

# EXPLORING THE RELATIONSHIP BETWEEN QUALITY AND INNOVATION AND REVENUE GROWTH: A CASE STUDY OF THREE GLOBAL TECHNOLOGY GIANTS

Jaroslav Kollmann<sup>1</sup>, Pavel Cepák<sup>2</sup>

<sup>1</sup>The Faculty of Operation and Economics of Transport and Communications, Department of Economics, University of Žilina, Slovakia

<sup>2</sup>The Faculty of Corporate Strategy, Department of Management, Institute of Technology and Businesses in České Budějovice, Czech Republic,

ORCID ID: 0000-0003-4110-145X

[kollmann@mail.vstecb.cz](mailto:kollmann@mail.vstecb.cz) (\*corresponding author), [cepak@mail.vstecb.cz](mailto:cepak@mail.vstecb.cz)

## ABSTRACT:

This paper aims to explore current market trends adopted by technology giants Apple Inc., Samsung, and Xiaomi and their impact on revenue generation. Through content analysis of internal documents, websites, and social media, a SWOT analysis and correlation analysis were conducted to identify the trends used by these companies. The findings indicate that companies with effective trend strategies achieved higher revenues. The prevalent trends include machine learning, artificial intelligence, corporate sustainability, environmental implications, and product quality optimization. The results of this paper provide valuable insights for businesses seeking to align their strategies with current trends, serve as a teaching resource, and offer a foundation for further research on the impact of trends on sales. Additional data can be collected to expand the investigation to other relevant subjects.

**Keywords:** *Trends, quality, innovation, technology companies, revenue*

## INTRODUCTION

In contemporary times, the emergence of artificial intelligence and advanced algorithms has led to a heightened emphasis on quality and innovation across various business domains. Churin et al. (2022) point out that in a dynamically changing environment that is abundantly used by technology, it is important to remember that the use of technology and information systems as a tool for companies and governments is not only based on increasing business revenues but should also focus on creating valuable experiences, improving services, and discovering new trends in the market environment. In a dynamically changing business environment, there is a need to build value, bring new innovative ideas, and use their skills and capabilities to influence the performance, competitive advantage, economic development, and success of the whole business (Lorincova, Miklosik, & Hitka, 2022). Mietule, Maksymova, and Holikova (2019) argue that in the current digital communication environment, digital technologies are developing global trade and business, which has a positive impact on companies as customers can buy their products from all corners of the world from the comfort of their homes. Dugia et al. (2022) define that digital capabilities positively affect the performance of a company only if the company is sufficiently technologically savvy and can handle and transform information efficiently and effectively for its benefit. Marketers are increasingly seeking to get their messages and information out to social media users, who in turn share it with their contacts, so the

product, service, or idea reaches a larger number of potential consumers (Duque et al. 2020). This is also confirmed by experts Ghorbani, Karampela, and Tonner (2022), who state that in today's digital era, the importance of digital marketing as a way of providing new information and selling services and products has increased to a great extent. Kaira, Vaschenko, and Vaschenko (2020) and Artemenko and Gavrilova (2021) assert that the competitiveness of enterprises is contingent upon the implementation of efficacious marketing communication tactics, which, when executed appropriately, result in increased profitability and the acquisition of a non-competitive edge. In recent times, a multitude of adverse factors have significantly impacted the market. These include, first of all, the global pandemic COVID-19 and the invasion of Russian troops into the territory of Ukraine, where fighting is still going on and the times are therefore very uncertain (Bezakova, Tomova, 2020). Therefore, it is necessary to correctly and clearly define the strategy of the enterprise so that, together, the whole organisation walks towards the set goal. Rudiawarni et al. (2022) have verified that organisations that establish a well-defined and unambiguous strategy and execute it effectively exhibit superior performance compared to those that lack a clear strategy. According to Cilento et al. (2022), not only is it important in implementing a strategy to set it correctly and clearly, but also to create trust with subordinates in the process of implementing the strategy.

