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**GROUP PART**

SAMSUNG ELECTRONICS: NAVIGATING COMPETITIVE WATERS OF THE SMARTPHONE INDUSTRY IN 2023

**INDIVIDUAL PART**

CONDITIONS OF THE INTERNATIONAL SMARTPHONE MARKET – ANALYSING THE U.S. MARKET

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**Abstract**

This paper presents a case study of Samsung Electronics' position in the global smartphone industry in 2023, incorporating macroeconomic trends and changes in the competitive landscape. An analysis of the smartphone industry and company follows, along with aspects of Samsung's unique internal resources and capabilities, leading to its sustainable competitive advantage and granting the corporation its superiority in the global context. Additionally, Samsung's regional presence in the U.S. is evaluated, streamlining the tailored strategic decisions in one of Samsung's most important market and extracting opportunities to strengthen their positioning further, aiming at long-term value maximisation.

Keywords: Competitive Strategy, Corporate Strategy, International Business, Sustainable Competitive Advantage, Smartphone, Samsung, Global Competition, Technology

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## Group Part – Case Study

### The beginning of a new era for Samsung Electronics

A renounced tech company rarely adopts a new competitiveness strategy that inherits slimmer profit margins, changing its trajectory from an established cost reduction path. However, Han Jong-hee, CEO[1] of Samsung Electronics and chief of the Device eXperience (DX) division, announced that exact move in a senior management meeting on the 5th of January 2023. Who would have thought that the once modest producer of basic goods, turned titan of the global consumer electronics arena, could possibly become the epitome of premium?

In late 1969, Samsung entered the electronics industry with the establishment of Samsung Electronics (Samsung). Since its early beginnings, the company has boasted a diverse range of products and services, spanning from semiconductors and telecommunications equipment to consumer electronics and digital media technologies. The wide-ranging portfolio underlines Samsung's ability to adapt and thrive in various sectors, solidifying its status as a technology leader in the global market. The company marks an impressive $234bn of revenue in 2022, whereby its Mobile eExperience (MX) Business contributed significantly (Exhibit 1). In 2023, Samsung Electronics stands as a formidable force in the global business landscape, securing the 14th spot on the Fortune Global 2000 List – a testimonial to the company's impressive journey of growth and innovation.

With a global market share of 20%, Samsung is a leading smartphone player in Q2 2023 (Exhibit 2).

[1] Samsung Electronics has a two-top CEO system consisting of Han Jong-hee, vice chariman and Co-CEO of the device experience division (DX), and Kyung Kye-hyun, Co-CEO of the device solution division (DS). Both are responsible for consumer products like smartphones, home appliances and semiconductors (Byung-Yeul 2023). For simplicity matters Han Jong-hee is addressed as the CEO, excluding Co without further meaning.

However, different economic and political circumstances worry Jong-hee as the question of how long the company will sustain its superior performance remains, understanding that a competitive advantage is not granted forever. This is a harsh reality as the persistent competition from Chinese players offering comparable, innovative technology at a fraction of the price has started to erode the once solid loyalty of Samsung's customers.

Jong-hee taps his fingers on the latest Galaxy S23 Ultra as he reviews the newest financial results of a sluggish 2023, graphs showcase the relentless competition from Chinese firms, each striving to chip away at Samsung's market share. Now, six months later, with the results of Samsung's second quarter, Jong-hee must ask himself if going premium is the right choice under current market conditions and Samsung's brand. Is Samsung making the right strategic choices as emerging players make great strides at low costs and Apple prevails as a premium leader? Where else could the future move the South Korean tech giant? In navigating these complex market dynamics, what strategic manoeuvres should Jong-hee consider to ensure that Samsung maintains and strengthens its position in the global smartphone market?

**Brief History of the Global Smartphone Industry**

Today, smartphones are indispensable for telecommunication and the efficient accomplishment of tasks such as emailing, messages, videos, or online purchases throughout the day. Smartphones have been omnipresent and have become the world's quickest-selling devices, with over 1.23bn in shipments in 2022 (Exhibit 3). Over the past two decades, the smartphone industry has undergone a transformative journey shaped by rapid technological developments, evolving consumer preferences, geopolitical influences, and shifting market dynamics.

In 1994, the smartphone industry was born when IBM launched the first smartphone under Simon's Personal Communicator in the U.S. market. Features like the first early-stage touchscreen, the capability to send and receive e-mails, and other built-in programs, later called Apps, made the device revolutionary, setting a significant milestone in mobile technology.

However, it did not garner much success, with a battery life of merely an hour, a price tag of $899 and the absence of mobile internet connectivity during that era.[2] Soon, other technology companies started to launch their products on the new market. At the same time, only the most innovative would later stay and succeed in the industry: Nokia was among the first companies to provide internet connectivity, allowing users to browse the web and play games on their mobile devices. Blackberry catered mainly to the business segment with its integrated keyboard.

Apple's iPhone 3G launch in 2007 became the defining technological milestone of the early 21st century. By introducing their operating system (OS) iOS to their first smartphone, Apple popularised the concept of an integrated mobile ecosystem, providing a unique and cohesive user experience. With its intuitive user interface, consumers could now use cloud storage that syncs and stores data across devices, leading to an integrated experience designed to work seamlessly between their different devices.[3] The later introduced App Store is to this day a pivotal element of iOS, with an extensive library of apps, altering software access and development forever. This approach has set Apple apart in the technology industry, creating a loyal user base and influencing how other companies approach their device and service ecosystems.[4] However, Samsung followed Apple's lead by joining forces with Google to integrate the Android OS to its ecosystem. The first Galaxy S series device launched in March 2010, marked the beginning of Samsung's journey in the smartphone industry (Exhibit 4). Allowing Samsung to quickly become a significant player in the smartphone industry, following and adapting the newest technologies, competing effectively with Apple's innovations, and thus, leading the smartphone market since 2012 (Exhibit 5). However, since

[2] (Tweedie 2015)
[3] Consumers ability to obtain Software easily via apps unlocked new functions for the daily use of the smartphone, adding value outside of simple communication and making them the necessity that they are today. Pushing hardware innovations as sophisticated apps require high resolution screens as well as improved processors and cameras to unlock their full potential.
[4] (Apple 2007)

2014, rising market saturation in North America and Western Europe significantly strengthened Apple's market position, enabling the company to regain its lead over Samsung after eight quarters (Exhibit 5). Moreover, the increasing competition from Chinese manufacturers in the low-mid-price segments emerged as a significant challenge for Samsung, positioning the company between the premium dominance of Apple and the emerging cost leadership of Chinese competitors.[5] Emulating Samsung's strategy, these firms improve and refine existing products to create their versions faster and cheaper.

However, adapting to changing market dynamics is crucial due to the fast-paced environment with continuously rising new competitors.[6] Nothing has changed in this respect: In 2021, LG Electronics could not withstand these pressures and ultimately exited the global smartphone business.[7]

*The Rise of China*

With China's entry into the World Trade Organization in 2001, the U.S.-China trade relationship saw significant growth and has been beneficial for both U.S. and Chinese consumers and businesses. However, manufacturing job losses in the U.S., imbalances of in- and export as well as human rights violations by Chinese companies have led U.S. President Biden to put tariffs on Chinese products and implement new trade restrictions.[8] The concern is amplified with emerging Chinese manufacturers continuing to capture global leadership in the smartphone market. Chinese competitors are expanding quickly. With aggressive pricing strategies and significant R&D investments OEMs develop innovative features as fast followers within the industry. This is posing a threat to the established leaders, as Chinese OEMs quickly

[5] (Goasduff and Forni 2017)
[6] (Warner 2013)
[7] (LG 2021)
[8] (Siripurapu and Berman 2023)

capture significant global market shares (Exhibit 2). A diverse product portfolio and fast adaptation to market trends are supporting their rise.

This shift in market conditions and dynamics was also clearly visible in the second quarter of 2020, as the global smartphone industry witnessed a shift with Huawei as the first Chinese OEM bypassing Samsung and Apple in market share (Exhibit 5). The notable patriotic allegiance of Chinese customers towards local offerings allows domestic manufacturers to profit from the country's large consumer base (Exhibit 6) and to achieve economies of scale quickly.[9] Thus, the ban on Huawei from the U.S. market in 2019, attributed to national security concerns, was substantially offset by Huawei's increased sales in the company's domestic market. The Chinese government streamlined additional funding in R&D into Huawei, thereby allowing them to excel in technological innovation.[10] Due to this symbiosis, the company can offer advanced technology at competitive prices. Additionally, Chinese OEMs are now catching up with the trend, shifting their portfolio towards the high-end segment.[11]

**The Global Smartphone Industry**

Until 2017 the international smartphone shipments have been consistently rising. However, since then, the number of smartphones shipments declined, bringing shipments down to modest levels last seen in 2014 (Exhibit 3). A tumultuous period followed, disrupting the global smartphone market as manufacturing centres in China went into a strict nationwide lockdown during the onset of COVID-19. Supply chain distruptions had a significant impact on manufacturers, as work discontinued, suppliers still transportation and logistics channels had to pause. Thus, operations collabsed. At the same time, the focus was shifted to the development of innovative products.[12] Eventually, consumers prioritised essential investments over

[9] (Sun, Gonzalez-Jimenez and Wang 2021)
[10] (Liu 2023)
[11] (Counterpoint 2022)
[12] (Davies and Wearden 2020)

discretionary purchases, resulting in reduced demand for smartphones.[13] Thus, inventory problems arose, leaving manufacturers like Samsung with shrinking sales and skimmed profits (Exhibit 7).[14] Moreover, the electronic market is affected by continuously rising costs, driven by rising interest rates due to COVID-19 (Exhibit 8).

Long gone are the years of shipments tripling as units are below the pre-pandemic level. Overall growth has stagnated, and shipments in 2023 are expected to hit a decade-low (Exhibit 3). However, as smartphones increasingly penetrate rural areas in developing countries and governments push the telecom sectors, the smartphone adoption rate is expected to reach over 90% by 2030 (Exhibit 9). In addition, forecasts promising revenue growth as the global smartphone market is expected to reach $542bn in 2028 (Exhibit 10), remaining a leader in consumer electronics.[15] Also, the rising demand for premium models showcases consumers' growing preference for highly innovative, high-quality products that offer enhanced durability and allow for extended usage (Exhibit 11).[16]

The worldwide smartphone market reveals a complex structure that defines the market landscape, including the universe of OS, different pricing segments led by consumer needs, and original equipment manufacturers (OEMs) producing and selling mobile devices.

*Ranging prices: Broadband offers*

A considerable portion of today's market share is held by leading companies, notably Chinese brands such as Huawei, Xiaomi, Oppo, Vivo, and Transsion. These competitors vigorously compete across diverse price ranges (Exhibit 12). Enhancing their market presence and gaining momentum in crucial markets like India and China by providing more affordable phones equipped with a wide range of advanced features.

[13] (PwC 2023)
[14] (Statista 2023e)
[15] (Statista 2023c)
[16] (Lee, et al. 2021)

The global market can be divided into low-budget, mid-range, and premium-priced smartphones (Exhibit 12). Smartphones up to $200 belong to the **low-budget segment** and build the backbone for most Android smartphone manufacturers, which are active across the low-, middle-, and premium-priced segments.[17] They offer great value-for-money alternatives compared to premium-priced competitor Apple. As market leaders vary in quality across features such as camera and processing power, competitors like Huawei, Xiaomi and Oppo consistently implement new features and models throughout the year with short launch cycles to distinguish themselves and be able to compete.

The **mid-range segment**, up to $600, appeals most to the average consumer looking for good quality at reasonable prices. Balancing between technology and prices, like Samsung's Galaxy A-series, which is highly favourable within the category due to superior performance support services and updates at an affordable price. Other models in this segment are Xiaomi's Poco line or Huawei's P line.[18] [19]

The **premium segment** of today's smartphone market houses the flagship models of each manufacturer. For prices starting at $600, customers expect state-of-the-art technology and various features sought from premium materials and sophisticated designs. Targeting early adopters and tech enthusiasts as these models lead companies' keynotes, often surrounded by press and media attention, followed by high anticipation for these launches. This intensifies a highly competitive environment as manufacturers fight for timely patent registration of desired and breakthrough technology fitting in the palm of the end consumer. While premium brands like Apple's and Samsung's profit margins are around 59.1% per unit, low-cost Chinese suppliers can only grasp margins of less than half (Exhibit 13). In addition to sole production costs, higher retailer service fees for producers with less bargaining power and lower general

[17] Price ranges vary, but for the purpose of this Case and the alignment with used data, the pricing segmentation of Varun Mishra (2023) via Counterpoint has been used.
[18] (Mobileinto n.d.)
[19] (Huawei n.d.)

sales prices push the margins. While both companies dominate the premium segment by share and margins, Apple leads the only segment that grew in 2022, despite the harsh conditions, capturing three-fourths of all smartphone sales in the premium market (Exhibit 14). Overall, since 2007, there has been a strong surge in both smartphone prices and consumer willingness to invest in their essential daily devices. As a result, top-tier smartphones can exceed $2,000, a stark contrast to the $599 price of the first Apple iPhone in 2007.[20]

*Operating systems: iOS vs Android*

Operating systems build the heart of smartphones, managing hardware and software resources that allow users to run multiple applications simultaneously. The market is predominantly segmented by major OSs, namely iOS and Android, with buyers making a conscious choice. Apple iOS holds 28.83% of the global market share, while Google Android has a substantial 70.46% (Exhibit 15). Unlike iOS, Android's open-source architecture accommodates a variety of smartphones across various brands. Thus, Samsung, Xiaomi, Oppo, Vivo and Transsion are all based on the standardised Android platform. However, high flexibility for customisation allows manufacturers to create a unique user experience despite using the same OS. These systems connect smartphones to various other products and services such as TVs, Tablets and Laptops, as well as complementary products, such as headphones, docking stations, Bluetooth speakers, smartwatches, or VR Headsets. The latest technology accounts for digital services and assistance like Samsung Pay or Bixby, designed to simplify mobile payment or offer AI-steered voice assistance (Exhibit 16).

*Shifting needs: Meeting global consumer demand*

Previously focused on realising elementary communication requirements, the industry strives to meet the contemporary user's demand for advanced features like high-speed 5G connectivity

[20] (Farah 2023)

and professional-grade photography, including periscope zoom lenses. As consumers access entertainment through their phones and spend more time on networking and messaging apps, the average device usage extends more than three hours daily. In the U.S. alone, usage is expected to increase by six minutes a day in 2023, while the number of adults using mobile phones will continue to grow to 253.3m users this year.[21] Moreover, users increasingly seek an interconnected experience through their preferred ecosystem, valuing the seamless integration of their smartphones and the digital ecosystem, enhancing experience and convenience. Therefore, transitioning from one OS to the other remains rare, primarily due to the respective ecosystem lock-ins. Users are deeply integrated into their OS, fearing substantial loss of data, obtained knowledge of the interface and a decrease in usability with the lack of cross-platform compatibility for many apps and services.[22] If consumers happen to switch between OSs, the main reasons include expectations of better functionality, data protection, and hardware (Exhibit 17). Today, factors such as brand loyalty, extended replacement cycles, user interface, and the comprehensive ecosystem in which smartphones are integrated play a decisive role as consumers are more inclined to invest wisely.[23]

*Competition in the smartphone industry: The Big Seven*

In the early stages of smartphone production, manufacturers would compete with one another by focusing on core technology upgrades like extended battery life and central processing units. However, while smartphones achieve similar functionalities across brands and price ranges, manufacturers have gained a competitive edge through added functionalities such as mobile payment and non-functional design attributes like after-sales services.[24] Throughout the last

[21] (Dolan 2023)
[22] (Cai, et al. 2019)
[23] (Stanley 2017)
[24] (Chen, Chen and Lin 2016)

few years, Apple and Samsung have been in a head-to-head race for the leading position in the global smartphone market.

By securing a 20.2% global smartphone market share, **Samsung** outperformed its main competitor, Apple, in Q2 2023 (Exhibit 2). The company's strategy shift towards early improvements and technological advancements added to Samsung's competitive edge in the smartphone market. Exemplary, foldable screens and integrated 5G connectivity have been introduced by the company to the market, joining the ranks of innovative breakthroughs.[25]

Alongside the company's focus on innovation, Samsung's strategic pricing model makes its innovative technology accessible to a broader audience. However, despite Samsung's overall strong positioning, the company encountered a notable 15.2% decline in shipments, significantly impacted by the global recession (Exhibit 3). Still, the company managed to increase its profits driven by strong sales of premium models.[26] Also, with a market share of only 24% in North America and minimal presence in the Chinese market (Exhibit 2), Samsung's competitive edge, especially against Apple, is improvable.

**Apple**, trailing slightly behind Samsung with a 16% share of the global market (Exhibit 2), faced a lesser impact from the recession, with only a 2% decrease in shipments (Exhibit 3). Apple's company's success can be attributed to its premium strategy and in-house developed iOS, building a cohesive ecosystem characterised by its seamless cross-device functionality.[27] Their platform-based business model draws consumers more profound into the ecosystem while making it increasingly difficult for customers to switch to other systems and products due to increasingly high switching costs.[28] This has fostered extraordinary brand loyalty estimated at 94%, especially in the key markets Europe, the U.S., China and Japan.[29] [30] The most valuable

[25] (ProductLine 2023)
[26] (Samsung 2023c)
[27] (F. Laricchia 2023g)
[28] (Scott, Loveland and Loveland 2019)
[29] (Mickle 2023)
[30] (F. Laricchia 2023g)

company is doing exceptionally well in the U.S., holding a 55% market share in Q2 2023 (Exhibit 2).[31] In addition, Samsung's lack of presence within the Chinese market is playing into Apple's hands, leaving the company as the leading provider for the high-end market's needs.[32] Chinese government officials are increasingly concerned with Apple's market position and have banned using iPhones in agencies and state-owned enterprises to improve the appeal of domestic smartphone brands. Despite these efforts, Apple smartphones are still popular among China's youth, where the iPhone is regarded as a status symbol.[33] Huawei's decline following U.S. sanctions and China's shifting consumer preferences toward high-end smartphones further improved Apple's position.[34] It is important to note that Apple often gains momentum and surpasses Samsung in market share during the last quarter of the year, overlapping with its new product releases (Exhibit 5).

**Xiaomi** currently stands in third place, with a share of 12.5% in the global smartphone market (Exhibit 2). The company peaked in June 2021 with a market share of 17.1%, surpassing Apple and Samsung despite its lack of presence within the U.S. market due to ongoing political tensions between China and the U.S. The global success can be attributed to Xiaomi's principles of value innovation, aiming to make conscious feature choices to close market gaps. Sub-brands like Redmi and Poco cover different price ranges, enabling the company to cover broader customer segments. In addition to its success in the smartphone landscape, Xiaomi has become a significant player in the global Internet of Things (IoT) industry. Using multiple digital ecosystems, the company provides seamless access to WeChat, Weibo, and other applications across a broad range of complementary products like IoT appliances and electronic scooters.[35]

[31] (Kantar 2023)
[32] (Counterpoint 2023i)
[33] (Yoon 2023)
[34] (Counterpoint 2022)
[35] (Lin 2021)

Despite its unique strategy, Xiaomi couldn't maintain its leading position. A weak post-pandemic economy and strong headwinds in China and India decreased YoY sales in Q2 2023. To offset its decline, the company expanded into additional markets and widened its portfolio by introducing additional premium models. This premiumisation strategy is catering towards the rising demand for premium devices in India, where the company lost its leading position to Samsung in Q4 2022 for the first time since 2016.[36] [37]

Another noteworthy mention is **Oppo**, a sub-company of BBK Electronics. The company is number four, holding 9.6% of the global market share in Q2 2023 (Exhibit 2). The company has made itself a name with innovative camera technology, particularly with its front camera, designed for selfie enthusiasts.[38] Out of every region, Oppo thrives particularly well within China and Southeast Asia (Exhibit 2). The success can be attributed to the company's pricing strategy, undercutting competition by as much as 20% and targeting rural areas through high retail commissions. The latter allows for personal relationships with clients and increases the understanding of customer demands and expectations.[39] Oppo ultimately took the number one spot within China in Q2 2023 (Exhibit 2). While the country certainly played a significant role in Oppo's rise, the Indian market, was no less critical to the company's success.[40] The Chinese manufacturer partnered up with celebrities and the national cricket team in an effort to increase brand awareness and found mass appeal thanks to their budget-friendly pricing strategy.[41] Success within India and other Southeast Asian countries is vital to Oppo, since increasing competition from Huawei in China and a weak European economy are damaging the company's revenue streams.[42] Especially Europe, where the company now holds a mere 3%

[36] (Xiaomi 2023)
[37] (S. Sun 2023a)
[38] (Sharma und Sharma 2020)
[39] (Thuong 2023)
[40] (Kumar et al. 2019)
[41] (Kumar et al. 2019)
[42] (Ting-Fang 2023)

market share after a 51% YoY decline in Q2 2023 (Exhibit 18), mainly driven by the nationwide ban poses a significant challenge. Overall, the Russia-Ukraine war and nationwide bans of Oppo's products due to BBK's lawsuit with Nokia in 2023 left their marks.[43]

Despite the ongoing market decline, one company still stands out with YoY numbers far above the market average in Q2 2023. **Transsion**, like most other Chinese players, is quickly gaining momentum and is outperforming the market. With a 34.4% increase in smartphone shipments (Exhibit 3) and a 9.5% market share in Q2 2023 (Exhibit 2), the company secured a place as the fifth player globally for the first time. The foundation of its triumph can be understood by carefully examining the brand's strategic blueprint. The company encompasses three sub-brands: Tecno, Inifix and Itel, each covering a different smartphone segment. Transsion's budget-friendly smartphones mainly found mass appeal. The company's global sales network spans over more than 70 countries worldwide which allows for market penetration via offline channel distribution.[44] This is particularly important in hindsight of emerging markets, where offline sales still play a significant role.[45] To strengthen its position within emerging markets, Transsion focuses on local market needs, granting them access to many new potential customers. As a result, the company took the lead against Samsung and Xiaomi as the number one market share holder in Africa in Q2 2023, offering phones with both dual sim card slots and camera software, that caters towards darker skin tones.[46] [47] Thanks to the recent success within Africa and the market entry in high-value markets such as Latin America, India, Eastern Europe and Southeast Asia, the Chinese player even managed to overtake Vivo, entering the global top five. The company is introducing premium smartphones, such as foldable devices, as part of its premiumisation strategy.[48]

[43] (Kawakami 2022)
[44] (Transsion n.d.)
[45] (Kunst 2023)
[46] (IDC 2023d)
[47] (Tan 2019)
[48] (Wang 2023)

As the fight for market share continues, **Vivo**, once located in the global top five (Exhibit 5), recently suffered from a substantial decline in sales due to fierce competition.[49] Although still recognised as China's second-largest player, offline initiatives by competitor Oppo in India, Southeast Asia, and China took a toll on Vivo's growth.[50] In addition, the company faced challenges due to the legal dispute between its parent company BKK and Nokia in Europe, which resulted in the prohibition of Vivo's products in countries like Germany and the UK.[51] However, the company is known for its feature-rich smartphones and cameras, covering premium model budgets. Vivo also strongly emphasises the Indian market, where the company constructed new manufacturing facilities to increase its output capacity.[52] This is particularly important since the Indian market is expected to grow to $61.4bn in revenue until 2025 (Exhibit 19). Partnerships with well-established camera manufacturers like ZEISS, as well as the implementation of "Make in India" labels are catering towards Indian consumer needs and further support Vivo's export ambitions.[53]

**Huawei** ranked as the world's largest smartphone manufacturer in Q2 2022, overtaking both Samsung and Apple (Exhibit 5). The company's success was mostly attributed by its market penetration strategy based on strong promotional offers and low pricing strategy, resulting in a fast occupation of various markets.[54] As of Q2 2023, however, the company is not under the top five anymore (Exhibit 2). U.S. concerns about alleged ties with the Chinese government and unfair trade practices have ultimately led to the implementation of trade restrictions, requiring export licenses for goods sold to the Chinese player. The Biden Administration even intensified the sanctions, particularly in semiconductor sales for 5G

[49] (Counterpoint 2023h)
[50] (Counterpoint 2023h)
[51] (Times of India 2023)
[52] (Khan and Mallick 2022)
[53] (Khan 2022)
[54] (Dmitrijevs 2020)

devices.[55] The trade war also caused Huawei to lose access to Android, forcing them to develop their own operating system, called HarmonyOS. Considering strict sanctions, rising raw material costs and the challenges posed by the COVID-19 pandemic, Huawei strategically decided to sell its Honor brand in 2020. This move responded to the various external factors impacting the company's business and market position.[56] [57] [58] In 2023, Huawei is indicating a recovery, marked by a 58% YoY increase in sales during the second quarter.[59] The company managed to stay afloat by strongly emphasising reaching both high-end and low-end middle-class customers through various products and is considered a leader within the telecommunication industry thanks to advanced 5G technology. The reveal of self-made 7nm chips left competitors concerned as the technological breakthrough makes Huawei the only self-sufficient Chinese manufacturer. This allows the company to leverage the latest smartphone trends, such as 5G network connectivity.[60]

**Samsung Electronics - A Global Player**

Samsung, established in 1938 in South Korea, began as a small company exporting fruit, dried fish, and noodles mainly to China. Now a leading Chaebol,[61] it is managed by the second and third generations of the wealthy Lee family. Over eight decades, Samsung has diversified into various sectors, including electronics, insurance, shipbuilding, luxury hotels, and hospitals.[62] Its most prominent subsidiary, Samsung Electronics, has significantly contributed to South Korea's economy, accounting for over 14% of the nation's GDP for the past decade.

