governmental barriers (Statista, 2020).

The political tensions between the US and Huawei escalated due to accusations of espionage and threats to US national security. US government officials expressed concerns that Huawei's equipment could be used for spying by the Chinese government (Reuters, 2018). Initial restrictions on the company were introduced as early as 2018, but large-scale sanctions were imposed in 2019 when the US banned American companies, including Google, from collaborating with Huawei. As a result, Huawei lost access to critical technologies and software, such as Google Mobile Services, which significantly impacted its position in the global market (Forbes, 2019).

The sanctions imposed by the US government in 2019 significantly affected Huawei's ability to continue its growth in the global market. One of the most painful losses for the company was being deprived of the license to use Google Play Services, a critical component of the Android operating system that powered most of Huawei's smartphones. Without this access, the company could no longer sell smartphones with popular apps such as YouTube, Gmail, and Google Maps, drastically reducing the competitiveness of its products outside of China (Counterpoint Research, 2020).

In addition, the sanctions prohibited American companies from supplying Huawei with crucial technologies, including semiconductors and microchips. The lack of access to high-tech components, critical for manufacturing modern smartphones, telecommunications equipment, and other devices, severely limited the company's capabilities. Specifically, the American chip manufacturer Qualcomm ceased supplying its microprocessors to Huawei, further exacerbating the problem (Statista, 2021).

One of Huawei's most significant responses to the US sanctions was the development of its operating system, HarmonyOS. The company announced the launch of this system in 2019 as an alternative to Android. HarmonyOS was designed as a universal platform for various types of devices, including smartphones, tablets, smartwatches, and home appliances (Huawei, 2020). Although the initial rollout was challenging due to user distrust and an underdeveloped app ecosystem, by 2024, Huawei had significantly improved its platform, attracting many developers and partners.

Another crucial step the company took was developing its own semiconductor solutions through its subsidiary, HiSilicon. Huawei began investing in its chip research and production to reduce its dependency on American suppliers. For example, the Kirin chipset, developed by HiSilicon, became one of Huawei's first commercial solutions to ensure autonomy in producing smartphones and other devices. However, the production of these chips was complicated by US restrictions, which prohibited access to the most advanced technologies for chip manufacturing (Reuters, 2021).

The sanctions impacted Huawei significantly, both economically and reputationally. The company lost a

substantial share of the global smartphone market. In 2020, its smartphone sales dropped by 42% compared to the previous year (IDC, 2020). This sharp decline in sales led to the need to reduce production and revise its global expansion plans. Specifically, the European and Indian markets became less of a priority for Huawei due to its strong dependence on Google Play Services and access to American technologies.

Regarding the reputational consequences, Huawei suffered from associations with possible espionage activities, which were widely reported in the media and international forums. Although the company repeatedly denied any involvement in espionage, restrictions imposed by several countries, including the US, the UK, and Australia, negatively affected its image as a reliable supplier of telecommunications equipment (BBC, 2020).

After the implementation of sanctions against Huawei, the company sought new markets for expansion, particularly in countries where its technologies were in demand and the political climate did not create additional barriers. Huawei focused its attention on India, Africa, and Europe. The company applied different approaches and strategies in each of these regions to overcome challenges and strengthen its presence.

India is one of the largest smartphone markets in the world, with enormous growth potential, making it strategically crucial for Huawei. Given that a significant portion of the Indian population is young and seeks affordable technological solutions, Huawei has tried adapting its products to the Indian market (Statista, 2022).

Considering the specific characteristics of the Indian market, Huawei actively worked on creating budget smartphone models aimed at mass consumers. In addition, the company formed strategic partnerships with local telecommunications operators to provide high-quality telecom services. For example, Huawei collaborated with Bharti Airtel and Reliance Jio to expand its products and services in India (Economic Times, 2020).