According to Lukac et al. (2020), the significance of quality cannot be overstated, as it plays a pivotal role in determining the success of an organization. Mittal and Gupta (2021) have affirmed that the execution of total quality management initiatives leads to an enhancement in both product quality and customer satisfaction, resulting in improved performance and increased sales. Rauter et al. (2019) argue that in light of the growing complexity of products and services, companies must adopt novel practices in order to remain competitive. The discourse surrounding quality is pervasive; however, it is imperative that a plethora of knowledge, expertise, and proficiencies be effectively employed and leveraged (Martin, Elg, & Gremyr, 2020). The digital transformation of the economy is closely linked to the evolution of society and the advancements in digital technology. Despite the benefits that digital technologies offer to companies, the drivers of this transformation encounter various internal and external organizational challenges (Bai, 2021). As per the findings of Mohamed Ali (2020), service quality holds significant importance for enterprises as it exhibits a positive correlation with customer loyalty. Thus, it becomes crucial for organizations to consistently maintain and enhance their service quality to ensure customer retention. The attainment of quality is a crucial and indispensable factor in the achievement of success for a business. According to Rats et al. (2022), the variations in quality management are contingent upon factors such as the scale of the enterprise, the sector in which it operates, the technological infrastructure employed by the organization, and the industry's performance as determined by the value added. Stachova et al. (2021) and Yuan, Wang, and Liu (2023) contend that in order to achieve business growth and uphold quality standards, it is imperative to adopt an appropriate human resource management policy that encompasses various aspects such as employee selection, motivation, recognition, and compassionate treatment of subordinates. Hedenus, Backman, and Hakansson (2019) posit that the enhancement of a company's quality is contingent upon the implementation of a structured quality management system and the provision of adequate training to employees. Zilincikova and Stofkova (2020) corroborate this fact by asserting that education is a crucial component not only in personal life but also in the professional sphere, as knowledgeable employees can significantly contribute to the growth of an organization. According to Levkin (2020), a crucial element of achieving prosperity in an enterprise is not limited to the education of employees but also encompasses the education of managers, who hold a pivotal position in overseeing the quality of the organization. The assertion is corroborated by Wallo et al. (2021), who augment the discourse by positing that managers in an organization do not solely function as task-givers but primarily endeavour to inspire, instruct, assist, and exemplify their subordinates, not only within the workplace milieu but also in their daily lives. In the context of a business environment that is subject to constant change, it is imperative to cultivate value, generate novel and inventive concepts, and leverage one's skills and competencies to exert a positive impact on the overall performance, competitive positioning,

economic growth, and prosperity of the enterprise (Deshati, Gorica, 2022). According to Allahar (2019), there exist multiple approaches to innovation that are contingent upon the specific requirements, tactics, and objectives of the enterprise. Villaluz and Hechanova (2019) suggest that one strategy for promoting innovation is to establish a culture of innovation. Their findings indicate that in family firms, innovation culture is primarily influenced by leaders, whereas in non-family firms, leaders exert influence on innovation through the implementation of strategic measures, incentivization, and performance evaluation. Collaboration with external partners is a widely recognized approach that can facilitate innovation. This approach is gaining significance due to its potential to accelerate innovation, distribute costs, mitigate risks, and enhance market penetration (Lesakova, Gundova, & Kral, 2020). The allocation of resources towards research and development is a crucial factor in the growth and competitiveness of a company. Cui, Tong, and Tan (2022) posit that the utilization of information technology (IT) can result in enhanced innovation performance, thereby increasing competitiveness within the market landscape. According to Dana et al. (2022), the advent and proliferation of digital technologies have amplified the potential for innovation and exerted a significant impact on business innovation in global markets. The significance of digital innovation management, encompassing both open innovation and dominant design, cannot be overstated in terms of its impact on innovation performance, as posited by Nylund and Brem (2021). Chesbrough (2020) posits that the analysis of innovations is predominantly centered around cost considerations, specifically the decision to produce or procure, with firms typically opting for the alternative that is more cost-effective. Sa'adon, Amr, and Amiruddin (2019) posit that two distinct types of innovations, namely radical and incremental innovations, have a positive impact on the financial performance of firms. Barabino (2019) posits that innovations are defined as entities such as products, services, and processes that yield favourable outcomes for the organization. Innovation has been significantly impacted by various adverse factors in recent times. The events under consideration encompass, primarily, the worldwide outbreak of COVID-19 and the encroachment of Russian military forces onto Ukrainian soil, where hostilities persist, and the prevailing circumstances are consequently characterized by considerable ambiguity (Bezakova & Tomova, 2020). Svabov, Kramarov, and Chabadov (2022) assert that global economic development was considerably impacted by the COVID-19 pandemic. However, the pandemic also presented opportunities in the form of novel technological reforms and economic structures, particularly the transition to online platforms. The proliferation of digital technologies has intensified competition, thereby necessitating businesses to prioritize customer demands and deliver goods or services that align with their preferences while ensuring optimal quality (Siwiew & Pacana, 2022). In contemporary times, ecology has emerged as a highly pertinent subject matter, with a growing emphasis on the provision and utilization of environmentally friendly