[55] (Gallagher 2022)
[56] (Huawei 2020)
[57] (Che 2023)
[58] (Slotta 2023c)
[59] (Counterpoint 2023a)
[60] (Yoon 2023)
[61] Chaebols are diversified Korean corporations with some degree of family control.
[62] (Albert 2018)

*How Samsung Electronics became a leading smartphone manufacturer*

In a significant strategic move in 1980, Samsung Electronics and Samsung Semiconductor merged, integrating their expertise and reinforcing the company's innovation capabilities. Thus, bolstering Samsung's leadership in the semiconductor sector (Exhibit 20). To further strengthen its global presence, Samsung established its first international production subsidiary in Portugal, which marked the beginning of its global manufacturing footprint. Concurrently, the company expanded its overseas sales entities, illustrating its ambition to enhance its manufacturing capabilities and strengthen its market reach and brand presence worldwide. This period was foundational in Samsung's evolution into a global electronics powerhouse.[63]

The Asian financial crisis 1997, which saw a dramatic drop in currency values, debt crises, and downturns across the region, posed a significant challenge to South Korea's chaebol-dominated economic model. In the lead-up to the crisis, South Korean banks extended substantial loans to chaebols to expand into new sectors. Thus, Samsung's ability to focus on technological advancement through the government's financial support significantly shaped its future trajectory in the global technology sector. After the Asian financial crisis, the company's focus on advanced technology adoption led it to construct research centres, which paved the way for new domains of technology and areas such as consumer electronics.

Through the early 2000s, Samsung rapidly responded to innovations by competitors like Apple and Sony, often releasing similar products shortly after them. By the 2010s, Samsung became the largest electronics company in the world by revenue.[64] Within the same year, the company launched its Samsung Galaxy Smartphone line, quickly becoming one of the most popular and best-selling smartphones.[65] Since then the smartphone market has become increasingly crucial to Samsung's success. Samsung continued to enhance its products, building

[63] (Samsung n.d.b)
[64] (Samsung n.d.b)
[65] (Hosch 2023)

on its strengths to create high-quality, cost-effective products for the mass market. Recognising the changing landscape with new Chinese competitors, Samsung shifted its strategy more definitively towards being an innovation leader. Former CEO Kwon Oh-hyun emphasised in 2016 the need for Samsung to adapt to the new environment, moving from being a fast follower to a first mover, indicating a strategic pivot towards leading in innovation rather than following.[66] Using their ever-growing income stream, Samsung is also developing new products such as smartwatches and tablets.[67] Both are designed to complement the smartphone user's experience and offer excellent cross-selling possibilities. Furthermore, Samsung's technological breakthroughs, such as edged and bendable displays, not only set new standards for the smartphone industry but also translated over to other product lines, resulting in products like the world's first "phablet"[68] in 2011.[69] To sustain a new wave of innovation across the digital landscape, Samsung opened its Silicon Valley headquarters, symbolising its long heritage in the tech corridor and strengthening its focus on innovation and growth. Utilising research labs for semiconductors, LEDs, and displays by integrating employees from sales, marketing, and support areas to enhance efficiency under one roof to ensure global operations foster a more aggressive growth pace.[70]

*Samsung: The Conglomerate*

The Korean-based Chaebol[71] boasts a vast global presence with 233 subsidiaries worldwide (Exhibit 21), built up in pyramid ownership structures, primarily renowned for its comprehensive range of mobile devices (Exhibit 22). This facilitates internal capital flow and allocation, supporting investment and divestment decisions. Over the subsequent decades, it

[66] (Birkinshaw and Brewis 2016)
[67] (F. Laricchia 2023d)
[68] Smartphones with an increasingly large display, also incorporating features of a tablet.
[69] (Samsung n.d.b)
[70] (Samsung 2015)
[71] Due to their ownership structure and general practices, Chaebols have the flexibility of allocating capital freely within the conglomerate. This practice enables the company to support underperforming subsidiaries and emphasising those, which need most resources, bolstering operational efficiency and therefore maximise returns.

burgeoned into a global electronics titan, showcasing a remarkable trajectory of growth and innovation through its core divisions (Exhibit 1). In December 2021, Samsung announced a significant organisational change, merging its mobile (MX) and consumer electronics divisions into the DX Division, symbolising its commitment to a forward-looking business approach and strategic positioning as a global leader.[72] Its sustained effort in diversifying and upgrading its product line-up, pioneering flip phones, and its agile response to market dynamics underscores its enduring leadership in the global mobile market (Exhibit 5). With a focus on the premium segment and flagship products, the top model in its S-Series, Samsung strengthens its leadership in the premium market (Exhibit 23). Samsung is further planning to actively address the growing 5G demand in emerging markets like Southeast Asia and Latin America, aiming to boost overall smartphone growth (Exhibit 24). Additionally, by partnering with the DX Division, the MX Business intends to enhance the multi-device experience across mobile products, TVs, and home appliances within the Galaxy Ecosystem, providing customers with a seamless and enriched user experience (Exhibit 16).

**Components of Samsung's Value Chain**

The value chain comprises distinctive operational facets crucial for consumer reliance, with interconnected phases, facilitating seamless production and distribution of their products.

*Raw Materials*

Tantalum, Tungsten, Gold, Cobalt (3TG), and many other minerals can be found in electronic products as they ensure high functional reliability (Exhibit 25). However, most of these minerals come from politically affected areas like Central Africa, South America, and China. Thus, sourcing those minerals requires extensive monitoring as the supply chain is highly vulnerable.

[72] (Samsung 2021)

Samsung conducts due diligence guidance for responsible supply chains of materials from conflict-affected and high-risk areas. Despite Samsung intensifying its oversight of suppliers and their various levels in the aftermath of the pandemic, there were instances where certain suppliers did not accurately report their sourcing of conflict minerals to the company. The current standards are somewhat resistant to supply chain disruptions, but regarding the rising customer perception of sustainable supply chains, standards require improvement.

As a result, corporations commit to net-zero targets, and disclosure regulations, especially in Europe and the U.S., focus on reducing Scope 1 and Scope 2 emissions. Scope 3 emissions include companies' indirect ESG impact throughout their value chain. In the telecommunication industry, Scope 3 emissions make up about 90%. With increasing ESG regulations, corporations face challenges in their production processes, which might substantially affect business models (Exhibit 26).

*Research and Development*

The company's history has shown the process from imitation to innovation by using dynamic capabilities and turning from a low-cost producer to an innovative technology hub incorporating aspects of traditional Chaebol structures.

When introducing new technologies like DRAM semiconductors or OLED displays, R&D hubs (e.g., in Silicon Valley and South Korea) competed against each other to create pressure for fast technology development but also to ensure internal knowledge exchange between the different countries, cultures, and business units. Samsung strategically relocates key personnel at the conclusion of significant projects to bridge knowledge gaps. Thus, internal capabilities are transferred across the whole company.[73] The concept of dynamic capabilities, including co-opetition, is commonly used at Samsung as technological advances can be reached

[73] (Song, Lee und Khanna 2016)

more quickly with reused resources and internal synergies between multi-disciplinary business units.

In a diversified company like Samsung, this co-opetition can happen vertically between internal vendors and buyers and horizontally between business units and, thus, generate extensive capabilities. Internal competition yields the risk of product cannibalisation and rising cultural tensions. However, Samsung tries to mitigate those risks through human-resource-related compensation like performance-based payments and additional training, which lead to long-term employment and, thus, a workforce aligned with company goals. The combination of continuous efficiency improvements and agile organisational structures has proven to quickly generate innovations on a relatively low budget, which enabled Samsung to offer an extensive product portfolio across all customer segments and to retain respective profit margins.

In 2022, Samsung Electronics spent $19.3bn on R&D (Exhibit 27). These R&D spendings primarily contain the 5G telecommunication infrastructure development and the registration of several patents most of which are technology and design-related (Exhibit 28). Pioneering holders like Samsung must license patents to competing manufacturers under fair circumstances in the name of standardisation. High R&D spending is typical for the computer services and hardware and equipment industries in which Samsung Electronics competes. While industry averages are 8-12% of total revenue, Samsung Electronics spent 8.2% in 2022 (Exhibit 27).

*Production*

As part of the DX division, mobile application processors (APs) are a main component of the smartphone's central processing unit (CPU), which Samsung Electronics purchases from Qualcomm and MediaTek. Prices for mobile APs have increased by 77% YoY, indicating skimmed profit margins for the end products as production costs increase.[74] While the DX

[74] (Samsung Electronics 2023b)

division still has optimisation potential regarding its production capacity, the DS division responsible for memory chip production struggles to meet rising demand (Exhibit 29). Internalised component and smartphone production reduces reliability on external suppliers.

Compared to rival Apple, whose manufacturing is mostly executed by the Taiwanese "Foxconn", Samsung pursued offshoring but not outsourcing. The company offshored low-skilled labour to foreign countries while keeping jobs of higher quality in their domestic market and additionally introducing regional corporate headquarters. Three conditions were required to internationalise: ownership advantage, location advantage, and internalisation advantage. Production facilities are now located in Mexico, Vietnam, Brazil, and Hungary, as Samsung Electronics stopped production in China in 2019.[75] Still, the company has extended requirements, but also incentives, for their suppliers and internal expansion, including requirements of continuous operational improvements, ethics, safe working environments, country-specific wage and benefit requirements, as well as environmental standards (Exhibit 26).

*Marketing & Sales*

Samsung uses demographic segmentation while targeting those segments according to their relevance in the regional market which leads to a high variety in customers. This broad target, based on technological advances of qualitative products, appeals to tech-enthusiasts, as well as budget friendly buyers within the lower-priced segments. With maturing markets, the reliance on premium increases and suppliers such as Samsung and Apple extend their standing in the premium market by the distribution of flagship stores. Samsung operates numerous flagship outlets in various countries. Distributing phones through their network of third-party carriers, wholesalers, retailers, and sellers, ensuring a broad availability of their devices globally. Completing its own sales channels which are made up of direct sales (51%), retail (27%), and

[75] (Samsung Electronics 2023b)

wholesale (19%), it is typical for the smartphone industry to generate sales across on-and offline intermediaries whose distribution channels grasp local opportunities tailored to local circumstances and consumer preferences. In addition to B2C sales, Samsung has broad B2B operations, selling components and end products to Samsung's largest clients Apple, Best Buy, Deutsche Telekom, Qualcomm, and Verizon. Sales to those five customers comprised 16% of total sales in 2022.[76]

To ensure a unique experience, Samsung spends extensive marketing budget of $4.7m in 2022 (Exhibit 8), ensuring a variety of exclusive content creation with advertising partners such as K-Pop stars, streaming giants such as Netflix, or prominent events presenting its ecosystem. The presence of the ecosystem is further leveraged through companywide interdependencies spilling over customer trust from other Samsung products.

Additionally, apart from other durables, complementary products integrated in Samsung's OS are designed to provide a more personalised and seamless user experience tailored to the unique needs of its customers. The integration of devices within the Samsung ecosystem and the ability to run Microsoft 365 further boosts consumer productivity, particularly in business-related contexts. Also, Samsung's virtual assistant "Bixby", Samsung Health and Samsung Wallet allow for a seamless and interconnected user experience across various Samsung devices and services (Exhibit 16).

**Samsung's competitive positioning in the global smartphone industry**

Worldwide smartphone shipments dropped from 2017 to 2022 by 22% (Exhibit 3), putting global manufacturers under constraints. In a highly competitive market environment, Samsung positions its smartphone business globally by catering to their critical markets in South Korea, North America, Europe, Asia-Pacific, and China. Each region presents unique consumer preferences, competitive dynamics, and regulatory landscapes that Samsung actively navigates.

[76] (Samsung Electronics 2023b)

The American and European markets stand out as the strongest, accounting for 56% of Samsung Electronics' total revenue in 2022 (Exhibit 30).

*Europe*

As of 2022, the European smartphone market is generating $75bn in revenue, with numbers expected to grow by 22% between 2022 and 2028 (Exhibit 10). Varying preferences in the European smartphone market across different regions are evident, leading to distinct rankings in popularity and sales.[77] Despite future predictions being optimistic, Europe had to face significant economic setbacks such as the ongoing Ukraine crisis, resulting in a 12% YoY decline in shipments during Q2 2023, reaching the lowest since 2012 (Exhibit 18). While long-established players like Samsung (33%) and its biggest competitor Apple (23%) still make up for the better part of Europe's smartphone market, Chinese competition noticeably, Xiaomi (20%), Realme (4%), and Oppo (3%) have been on the rise thanks to aggressive pricing strategies through low priced devices (Exhibit 2). The Korean smartphone manufacturer managed to stay ahead of its competition with the successful launch of its flagship Galaxy S23, and Galaxy Z Flip5 by seeing substantial pre-orders with significant demand.[78] Both Samsung's S-line and its foldable smartphones are part of the company's dedication to the mid-to-high-end segment, especially in Western Europe, where high-profit margins and a strong potential for ecosystem integration promise profitability.[79] Releases of premium models contributed to Samsung's highest-ever quarterly average selling price in Europe. Samsung's premium strategy is perfectly aligned with the region's evolving demand for high-end devices encompassing the latest camera and 5G technology, Thus, Samsung gives less priority to its A-series (Exhibit 31).[80] The increasing consumer demand for flagship products is progressively linked to

[77] (Stryjak 2021)
[78] (Samsung 2023a)
[79] (Canalys 2023a)
[80] (Canalys 2023e)

sustainability regulations of the market, reflecting a growing awareness and concern for environmental issues among both consumers and policymakers. Thus, the European Commission has implemented its first regulatory drafts, aligning with the European Green Deal to ensure that modern smartphones adhere to eco-design principles and the objective of efficient resource usage.[81]

*North America*

The North American region is slowly growing with an expected CAGR in revenue of 1% from 2018 to 2028 (Exhibit 10). Apart from rising interest rates and tenacious inflation leading to decreasing consumer demand, the North American smartphone market is mature, with a significant proportion of sales coming from technological and feature upgrades rather than first-time buyers.[82] Thus, in Q2 2023, 24% of YoY shipments in the U.S. dropped (Exhibit 32). The downturn can be attributed to low-end smartphone sales declining due to rising demand for premium devices with advanced features and differentiated form factors.[83] However, the premium segment in the market remains solid.[84] The uniqueness of the North American region is characterised by the persistent duopoly of Apple and Samsung, making it a key market for both companies in terms of sales volume and value.[85] Apple smartphones account for 55% of the U.S. market, followed by Samsung at 23% and Motorola at 9% (Exhibit 32). As of July 2023, Apple provided four of the region's top five best-selling smartphones.[86] Thus the company was one of the few OEMs who outperformed the overall YoY decline, with shipments decreasing by less than 10% (Exhibit 32). Major contributors to the company's long-lasting success are its costumer's loyalty towards the brand. While Apple is holding on, Samsung had

[81] (Frauenhoer IZM 2022)
[82] (Canalys 2023d)
[83] (Canalys 2023d)
[84] (Canalys 2023d)
[85] (Canalys 2023b)
[86] (Counterpoint 2023f)

to deal with increasing competition from other Android OEMs, ultimately dropping shipments by 37% YoY in Q2 2023 (Exhibit 32). Especially Google, which saw its market share increase to 3% following the early release of its Pixel 7a, capitalising on Samsung's overall weak performance in 2023 (Exhibit 32).

*Asian Pacific*

In 2022, the Asia-Pacific smartphone market reported nearly $220bn in revenue. The market is forecasted to grow with a CAGR of 3% until 2028 (Exhibit 10). China remains in the top position in revenue with $117bn (Exhibit 33), followed by India, which is experiencing rapid growth (Exhibit 19) and, distantly, Japan (Exhibit 33).

The rapid growth offers excellent opportunities for companies like Samsung, Xiaomi, and Huawei, constantly fighting over market share. While Android smartphones make up for the better part of the market, Apple still hangs on tight, thanks to its increasing popularity in Japan and Australia (Exhibit 2). However, Samsung's market share has also declined (Exhibit 34). Discounted inventory led to product cannibalisation of low- and mid-priced models. However, the company still holds the title of being the region's champion, holding a 22% market share, closely followed by Apple (21%) and Xiaomi (15%) as of Q2 2023 (Exhibit 2). Chinese brands such as Oppo, Vivo or Xiaomi might sound unfamiliar to most people living in the Western world. However, they have a strong prominence in the Asia-Pacific region, holding more than 50% of the market share in Southeast Asia (Exhibit 2). Many emerging markets value affordable Chinese brands and Samsung's broad portfolio (Exhibit 35).

At last, the market is currently shaped by changing consumer behaviour. A falling demand for mobile voice services and a rising interest in mobile data showcase how consumer behaviour is shifting towards extensive mobile internet usage for various activities and digital payments. The aftermath of the change will play a part in a region well known for its lucrative prospects and rising adoption rates forecasted to reach 94% by 2030 (Exhibit 9).

*China*

Out of all the countries within Northeast Asia, China certainly is the most important one: China is the world's leading contributor to the smartphone market, being responsible for 23% of global shipments, amounting to 286m units in 2022 alone (Exhibit 3 & Exhibit 36). Moreover, China's smartphone adoption rate surged to 81% in 2022, with forecasts predicting up to 93% in 2030 (Exhibit 9), making the density of customers in the region attractive to manufacturers. The growing trend towards premiumisation, indicating a rising demand for advanced features and a rapid embrace of the latest technological trends, has significant implications for the market dynamics. As of Q2 2023, Chinese brands are leading the market (Exhibit 2) thanks to a successful entry into the premium segment, high brand loyalty, and the satisfaction of consumer demands through features like selfie enhancement and the latest camera technology.

Also, 5G connectivity has become increasingly important to the market. Northeast Asia, including China, recorded more than 640m 5G subscriptions in 2022, making up 68% of the global market, with projections indicating a rise to 1.6bn by 2028 (Exhibit 24). However, the incorporation of 5G technology presents a significant challenge for Chinese manufacturers who lost access to their primary 5G chip suppliers due to U.S. sanctions.[87] One of Huawei's leading suppliers of memory chips was Samsung, thus contributing to a significant setback in the profits of the Korean electronics conglomerate in 2019.[88] Amidst this ongoing trade tension, Chinese regulations have increasingly favoured domestic companies in the technology sector over foreign entities, providing them a competitive edge in the market.[89] Despite its focus on premium devices, Samsung's market share in China experienced a dramatic decline, plummeting from 20% in Q1 2014 to a mere 2.34% in 2022 (Exhibit 37 & Exhibit 38). In stark contrast, Apple's iPhone has ascended to a unique position in the Chinese market.

[87] (Nordin 2023)
[88] (de la Merced 2019)
[89] (Allen 2023)

*South Korea*

During the post-Korean War period, Samsung benefited from the financial support of the South Korean government enhancing technological competitiveness. The support to this day, coupled with the brand's strong connection to its home country, fostered considerable brand loyalty among Korean consumers, who often prefer domestically produced products. A loyalty that has effectively enabled Samsung to assert its dominance in the Korean market, securing a significant market share exceeding 61% as of Q2 2023 (Exhibit 2). Also, Samsung's connection to K-Pop boosts brand visibility and resonates with the younger demographic, further strengthening the brand's market presence and appeal in domestic and international markets.

As overall noticed, also the Korean smartphone market experienced a decrease in Q2 2023, with a 4% YoY decline, the market diminished by 3.6m units. This dip is particularly impacting the market's mid-range and budget smartphone segments. Thus, Samsung's mid-range smartphone sales also fell by 4% YoY.[90]

Despite these challenges, the Korean smartphone market remains a crucial region for domestic and international smartphone brands, offering a tech-savvy consumer base with a high rate of smartphone usage. The country has also been the world's first rolling out the 5G mobile network, offering new opportunities for smartphone manufacturers in 2019.[91]

**Writing Samsung's next chapter**

Looking ahead, the Samsung must navigate future market challenges and technological advancements, potentially setting new benchmarks in the evolving landscape of mobile technology.

[90] (Shin 2023)
[91] (Li and Park 2019)

*Accelerating future technology*

Current trends in the telecommunication industry are mostly related to the fast-tracking developments in the network sector. Through the rising demand for data capacity and the roll-out of 5G networks, edge computing yields a multibillion-dollar market as interconnectivity becomes more prevalent today. Innovations that enhance the integration and interaction across IoT are on the rise, and smartphones profit from stable networks, solidifying the interconnection of people and devices. The rapid deployment of 5G opens further potential as Samsung rushes to provide low latency, mass connectivity, and immersive consumer experiences through their Galaxy ecosystem. Samsung pioneers the 5G expansion (Exhibit 39), by collaborating with telecommunication network providers and governments, making the company the leading 4G and 5G vRAN software enabler.[92] [93] [94] [95] Even accelerating the environmental sustainability of urban areas through smart devices that enable more efficient and sustainable environments.

The tech giant's rapid progress in technological innovation is supported not least by strategic partnerships. One example has been a $6.6bn deal between Samsung and Verizon which support the development of 5G networks in the U.S. The agreement calls for Samsung to provide Verizon with key wireless telecommunications equipment for its 5G services.
By garnering new strategic partners, Samsung accelerates in the context of the global 5G rollout, while simoultaneously strengthening sales in the market.[96]

Premium devices and mass-market products are differently leveraged throughout the existing markets. Providing consumers with dynamic displays, digital key and content sharing using, water- and dust proofing, high-speed cable along with high-resolution and optical zoom/night mode camera. AI technology and 8K video recording, on top of large-screen infinity

[92] Virtualised radio access network (vRAN) modernises cellular networks, especially 5G, by shifting from hardware to virtual or software-based functions (Kern and Johnston 2020).
[93] (Samsung n.d.c)
[94] (Samsung 2023b)
[95] (Statista 2022)
[96] (J.-a. Song 2020)

displays, are currently developments that challenge Samsung, aiming to add these innovations to its portfolio. To further expand their standing in the premium segment, great efforts are made to improve and scale the Galaxy Z Fold and Flip series, which bear high profit margins and upselling possibilities.

However, as the availability of data increases, so does the concern for cybersecurity. Tighter regulations and governmental policies have been followed recently to protect consumers. Managing these regulatory landscapes and ensuring user trust has become crucial in the data-driven tech world. With growing cyber threats and increasing interconnection, companies must implement robust data protection and privacy measures.[97]

*Going green*

In 2022, Samsung Electronics adopted a sustainability strategy to achieve Net Zero Targets by 2030 for its DX division and by 2050 for its DS division. A move valued by Executives for enhancing the company's capabilities to control a disruptive market environment. To reach those targets, Samsung intends to allocate $5.4bn towards environmental initiatives, including reducing semiconductor process gas emissions, thereby diminishing pollution in smartphone production. Additionally, R&D investments are put into technological innovation of ultra-power-saving technology for smartphones and data centres, aiming to cut the power consumption of devices by 30%. Samsung is also engaging in circular economy initiatives, aspiring to incorporate recycled materials in 50% of their plastic components by 2030, with a target to increase this number to 100% by 2050.[98]

*Shifting Strategic Moves: Samsung in the next Decade?*

The smartphone industry and Samsung's strategy have significantly changed over the past decade. The former fast follower faces pressure from Chinese manufacturers to accelerate

[97] (World Intellectual Property Organization 2021)
[98] (Samsung Electronics 2022)

innovative processes and Apple's undefeated popularity in the prestigious premium segment. Jong-hee is sure that reevaluating the sustainability of Samsung's cost-efficiency strategy has been valuable, redirecting the company for long-term growth. And while Jong-hee acknowledges Samsung's innovation and technological strength, he wonders how Samsung should strategically position itself to remain competitive in the ever-changing smartphone industry. How should Samsung cope with saturated markets and rising demand for premium products while, at the same time, consumers in promising emerging markets demand similar features but at lower prices?

## Case Appendix

Exhibit 1: Samsung's financial summary by organisation.