In India, Huawei faced intense competition, particularly from local brands and international giants like Xiaomi and Samsung. Xiaomi, in particular, held leading positions in the budget smartphone market, putting additional pressure on Huawei (Counterpoint Research, 2021). Furthermore, political tensions between India and China affected Huawei's reputation in this region, partially losing consumer trust.

Africa became a critical region for Huawei due to its significant need for telecommunications infrastructure development. The company invested substantial resources in infrastructure projects to develop 4G and 5G networks across the continent. For instance, in Nigeria and South Africa, Huawei collaborates with local telecommunications companies to build modern networks (Reuters, 2021).

Huawei has established itself as a critical partner for African governments in implementing modern technologies. The company actively collaborates with governmental bodies in countries like Kenya and Ethiopia to ensure technological development. For example, in Kenya, Huawei participated in the "Smart City" project, which includes integrating intelligent systems into urban infrastructure (BBC, 2021).

The African market has proven less sensitive to geopolitical challenges, allowing Huawei to strengthen its position as a leading telecommunications equipment supplier. The company provides network solutions and technologies for digitalizing the economy and implementing innovative governance solutions in countries (Statista, 2021).

Despite restrictions imposed by several European countries due to pressure from the US, Huawei continued to operate actively in European markets, particularly in Germany and France. The company sought to expand its 5G network segment presence, offering high-quality and cost-effective solutions to local telecommunications operators (Politico, 2022).

However, political pressure on Huawei from the governments of the UK, Norway, and several other EU countries negatively impacted the company's opportunities. For instance, in 2020, the UK government announced the gradual removal of Huawei equipment from the national 5G network due to security concerns (The Guardian, 2020).

At the same time, Huawei continued to collaborate with European companies in various sectors, particularly in software and services. Critical partners for Huawei included companies like Vodafone and Deutsche Telekom, which remain interested in Huawei's technological solutions for network infrastructure development (Deutsche Telekom, 2021).

Reputation challenges played a crucial role in Huawei's future development, especially given international politics and accusations of espionage. The 2019 US sanctions severely restricted Huawei's access to vital Western technologies. The company lost the ability to collaborate with semiconductor suppliers like TSMC and access to Google Play Services, which was critical for its smartphones targeting international markets (Reuters, 2021). Semiconductors became one of the most significant challenges, as Western companies controlled the majority of advanced chip supplies. This became particularly evident after TSMC stopped producing chips for Huawei (Statista, 2021).

In response to these technological restrictions, Huawei focused on developing solutions to reduce its dependence on Western companies. One of the company's most prominent projects was creating the HarmonyOS

operating system, designed to replace Android. While HarmonyOS was initially developed for IoT devices, it was later adapted for smartphones, allowing Huawei to continue operating in markets where Google Play was unavailable (Counterpoint Research, 2021). Additionally, Huawei Mobile Services (HMS) was developed to replace Google Play Services, and it included its app store, AppGallery, enabling the company to remain competitive globally.

Huawei has also invested heavily in developing its semiconductor solutions through its subsidiary HiSilicon, which designs Kirin processors. Although HiSilicon's manufacturing capabilities were limited by sanctions, the company sought to invest in domestic chip production to ensure a stable product supply (South China Morning Post, 2022). Huawei continued its innovations in 5G technology, providing network solutions to countries that did not join the US sanctions.

Despite significant challenges, Huawei managed to partially offset its losses by developing proprietary technological solutions. HarmonyOS and HMS gained popularity in the domestic Chinese market and in some regions where Google Play support was not crucial. However, competition with other manufacturers, such as Samsung and Xiaomi internationally, has become a significant barrier to Huawei's further growth (IDC, 2022). While innovations were successful in certain regions, the overall impact of the sanctions on the global market remained significant.

For many years, Huawei faced accusations of espionage and collaboration with the Chinese government, which worsened its reputation on the international stage. The leading cause of the conflict was the US accusations that Huawei's equipment could be used for spying on users, mainly through the deployment of 5G networks. This led the US and its allies, including the UK and Australia, to ban Huawei equipment in their telecommunications networks (The Guardian, 2020).