products. As per Trapp and Kanbach's (2021) findings, enterprises that operate on sustainable models, technologies, and practices are increasingly being perceived as cleaner and more appealing to consumers. Yousaf (2021) has substantiated the veracity of this assertion, contending that the adoption of green practices, innovations, and dynamic capabilities by businesses can facilitate sustainable development and yield enduring financial gains. Selecting an appropriate communication channel for a product is imperative in order to enhance consumer engagement, fulfil elevated customer expectations, enhance services, and incorporate data that can be utilized in the future (Chygryn et al., 2020). Ma, Wu, and Peng (2017) conducted a questionnaire survey and found that the implementation of green marketing can enhance the rate of return on assets for enterprises. Furthermore, their research suggests that the effectiveness of green marketing is positively correlated with the duration and investment in such marketing efforts. Nath and Siepong (2022) have observed that the effectiveness of promoting green marketing practices varies across different companies. Alec and Draghici (2021) assert that contemporary businesses are observing a growing demand from customers for customized products that cater to their individual preferences and requirements while simultaneously ensuring that the benefits and costs are mutually beneficial for both the company and the customer. Nonetheless, formulating a universal guideline for adhering to prevailing trends during the current volatile era is unattainable. Dubec (2017) asserts that the product must generate high-quality visualization and presentation. Investment in innovation, quality, and logistics is imperative to ensuring expedited delivery times.

The data for both research inquiries will be obtained through the examination of the internal charters, social networks, and websites of the companies. The proposed methodology involves conducting a comparative analysis of the product portfolios and sales of three chosen companies, followed by a cross-comparison of the three entities.

The aim of the paper is to identify and find current trends in technology companies and given their revenues, to propose suitable trends for the technology segment that they could apply in their companies.

**RQ1: What are the three most prevalent contemporary trends among the technology firms that were surveyed?**

Each corporation employs a distinct approach to its strategy implementation; however, it is crucial that it be established accurately and efficiently to cater to the company's needs. By implementing appropriate tools, a corporation can enhance its market position and augment revenue generated from the provision of goods or services. According to Zapletalova (2022), the proper establishment of an enterprise's strategic plan can lead to business success and competitiveness within the market environment.

**RQ2: In what ways do these trends impact sales?**

The second inquiry is predicated upon the antecedent query and, as such, is integrally connected to the data garnered from the initial investigation. Staying up to date with market trends is a crucial aspect for both for-profit and not-for-profit entities, including businesses, corporations, and institutions. This holds significant importance in the operations of all such business entities, as noted by Linchpin et al. (2023). According to Buljubasic and Kotrla (2018), the strategic selection of tools and effective promotion of products can result in a competitive edge and subsequent growth in sales.

**MATERIALS AND METHODS**

Upon contemplation of the literature review and the social exigencies delineated therein, we shall proceed to analyze a dataset pertaining to technology enterprises, namely Apple Inc., Samsung, and Xiaomi. Present research inquiries will be scrutinized through the application of selected methodologies.

Regarding the first research question, the methodology will involve utilizing data obtained from the companies' websites and social media platforms. Additionally, observations will be made based on the survey conducted through the companies' websites and other available sources within the online environment.

In addressing research question 2, the paper will utilize internal data from the companies' sales records, with a particular focus on the sales figures for the entire year of 2021. This approach is intended to ensure that the data is comprehensive and not subject to any form of bias. Additionally, the paper will employ the same methodology as in research question 1, namely content analysis of the companies' social media platforms and websites.

Research question 1 entails the development of a SWOT analysis of prevailing technological trends, utilizing a point scale to evaluate their strengths, weaknesses, opportunities, and threats. Subsequently, recommendations for enhancing these trends will be proposed. It is my contention that the aforementioned tools possess the capability to effectively discern the prevailing patterns employed by major corporations, thereby enabling me to conduct an evaluation of the most proficient company in this regard. Additionally, I will conduct a comparative analysis of the methodologies employed by the companies and assess their similarities and differences vis-à-vis their rivals.

Research question 2 will be analyzed using the correlation analysis method in Excel, specifically the CORREL function to calculate the Pearson correlation coefficient:

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2} \sqrt{\sum_{i=1}^n (Y_i - \bar{Y})^2}} \quad (1)$$

where  $\bar{A}$  and  $\bar{B}$  are weighted arithmetic mean.

The present paper aims to investigate the associations between trends and the revenues of major corporations. In this discourse, I shall expound on the influence of corporate sales on the utilized patterns. Moreover, upon scrutinizing the internal charters of the companies, particularly their sales figures for the year 2021, I will be capable of ascertaining the present condition of their quality and innovation.