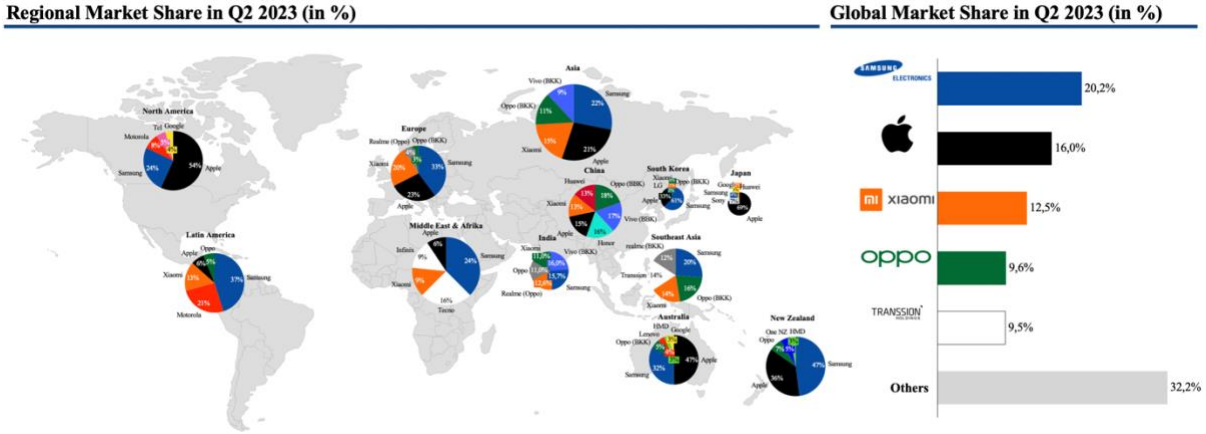
*Annual As Reported in Millions of $, Consolidated*

| Organization | Classification | 2022 | | 2021* | | 2020* | |
|---|---|---|---|---|---|---|---|
| | | Amount | % of corresponding total | Amount | % of corresponding total | Amount | % of corresponding total |
| DX Division | Revenue | 1.413,44 | 60,4% | 1.287,73 | 59,5% | 1.153,38 | 62,9% |
| | Operating profit | 98,72 | 29,4% | 134,67 | 33,7% | 117,36 | 42,1% |
| | Total assets | 1.765,68 | 38,6% | 1.920,71 | 42,0% | 1.784,23 | 43,6% |
| DS Division | Revenue | 762,57 | 32,6% | 738,81 | 34,1% | 573,57 | 31,1% |
| | Operating profit | 184,46 | 54,9% | 226,10 | 56,5% | 145,66 | 52,2% |
| | Total assets | 2.029,71 | 44,3% | 1.749,07 | 38,3% | 1.460,53 | 35,7% |
| SDC | Revenue | 266,30 | 11,4% | 245,62 | 11,3% | 236,90 | 12,9% |
| | Operating profit | 46,11 | 13,7% | 34,52 | 8,6% | 17,33 | 6,2% |
| | Total assets | 571,45 | 12,5% | 518,04 | 11,3% | 512,69 | 12,5% |
| Harman | Revenue | 102,34 | 4,4% | 77,76 | 3,6% | 71,13 | 3,9% |
| | Operating profit | 6,82 | 2,0% | 4,64 | 1,2% | 0,43 | 20,0% |
| | Total assets | 132,46 | 2,9% | 123,05 | 2,7% | 113,87 | 2,8% |

**Due to restructuring of the internal business units in December 2021, the numbers for 2020 and 2021 were adapted accordingly.*

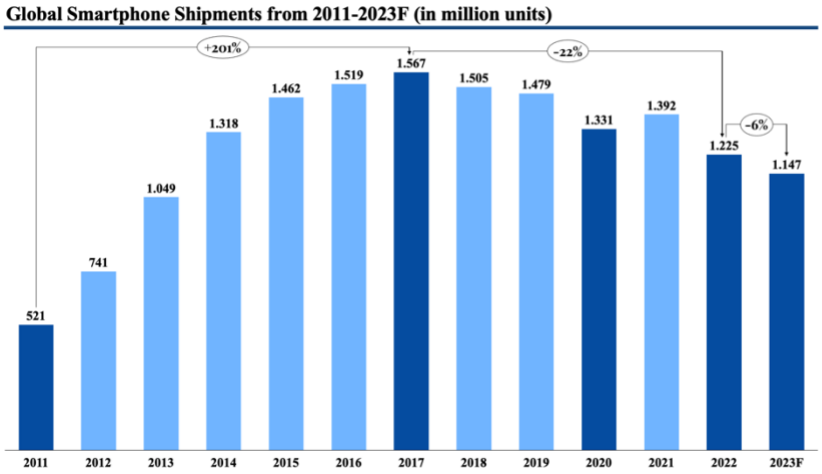
Source: Samsung Electronics (2023b).

Exhibit 2: Top 5 Market Share (in %).




Source (adapted): IDC (2023a), Canalys (2023d), Counterpoint (2023d), StatCounter (2023b), Slotta (2023b), Counterpoint (2023c), StatCounter (2023a), IDC (2023b), IDC (2023c), and Counterpoint (2023e).

Exhibit 3: Global Smartphone Shipments (in million units).




**Top 5 Companies Worldwide, in Q2 2023**

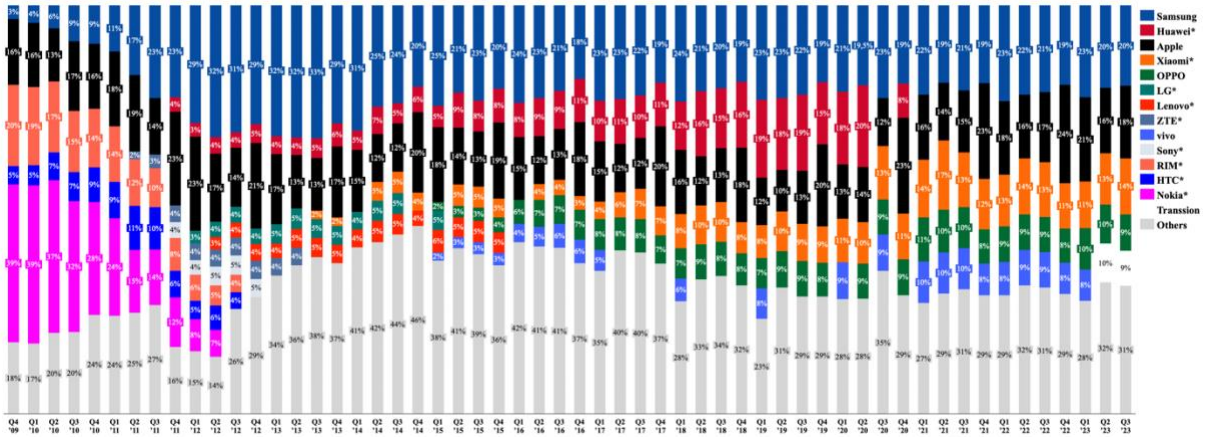
| | Q2 2023 | Q2 2022 | YoY Change |
|---|---|---|---|
| SAMSUNG ELECTRONICS | 53,5 | 63,1 | -15,2% |
| | 44,5 | 45,4 | -2% |
| xiaomi | 33,2 | 39,5 | -15,9% |
| oppo | 25,4 | 27,4 | -7,5% |
| TRANSSION | 25,3 | 18,8 | 34,4% |
| Others | 86 | 93,3 | -7,8% |
| Total | 268 | 287 | -6,8% |

Source (adapted): Laricchia (2023a), Counterpoint (2023g), and IDC (2023a).

Exhibit 4: Timeline Samsung Smartphones.

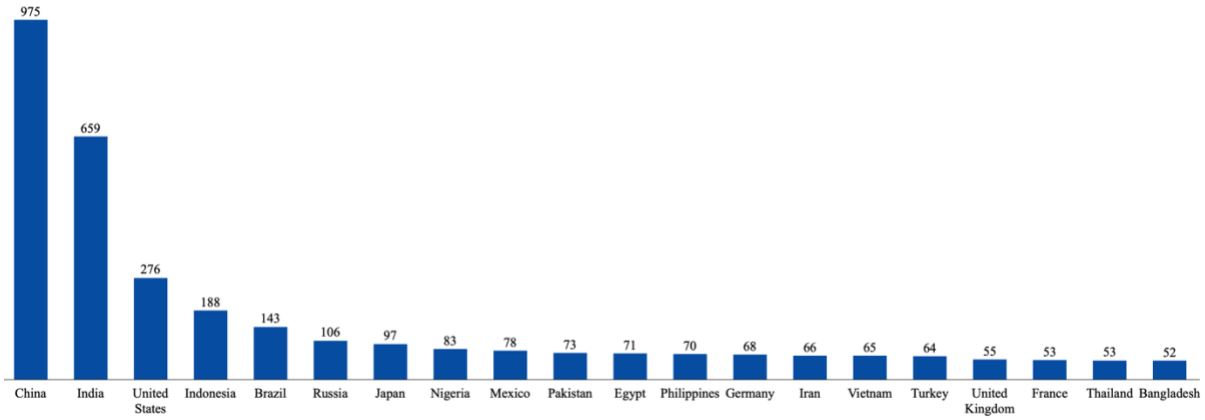

Source (adapted): Hall (2023), Verizon (2023), and Samsung (2023a).

Exhibit 5: Global smartphone market share from 4th quarter 2009 to 3rd quarter 2023 by vendor (in %).




Source: Laricchia (2023e).

Exhibit 6: Smartphone users by country worldwide 2022 (in million).




Source: Laricchia (2023b).

Exhibit 7: Inventories.

*Annual As Reported in Million $, Consolidated*

| Division | Category | 2022 | 2021 | 2020 |
|---|---|---|---|---|
| DX | Finished goods | 5.973,89 | 6.889,29 | 5.489,94 |
| | Work in progress | 785,07 | 619,02 | 459,22 |
| | Raw material | 8.148,32 | 8.817,97 | 6.089,62 |
| | Material transit | 730,63 | 1.006,60 | 678,70 |
| | **Total** | **15.637,91** | **17.332,89** | **12.717,49** |
| DS | Finished goods | 5.112,76 | 1.928,66 | 1.331,50 |
| | Work in progress | 14.527,23 | 9.147,17 | 8.240,93 |
| | Raw material | 2.818,57 | 1.640,79 | 1.296,63 |
| | Material transit | 47,52 | 28,41 | 36,08 |
| | **Total** | **22.506,08** | **12.745,04** | **10.905,14** |
| Total (including SDC & Harman) | Finished goods | 12.417,49 | 9.511,72 | 7.271,23 |
| | Work in progress | 15.550,71 | 10.435,77 | 9.153,50 |
| | Raw material | 11.601,95 | 10.986,63 | 7.583,27 |
| | Material transit | 851,09 | 1.119,48 | 810,47 |
| | **Total** | **40.421,24** | **32.053,60** | **24.818,48** |
| Inventory Ratio (%) [Inventory / Total Assets] * 100 | | 11,60% | 9,70% | 8,50% |
| Inventory Turnover (x) [Yearly COGS / {[Beginning of Inventory + End of inventory)/2]} | | 4,1 | 4,5 | 4,9 |

Source: Samsung Electronics (2023b).

Exhibit 8: Annual Statement of Samsung Electronics.

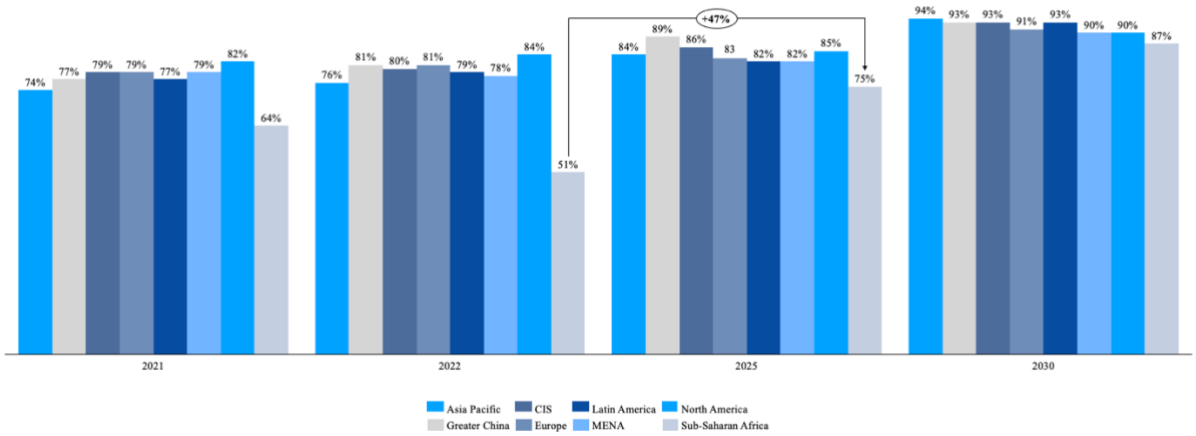
*Annual As Reported in Million $, Consolidated*

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Sales Revenue | 234.088,27 | 216.563,24 | 183.414,91 | 178.453,16 | 188.809,09 |
| **Total Revenue** | **234.088,27** | **216.563,24** | **183.414,91** | **178.453,16** | **188.809,09** |
| | | | | | |
| Adj.Costs of Goods & Services Sold | 120.474,39 | 105.651,24 | 91.609,15 | 94.044,00 | 84.265,56 |
| Depreciation, COG | 25.006,43 | 21.584,76 | 18.452,64 | 18.283,83 | 17.780,27 |
| Amortisation in COR/COGS | 1.712,87 | 1.655,13 | 1.849,20 | 1.714,11 | 498,06 |
| Costs of Goods & Services Sold | -- | -- | -- | -- | -- |
| R & D Expense | 19.300,75 | 17.350,88 | 16.351,55 | 15.418,82 | 14.215,85 |
| Salaries & Wages | 6.013,16 | 5.612,25 | 5.238,28 | 4.742,97 | 4.793,39 |
| Retirement & Severance Benefits | 255,69 | 240,74 | 216,65 | 231,54 | 203,43 |
| Commissions | 5.776,39 | 4.796,35 | 4.398,34 | 4.270,07 | 4.457,25 |
| Depreciation | 1.219,70 | 1.184,65 | 1.234,11 | 1.217,16 | 781,35 |
| Amort. of Intangibles | 514,56 | 420,99 | 381,31 | 363,52 | 339,93 |
| Advertising Expense | 4.734,68 | 4.163,90 | 3.306,52 | 3.574,10 | 3.096,96 |
| Sales Promotional Expense | 5.507,43 | 4.868,84 | 4.540,28 | 5.172,39 | 5.509,40 |
| Shipping & Handling Expense | 2.489,58 | 2.163,03 | 1.718,24 | 1.607,68 | 1.899,13 |
| After Sales Service Expense | 2.844,02 | 3.128,84 | 2.608,94 | 2.299,14 | 2.150,50 |
| Other Selling & Administrative Expen | 4.641,97 | 3.749,47 | 3.631,22 | 4.006,19 | 3.208,33 |
| Impmt Loss on Intangibless | -- | -- | -- | -- | 1,22 |
| **Total Operating Expense** | **200.491,62** | **176.571,10** | **155.536,45** | **156.945,53** | **143.200,62** |
| Interest Capitalized | 32,25 | 19,29 | 3,02 | 4,90 | 17,12 |
| Interest Income | 2.107,10 | 990,07 | 1.529,28 | 2.060,28 | 1.779,21 |
| Gain on Derivative | 1.216,53 | 572,56 | 792,43 | 567,43 | 779,56 |
| Loss on Derivative | (1.126,92) | (609,50) | (671,10) | (570,14) | (607,58) |
| Loss on FC Transaction&Translation | (13.019,68) | (5.023,70) | (7.643,55) | (5.307,42) | (5.537,78) |
| Dividend Income | 321,12 | 105,21 | 118,07 | 119,80 | 101,76 |
| Rental Income | 109,14 | 102,86 | 113,94 | 118,78 | 109,11 |
| Gain on FC Transaction&Translation | 12.809,12 | 5.054,35 | 7.179,95 | 5.242,82 | 5.186,04 |
| Gain on Disposal of Invmt Assets | -- | -- | 33,05 | 37,44 | 28,18 |
| Gain on Disposal of PPE | 123,25 | 263,65 | 119,47 | 235,53 | 299,80 |
| Others in Other Income | 966,18 | 1.236,66 | 687,48 | 866,08 | 611,36 |
| Interest Expense - Balancing value | (623,23) | (353,53) | (454,58) | (536,51) | (539,63) |
| Donations Paid | (236,96) | (209,84) | (241,21) | (277,09) | (240,35) |
| Loss on Disposal of PPE | (47,44) | (58,54) | (67,91) | (111,96) | (70,26) |
| Others in Other Expense | (1.102,14) | (1.324,03) | (1.618,63) | (706,69) | (572,70) |
| Gain under Equity Method | 844,74 | 565,11 | 392,32 | 319,85 | 418,13 |
| Net Income Before Taxes | 35.969,70 | 41.322,77 | 28.150,50 | 23.570,75 | 47.370,43 |
| Prov. for Income Taxes | (7.136,24) | 10.413,12 | 7.696,76 | 6.733,27 | 13.023,86 |
| Net Income After Taxes | 43.105,94 | 30.909,65 | 20.453,75 | 16.837,48 | 34.346,57 |
| Minority Interest | (715,71) | (514,03) | (245,52) | (181,09) | (351,62) |
| **Net Income** | **42.390,22** | **30.395,62** | **20.208,23** | **16.656,38** | **33.994,95** |

*The exchange rate of W 1.291,1 to $1 is calculated of the average of the year 2022. This principle is not accepted in official accounting and is thus not representative. However, in this case $ are used to simplify understanding for students.*

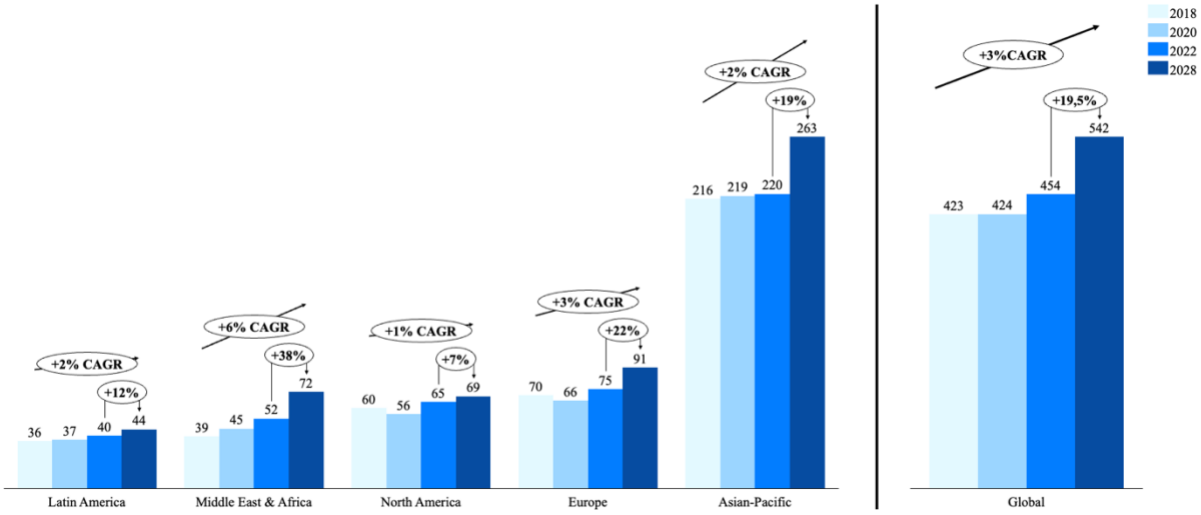
Source: Samsung Electronics (2023b).

Exhibit 9: Global smartphone adoption rates (in %).



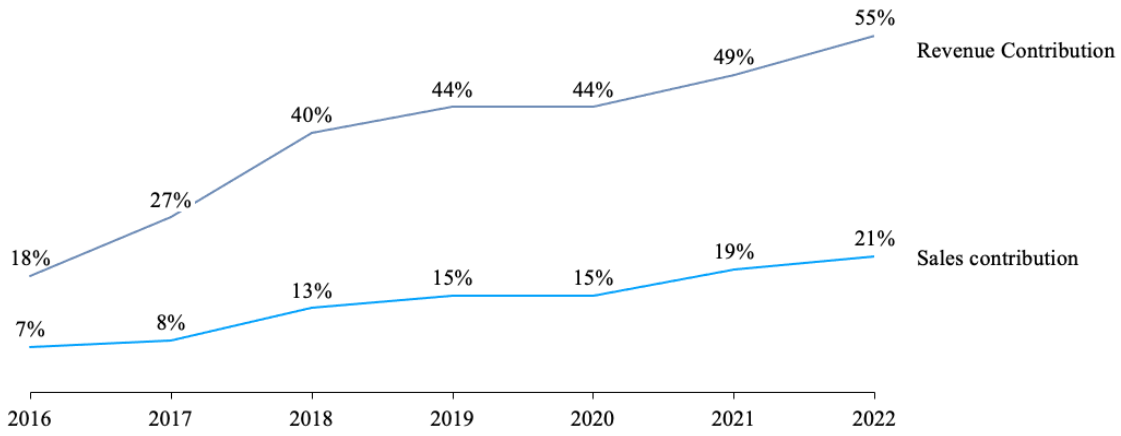

Source: Laricchia (2023c).

Exhibit 10: Revenue of the smartphone market worldwide from 2018 to 2028 (in billion $).



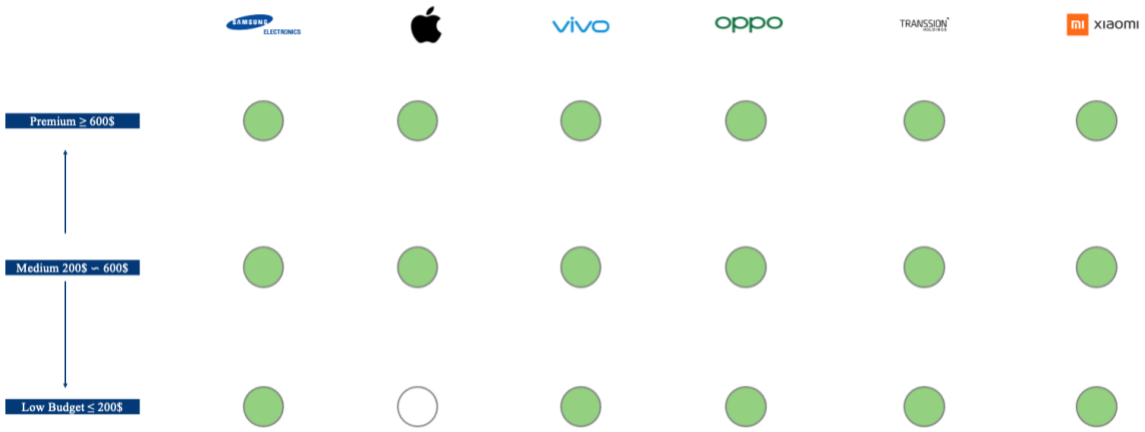

Source (adapted): Statista (2023h) and Statista (2023f).

Exhibit 11: Global Premium Market Sales and Revenue Contribution ≧ $600 (in %).




Source: Mishra (2023).

Exhibit 12: OEM's activeness across price segments.




Source (adapted): Samsung (n.d.a), Apple (n.d.), Vivo (n.d.), OPPO (n.d.), and Xiaomi (n.d.).

Exhibit 13: Comparison of the Bill of Materials of Competition.