Accusations of espionage and political tensions created significant obstacles for Huawei in the international market. For instance, the US government attempted to persuade its allies, including EU countries and those in Africa, to cease cooperation with Huawei in the field of 5G technology. Some countries, like the UK, have made strict decisions to ban Huawei's equipment, while others, such as Germany, have adopted a more flexible approach and continued their collaboration (Politico, 2021). In African countries, Huawei managed to maintain its reputation, as its infrastructure projects remain critical for the region's economic development.

To restore the trust of the international community, Huawei actively employed communication strategies to increase the transparency of its operations. The company sought to demonstrate its independence from the Chinese government through public statements and international conferences. Specifically, Huawei regularly held open discussions at international forums where it shared information about its activities and security standards (Bloomberg, 2021). Additionally, Huawei collaborated with independent cybersecurity experts to conduct audits of its products.

Beyond technical and political measures, Huawei also engaged in social responsibility and ethics initiatives. For example, the company funded educational projects in Africa, including training programs for information technology specialists (Huawei, 2022). This allowed Huawei to strengthen its position in regions where technological development was crucial and partially restore its reputation through active participation in community projects.

In the global smartphone market, Huawei faces serious competition from giants like Samsung, Apple, and Xiaomi. For example, Samsung maintains its leading position in the global market due to its innovative solutions in the premium product segment and its substantial presence in developing markets such as India and Africa (IDC, 2023). Apple also remains a strong player in the premium segment, particularly in Europe and the US, where its ecosystem of apps and services attracts loyal customers (Counterpoint Research, 2022).

Xiaomi has established itself in the budget smartphone segment, particularly in India and Africa, where device pricing plays a crucial role. Huawei has attempted to stay competitive through its innovations in 5G and IoT; however, sanctions have significantly restricted its access to critical components and technologies, weakening its competitiveness (Reuters, 2023).

In India, Huawei has faced intense pressure from Xiaomi and Samsung, which have adapted their products to local needs by offering a wide range of budget models. Furthermore, India's domestic policies to develop local manufacturers have created additional challenges for Huawei (Bloomberg, 2022). In Africa, the company has maintained its leadership position in the telecommunications equipment sector, but competition in the consumer devices segment has increased due to Xiaomi's aggressive strategy.

In Europe, Huawei's situation has been more complex due to US pressure, which has led some EU countries to abandon its 5G equipment. Nevertheless, the company has continued to collaborate actively with certain European partners in telecommunications and software, allowing it to partially maintain its market positions (Politico, 2023).

The sanctions imposed have had a significant impact on Huawei's global standing. The loss of access to American technologies, including chips and software, has severely weakened its competitiveness, particularly in the premium segment (Table 1, Table 2). In response, the company has shifted its focus to budget and mid-range models, which are in demand in developing countries (Table 3), such as Africa and some Asian countries (Statista, 2022). Sanctions have also complicated collaboration with international suppliers, forcing Huawei to seek alternative ways to develop its products

Table 1: Comparative Analysis of Huawei's Strategies.

Direction	Strategies Before Sanctions (2012-2018)	Strategies After Sanctions (2018-2024)
Smartphones	Market share expansion in Europe, Asia, and North America through innovative technologies and aggressive marketing	Reducing dependence on American technologies, focusing on markets in Asia and Africa, and developing proprietary operating systems (HarmonyOS)
Telecommunications Equipment	Investments in partnerships with local operators and active participation in tenders for the deployment of 4G and 5G networks	Focus on alternative markets, particularly in Africa and Latin America, with limited influence in Europe due to sanctions.
Investments in R&D	Significant expenditures on research and development, focused on 5G technologies, artificial intelligence, and IoT.	Review and redirect investments in internal technologies, reduce external dependency, and focus on chip development.

Table 2: Comparative Analysis of Huawei's Strategies by Activity Areas.