Upon analysing the outcomes of the prevalent patterns observed in the technological landscape, the gathered insights can be leveraged by technology enterprises seeking to enhance their calibre and ingenuity, or alternatively, to align with the prevailing market trends.

### RESULTS

The present paper will present an analysis of the three major technology corporations and report the findings derived from the application of rigorous data analysis techniques.

The following entities that will be delineated are Apple Inc, Samsung, and Xiaomi. The aforementioned entities are enterprises engaged in the production and distribution of technological apparatus, as well as the provision of associated services.

The tech giant Apple Inc. was founded in 1976. University students Steve Jobs and Steve Wozniak founded the firm. The business initially developed practical and useful computers to make enormous, bulky computers more manageable. However, the first Apple I computer was a simple wooden box with minimal arithmetic capabilities. It was a major technological advance. The company started with \$1300. The business has grown significantly and is now well-known. It is reliable and profitable (Faizal, 2021). However, the company faced obstacles. Three CEOs, including Steve Jobs, resigned over numerous years. The corporation was near bankruptcy during this turbulent time. Steve Jobs returned to Apple Inc., advancing the company with his incomparable intelligence. His leadership helped the company overcome adversity and become one of the world's most valued. Employees disliked Steve Jobs' harsh supervision. His focus on product design and user experience helped the company. Thus, the products' strong demand and steady growth. Due to health difficulties, Steve Jobs resigned in 2011 and died the following year. Tim Cook took over and still works there. Like Steve Jobs, the person in question has done well in pushing the company forward. The California-based firm is worth \$355.1 billion. Apple Inc. earned \$101 billion in 2021, according to Curry (2022). According to Curry's (2022) estimate, revenues increased to \$365 billion in 2022.

Samsung was founded in 1938; however, the corporation has changed significantly. The company sold seafood, veggies, and homemade noodles. Lee Byung-chul, who wanted to grow his business-like Steve Jobs, founded it. He invested in technology and electronics in the late 1960s to fulfil his goals. A 1970 monochrome television sold 1 million units in six

years. The company expanded its product portfolio to include televisions, washing machines, microwave ovens, and tele-communication devices by allocating more resources to technology. Motorola beat the company's phone output at first. The company sold components to other manufacturers until they could make a phone that met the brand's standards due to the phones' poor quality. The user's citation includes the author's last name and publication year, following academic writing traditions. It's hard to identify the academic work without context. Today, the corporation holds 20% of the mobile phone industry and is well known. The company supplies Apple and other multinationals. The business recently presented a foldable phone, which it sees as a future improvement. One of the largest global enterprises, the company is valued at \$107.3 billion. According to Yordan (2022), 2021 revenues reached \$232 billion.

Xiaomi, a 13-year-old brand formed in 2010, is a rising brand. The company started in China only. It left China in 2014, four years after its creation. The company makes mobile devices, computer software, and consumer electronics. The company prioritizes quality above price, unlike Apple. It makes smartphones, laptops, smart watches, CPUs, scooters, software, and smart home goods. Xiaomi became the world's fourth-largest smartphone provider in 2015. Due to its high-quality, low-cost products, Presthith and Goswami (2021) expect the company to grow steadily. Udin (2022) reported 2021 revenues of US\$51.5 billion.

### TRENDS OF TECHNOLOGY COMPANIES

Apple's strategy distinguishes them from other brands and huge corporations. The company is proud of its customer loyalty. The company pioneered Apple I, Apple II, and Macintosh computers. The company's biggest achievement in the 21st century was diversifying into portable functional gadgets from computing devices. The technology boom benefited the corporation from this strategic decision. The company sells Macbooks, iPhones, iPads, Apple Watches, and accessories, including AirPods. Apple offers software services, including Apple Music, Apple TV+, iCloud storage, and Apple Arcade, in addition to hardware. Profits are high due to the company's diversified offerings. Apple's history of technological innovation suggests it will continue to create new products that consumers will like and boost revenue. Apple Inc. integrates artificial intelligence, machine learning, and other technologies into its devices and services. Siri, the voice assistant on all devices, pioneered this field. Voice control of all items boosts their value. It also improves its cognitive and communicative abilities with Apple product consumers. Apple Inc. removed charging adapters and headphones from its latest smartphones to enhance environmental sustainability. The corporation cited environmental concerns for this move. In 2021, Apple emitted 23.2 million metric tons of carbon dioxide, according to Whitham (2022). This calls into question whether the company's recent steps are enough and whether it should prioritize fixing its environmentally detrimental production practices. Since its founding, the company has been inventive and recognized. The company's