**Iphone X: Bill of Material and Assembly Costs**

| Components | Manufacturers | Cost |
|---|---|---|
| **PCBA** | | **$144.75** |
| CPU:A11 Bionic | Apple, TSMC | $26 |
| NAND flash memory: 256 GB | Toshiba | $45 |
| DRAM 64 GB | Samsung | $24 |
| Others | QCOM, Broadcom, AMS, M-Flex | $29.75 |
| **Function Parts** | | **$254** |
| 5.8" OLED | Samsung | $80 |
| Camera Module | STM, Largan Precision, Crystal Optech | $33 |
| Battery | Sunwoda | $35 |
| Others | Broadcom, Nissha Japan | $106 |
| **Wireless Charger** | **Broadcom, Lexshaare Precision** | **$6** |
| **Assembly** | **Foxconn** | **$4.5** |
| **Grant Total** | | **$409.25** |

**Xiaomi MIX 2: Bill of Materials, Assembly Costs and Royalties**

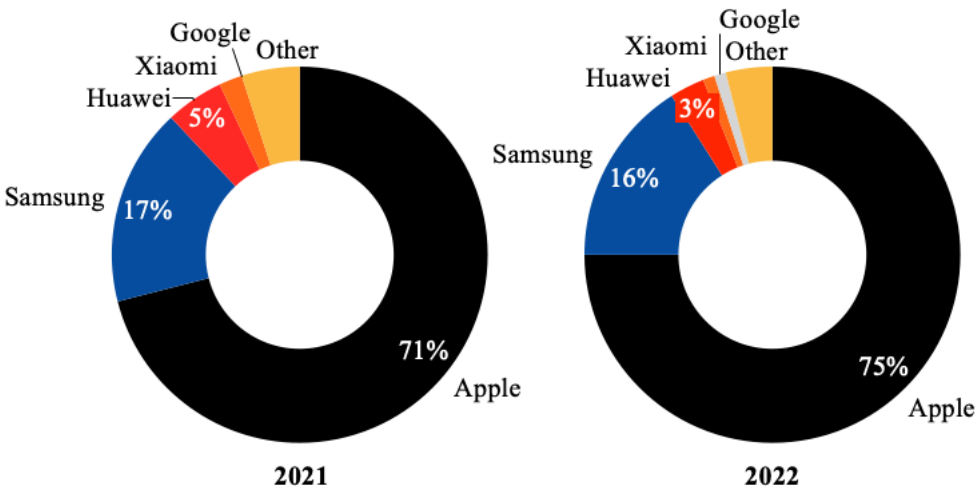
| Components | Manufacturers | Cost |
|---|---|---|
| **PCBA** | | **$209.72** |
| CPU: Snapdragon 835 | Qualcomm | $62.56 |
| NAND flash memory: 6GB | Hynix | $46 |
| DRAM 64 GB | Samsung | $24 |
| Others | TDK, Muruta, Infineon, etc. | $77.16 |
| **Function Parts** | | **$113.89** |
| Display: 5.99inch 1080x2160 | JDI | $33.85 |
| Camera | SONY | $20 |
| Battery | SCUD | $6.15 |
| Others | BIYADI, Q-Tech, AAC, etc. | $53.89 |
| **Packaging materials** | Chinese companies | **$7.77** |
| **Assembly** | Chinese companies | **$4.62** |
| **Royalty** | | **$10.92** |
| **Grant Total** | | **$346.92** |

**OPPO R11: Bill of Materials, Assembly Costs and Royalties**

| Components | Manufacturers | Cost |
|---|---|---|
| **PCBA** | | **$120.94** |
| CPU: Snapdragon 600 | Qualcomm | $28 |
| Memory eMPC | Samsung | $56 |
| Others | TDK, Murata, Yageo, etc. | $36.94 |
| **Functional Parts** | | **$154.77** |
| Display: 6.01 inch 1080x2160 pixels | Samsung | $52.86 |
| Dual camera | SONY | $43.08 |
| Front Camera | Samsung | $13.08 |
| Battery | Sunwoda | $4.62 |
| Others | Q-Tech, AAC, O-Film, etc. | $41.13 |
| **Packaging materials** | Chinese companies | **$13.63** |
| **Assembly** | Chinese companies | **$3.85** |
| **Royalty** | Qualcomm | **$9.53** |
| **Grand Total** | | **$302.72** |

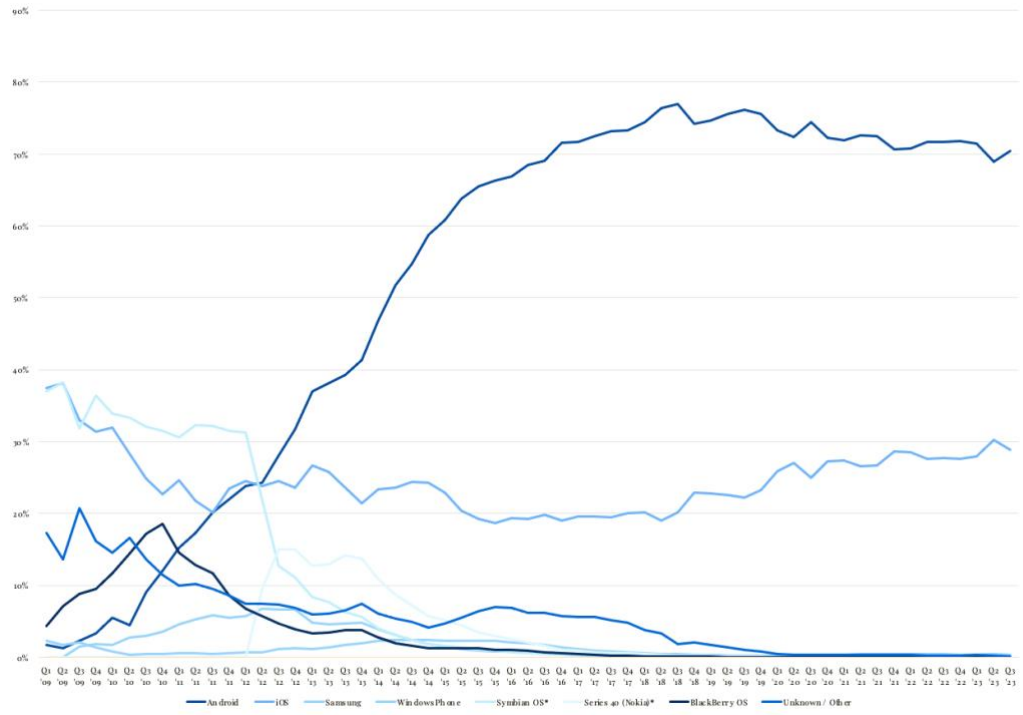
Source: Xing & Huang (2021).

Exhibit 14: Top Smartphone OEMs' Market Share for Premium Segment ≧ $600 (in %).




Source: Mishra (2023).

Exhibit 15: Global market share held by mobile operating systems from 2009-2023 (in %).

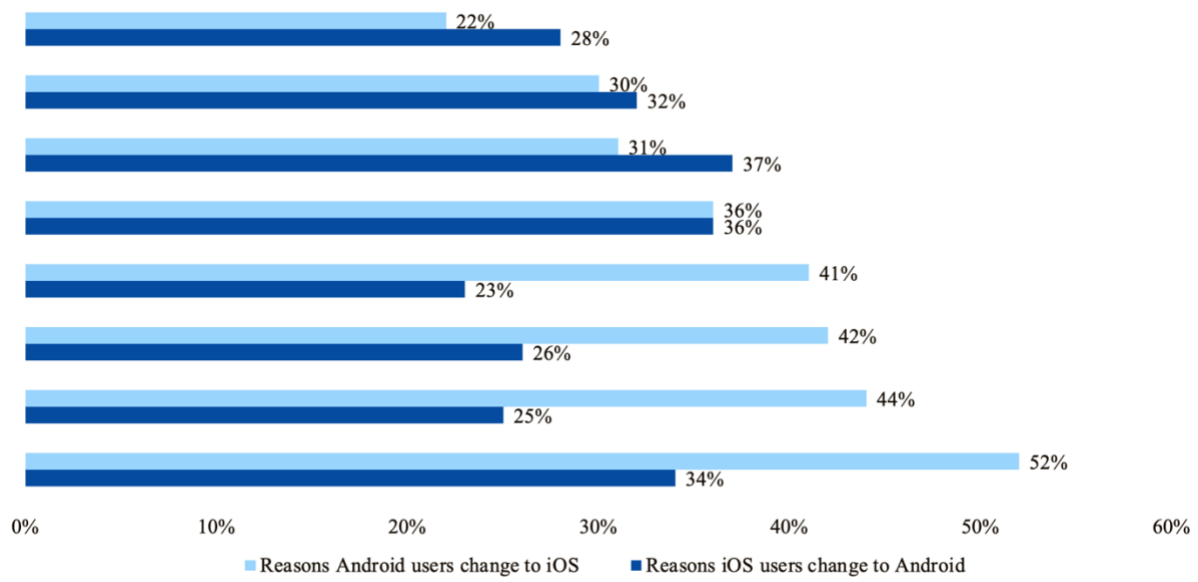


Source: StatCounter (2023c).

Exhibit 16: Samsung's ecosystem – A galaxy of its own.


Source (adapted): Samsung (2023d).

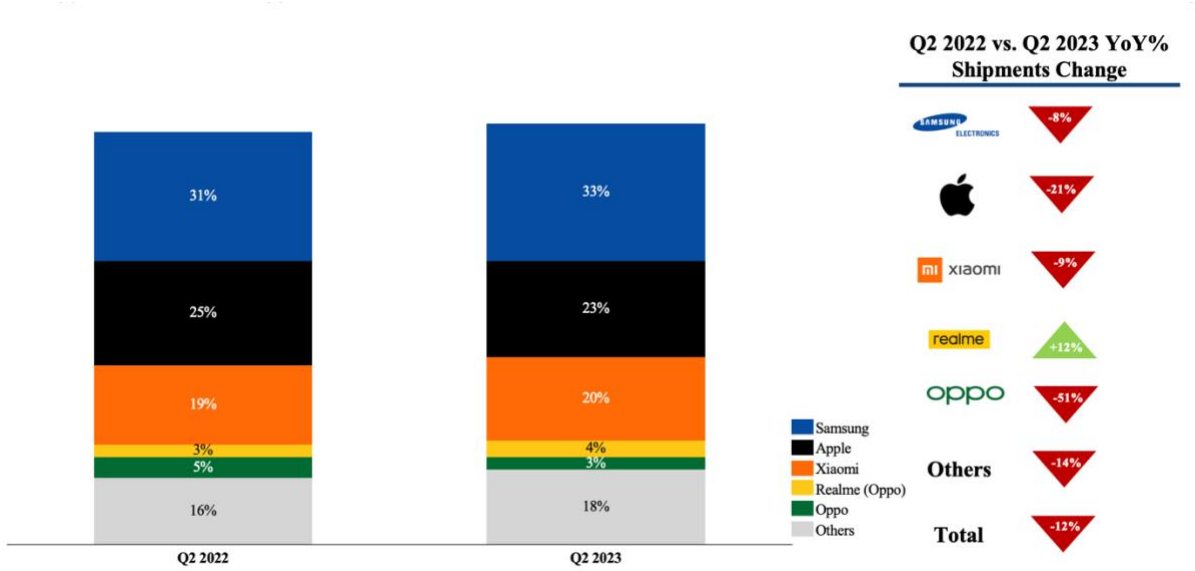
Exhibit 17: Reasons for operating system switch.




*Please note that a multiple selection was possible and the cumulative figures therefore exceed 100%.*

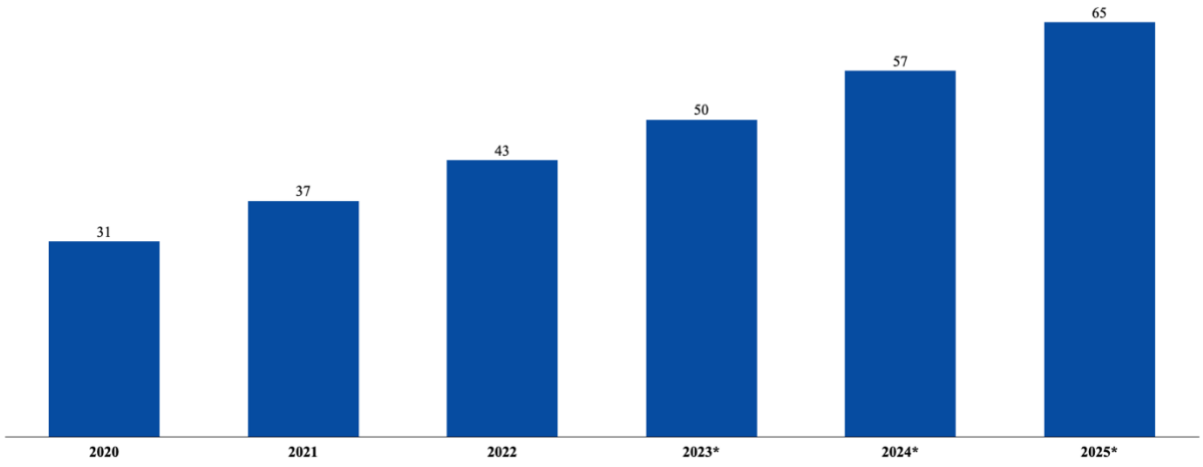
Source: Heywood (2022) and Ceci (2022).

Exhibit 18: Top Smartphone OEM's Market Share in Europe (in %), Q2 2022 vs. Q2 2023.



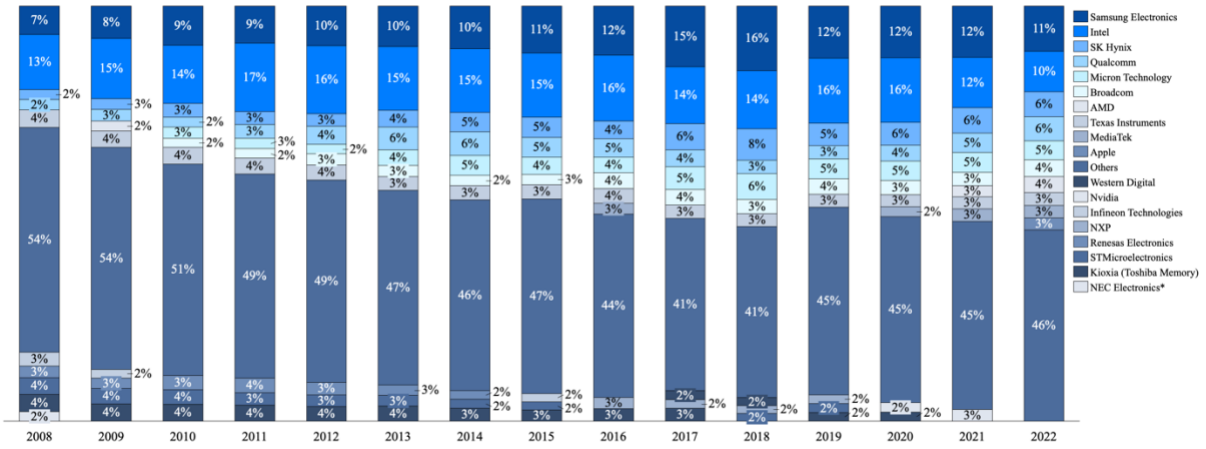

Source: Counterpoint (2023d).

Exhibit 19: Revenue of smartphone industry in India from 2020 to 2022 with forecasts until 2025 (in billion $).




Source: Sun (2023b).

Exhibit 20: Global semiconductor market share (in %).

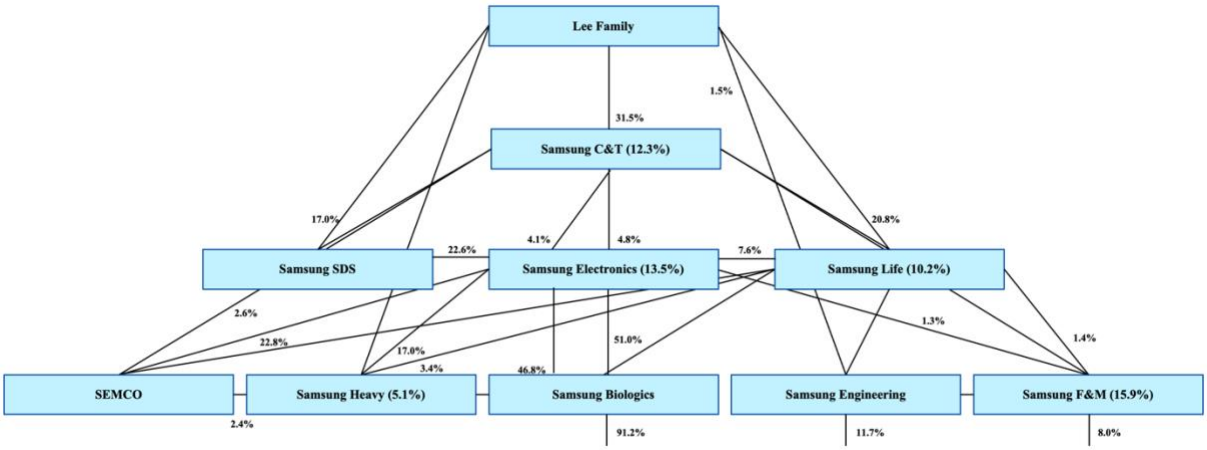



Source: Samsung (2023b).

Exhibit 21: Global Operational Coverage.

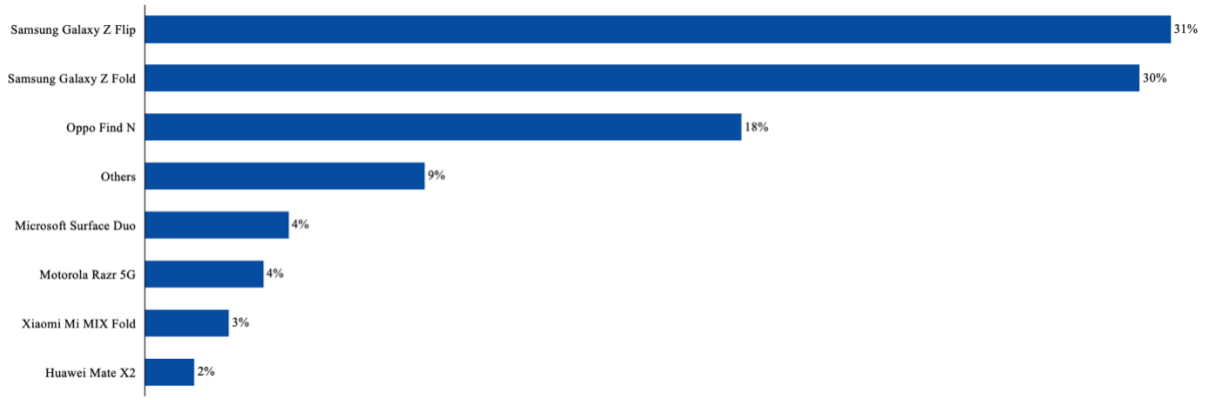

Source (adapted): Samsung Electronics (2023b).

Exhibit 22: Pyramidic Equity Ownership Structure (in %).



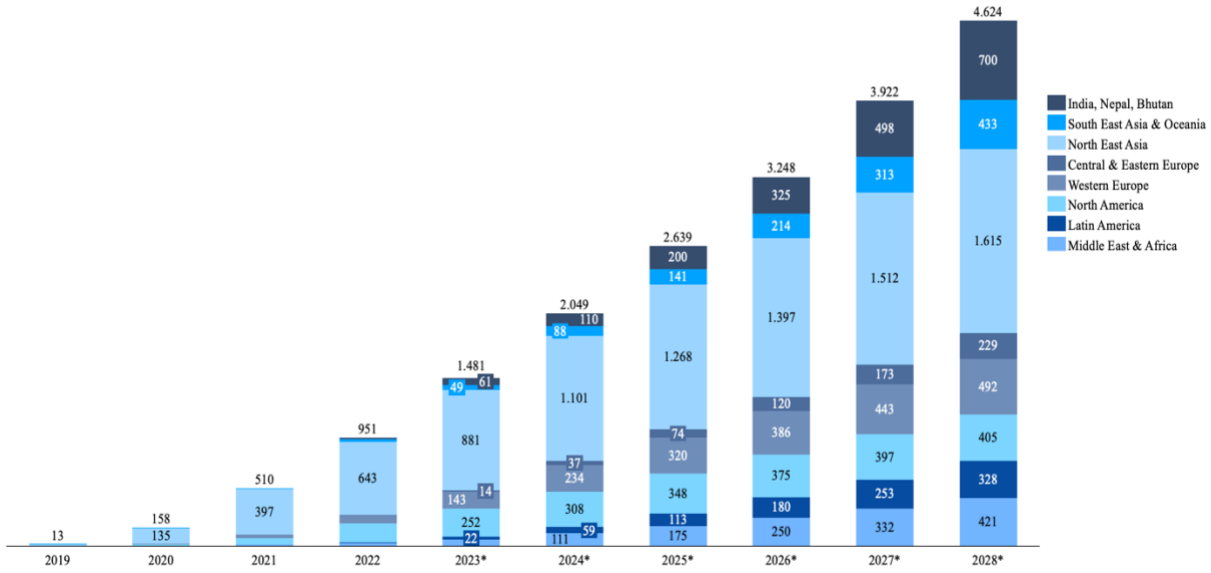

Source (adapted): Back (2014).

Exhibit 23: Share of respondents owning a foldable smartphone worldwide as of February 2023, by vendor (in %).




Source: Laricchia (2023f).

Exhibit 24: 5G subscription worldwide from 2019 to 2028 (in million users).



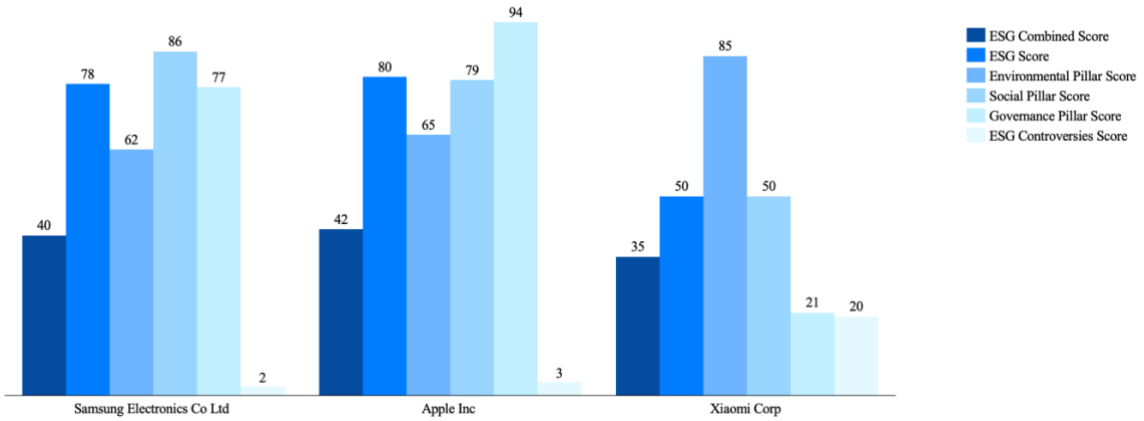

Source: Statista (2023d).

Exhibit 25: Mineral commodity cost development.

| **Vulnerable raw material costs (3TG costs)** | **2022** | **2021** | **2020** | **2019** | **2018** | |
|---|---|---|---|---|---|---|
| **Tantalum** (used in most electronic devices due to high reliability) | 150 | 158 | 158 | 161 | 214 | *$/kg* |
| **Tin** (included in electronic products and components) | 31.335 | 32.384 | 17.125 | 18.661 | 20.145 | *$/mt (in $ per metric ton unit)* |
| **Tungsten** (valuable to its high melting point) | 270 | 225 | 172 | 198 | 261 | *$/mt (in $ per metric ton unit)* |
| **Gold** (valuable due to ist malleability, ductility, thermal and electrical conductivity) | 1.929 | 1.802 | 1.799 | 1.774 | 1.393 | *$/ounce average closing price* |

Source (adapted): Samsung Electronics (2023a) and Statista (2023g).

Exhibit 26: ESG Scores of Competitions and Samsung.




Source: Refinitiv (2023).

Exhibit 27: Relative R&D Spendings.

| | Samsung | Apple | Huawei | Xiaomi | Vivo | Oppo | Transsion |
|---|---|---|---|---|---|---|---|
| Relative R&D expenses, as of revenues | 8,25% | 8,30% | 25,13% | 5,72% | n/a | n/a | n/a |

Source: Samsung Electronics (2023b), Apple Inc. (2023), Huawei (2023), and Xiaomi (2023).

Exhibit 28: Registered patents per year.

| | 2022 | 2021 | 2020 |
|---|---|---|---|
| Korea | 9.136 | 8.437 | 6.648 |
| US | 8.490 | 8.565 | 8.520 |

Source: Samsung Electronics (2023b).

Exhibit 29: Samsung Electronics Production. Adapted from Samsung Electronics (2023b).