Direction	Parameter	Strategies Before Sanctions (2012-2018)	Strategies After Sanctions (2018-2024)
1	2	3	4
Smartphones	Advantages	High competitiveness, increased sales, innovations	Development of proprietary technologies, new markets, reduced dependency
	Disadvantages	High competition, dependence on American technologies	Limited access to international markets, reputation risks
	Risks	Risks of sanctions, decline in smartphone demand	Political risks, changes in international politics
Smartphones	Opportunities	Expansion into new markets, growing demand for new technologies	Partnerships in new regions, innovations in proprietary operating systems
Telecommunications Equipment	Advantages	Leadership in the 5G market, strong partnerships	New markets, focus on developing local partnerships
	Disadvantages	Dependence on large contracts	Reduction of orders from Europe, risk of losing technological advantage
	Risks	Competition with other manufacturers, political risks	Changes in legislation, market fluctuations.
	Opportunities	Expansion into emerging markets	Investments in localization of production, partnerships with governments
Investments in R&D	Advantages	High level of innovation, attracting talented personnel	Reduction of dependence on Western technologies
	Disadvantages	High research costs	Reduced budgets due to export restrictions
	Risks	Risk of failure in new technologies	High pressure on internal resources, security risks
	Opportunities	New technologies, partnerships	In-house development of new

		with universities	chips, alternative technologies
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Table 3: Comparative Analysis of Major Markets.

Strategies Before Sanctions (2012-2018)	Strategies After Sanctions (2018-2024)
USA, Germany, United Kingdom, India, Canada	India, African countries, Latin America, China, Russia

Despite the sanctions, Huawei has achieved some success in developing markets. The company continued to play a vital role in building telecommunications infrastructure in Africa, particularly in deploying 4G and 5G networks (CNBC Africa, 2023). In India, Huawei focused on budget models; however, due to intense competition from Xiaomi and Samsung, its market share remained limited.

In Europe, the situation was mixed: while some countries, like Germany, continued to cooperate with Huawei, others, like the United Kingdom, succumbed to pressure from the U.S. and rejected its equipment. Nevertheless, Huawei managed to retain some market presence through partnerships with local players and adapting its products to regulatory requirements (Financial Times, 2022).

Huawei partially offset losses from sanctions by expanding into new markets, such as Africa and some Asian countries. Market diversification became necessary to maintain competitiveness, especially amid political pressure from the U.S. and its allies. However, sanctions restrict Huawei's opportunities in developed markets like Europe and North America (IDC, 2023).

Given the current situation, Huawei will continue to seek ways to strengthen its position in developing markets, particularly in Africa and Asia. However, the company faces significant challenges without access to Western technologies and in light of ongoing pressure from competitors such as Samsung and Xiaomi. The prospects for growth in the global market will depend on the success of its innovations, such as HarmonyOS and its semiconductors, as well as the potential for reduced political pressure in the future (Bloomberg, 2023).

Conclusions

The comparative analysis of Huawei's strategies before and after the imposition of sanctions leads to several key conclusions. Strategies employed prior to 2018 were based on aggressive market share expansion through product innovations, active partnerships with local operators, and substantial investments in research and development. This approach allowed the company to become a leader in the smartphone and telecommunications equipment markets; however, its dependence on American technologies and political risks threatened its stability.

After introducing the sanctions, the company had to adapt its strategies to reduce dependence on Western markets and technologies. Notable was the redirection of investments toward developing proprietary technologies, including the HarmonyOS operating system, and a focus on Asian and African markets. Despite numerous challenges, Huawei has the opportunity to develop new partnerships, localize production, and concentrate on innovations in internal technologies.

Future research prospects in this area may include a more detailed analysis of the impact of sanctions on the technology market as a whole and studying consumer reactions to Huawei's new products under limited access to international markets. Additionally, it is worth paying attention to the evolution of global policies regarding technology companies and their potential impact on the strategies of other market players. Such studies can help understand how companies adapt to new challenges and opportunities in a dynamically changing business environment.

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