**Capacity** *1,000 units*

| Organization | Item | Capacity | | |
|---|---|---|---|---|
| | | 2022 | 2021 | 2020 |
| DX division | Image devices | 55.747 | 54.235 | 51.538 |
| | HHP | 332.170 | 319.550 | 321.600 |
| DS Division | Memory | 1.905.731.836 | 1.756.009.941 | 1.230.287.321 |

**Output** *1,000 units*

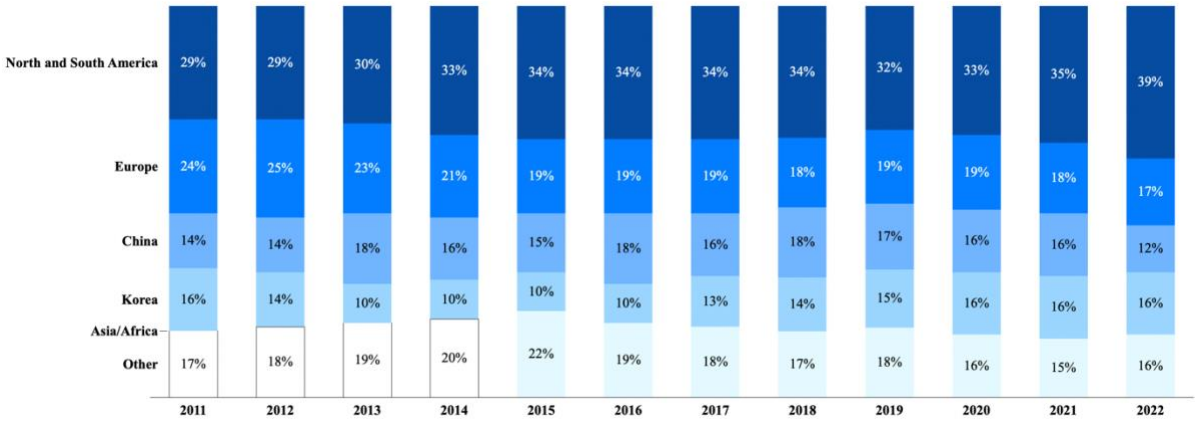
| Organization | Item | Output | | |
|---|---|---|---|---|
| | | 2022 | 2021 | 2020 |
| DX division | Image devices | 41.802 | 44.133 | 48.244 |
| | HHP | 229.180 | 260.501 | 249.218 |
| DS Division | Memory | 1.905.731.836 | 1.756.009.941 | 1.230.287.321 |

**Utilization Rates** *1,000 units*

| Organization | Item | 2022 | | |
|---|---|---|---|---|
| | | Production Capacity | Output | Utilization Rate |
| DX division | Image devices | 55.747 | 41.802 | 75% |
| | HHP | 332.170 | 229.180 | 69% |

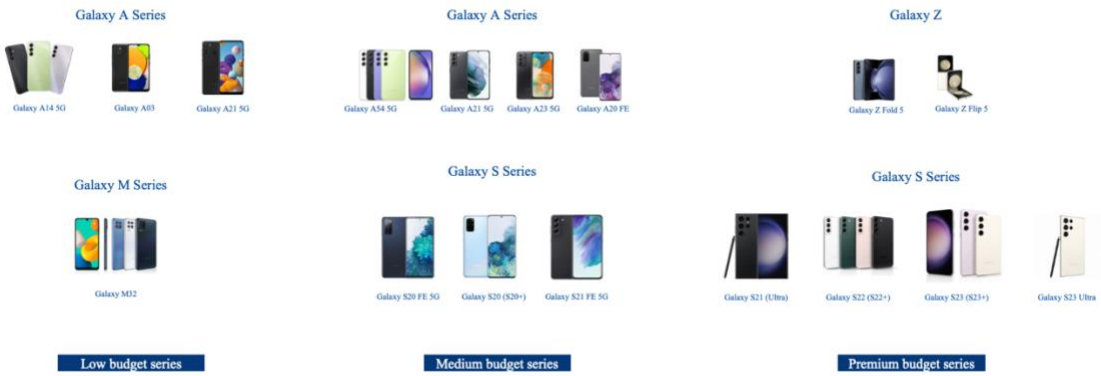
| Organization | Item | 2022 | | |
|---|---|---|---|---|
| | | Pot. Production time | Actual production time | Utilization Rate |
| DS division | Memory | 83.016 | 83.016 | 100% |

Exhibit 30: Samsung Electronics share of revenue from 2011 to 2022, by region (in %).



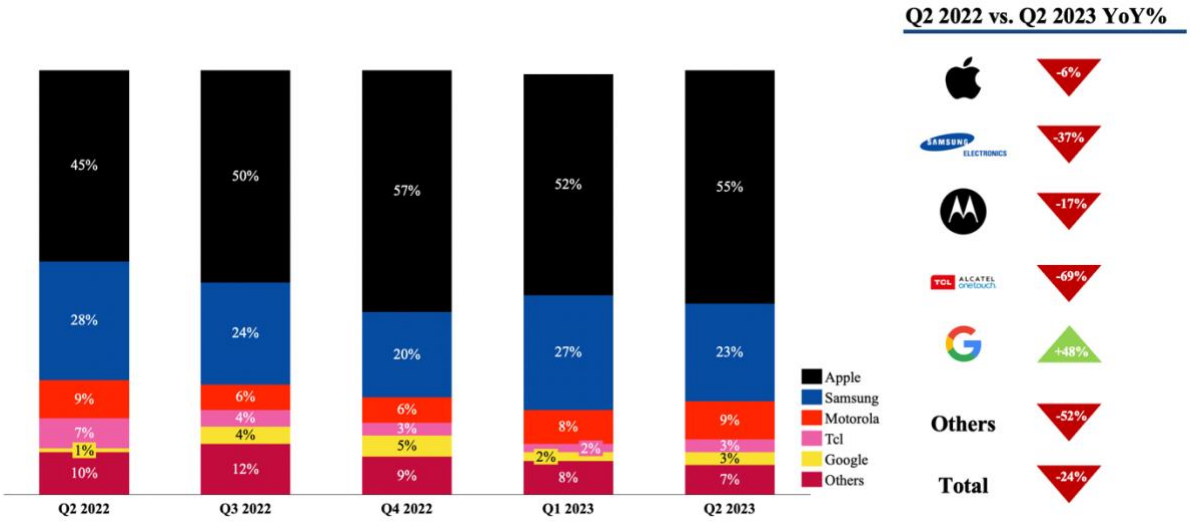

Source: Laricchia (2022).

Exhibit 31: Samsung's smartphone offerings in the current U.S. market.



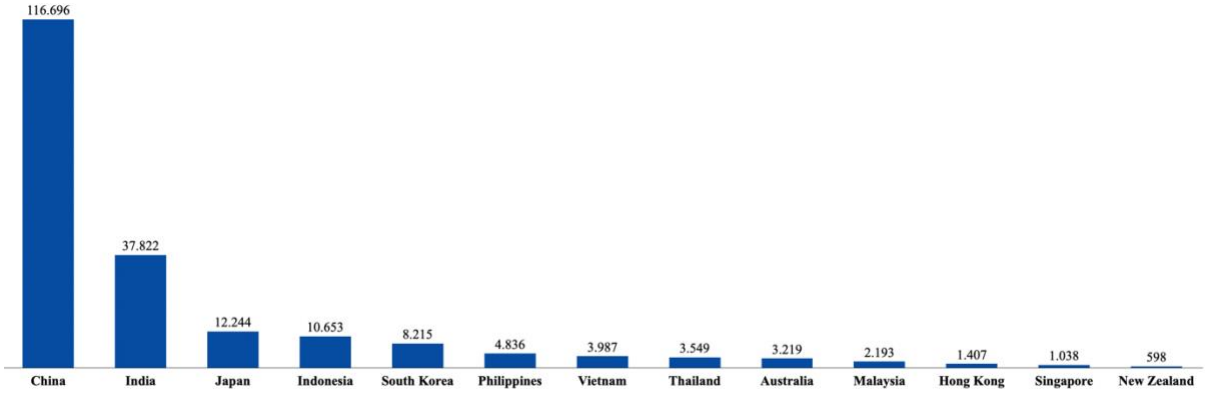

Source (adapted): Samsung (n.d.a).

Exhibit 32: US Smartphone Shipment Share by OEM (in %).



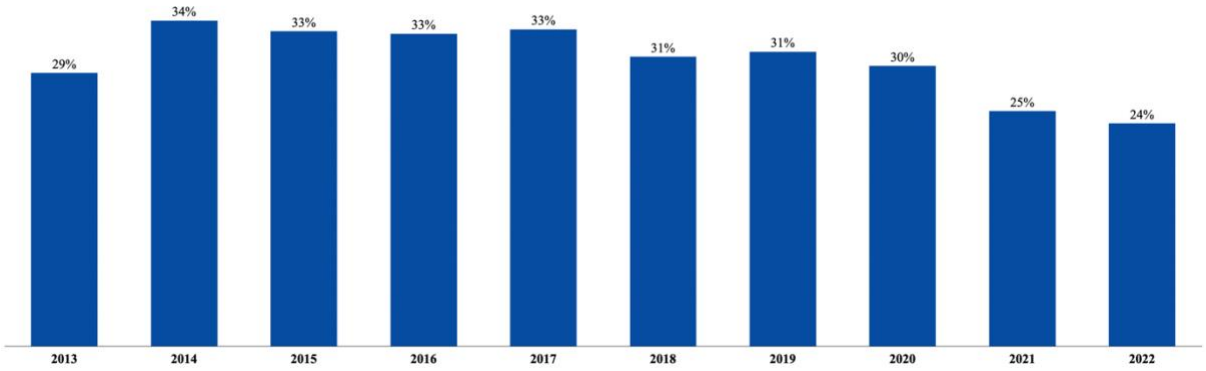

Source: Counterpoint (2023b).

Exhibit 33: Revenue of the smartphone market in the Asia-Pacific region in 2022, by country (in billion $).




Source: Statista (2023i).

Exhibit 34: Market share of Samsung smartphones in Asia from 2013 to 2022 (in %).




Source: von Kameke (2023a).

Exhibit 35: Southeast Asia Market Share (in %).

**Indonesia**

| | | |
|---|---|---|
| 1 | Oppo | 20% |
| 2 | Samsung | 19% |
| 3 | Vivo | 18% |
| 4 | Xiaomi | 16% |
| 5 | Transsion | 13% |

**Philippines**

| | | |
|---|---|---|
| 1 | Transsion | 35% |
| 2 | Realme | 19% |
| 3 | Oppo | 12% |
| 4 | Samsung | 11% |
| 5 | Vivo | 8% |

**Thailand**

| | | |
|---|---|---|
| 1 | Samsung | 23% |
| 2 | Oppo | 15% |
| 3 | Xiaomi | 12% |
| 4 | Realme | 12% |
| 5 | Apple | 10% |

**Vietnam**

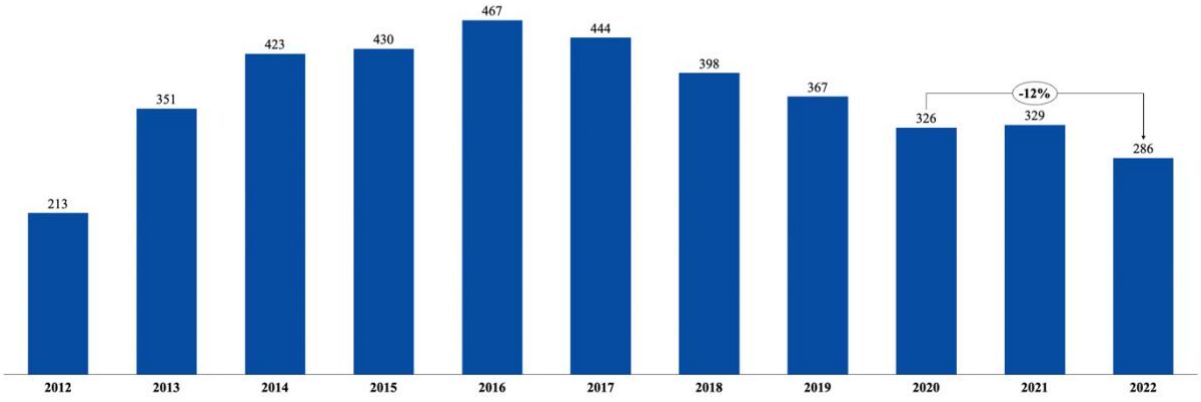
| | | |
|---|---|---|
| 1 | Samsung | 31% |
| 2 | Xiaomi | 22% |
| 3 | Oppo | 14% |
| 4 | Apple | 14% |
| 5 | Realme | 10% |

**Malaysia**

| | | |
|---|---|---|
| 1 | Xiaomi | 18% |
| 2 | Samsung | 17% |
| 3 | Oppo | 16% |
| 4 | Vivo | 12% |
| 5 | Realme | 10% |

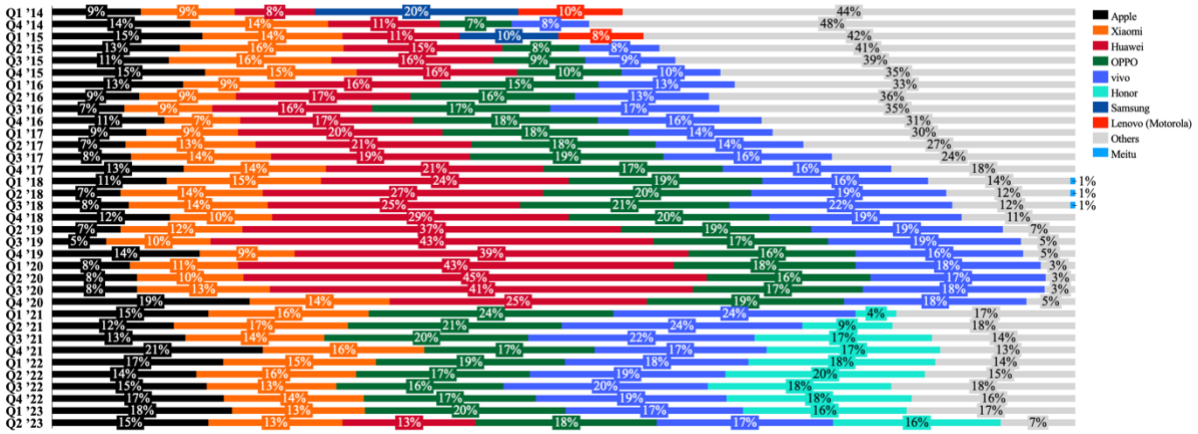
Source: Canalys (2023c).

Exhibit 36: Total number of smartphone shipments in China from 2012 to 2022 (in million units).



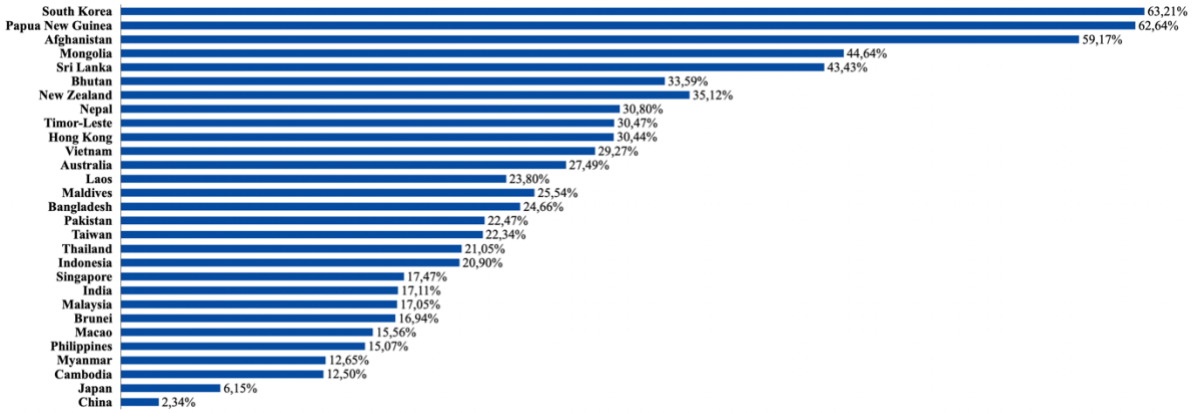

Source: Slotta (2023a).

Exhibit 37: Smartphone vendor market share in China Q1 2014-Q2 2023 (in %).




Source: Slotta (2023b).

Exhibit 38: Market share of Samsung smartphones in the Asia-Pacific region in 2022, by country (in %).




Source: von Kameke (2023b).

Exhibit 39: Leading 5G innovators and licensors.

| Rank | Company | HQ |
|---|---|---|
| 1 | Huawei | China |
| 2 | Qualcomm | USA |
| 3 | Samsung | Korea |
| 4 | Ericsson | Sweden |
| 5 | Nokia | Finland |
| 6 | LG Electronics | South Korea |
| 7 | ZTE | China |
| 8 | Oppo | China |
| 9 | NTT | Japan |
| 10 | InterDigital | USA |

Source: LexisNexis (2023).

## Group Part – Teaching Note

### Case Summary

The Samsung case is set for the second half of 2023, when Samsung is leading the global smartphone market with a share of 20%. Samsung Electronics has been a cornerstone of the smartphone industry, launching its first smartphone in 2010. Since then, Samsung has established itself as an affordable yet highly innovative company. This has contributed to the company's growth in demand across global regions and customer segments.

However, rising competition from Chinese OEMs intensifies industry rivalry, threatening Samsung's positioning in the market: As of the second quarter of 2023, the global market share is distributed among five players, while three out of the five are Chinese OEMs. Additionally, geopolitical tensions, global economic uncertainty and shifting consumer demand challenged the industry as smartphone replacement cycles extended.

The case scenario unfolds with an exploration of the challenges faced by Han Jong-hee, the CEO of Samsung Electronics, as he formulated a premium focus as the optimal strategy to ensure Samsung's enduring competitive edge. Jong-hee must carefully weigh whether this decision was the right one and make a well-versed proposal to prove himself. The objective of this case study is for students to analyse Samsung's current positioning to debate opportunities and threats, eventually formulating a recommendation.

### Target Audience and Objective

The case teaches students how to adapt a company's business strategy in the world of the booming smartphone market leader, Samsung. It is particularly suited for strategy courses and seminars at both undergraduate and graduate levels and is also suitable for Executive Education Programs. The focus of the case analysis is on the assessment of the smartphone industry and Samsung's performance in the highly competitive environment. Students should put themselves

in Jong-hee's shoes to analyse critical factors affecting Samsung's strategic positioning in vertical trading relationships and horizontal competitive relations. After recognising Samsung's competitive advantage in the industry, students should develop strategic recommendations that will enable Samsung to maintain this advantage in the long term.

**Learning Objectives**

After analysing the case, students will be able to understand and leverage the following outcomes:

*Innovation and Differentiation:* Like many other Asian brands, Samsung transitioned from a fast follower to an innovative industry leader. It embraces its position as a market leader by differentiating its smartphone product categories and leveraging its extensive market reach.

- Understand how Samsung is upgrading from its historical strength of mass production within the low-to mid-priced segment towards high-quality, high-priced smartphones to maintain its reputation for innovation and excellence.
- Recognise how Samsung reinforces its market leadership through technological advancements and strong brand positioning, emphasising its commitment to consumer-centric innovations by continuously extending its ecosystem and product compatibility.
- Understand how Samsung plans to enhance smartphone accessibility, particularly in emerging markets with growth potential where smartphone adoption is still expanding and aims to capture market share by providing value-oriented devices.
- Understand the difference between emerging and mature markets and how the status of maturity influences consumers' purchasing decisions.
- Investigate the advantages and disadvantages of this strategic transformation and the likelihood of success.

*Sustainable competitive advantage:* To lead in the competitive industry, Samsung must strengthen its capabilities, enabling disruptive innovations.

- Assess the competitive dynamics within the smartphone industry, including the roles of competitors, market trends, and disruptive forces, and understand how Samsung has (effectively) responded to these dynamics.
- Emphasise the role of network externalities in enhancing Samsung's sustainable competitive advantage in the smartphone business by fostering a growing ecosystem of interconnected devices, software services, and brand loyalty.
- Recognising the unique resources and capabilities Samsung can generate through its vertically integrated supply chain and their contribution to Samsung's success in the smartphone industry.

Based on their analysis, students should be able to formulate recommendations for Samsung's future strategies to sustain and enhance its sustainable competitive advantage in the dynamic smartphone business.

**Teaching Plan**

The teaching plan (Exhibit 1) is structured into a self-study period and an in-class discussion. The self-study period allows students to read and prepare the case, while the in-class debate is set for 90 minutes. The case study sets the scene and provides the required information about the smartphone industry and Samsung's current positioning in different markets. The analysis builds on the strategic decision-making to foster the company's positioning. It is structured into four parts representing the various steps Jong-hee must take during the strategic planning process.

One key guiding question per framework summarises sub-questions in each part of the analysis. Sub-questions support the lecturer in guiding the discussion to the desired outcomes, eventually realising the learning objectives. Detailed solutions in text and summarised figures

in the appendix are therefore provided. Furthermore, the questions should encourage a lively discussion in class, motivating students to assess the facts and justify their results with information from the case. Additionally, the included exhibits are designed to assist the lecturer in presenting key findings through tables for visual clarity. It's advisable to share these exhibits with students after the analysis or to note them down during class, ensuring that students can access the information and sample solutions for reference.

The four sections of the case are framed by opening and closing questions. To help students prepare for the in-class discussion, the lecturer should forward Q1.1, Q1.2 and Q1.3 about the external environment and the case. The in-class discussion should start with summarising students' key findings of Q1.1, Q1.2 and Q1.3, guided by the questions in the respective parts. Students should understand market dynamics to connect the macro-environment with the intensity of competition in the smartphone industry. Due to the time limit of 90 minutes, this should not take longer than 30 minutes. Afterwards, Samsung's main internal analysis should be initiated.

Overall, the sub-questions should allow the lecturer to gauge the progression of students' understanding of Samsung's positioning and chances for future success in the global smartphone market. Ideally, the lecturer can indicate a journey of discovery when students realise how the external industry environment influences Samsung's internal business structure and how resources and distinctive capabilities support the company's sustainable competitive advantage. Eventually, students should derive a recommendation for Samsung's future success in the global smartphone industry.

Before the lecturer should pose the opening question, the following main items on the agenda should be presented:

- *External analysis:* Understand the smartphone industry's macro environment and attractiveness by analysing the intensity of competition. Identify market dynamics and forecast the evolution of the sector.
- *Internal analysis:* Build Samsung's value chain and identify threshold resources and activities.
- *Strategic decision-making:* Identify Samsung's distinctive resources and capabilities to understand the company's sustainable competitive advantage.
- *Recommendation:* Define a strategic recommendation that supports Samsung in creating a sustainable competitive advantage in the long term.

## 1. External Analysis

### *1.1 The macro environment of Samsung*

The analysis starts with the PESTEL and covers the vital macro-environmental trends influencing Samsung's strategic decision-making and operations in the smartphone industry. The objective is to identify opportunities and threats that Samsung encounters within the industry landscape.

***Q 1.1: What are the main trends shaping the smartphone industry? How are these drivers intertwined? How do they impact Samsung's smartphone business?***

To start the discussion about the macro-environment, the lecturer should ask the students: *"Considering the rapidly evolving landscape of the smartphone industry, what would you identify as the key factor driving the relevant market and non-market changes that influence Samsung?"* Students should be able to conclude from their self-study analysis that the intersection of Political, Social, Economic, and Technological factors mainly influences Samsung in the smartphone industry, shaping its market dynamics, consumer preferences, and innovation trajectories (Exhibit 3).

***Political**:* The lecturer should ask the students: *"How is the geo-political landscape, including trade restrictions and tariffs, influencing the global smartphone industry and thus Samsung's positioning?"* The students should mention Huawei's alleged close relationship with the Chinese government and the U.S.'s fears of risks to national security, particularly in connection with the rollout of the 5G networks. The resulting ban of Huawei from the U.S. market influences the whole smartphone industry due to supply chain distributions and a change in the competitive landscape. Moreover, they should connect Huawei's ban from the U.S. market to the emerging presence of Chinese OEMs in the global smartphone market while they disappear in the U.S. market. The fast-follower strategy employed by Chinese manufacturers is perceived as a threat to the U.S.' domestic innovations and intellectual property rights. Yet, despite U.S. sanctions on Chinese technologies, Chinese companies like Xiaomi, Vivo, and Oppo instantly filled the declined market share of Huawei (Case Exhibit 5), demonstrating the fast-paced competitive nature of the industry. Students should point out that the trade war threatened Samsung, as Huawei was a significant customer of Samsung's memory chips. The disruptions in the supply chain and sales restrictions for Huawei led to lower demand for these chips and, thus, lower sales for Samsung.

The lecturer should now challenge the students and ask: "*How have Chinese manufacturers seized significant global market shares despite their diminished presence in North America, especially the U.S. market?*" Students should use information from the case and identify the following:

- **China's** expansion of trading routes, especially in emerging markets, facilitates exports and thus supports Chinese manufacturers in establishing a presence on the global market (Case Exhibit 2).
- Investments by the **Chinese government** in R&D improve the competitiveness of Chinese companies in the global market.

- **Chinese policies** promote domestic technologies and help Chinese manufacturers benefit from the large consumer base (economies of scale) influencing global market shares (Case Exhibit 6).

***Economical**:* The lecturer should now lead to the following framework domain and ask: *"How are economic trends influencing the industry and thus Samsung?"* Using Case Exhibit 3, students should indicate that the Russian-Ukraine war impacts overall smartphone shipments. Inflationary pressure and general uncertain fiscal and monetary policies lead to conservative consumer spending around the globe, dimming post-COVID recovery. Consequently, less discretionary spending caused smartphone shipments to decrease in Q2 2023. However, students should put this development in contrast to increasing industry profits (Case Exhibit 11), bolstered by the industry's concentration on flagship sales. Thus, Samsung's operating profits also increased due to the company's strategic emphasis on premium products.

***Social**:* To analyse the contrary movement, the lecturer should ask the students: *"How do economic growth rates specifically influence the nature of demand and supply, and in what ways can they shape the innovativeness, power, and effectiveness of companies?"* Students should take from the case that smartphone upgrade cycles have extended, leading to delayed smartphone purchases. Especially in mature markets, consumers are waiting for innovative developments that make a new purchase worthwhile, demanding more significant technological advancements from manufacturers. Also, increasing consumer awareness of sustainability can be mentioned here. Overall, these trends are supporting the increasing demand for premium products, which encompass the newest technologies, feature upgrades, and support longer technological lifecycles at higher prices. After analysing this movement, the lecturer should lead the discussion towards the differentiation between consumer sentiment across regions and demographics by mainly focusing on consumer preferences between emerging and mature markets. The lecturer should ask: *"How are emerging markets contributing to the growth of the*

*smartphone industry? Why are Chinese manufacturers successful in these regions?".* Students should point out that the effectiveness of smartphone companies in emerging markets depends on their ability to understand local consumer preferences. Their preference for money-for-value products supports the market dominance of Chinese manufacturers (Case Exhibit 2), threatening Samsung's value-based strategy. Growing smartphone adoption rates (Case Exhibit 9) and increasing forecasted economic growth rates underline the prospect of those markets.

***Technological**:* The lecturer should ask the students: *"What are current technological advancements driving the smartphone industry, and how are they shaping the future of mobile communication? How do these trends influence Samsung?"* Students should transfer from their user behaviour that their smartphone usage goes beyond simple internet usage. Technologies like IoT integration, real-time data enabled by 5G connectivity, and enhanced data storage via cloud computing create an interconnected ecosystem. This ecosystem fosters a user experience that is seamless, efficient, and tailored to individual needs. These improvements encourage consumers to replace their smartphones earlier. Thus, students should again connect these trends to the rising demand for high-end products, which often incorporate the latest innovations.

***Environmental & Legal**:* To end the analysis, the lecturer should ask the students: *"In what ways is sustainability relevant within the industry?"* The lecturer should not lead the discussion towards a specific answer but rather support the students to gather ideas. Advanced battery technology to foster efficiency, extended product lifespan through longer software updates or repair services, more sustainable components, and net-zero targets of companies could be named. However, students should also indicate that flagship products are often more sustainable as their durability is extended and high-quality components are used.

Then, the lecturer should also refer to *legal obligations* crucial in guiding the smartphone industry towards sustainability. Students should refer to the government-

implemented regulations covering direct pollution, product stewardship and sustainable development. Thus, students can refer to industry collaboration, internal R&D, responsible supply chain management, and CSRD initiatives within their organisational fields and internal organisation to foster sustainable development. Sustainability should be identified as an opportunity for OEMs as it opens possibilities for innovation and competitive differentiation. However, to implement new regulations, students could also identify financial threats for the company.

***Q 1.2: What is the smartphone market's size, growth, and demand?***

After analysing the macro-environment of the smartphone industry, students should indicate major developments influencing industry dynamics. The analysis serves as a bridge between the PESTEL and Porter's Five Forces.

The global smartphone market has experienced significant growth over the last decade, driven by technological advances, increasing internet penetration, and rising demand for mobile connectivity. Thereby, emerging markets often showed higher growth potential due to the increasing penetration of smartphones. However, despite rising numbers during COVID-19, smartphone shipments have decreased by 22% since 2017. As of Q2 2023, the major decline of 24% YoY challenges global smartphone OEMs (Case Exhibit 2).

The smartphone market can be segmented using different variables. It is divided into common segments: price (low-, mid-, and high-priced smartphones) and geographic region. Regional differences are observable regarding geographic regions, with the smartphone penetration rate serving as an indicator of market maturity, impacting growth opportunities for OEMs. However, the Asia-Pacific region is predicted to grow the most in revenue. Thus, until 2028, the region is predicted to grow at a CAGR of 19% (Case Exhibit 10). This is mostly due to higher disposable incomes and the growing relevance of technology, making the region an important market for OEMs.

Moreover, the market can be segmented by OS, with Google's Android and Apple's iOS being the most popular.

However, when analysing a market, it is crucial to understand which companies are proclaiming positions in the market. By the second quarter of 2023, the global smartphone industry is led by five major players, namely Samsung (20.2%), Apple (16%), Xiaomi (12.5%), Oppo (9.6%) and Transsion (9.5%), while various smaller player predominately from China are capturing the rest of the market (Case Exhibit 2).

The declining shipments are primarily driven by rising maturity in emerging markets, showcasing high smartphone penetration rates. While the Russia-Ukraine war slows post-COVID recovery, consumers are becoming more price-sensitive, especially regarding non-necessary goods such as smartphones. Additionally, rising consumer awareness for sustainability contributes to lengthening upgrade cycles of smartphones and thus decreasing demand for smartphones. Only the newest technological features and major upgrades can encourage consumers to purchase a new smartphone. For this reason, the premium segment has been experiencing increasing demand since 2023.

***Q 1.3 What are the competitive forces in the global smartphone industry? How is the intensity of competition impacted by the industry structure?***

By reading the case, students should be able to analyse the intensity of competition and how industry structure affects the intensity of competition by applying Porter's (1980) Competitive Five Forces Framework (Exhibit 4). The lecturer should define industry attractiveness as measuring how easy it is for participants to earn (high) profits, and, therefore, the lecturer should ask the students: *"What key determinants are influencing the profitability in the industry?"* Students should be able to identify the extent of competition and the strength of buyers and suppliers as key determinants. However, complements and network effects must be acknowledged as they shape industry competencies.

***Competitive Rivalry:*** The competitors' market concentration and distribution dictate the degree of rivalry within an industry. With the top five smartphone OEMs capturing nearly 68% of the global market share, only a few smartphone manufacturers dominate. Market leaders are showcasing similarities in their ability to produce and impact industry dynamics through competitive behaviour. However, smaller players are capturing the rest of the market. Competitive pricing tactics align with the oligopoly theory, predicting lower prices once more competitors are in the market (Besanko et al. 2012). This speaks to Chinese manufacturers who undercut each other to improve their market position, intensifying rivalry. Thus, the increase in market share is influenced by the elasticity of demand that the firm experiences and by the possibility of competitors lowering their prices in reaction.

With industry growth rates stagnating in developed markets like North America or Europe, rivalry intensifies as competitors can only gain market share at the expense of others.[99] Strained margins due to increasing production costs and pricing pressure through low-priced Chinese competitors accelerate the need for innovative approaches and technological advances to differentiate from the competition. Alongside, students should gather that high smartphone penetration levels in mature markets, extended replacement cycles of consumers and the establishment of second-hand markets further accelerate a highly competitive environment.

The entry of Chinese manufacturers in the premium-priced segment further intensifies the competition's need to differentiate through high quality and innovation. Additionally, high fixed costs due to increased investments in capital requirement, R&D, innovation, and production costs result in high entry barriers and a **high** rivalry.

The importance of **network effects and complementors** on competition rivalry should be a focal discussion point. The lecturer should, therefore, ask: "*How do operating systems and*

[99] Students can additionally use the Industry Life Cycle and apply it to the Smartphone industry. After a short discussion, participants should assign a saturated market as repeat purchases grow and limited global growth in a mature industry result in a shift to innovation and aggressive marketing.

*complementors influence the dynamic of competition in the smartphone industry?"* Students should use this question to separate between the two main OSs of the industry, Google's Android and Apple's iOS, that impose competition.

Students should then identify the impact of network effects through complementors, among others, that create lock-in effects in the respective OS (Case Exhibit 15). Amplifying consumer switching costs while reinforcing the dominance of established players and creating entry barriers, ultimately decreasing competition dynamics while magnifying incumbency advantages. Finally, students should take away that the intense rivalry leads to intense competition defined by competitive pricing, higher marketing spending and the need to differentiate through innovation.

***Threat of entry***: Throughout the following section, students should highlight the interdependency of rivalry and entry barriers. The lecturer should guide the conversation by asking: *"What significance do entry barriers pose on the competitive dynamic between existing OEMs?"* Initial costs of starting a smartphone manufacturing company run high due to the requirement of significant investments in R&D, manufacturing, marketing, and distribution, as well as the necessary development or acquisition of technological advancements to jumpstart, resulting in high capital requirements. Students should refer to the immense economies of scale and scope as prominent players can produce higher volumes to reduce per-unit costs. Offering incumbents natural advantages as they have generated a successful experience curve, providing them a cost advantage through efficient production usage. Thus, new players must achieve a solid market share to achieve the minimum efficient scale. Until then, the new entrant might face a significant cost disadvantage.

Further, the access to specific technologies, components, and patents of long-established players like Samsung are inaccessible to new players. Students should refer to exclusive, long-maintained relationships with distributors, retailers, and telecommunication carriers, impeding

access to distribution channels for new entries. Thus, new entrants must heavily invest in brand awareness to establish a strong reputation. Also, critical inputs like raw materials and technological know-how are to be mentioned as barriers to entry.

Previously mentioned network externalities, complimentary products, and high brand loyalty strengthen existing incumbents' standing. Samsung's large installed base contributes to its advantage of network externalities. Lastly, manufacturers are subjected to government policies, regulations, and ongoing trade tensions, previously analysed in the industries PESTEL, that have an unfavourable effect on the supply chain. With the given conditions, students should, therefore, conclude a **low** threat of entry.

***Power of Buyers:*** To elaborate on the bargaining power of buyers and their impact on industry attractiveness, the lecturer should ask students: *"To what extent are buyers shaping the industry and its attractiveness for OEMs?"* Students should start by distinguishing between businesses and end consumers as buyers. This differentiation is important as businesses and retailers buy larger quantities and thus have more negotiation power than the end consumer does. Retailers and carriers, as intermediate to customers, gain significant bargaining power through their ability to influence customers' purchasing decisions with promotions, offers and services. In the hypercompetitive environment, where price sensitivity and the costs of switching products and providers vary greatly, buying power also varies between different price segments. While price-sensitive consumers value low costs and are flexible in their brand choices, consumers willing to pay more are focused on value, quality, and brand loyalty. High-end buyers are, therefore, less influenced by price adjustments than low-end buyers.

Also, students should indicate the lock-in effects of OSs, where switching platforms entails transaction, learning and psychological costs. Explained by the loss of data, the need to relearn a new system and brand loyalty. Strategic lock-in effects that differentiate OEMs can create high switching costs. Additionally, with a wide choice of products, models, features,

suppliers, and easily accessible information that reduces asymmetry, consumers can easily compare prices from different brands and choose from multiple sales channels. This significantly increases their purchasing power. Therefore, students should conclude that the **high** buyer power diminishes the industry's profitability while discouraging new prospects from entering markets due to the high switching costs.

***Power of Suppliers***: To analyse the supplier power in the smartphone industry, the lecturer should ask: "*What are the power dynamics of suppliers and manufacturers?"* The most vital observation should be the power discrepancy between hardware and software suppliers, such as Google with Android, supported by consumers' switching costs. Software suppliers have a higher bargaining power due to the smartphone industry's unique positioning of proprietary ecosystems. They have considerable bargaining power since OEMs depend heavily on platforms like Android, owing to the industry's reliance on ecosystems (excluding Apple as they provide their software technology) and the lack of comparable alternatives. On one hand, hardware suppliers are interchangeable due to the complex and highly fragmented chain of suppliers across the globe.

On the other hand, hardware suppliers rely on a few big players as their buyers, leaving them with little power, as the loss of one could result in extensive economic losses. Therefore, a high ratio of firm concentration to supplier concentration limits suppliers' power and influence in the smartphone industry. High entry barriers further diminish the power of suppliers as a forward integration is unlikely. Students should recognise the disparity in bargaining power between the two types of suppliers and, upon evaluating them, infer that the overall bargaining power of suppliers ranges from **moderate**.

***Threat of Substitute:*** To finalise the analysis, the lecturer should ask: *"Can you identify a threat of substitute?"* From the low risk of products suitable to substitute smartphones in the same extent of functionality, convenience and portability, students should conclude a higher price

flexibility for manufacturers. Students can list products that offer partial substitution, like feature phones for essential communication or tablets for entertainment. However, the lack of alternative products for consumers ultimately reduces competitive pressure and strengthens the market position of existing manufacturers.

## 2. Internal Analysis

### *2.1 Samsung's Value Chain*

The following analysis evaluates the internal resources and capabilities responsible for Samsung's value creation. Extracting information about Samsung's positioning and understanding the company's value chain will help students understand Samsung's competitiveness in the market.

***Q 2.1 Which resources and capabilities support Samsung's competitive advantage?***

**Positioning:** To start the analysis of Samsung Electronics, the lecturer should ask: *"What is Samsung's strategic positioning?"* It is here to mention that Samsung's traditionally employed "Fast Follower" strategy has accelerated the company's ability to quickly adapt and improve upon innovations introduced by competitors at a cheaper price. This has allowed Samsung to become a dominant player in the industry. Students should name market penetration, brand perception, diversification in Samsung's product line, innovation leader, resilience, and patents as key drivers, adding value to their consumers worldwide. Overall, this strategy allowed Samsung to quickly adapt and improve upon innovations and designs introduced by others. Thus, Samsung could expand its market presence, scale up operations, and increase its overall size as a corporation.

**Value chain:** To maximise value, students should highlight the most relevant activities in Samsung's value chain. The lecturer should dig deeper into the corresponding activities by asking: "*How can Samsung Electronics strategically leverage its unique resources and capabilities to create and sustain value?"* From their previous strategy courses, students should

be familiar with distinctive resources and capabilities necessary to differentiate from the competition. They should understand how companies can create value for the end consumer and ensure a superior positioning through resources and capabilities. Students are encouraged to use Porter's value chain (1985) to structure their analysis (Exhibit 6). Additionally, the lecturer can use the value creation of Apple in comparison to Samsung's as a tool for reference to moderate discussion for students (Exhibit 7 & Exhibit 8).

Samsung's value chain comprises several resources and capabilities that are extensively interconnected. Therefore, this teaching note proposes a structure based on Samsung's unique organisational structure, leveraging financial flexibility, and yielding potential for supporting its vertically integrated supply chain, innovation process, operational efficiency, distribution, and brand.

***Chaebol structures:*** To build the foundation of all the following capabilities, the lecturer should begin the discussion by asking: "*What differentiates Samsung's organisational structure from other producers? How does the Chaebol financially benefit from it?"* State-owned South Korean banks are known to support Chaebols like Samsung, facilitating long-term investments at attractive rates. This fuels Samsung's ambitious projects and innovations and contributes to its financial stability, making it more attractive to foreign investors. Furthermore, cross-subsidisation enables more profitable subsidiaries to support underperforming ones, ensuring overall financial robustness and risk reduction within the company.

Additionally, the size of the Chaebol empowers Samsung to engage in strategic investments and mergers that are typically beyond the reach of smaller firms. This opens doors for acquiring new technologies, entering uncharted markets, and expanding product lines, fuelling Samsung's continuous growth. Students should, therefore, understand that Samsung

can shift capital and resources between subsidiaries, which bolsters innovation and expansion initiatives without overreliance on external funding.

***Internalisation of manufacturing**:* Students should elaborate on the different value-creation steps after discussing the company structure. Narrowing down on the supply chain, the lecturer could ask: "*What are the key components of Samsung's supply chain, and what advantages does it bring to those of competitors?"* Students should point out the vertically integrated supply chain of Samsung's smartphone business. Producing components such as semiconductors, OLED displays, and end products decreases supply chain disruption risk. The autonomy of the supply chain further anticipates shortages due to explicit knowledge of monitoring information systems, which can combine information from several supply chain steps. This proved to be increasingly valuable during the COVID-19 pandemic. The interconnectivity enhances Samsung's ability to scale manufacturing according to demand and creates an agile process, creating a causal ambiguity that sets barriers for competitors to duplicate. The result of these internal linkages lies in its ability to integrate a bundle of skills and technologies. For example, Samsung's expertise in semiconductor manufacturing enhances its smartphone capabilities, while its leadership in display technology is evident in its consumer electronics products. Embedded in the organisation, all parts benefit from structures building the groundwork for subsequent profit pools.

***R&D capabilities and the resulting innovation:*** To analyse the next step within the value creation process, the lecturer should guide the class towards Samsung's R&D capabilities: "*How does Samsung develop its technology leading to cutting-edge innovation?"* Students should learn from the case that Samsung leverages its geographical and cultural diversity to foster innovation with established R&D hubs across significant tech hotspots such as Silicon Valley and South Korea (Case Exhibit 21). R&D investments account for 8.2% of its revenue, feeding the company's substantial portfolio of patents, particularly in technology and design,

which serves to delay imitation by competitors. Notably, Samsung's patents extend beyond end products to encompass production processes and components, again underlining its involvement in areas like semiconductor manufacturing and, therefore, the advantages of vertical integration.

Students could acknowledge the "phablet" as an example of internal competition and linkages within Samsung, spurring innovation as different divisions collaborated. This synergy and the highly integrated supply chain ensure a seamless flow of tacit knowledge into the R&D process. Additionally, strategic external partnerships, e.g., with telecommunication provider Qualcomm, augment Samsung's internal expertise in areas where it seeks deeper insights.

The combination of internal and external linkages makes it challenging for competitors to pinpoint and replicate Samsung's innovation formula. This ambiguity, where R&D is both the driver and outcome of Samsung's success, adds to the difficulty of imitation. Furthermore, the long-term employment of R&D personnel, which aligns closely with the company's vision and is supported by the Chaebol culture valuing extended internal connectivity, contributes to a consistent track record of technological leadership, as previously seen in innovations like OLED displays.

***Distribution channels and global coverage:*** The lecturer should then pass over to the distribution of the produced goods after covering operational aspects, asking: "*What measures support the evolvement of Samsung's global operation coverage?*" While exclusive logistic management systems are not uncommon in the global technology sector, Samsung's implementation is notably valuable. It allows for streamlined and efficient product delivery, a crucial factor in customer satisfaction and maintaining the rapid pace needed in the highly dynamic industry. Students should point out Samsung's company size as a potential supporting factor for the efficiencies created.

The presence of regional headquarters significantly bolsters Samsung's distribution effectiveness. These hubs provide market proximity, enabling Samsung to gain deep cultural insights and adapt its strategies to local consumer preferences and market conditions. The market proximity afforded by regional HQs also allows for quicker decision-making and responsiveness to local market changes. These regional bases are also instrumental in attracting and retaining local talent, further enriching Samsung's understanding of and engagement with diverse markets.

***Marketing (Strategy & Brand Image):*** Taking all parts of value creation under consideration, students should have already mentioned the importance of Samsung's brand throughout the analysis. The lecturer should ask students to elaborate on Samsung's marketing strategy by asking: "*Considering Samsung's global presence and diverse product portfolio, how does Samsung's marketing strategy create the company's brand image?"*

Over the years, Samsung's brand image has evolved from that of a fast follower to a premium provider. This transformation is rooted in its early beginnings and the support it has received from the Korean government. The company's extensive marketing and branding efforts, which include high-profile sponsorships and collaborations with celebrities and events such as K-Pop stars, have significantly enhanced its brand visibility and appeal (Case Exhibit 16). Additionally, the company's brand image related to smartphones is fostered through its various related businesses. Samsung's brand is distinguished by its commitment to innovation, cutting-edge technology, and quality. Its ability to continuously introduce market-leading features – which are sometimes also components sold to competitors, like OLED displays or chips – further strengthens its position as a leader in the technology sector, boosting its reputation in the B2B business.

***Cost (and organisational) efficiency:*** After assessing the main components of value creation, the consequences of profitability should be considered. Students should be asked:

*"How do these resources and capabilities amplify cost efficiencies superior to those of competition?"* Samsung Electronics generates cost efficiencies on several levels of its value creation, leveraging various facts of its operations and firm infrastructure. Due to its chaebol structure, the company's size and bargaining power enhance this capability, allowing for beneficial cooperation with external entities and reducing overall dependency on external supply. This not only improves overall efficiency but also facilitates cross-functional coordination, which is essential for maximising value through in-house development, generating knowledge spill overs and aligning diverse interests. Due to Samsung's high number of raw material suppliers in addition to their internalised supply chain, the company is capitalising on economies of scale, reducing per unit costs through large production volumes on many steps.

Furthermore, its production sites are versatile and capable of handling different processes, benefiting from economies of scope. This flexibility is enhanced by Samsung's historical evolution from a fast follower to a technology leader. Such a strategic shift has fostered internal processes, supporting the development of tacit knowledge that is obscure to competitors, contributing to its unique market positioning nowadays.

Long-term employee retention further bolsters operational efficiency, supported by solid HR incentives and conducive working conditions. This stability aligns employees' skills and visions with the company's objectives, reducing the need for external expertise in high-level positions. Internal linkages within Samsung ensure that employees are well-versed in their roles, contributing to learning-curve effects and the interconnectivity of various steps in the value chain.

Samsung's prime resources and capabilities, including its manufacturing, cost-efficiencies, R&D, and corporate culture, in combination with its financial resources, are interconnected and influence its brand image. In addition to its company history, the ensemble of all factors has

made Samsung one of the most recognised and valuable firms, and the resulting cost efficiency is one of Samsung's most valuable assets.

## 3. Strategic Analysis

### *3.1 Analysis of Samsung's (sustainable) competitive advantage with the VRIO framework*

The VRIO framework is a critical tool in the assessment of the firm's unique resources and capabilities on not only their scrutiny of value creation, but also their rarity, imitability, and organisation granting a sustainable competitive advantage.

***Q 3.1: How do these resources and capabilities create value? What are the companies' capabilities that are distinctive from others?***

First, students should understand that capabilities are activities and processes that Samsung performs to deploy resources that it owns. Resources are Samsung's tangible or intangible assets. Both are used to deploy the company's strategy. After the Value Chain Analysis has been conducted, students should be able to differentiate between threshold and distinctive resources and capabilities. While threshold capabilities and resources are minimum requirements to stay in business, distinctive resources and capabilities generate a sustainable competitive advantage for a company. Thus, students are asked to use the VRIO framework (Exhibit 8) to identify Samsung's distinctive resources and capabilities that generate a sustainable competitive advantage.

***Value****:* To start the analysis of the VRIO framework, the lecturer should ask: *"Do resources and capabilities exist that are valued by customers and enable Samsung to respond to environmental opportunities or threats?"* Answering that question, students should acknowledge that Samsung's brand goes hand in hand with R&D resources, fuelling innovation of cutting-edge technology and valuable designs to customers. Its broad product portfolio serves the needs of heterogeneous customer segments adapting to their specific needs. To best use

these segments, Samsung has built a distribution network ensuring global operations and after-sales services coverage.

Due to Samsung's vertical supply chain, integrating comprehensive parts of manufacturing, students should understand that Samsung gains the ability to produce different product groups while ensuring a high-quality level flexibly. First, products serve as components to the end products, such as chips and displays, but many end products enhance their ecosystem, generating economies of scope. Additionally, Samsung generates economies of scale due to its size, portfolio, diversified network of suppliers and the resulting internal process optimisation yielding cost efficiencies, which ensures low price levels for the end consumer.

Combined, all distinctive resources and capabilities enhance Samsung's strong brand built on continuous customer satisfaction. Its brand recognition related to smartphones is generated through globally distributed channels, sales outlets, promotion measures and services.

***Rare***: The lecturer should then ask, "*Does Samsung possess resources and capabilities that are rare to competitors?"* Students should recognise that Samsung's R&D capabilities give the company a competitive edge. This includes value creation, as the company's R&D resources and capabilities build the necessary foundation for Samsung's time-limited monopoly rights through patents, copyrights, and licenses. Which, in return, allows Samsung to protect outstanding innovative technology and processes from competitors.

Additionally, Samsung can cross-license innovative technologies to competitors, which fosters additional revenue and maximises return on initial R&D investments. A practice that can reduce possible conflicts while increasing legal rights in disputes for Samsung. Overall, this allows the company to secure significant temporary advantages as they protect intellectual property on future technology in the smartphone industry and neighbouring industries while creating unique relationships with competitors.

Students should also point out Samsung's distribution strategy that offers significant value through its omnichannel approach, including flagship stores, carriers, third-party retailers, and online platforms, ensuring extensive global reach. Students should point out that the distribution network is accompanied by complex, long-standing relationships with carriers and other channels, oftentimes granting Samsung priority placement that smaller competitors do not receive. It indicates a unique network composition that strengthens Samsung's market position and offers a competitive advantage.

***Imitable***: After students have analysed which of Samsung's capabilities and resources are valuable and rare, the lecturer should ask: "*After identifying Samsung's competitive advantage, which impediments prevent competitors from copying the strengths of Samsung? Which distinctive resources and capabilities are difficult and costly for competitors to obtain and imitate?"* For this part, students analyse if Samsung's capabilities and resources, identified as valuable and rare, are inimitable to allocate sustainable competitive advantage. The lecturer should, therefore, guide students actively throughout the conversation to determine the historical conditions or path dependencies, social complexity of relationships and causal ambiguity.

Knowledge is a fundamental strategic resource for a company's competitiveness, especially in the high-tech smartphone sector, where companies differentiate through innovation. Samsung's interdivisional collaboration and external exchange have accelerated innovation processes. Samsung captures the complex knowledge of individuals, as exchange and innovation are influenced by various interpersonal factors and ambiguous processes. Copying exact value creation can become impossible to recreate for others as tacit knowledge is heavily reliant on the present talent pool, team dynamics and informal exchanges.

The vertically integrated supply chain ensures superior access to components and raw materials, along with Samsung's complex external linkages through the company's unique

positions as a chip and display developer outside their smartphone production. Competitors cannot discern which activities and processes depend on which others form linkages that create distinctiveness.

Due to its long history, Samsung has solidified its reputation for high-quality, innovative smartphones and reliable distribution based on its socially ambiguous network with carriers and other distributors. Samsung has continuously adapted and shaped consumer preferences, creating an inimitable ecosystem, including several complementary products and services. The network effects are built upon the unique user experience of the large customer base. In addition to its ever-evolving ecosystem boosting consumers' user experience, network effects are expanded, reinforcing switching costs and, thus, restricting competitors' ability to reach Samsung's brand reputation.

Therefore, the company's positioning allows for a certain degree of exclusivity that competitors cannot duplicate, thus providing Samsung with a competitive advantage. The fragmented nature of the smartphone market and regulations to prevent companies like Samsung from monopolistic stances limit the extent of exclusive relationships.

**Additional mention of limitation**: As a source of competitive advantage, complex relationships and ambiguity can also limit firms' understanding of their competitive advantages, limiting them in time as they don't know how to replicate them in other processes or current structures.

***Organisational***: Resources supported by the company's organisational structure allow Samsung to exploit opportunities effectively. These resources are of value and cannot be employed by competitors to the same extent or in the same manner. The lecturer should, therefore, ask students: "*Does Samsung offer organisational structures to create sustainable competitive advantages in their smartphone business?"* Students should conclude on the company's brand: Samsung has successfully created immense brand awareness through

extensive marketing and branding efforts, including high-profile sponsorships and collaborations with celebrities. Creating value through attracting a wide customer base, the company has obtained a high degree of customer trust as a known household brand, which is rare. Additionally, the inimitability of Samsung's brand lies in its deep-rooted brand loyalty, cultivated through a cohesive ecosystem of interconnected devices and long-standing customer service relationships. Lastly, Samsung's comprehensive marketing strategy, value proposition and ability to allocate its budget effectively testify to its robust organisational capabilities. Ensuring that Samsung can effectively leverage its brand strength and loyalty to maintain a sustainable competitive edge.

Finally, students should detect Samsung's vertical supply chain as a sustainable competitive advantage. Continuous process improvements, knowledge development and the network of established sourcing relationships ultimately create sustainable competitive advantages.

## 4. Recommendation

### *4.1 Strategic recommendations*

Based on the analyses conducted, students should have gained a deep understanding of Samsung's opportunities and threats within the global smartphone market. Students should now derive recommendations to Samsung, considering influential factors of the macroenvironment, the competitive forces within the industry, and its sustainable competitive advantage, answering the case questions.

***Q 4.1: What opportunities does Samsung have, supporting the company to overcome identified problems to sustain a sustainable competitive advantage in the industry?***

Finally, students should summarise the previous analyses and identify ways in which Samsung can maintain its market-leading position through distinctive resources and capabilities, providing a sustainable competitive advantage for Samsung. However, they should indicate that

Samsung's strategic decisions vary across different geographic regions and their maturity status. Thus, Jong-hee's strategy might not be right for every country.

***Adapting to consumer needs in mature market environments:*** Samsung Electronics faces unique challenges and opportunities in the evolving landscape of mature smartphone markets. The current economic climate, marked by the consequences of recession, has decreased consumer disposable income. Consumers delay purchases, directly influencing the smartphone demand in those markets. This trend pairs with the additional elongation of durable goods' product life cycle, creating a pressing need for innovation. The smartphone industry, now maturing in developed economies, no longer experiences the kind of disruptive technological leaps seen in the past decade. Instead, the focus has shifted to incremental yet impactful enhancements.

***Recommendation****:* There is a pressing need for innovation due to the lack of disruptive innovation and consumer consciousness around sustainability. Samsung's response to these market dynamics should translate into a strategic emphasis on flagship products. These products stay ahead of the latest technological advancements and align with the expectations of more cautious and environmentally aware customers.

***Adapting to consumer needs in emerging market environments:***[100] Emerging markets showcase rising demand trends contradicting the maturity in most developed countries. However, consumers in those rising economies value reasonable prices for high-quality features. These consumption trends are not fully aligned with Samsung's premiumisation strategy aiming at turning its back to the low-price segment, due to increasing importance of the premium device sales (Case Exhibit 11). Still, to increase accessibility and market reach, Samsung should keep its high-quality, low-to-mid-priced segment in addition to its flagship products.

[100] Emerging markets are characterised by rapid economic growth and industrialisation boosting their global relevance due to typically higher income and spendings.

Samsung has significant opportunities in these markets. Using its broad distribution network ensures market access, and its wide-scoped product portfolio, encompassing models across various price segments, allows it to meet diverse consumer needs. Additionally, Samsung's scale and efficiency advantages enable it to offer competitive pricing, even in the low-price segment, fighting Chinese rivals.

Yet, competition in the low-price segment is strong. Chinese rivals focusing on high quality at lower prices threaten Samsung's stake with their fast-follower strategies. However, by targeting customers in emerging markets with more affordable models, Samsung can build an established brand image, customer loyalty and lock-in effects. Due to the extended coverage of Android-based operating systems in emerging economies, Samsung has access to a larger customer base in favour of their products compared to Apple. The strategy has a long-term benefit: as consumers' purchasing power increases, consumers are likely to upgrade to Samsung's more premium lines, aligning with the company's premiumisation.

Its premium rival, Apple, has limited opportunities to enter emerging markets in the early stage and transfer its image accordingly. Samsung should exploit that opportunity, grasping the long-term competitiveness against Apple in the premium segment.

***Focus on innovation:*** In mature markets, Samsung's innovation strategy should aim to create interconnected user experiences. Ensuring seamless device integration, Samsung enhances customer experience and fosters loyalty through lock-in effects. This strategy also involves creating switching costs, making it more likely for users to continuously use (complementary) Samsung products and services in the established ecosystem.

Meanwhile, in emerging markets, Samsung benefits from the widespread use of Android. This existing familiarity with Android gives Samsung a competitive edge over Apple's iOS. Samsung's innovation in these markets should not just be about keeping up or

leading the rapid pace of developing current needs but should also be seen as laying the groundwork for future technological advancements towards more flagship innovation.

This duality in their strategic decision-making should be marked as essential by students for Samsung to maintain its global leadership in the smartphone industry.

**Additional Resources for Instructor Preparation**

The teaching note offers further valuable materials for comprehensive class preparation. For those who haven't discussed the theory in earlier classes, we particularly suggest reviewing the following resources:

Besanko, David, David Dranove, Mark Shanley, and Scott Schaefer. 2012. *Economics of Strategy*. John Wiley & Sons.

Porter, Michael E. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. https://openlibrary.telkomuniversity.ac.id/pustaka/4442/competitive-strategy-techniques-for-analyzing-industries-and-competitors.html.

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Zhu, Feng, and Marco Iansiti. 2019. "Why Some Platforms Thrive and Others Don't." *Harvard Business Review*, January. https://www.hbs.edu/faculty/Pages/item.aspx?num=55510.

**5. Key Takeaways**

The lecturer should show the students Exhibit 11 to summarise the in-class discussion.

The case aims at three key strategic takeaways that should become evident during the case analysis:

- First, Samsung should continue to dynamically adapt to consumer preferences in mature markets by expanding and building additional revenue streams through its ecosystem.

Hence, Samsung should encourage existing customers to purchase to shorten upgrade cycles. This should ideally lead to upgrading purchases into more innovative flagship product segments.

- Secondly, Samsung should simplify smartphone accessibility in emerging markets, grasping the heterogeneous consumer preferences as a valuable expansion to their existing revenue streams. Thus, the company should serve emerging markets with the entry-level smartphone segment to establish a large customer base, extend its brand reach, and ensure long-term expansion compared to the opportunity to shape consumer demand.
- Thirdly, due to the interconnectivity within Samsung's ecosystem, the incorporation of the newest, innovative technology should be Samsung's focus. The granted power of network externalities improves customer loyalty, prompting Samsung to remain at the top of the dynamic smartphone industry across regions.

## Teaching Note Appendix

### Exhibit 1: Guiding Questions

| Section | Framework | Question |
|---|---|---|
| **Opening Questions** | *Opening Questions* | On a scale from 1-10 how would you rate Samsung Electronics future success in maintaining its current positioning on the global smartphone market after reading the case and why? |
| **1. External Analysis** | PESTEL | Q 1.1 What are the main trends shaping the smartphone industry? How are these drivers intertwined? How do they impact Samsung's smartphone business?<br>Q 1.2 What is the smartphone market's size, growth, and demand? |
| | Five Forces | Q 1.3 What are the competitive forces in the global smartphone industry? How do these forces impact Samsung's positioning? |
| **2. Internal Analysis** | Value Chain | Q 2.1 Which resources and capabilities support Samsung's competitive advantage? |
| **3. Strategic Analysis** | VRIO (incl. Isolating Mechanisms) | Q 3.1 How do these resources and capabilities create value? What are the companies' capabilities that are distinctive from others? |
| **4. Recommendation** | Strategic Recommendation | Q 4.1 What opportunities does Samsung have, supporting the company to overcome identified problems to sustain a sustainable competitive advantage in the industry? |
| **Closing Questions** | *Closing Question* | Which resources and capabilities support Samsung's positioning in the global smartphone market? Which strategic shifts do you recommend to Samsung? How do these recommendations differ across regions and target groups? |

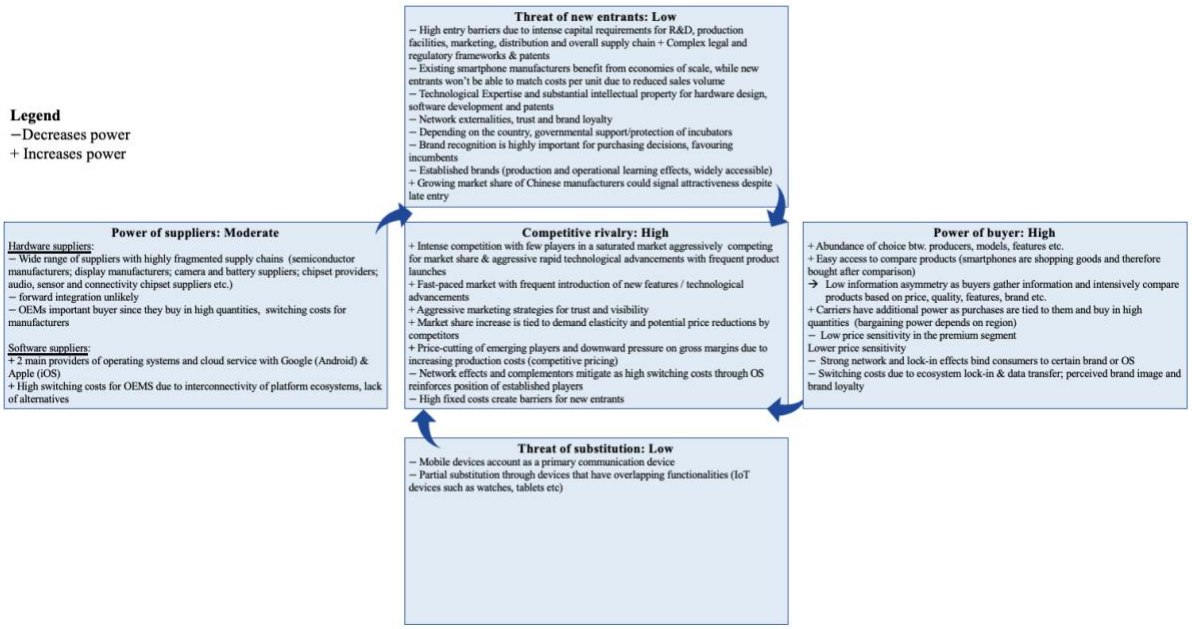
### Exhibit 2: Teaching Plan

| Part | Plan | Duration | |
|---|---|---|---|
| **Preparation for Case Discussion** | A case study is handed over to students before the class to ensure they can familiarise themselves with the subject. | **60 min** | |
| | Questions Q1.1 & Q1.2 are provided to students for preliminary analysis of the external environment of the smartphone industry in self-study. | | |
| **In-Class Case Discussion** | The lecturer starts by presenting the agenda and posing the opening question. | 5 min | **90 min** |
| | The lecturer and students briefly summarise key findings of Samsung's external analysis students prepared at home. | 20 min | |
| | The lecturer guides the students through Samsung's internal analysis by posing Q 2.1. | 25 min | |
| | The lecturer opens the discussion on Samsung's strategic positioning by posing Q3.1. | 20 min | |
| | Students synthesise learning and discuss how Samsung can sustain its competitive advantage (Q.3.2) | 10 min | |
| | The lecturer should conclude by posing the closing question and summarising strategic ideas students gathered throughout the analysis. | 10 min | |

### Exhibit 3: PESTEL

| Political | Economical | Social | Technological | Environmental (incl. Legal) |
|---|---|---|---|---|
| ▪ **Tightening government policies and protectionism** due to the trade war between the U.S. and China, triggered by the Huawei ban in 2018 from the U.S. market<br>▪ **Tightening trade tariffs and sanctions** between countries (e.g., U.S. and China, U.S. and Russia) support domestic protectionism of innovations<br>▪ **Increasing Data Protection** and safety standards due to Huawei scandal<br>▪ **Increasing cyber security** concerns due to geopolitical threats (e.g. Russian-Ukraine war)<br>▪ **Increasing governmental initiatives** related to the expansion of faster/extended internet access across regions | ▪ **Depressing economic stage** (uncertain government fiscal and monetary policy) marked by high inflation rates and corresponding interest rates, supporting conservative consumer spending<br>▪ **Increasing economic growth rates coupled with emerging markets** offer high business potential for smartphone manufacturers<br>▪ **Fluctuating exchange rates** impact international business relations in the industry (e.g., Korean won vs Dollar) | ▪ **Changing** consumer preferences in **mature markets** towards **flagship** products incorporating the newest features due to high smartphone penetration rates, which leads to extended upgrade cycles<br>▪ **Changing** consumer preferences in **emerging markets** towards localised strategies (e.g. price sensitivity vs features)<br>▪ **Increasing network density** fosters demand towards device connectivity enabled through IoT, 5G network connectivity, cloud computing, etc.<br>▪ **Increasing smartphone usage** fosters demand for seamless device connectivity, low latency, and large storage capacity | ▪ **Increasing investments in R&D** to historically fast-paced development of innovations and consumer's expectations for innovative feature developments (influence on purchase decision)<br>▪ **Rapid technological advancements** (IoT, AI, 5G, etc.) impacting market shares<br>▪ **Integrating smart solutions** (Smart ecosystems, e. g. Smart Home solutions) fostering intensified ecosystem integration | ▪ **Increasing consumer concerns for climate change and sustainability** are shifting awareness towards more eco-friendly reusable smartphones with longer lifecycles (Trend: longer smartphone replacement cycles)<br>▪ **Personal Value of organisations** to respond to ecological issues (CSRD)<br>▪ **Resource scarcity of raw materials** leads to concerns about sustainable manufacturing and pricing<br>▪ **Environmental Regulations** in the form of sustainability disclosure guidelines require more operational transparency<br>▪ **Product Safety Law** |

Exhibit 4: Porter's Five Forces




Source: Porter (1985)

Exhibit 5: Industry Life Cycle

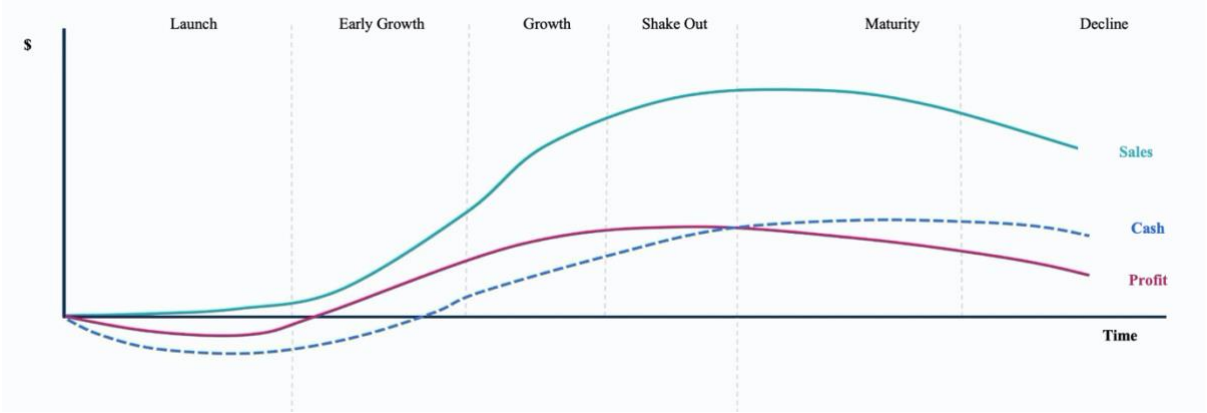
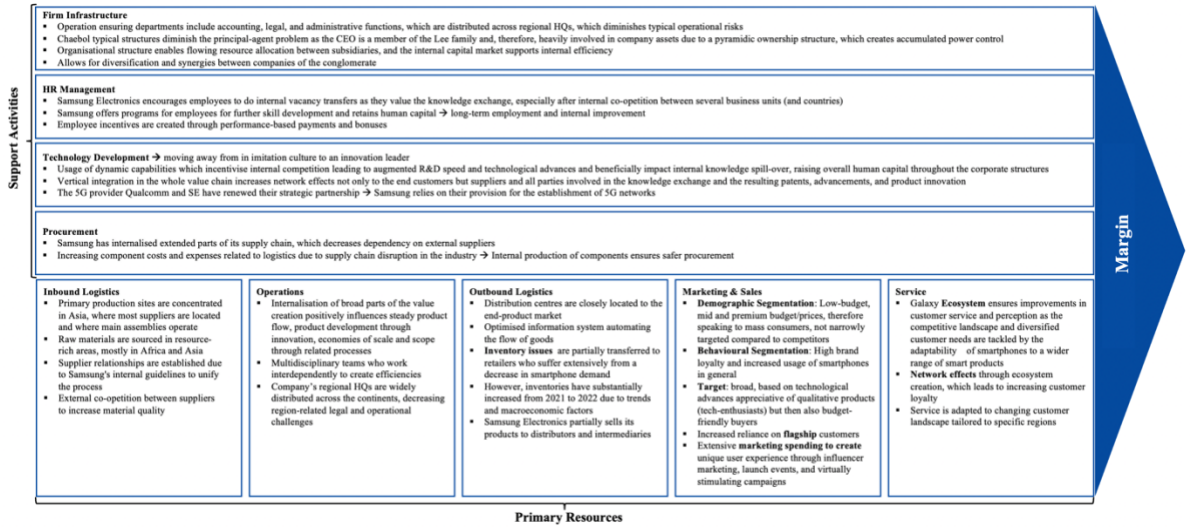


Exhibit 6: Porter's Value Chain




Source: Porter (1985)

Exhibit 7: Samsung's Value Chain

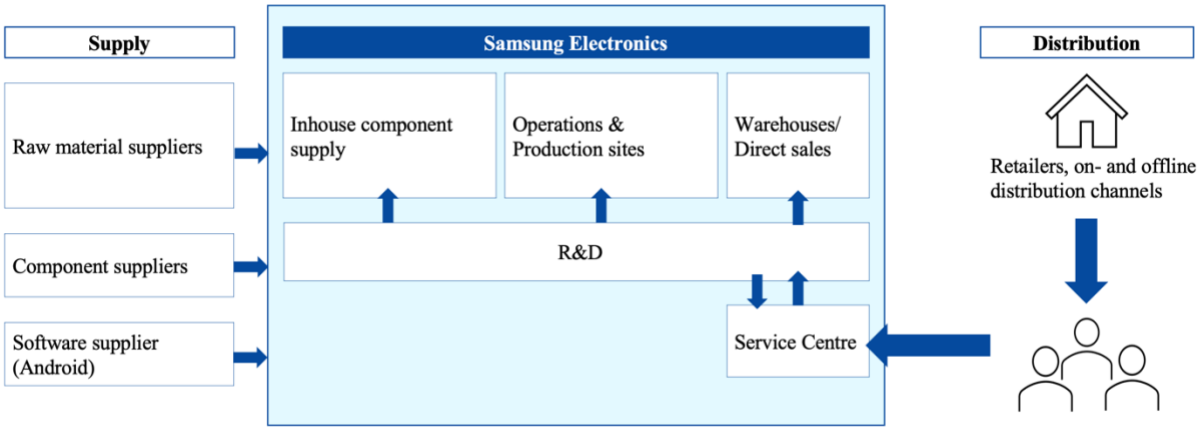



Exhibit 8: Apple's Value Chain

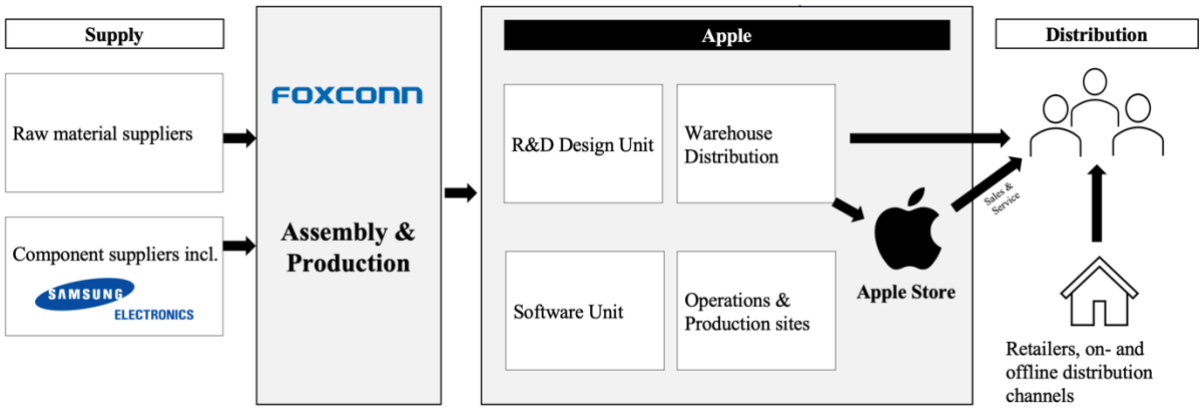


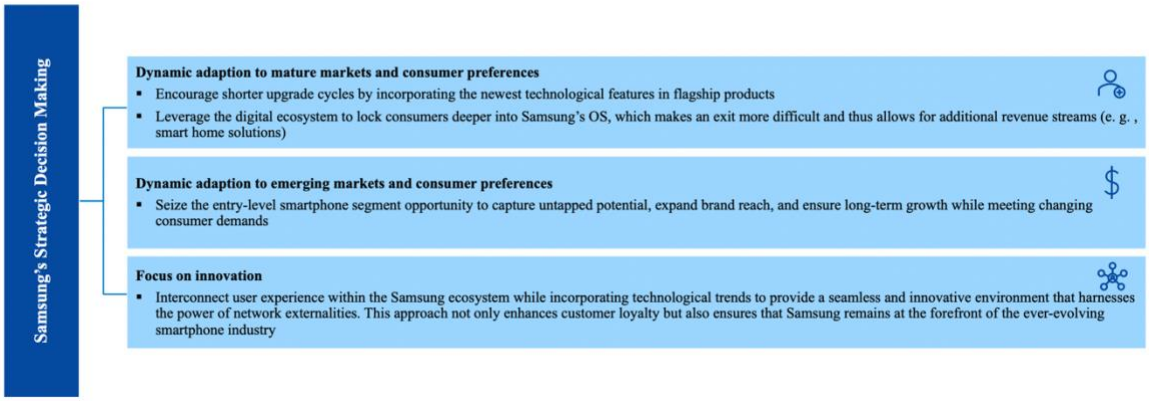
Exhibit 9: VRIO

| Resource and Capabilities | Valuable | Rarity | Imitability | Organization | Degree of competitive advantage |
|---|---|---|---|---|---|
| **Cost efficiency** | ▪ Production volume (scale economies), diversification and a diverse product portfolio (scope economies) allow Samsung to develop **devices corresponding to consumer needs** e.g., attractive design and useful features, simple user surface, diverse offers and models, attractive prices | **No**<br>▪ Several competitors produce high unit amounts and cover wide product portfolio | **No** | **No** | **Competitive parity** |
| **R&D capabilities and resulting technological innovation** | ▪ Samsung's R&D capabilities are contributing to the company's innovation leadership<br>▪ Premiumisation trend raises demand for innovative products | ▪ **Patent protection**: Samsung outpaces competition in 5G patents along with industry relevant technologies, such as semiconductors and wireless communication. Listing at the top regarding the number of tangible patents, across all domains<br>▪ **Unique relationships:** Cross-licensing (DRAM Chips, Displays, Memory Chips (EMPC)) with competition fosters additional revenue by maximising R&D investments, reducing possible conflicts, and enabling legal rights in disputes | **No**<br>▪ Samsung's technological leadership is restricted to short dimensions as fast follower quickly integrate new technology<br>▪ Intellectual property is time restricted | ▪ **Strategic shift:** from fast follower to innovation leader | **Temporary competitive advantage** |
| **Vertical supply chain** | ▪ Samsung's ability to produce in-house and sell its smartphones through exclusive channels, allow the company can sell "**below market price**" while generating additional **value** through its **inputs/innovativeness** | ▪ **Complex** relations of supplier, carriers and other parties that are strengthened by long-lasting partnerships<br>▪ Limited players are able to achieve similar supply chain integration, however, no competitor showcases **vertical integration** processes to Samsung's extent<br>▪ Superior access to rare materials<br>▪ **Component manufacturing** unique to Samsung based to the company's sophisticated vertical integration of the supply chain, including the production of Exynos processors, AMOLED displays, memory chips and camera sensors | ▪ Strengthening Samsung supply chain control, prioritizing own production.<br>▪ Knowledge exchange with unique composition of global teams.<br>▪ **Unique consumer relationship**: Exclusive promotions and flagship stores provide one-of-a-kind services and customer experiences, along with carrier partnerships in which Samsung benefits from priority placement that smaller competitors often do not receive, resulting in a vast distribution channel of global reach | ▪ **Decentralized Execution** of central made decisions (distributing corporate control), fostering global coherent strategy while regional branches adapt strategies to local markets<br>▪ Business Group Structure in which units are semi-autonomously while cohabitating and benefiting from network, talent acquisition, retention and management<br>▪ **Efficient resource allocation and capital flow of Samsung**, across their electronics divisions, allows them to leverage efficient investments and disinvestments | **Sustainable competitive advantage** |
| **Distribution Networks** | ▪ **Global Reach** through omnichannel distribution with flagship stores, carriers, third parties and online platforms | ▪ **Complex relationship**, specifically with retailers and carriers as well as unique flagship stores broad network | ▪ **Unique consumer relationship:** Exclusive promotions and flagship stores provide one-of-a-kind services and customer experiences, along with carrier partnerships in which Samsung benefits from priority placement that smaller competitors often don't receive, resulting in a vast global distribution channels<br>▪ **Social ambiguity** through Samsung's extensive network of suppliers, carriers and distribution channels | **No** | **Competitive advantage** |
| **Brand Image (Marketing strategy and Brand Reputation)** | ▪ **Brand Recognition:** Recognizable to consumers for their smartphones which is generated through global distribution, promotions, etc. | ▪ Household name as one of the largest company worldwide, benefitting of **brand proliferation**<br>▪ Reputation and brand image fosters customer trust and contributes to **the acquisition of new customers** | ▪ **Culture and History of Samsung** enables complex social interactions and interpersonal relations which contribute to the success of the company<br>▪ **Switching Costs & Network Effects:** Samsung large customer base increased network effects and thus switching costs, as consumers are deeply integrated in Samsung's ecosystem. Thereby demand for **complementary products** rise | ▪ Yearly market budget allocation, along with overall brand and company's value proposition of R&D developments strengthening image<br>▪ Embedded localization of marketing strategies, along with the ability to finance extensive marketing campaigns and maintain consistent quality across its product lines is a testament to its robust organizational capabilities | **Sustainable competitive advantage** |

Exhibit 10: Complements, network effects and lock-ins

| | |
|---|---|
| **Complementors** | ▪ Complementary products and services enhance consumer experience and value by adding functionalities and services to smartphones.<br>▪ Complementor products include banking and social media applications as well as other entertainment that increase smartphone utility and attractiveness. Creating a network of interdependent products and services that make smartphones the control centre of consumers' digital world. |
| **Network effects** | ▪ Smartphones interconnected nature and reliance on their ecosystems of apps, services and complementary products adapted to respective operating systems, create network effects that make switching to competitors challenging.<br>▪ Network effects in operating systems lead to a self-reinforcing cycle in which increased user adoption attracts more developers, enriches the app ecosystem, and improves compatibility and standardisation while creating locks in for users, further consolidating the operating system's market dominance. |
| **Lock-ins** | ▪ Switching platforms entails the loss of data and usage familiarity, along with the need to relearn a new system. These costs are related to lock-ins that the operating system exhibits. Along with wearable technologies such as fitness trackers and headphones, apps specifically create important lock-in effects in OSs.<br>▪ **Example of complementors creating lock-ins:** Apple's music platform is only accessible for products connected to the iOS ecosystem and, therefore, inaccessible for Android products. If consumers switch from iOS to Android, previously purchased music is untransferable, leading to economic and psychological loss. |

Exhibit 11: Key Takeaways - Samsung's strategic decision making



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## Individual Part - Pauline Schäfer

### Introduction: The U.S. smartphone market

While Samsung is leading the global smartphone market, the U.S. market is shaped by the duopoly of Apple and Samsung, with Apple prominent in the market. Strengthened geopolitical tensions, inflationary pressure, and shifting consumer preferences pose a new challenge to OEMs in the mature U.S. market. However, demand for the newest technological smartphone features like 5G network compatibility, IoT integration, cloud computing and extended digital ecosystems encourage consumers' purchasing decisions in the U.S.

The following analysis explores the macro-environment of smartphone OEMs operating in the U.S. market (Exhibit 1). Afterwards, the demand and supply side of the U.S. smartphone market, and thus industry dynamics, are explored. Porter's Five Forces (Exhibit 2) are used to understand the intensity of competition in the U.S. market and, thus, its attractiveness in terms of profits for OEMs. This analysis enables an assessment of Samsung's positioning in the U.S. market, from which opportunities are derived to give strategic recommendations, allowing Samsung to generate a sustainable competitive advantage (SCA).

### Macro-environment analysis of the smartphone industry

In 2023, the U.S. economy, with a GDP of $26.9 trillion, stood as the world's largest, reflecting its vast economic activities. The Bureau of Economic Analysis reports a 5.2% annual increase in real GDP as of December 2023, indicating a return to pre-pandemic levels (Bureau of Economic Analysis 2023). Despite this recovery, the U.S. economy still faces post-COVID challenges. Real GDP is projected to slow down in 2024, with expectations of slower job growth and a slight increase in unemployment. Inflationary pressure started to ease but remains above the 2.0% target, adding to recession concerns (Kliesen 2023). The U.S. consumer price index (CPI) rose around 3.0% YoY, driven by higher energy and gas prices during the pandemic, which let corporations increase their prices (Saraiva 2023). Thus, U.S.

manufacturing, making up over 11.1% of the economy, has only seen modest growth, impacted by rising interest rates in response to hiking inflation rates and higher material costs (Mutikani 2023). However, growing wages as a response to labour shortages due to COVID-19 have contributed to the increase in Americans' real disposable personal income by 3.8% YoY as of October 2023 (The White House, 2023). Consequently, consumer spending is higher than before the pandemic, significantly boosting the U.S. economy's performance to the fastest growth in nearly two years (Megaw and Duguid, 2023).

U.S. Consumers adapt their shopping habits as they become more price-sensitive and cautious in their purchase decisions. They mainly change the amount or size of products they buy and switch to different retailers for lower prices. Gen Z and Millennials of high-income classes are the most optimistic about future economic developments. They are, therefore, prepared to dig into their pockets even if they reduce the number of expenditures. This is especially visible in the strong growth in durable goods in the first half of 2023 (Waelter and Rogers 2023). However, they are willing to switch their once-preferred brand for a brand that offers more value or innovation (Charm, Lu, and Robinson 2023). Thus, while the younger U.S. generation tends to extend unnecessary spending, the population above 65, which makes up 17.7% of the U.S. population, is spending much faster, especially on lifestyle products (Silvestrini 2023).

Overall, U.S. consumers display environmental concerns, which influence their purchasing decisions - indicating that they are willing to pay an average 12% premium for sustainable, more durable products (Ware 2023).

In 2022, Biden legislation has signed the CHIPS and Science Act, comprising a $210bn budget for federal R&D, which should strengthen the country's global competitiveness and leadership role in innovation over the next ten years. Thus, the budget is invested in the domestic semiconductor manufacturing capacity, R&D and workforce development, and

financial incentives offered to companies manufacturing semiconductors domestically. The focus is commercialising the newest technological advancements such as quantum computing, AI, and clean energy. Thereby, new regional high-tech hubs with a better-educated workforce should be created (Badlam et al. 2022). Overall, the Act of 2022 represents strategic efforts of the U.S. government to protect and strengthen its domestic technology sector. Primarily, the Huawei ban from the U.S. market in 2019 led to a new era of protectionism, intensifying the trade war between the U.S. and China and increasing U.S. security concerns with the rollout of the newest technologies, like 5G connectivity (Qian 2019).

However, the U.S. economy is characterised by its capacity for innovation, driven by technological advances and a highly skilled workforce, making the country one of the top three most innovative countries in the world as of 2023 (Conte, 2023). Americans are among the three countries with the most prominent digital population, following China and India. Consequently, as of 2023, 91.8% of the U.S. population has access to the Internet (Petrosyan 2023). By the end of 2022, about 95% of the U.S. population already had access to a 5G network - Indicating the country's solid technological infrastructure and widespread adoption across industries (Elbert et al. 2023).

Moreover, since 2022, the U.S. market is the leading manufacturer of IoT devices worldwide, with an estimated CAGR of 24.7% until 2030 (Statista 2023a). U.S. consumers' rising interest primarily leads to smart home technology, automotive IoT solutions and wearable technology (Paxton 2019). As of 2023, the U.S. is the world's leading smart home market with a revenue of $34.7bn (Statista 2023b). This growth is driven by increasing demand from homeowners for smart home devices as they seek greater convenience and improved energy efficiency (Fortune Business Insights 2023a).

Moreover, cloud computing, which quickly processes the huge amount of data generated in digital ecosystems, is supported by the U.S. government through the Cloud Smart

Plan, boosting the adoption of cloud-based solutions (Fortune Business Insights 2023b). However, telecommunication providers are crucial in shaping market trends and competition in the U.S. market as they are forefront of technological advancements like the rollout of the 5G network. Strategic pricing approaches, service budling and network coverage shape industry competition and influence consumer behaviour, driving market standards and influencing leadership positions (Fernandes, Chow, and Gröne 2023).

**The U.S. smartphone market**

From 2013 to 2017, the U.S. smartphone market experienced consistent growth in sales (Laricchia 2023a). However, following this period, there was a decline in shipments until the pandemic generated a renewed demand for consumer electronics, particularly smartphones (Stewart and Crossan 2022). This resurgence in interest led to a notable increase in sales numbers (Laricchia 2023a). Yet, with the end of 2022, smartphone shipments have declined, showing a shift towards stabilisation rather than growth, which is visible in the 24% YoY shipment decline as of Q2 2023 (Counterpoint 2023a). This number is expected to decrease further (Laricchia 2023a). Hence, the market is forecasted to expand only at a CAGR of 0.29% from 2023 to 2028 (Statista 2023c). This stands in contrast to the global smartphone market, which is also growing slower but at a CAGR of 2.28% (Statista 2023d).

Different variables are used to understand better the U.S. smartphone market: product categories and consumer demographics, technology adoption, distribution channels and OS.

The U.S. market has a high smartphone penetration rate of 81.6%, ranking fourth after France, the U.K., and Germany (Laricchia 2023b). Thus, the U. S. market is nearing saturation, leading to a focus on smartphone upgrades and services rather than new user acquisitions (The Financial Times 2021). The demand for flagship products incorporating advanced cameras, high-resolution displays, powerful processors and 5G network connectivity increased. Apart from U.S. consumers' demand for the newest technological features, there is a demand for a

more connected digital experience across OEM's digital ecosystem. This is showcased by significant growth in the smartphone multiples market, including associated software, content, and services (Deloitte 2017). This explains solid operating profits in the market, even when shipments declined (Counterpoint 2023b).

However, these innovative features drive up production costs for OEMs, which are then passed to consumers through higher prices (Gabbitas 2023). Thus, the popularity of financing plans and trade-in programs that allow consumers to buy high-end smartphones in instalments or trade in their old phones for new models at a lower price has increased. High-end smartphones like the iPhone 12 Pro and Samsung Galaxy S line were primarily traded (Sherer 2023).

U.S. consumers show significant brand loyalty, particularly towards the largest brands, Apple and Samsung. Apple's iPhone is popular in the U.S. market due to its integrated ecosystem, simple design, and perceived status symbol. Gen Z's preferences for iPhones are more pronounced in the U.S. than elsewhere, making a switch to Android unlikely (McGee 2023).

**Competitive landscape**

In the second quarter of 2023, rivalry in the U.S. smartphone market remained intense, with significant players being Apple (55%), Samsung (23%), Lenovo (11%) and Google (3%) (Counterpoint 2023a).

**Apple** leads the U.S. smartphone market, consistently maintaining nearly half of the total U.S. market share throughout the year. Despite a 6% YoY decline in iPhone shipments in Q2 2023, the company's market share rose by 3% compared to the previous quarter (Counterpoint 2023a).

Additionally, aggressive promotional strategies across post-paid and prepaid segments through major U.S. carriers like Verizon, AT&T, and T-Mobile are followed by Apple. Thus,

customers were offered substantial promotional credits alongside discounts on older iPhone models. Thereby the company is increasing market presence and profits from visibility. However, these promotions are rare, as Apple usually follows a premium pricing strategy, limiting availability to newer, higher-priced models and reinforcing its brand image as a high-quality lifestyle provider. With the increasing price sensitivity of U.S. consumers, Apple is encouraging consumers' loyalty by decreasing cost barriers while making a switch from Android to Apple more likely (ZipDo 2023). Additionally, instalment plans and trade-in programs encourage upgrade purchases as consumers' upfront costs are reduced (Mus 2022).

Unlike Apple, **Samsung** follows different strategies in the U.S. smartphone market. The company's broad product portfolio comprises different models in each category, ranging from low-priced phones to flagship models (Garcia 2023). With 52 smartphone launches in 2022, Samsung quickly adapts its products to the newest technology advancements and changing consumer preferences (Won 2021). Each category comes with specific features and respective pricing to match the perceived value for those segments. Independent of the product line, Samsung encourages sales by building newer smartphones with wearable devices and accessories. Overall, the company sets its prices high for new releases and sets them lower as competitors enter the market, allowing it to maximise revenues while gaining customers' attention (Garcia 2023). This strategy further allows Samsung to reach a wide audience.

However, Samsung started reinforcing the perception of its flagship products as premium by setting prices like those of iPhones. Also, the Galaxy S23 Ultra comes with more extensive memory storage, a better camera resolution, and more hardware options consumers can choose from than the iPhone15 Pro Max. The S-Pen integration in the Galaxy S23 model increases the user experience (Kostadinov 2023). Thus, the Galaxy Fold experienced high demand in the U.S. market, boosting the company's operating profit in the third quarter of 2023. Consequently, Samsung pioneered a new niche market (Jung-A, 2023). This allows the

company to set prices above $1.700, remaining the first choice for U.S. consumers in the bendable segment (Bhatia et al. 2023).

In Q2 2023, Samsung faced increased competition from other Android manufacturers, shipments dropped by 37% YoY (Counterpoint 2023a). Especially the launch of Google's Pixel Fold and Motorola's Razr + let Samsung face tighter competition in the niche market of bendable screens (Jung-A, 2023).

**Intensity of competition**

The rivalry of Apple and Samsung mainly shapes the U.S. smartphone market, as the companies dominate the market by covering more than 70% as of Q2 2023. Due to the companies' size and power, smaller niche players like Motorola, Google and LG hesitate to challenge the incumbents directly. However, that changed with the recent launches of foldable smartphones by Google and Motorola, posing a threat to Samsung's leadership position in that segment.

The stagnating U.S. smartphone market forces companies to compete for a larger portion of the market by attracting and retaining customers of each other rather than acquiring new ones, resulting in lower profits through price reductions and promotions via carriers (e. g. Apple). However, due to the duopoly and Apple's dominance in the premium phone segment, prices are overall high in the U.S. smartphone market.

At the same time, the need for innovation is driving up manufacturers' fixed costs as extensive investments in R&D are required. However, in the face of declining demand, increasing production to reduce unit costs is becoming difficult, leading to shrinking profit margins. Yet, Samsung's vertically integrated supply chain enables the company to reduce production costs, leading to lower profit maximisation prices (see case analysis).

Stringent regulatory requirements of the U.S. government mainly drive limited competition in the U.S. market. The U.S. government's protectionism of domestic technological innovations mainly protects Apple's position in the U.S. market. Likewise, Samsung profits from tariffs

imposed on Chinese companies, which regulate and render the U.S. market, making the U.S. market not possible to enter. Besides, entering the U.S. smartphone market poses significant challenges for other OEMs due to the stronghold position of well-established giants Apple and Samsung. The incumbents reached large-scale production through their size, leveraging economies of scale, which would be costly and timely for new entrants to equal. With the increasing saturation of the U.S. market, OEMs are also faced with increasing capital requirements for R&D to guarantee innovation, further intensifying barriers.

In the U.S. smartphone industry, network effects are particularly important as consumers highly value being part of an extensive network of users, with a strong demand for more interconnectivity between them and other devices. This trend reflects the growing consumer expectation for seamless integration across multiple digital platforms and the ability to connect with a broad user base. Samsung and Apple, therefore, benefit from their established and large consumer base.

Apart from a large market share, incumbents have a deep-rooted brand loyalty that offers more than just competitive pricing but focuses on unique value propositions and technological advancements.

Moreover, OS lock-in effects create high switching costs for end consumers, especially when considering the switch from iOS to Android or vice versa. With the emerging trend towards smart homes in the U.S. market, this integration extends beyond the smartphone to a network of interconnected devices and services. Thereby, consumers' WTP also increases as their value perception increases.

**Samsung's positioning in the U.S. smartphone market**

Samsung's positioning in the U.S. market is characterised by its strong presence in the smartphone sector through its broad offering, extensive range of electronics and appliances and first-mover advantage in innovative technologies. Since Apple attained a (SCA) through its

privileged market position, Samsung must concentrate on its unique resources and capabilities to generate a SCA.

Samsung leverages its diversified product portfolio as a valuable sensing capability that provides a multi-layered view of consumer behaviour, market trends and competitive dynamics. This strategic advantage enables Samsung to continually adapt its product portfolio to the changing preferences of U.S. consumers, who are increasingly willing to invest in high-performance products even at higher prices. This strategy is unmatched in the U.S. market, also backed by legal barriers characterising the U.S. market, preventing innovation competition from China.

In addition, Samsung's scale and vertically integrated supply chain enable it to leverage and serve the changing demand for premium products in the U.S. market. This unmatched capability allows Samsung to improve its design and functionality, enter new markets, such as the bendable screen niche market, and establish itself as a pioneer (sizing). Thanks to its extensive research and development capabilities, Samsung can reconfigure its organisational strengths, further consolidating its position. In addition, Samsung is strategically moving away from its low-cost image by raising prices to project the image of a premium manufacturer, supported by its long-standing presence in the U.S. market, quality brand image and broad customer reach. Overall, Samsung's manufacturing strategy allows the company to circumvent sinking price profit margins – at least better than Apple can.

**Opportunities**

As Porter's Five Forces analysis revealed, fierce rivalry and price-cutting shape the U.S. smartphone market, leading to unattractive cost-price margins. However, as the PESTEL analysis indicates, U.S. consumers are increasingly interested in smart solutions and the interconnectivity between their electronic devices. Samsung already has encompassed a wide range of interconnected devices, from smartphones and tablets to home appliances and

wearables, all integrated through the SmartThings platform. Thus, Samsung's well-established ecosystem is perfectly positioned to capitalise on this IoT trend and differentiate its smartphones by seamlessly integrating them into the broader IoT landscape. Leveraging seamless device communication, facilitating smart home management, health monitoring, and other IoT applications. Samsung could use its open-source system and large network to connect users across OSs, distinguish itself from Apple's closed OS.

**Recommendation**

In the competitive U.S. smartphone market, dominated by Samsung and Apple, Samsung should strengthen its positioning through the following three strategic approaches:

First, by focusing on the premium segment, the company responds to U.S. customers seeking advanced features in the form of new technological advancements and quality improvements, for which they are willing to pay higher prices and switch their once preferred brand.

Second, by leveraging its comprehensive ecosystem, Samsung can offer integrated and seamless experiences across multiple devices offered under the Samsung Electronics umbrella, enhancing the user experience of its U.S. customers. Therefore, focusing on its premium products is crucial, as only the newest technological features enable interconnectivity in a digital system.

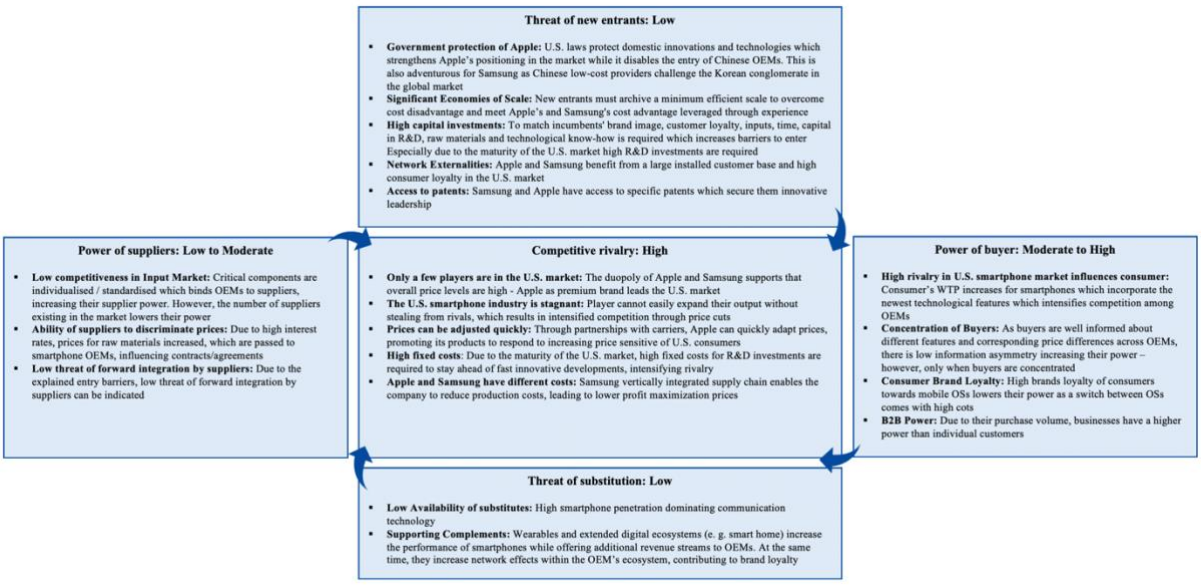
Finally, by emphasising its commitment to environmental sustainability, Samsung can appeal to the growing awareness of eco-conscious consumers in the U.S., strengthening its brand image. The lengthened upgrade cycle of U.S. consumers' smartphones can be taken as an opportunity to increase prices for more durable and sustainable products. This responds to their desire for higher value perception and matches their purchasing behaviour.

## Individual Part Appendix

Exhibit 1: PESTEL

| Economical | Social | Environmental | Political & Legal | Technological |
|---|---|---|---|---|
| **Slow economic growth prospects, despite stabilization of key indicators**<br>▪ Post-Pandemic challenges still impact the U.S. economy through high inflation rates and corresponding interest rates<br>▪ Oil and gas prices decreased, however, CPI still increased<br>▪ Labour shortages driven by the pandemic lead to higher wages, increasing consumers' disposal income<br>▪ Slowing economic outlook (real GDP) leading to higher unemployment rates | **Changing consumer habits**<br>▪ Economic uncertainty and inflationary pressure lead to higher price-sensitivity of U.S. consumers<br>▪ Non-necessary purchases are delayed<br>▪ High internet and smartphone penetration rates impact Americans' demand for new smartphones<br>▪ U.S. consumers are a highly digital population demanding for digital interconnectivity | **Rising awareness for sustainability**<br>▪ Increasing awareness for sustainable production and materials<br>▪ Willingness to pay more for sustainable produced products<br>▪ Growing demand for companies to adopt CSRD as a strategy for sustainable positioning | **Tightening protectionism of U.S. innovations and Tech companies**<br>▪ Initiated through the Huawei dispute in 2018, the U.S. government implemented several measurements to protect domestic innovations and technologies (e. g. CHIPS and Science Act)<br>▪ Trade tariffs and sanctions placed on Chinese goods, particularly within the tech industry, present obstacles for their access to the U.S. market | **Solid technological infrastructure**<br>▪ High internet, smartphone and 5G network penetration rate<br>▪ Increasing demand for IoT, cloud computing and AI solutions<br>▪ Increasing demand for digital ecosystems and interconnectivity boosting demand for smart home technology |

Exhibit 2: Porter's Five Forces



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