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self-created iOS operating system and exclusive use of internal resources create a product ecosystem. The end user benefits from expanded interconnectivity and product functionality. Apple Inc. devices are less susceptible to viral attacks and have sophisticated anti-virus software. Apple emphasizes product quality and design. The company's revolutionary products are meticulously detailed, resulting in fewer hardware and software faults than its competitors. They may not be the first to propose revolutionary features and goods, but they have a remarkable capacity to improve and perfect these offers with rigorous attention to detail, resulting in a nearly bug-free customer experience. The reason Apple products are so popular is intriguing. Apple emphasizes customer experience, so committed customers create films and product reviews and post them on social media. The company's ability to provide an experience beyond buying explains this. Products must be simple enough for non-technical people to use. Customers can visit one of the 25 Apple Stores worldwide for device troubles. These stores' skilled personnel can help consumers resolve their issues (Apple.com). The company's unique and extensive product offerings eliminate the necessity for large discounts. The company's website rarely offers student discounts, usually around September. "Back to School" offers a 10% discount on Apple products specifically to education sector students and personnel.

Samsung differs from Apple. Samsung is keeping up with market changes and trends in technology. Like Apple Inc., this technology corporation must constantly innovate and set new market trends. The previous section described the company's early years. The company manufactures smartphones, televisions, computers, home appliances, cameras, industrial equipment, monitoring devices, and audio equipment. The company's broad focus on technology is significant. The corporation has held a strong market position despite its extensive and diverse portfolio. Samsung, like Apple Inc., is using voice-activated smart home equipment to improve AI. The organization must ensure that the AI system can foresee and meet user needs. Simultaneously, a corporation must link their artificial intelligence (AI) services to all of their devices to ensure optimal efficiency and ease of use for users of all technical proficiency levels, from IT technicians to regular users. Joining RE100 shows Samsung's commitment to sustainability. The company wants zero device emissions by 2050. This ambitious initiative might reduce carbon dioxide emissions by 17 million metric tons by 2021. The company also plans to increase water efficiency to reduce pumping and encourage water reuse (Samsung Newsroom, 2022). In 2020, the company reintroduced the popular "V" touchscreen phones, a mobile phone industry milestone. Due to its tiny form, this smartphone has received mixed reviews. Whatever the response, this technological achievement is noteworthy. Foldable touchscreen phones were unthinkable a few years ago. Foldable phones may one day replace bulky mobile gadgets. This could let people who prefer smaller gadgets carry them. The South Korean corporation is focusing on virtual reality, which lets people experience simulated

environments. Samsung and app and game developers are working together. Virtual reality will be used for gaming, pleasure, education, medicine, the military, and industry in the future. Virtual reality technology simulates actual experiences in a synthetic environment, helping prepare for real-life circumstances and improving response time, especially in cognitively taxing conditions.

Xiaomi, a young Chinese digital company, is known for its innovative and affordable products. Xiaomi, like its predecessors, offers many items. These items include intelligent mobile phones, wrist-worn smartwatches and bracelets, automated vacuum cleaners, home automation systems, electrically powered scooters, portable computing devices, and compact audio amplification systems. The company's shorter market duration than its competitors makes it a fascinating and promising future prospect. Xiaomi is focusing on AI and machine learning research. Their devices are being updated to improve the user experience and customer happiness. For robotic vacuum cleaner owners, this solution eliminates the need for manual cleaning. The vacuum cleaner cleans the flat independently, simplifying the user's daily routine. Given its large subscriber base, the company under consideration must prioritize environmental issues. According to the press announcement, the company processed 3,386 metric tons of kitchen garbage in 2021, producing 328 metric tons of fertilizer and animal feed. Xiaomi said that their parks saved 2,000 metric tons of water and 16,339 metric tons of greenhouse gases. The data shows the company's efforts within its capabilities.

### SWOT ANALYSIS OF TECHNOLOGY COMPANIES

#### APPLE INC.

##### Strengths

Apple Inc. exhibits notable strengths in the realm of market trends, owing to its extensive tenure and consequent establishment of a robust market position. As one of the most valuable companies in the current market environment, Apple's longevity has contributed to its success. Despite having a wide-ranging portfolio, the company endeavors to prioritize environmental conservation and sustainability. Failure to consider this aspect would result in significant adverse effects on the environment. An additional notable aspect pertains to the extensive range of offerings, catering to the diverse preferences of potential consumers. Ultimately, the suitability of a particular product is contingent upon the user's expectations and financial circumstances. Apple Inc. is widely recognized for the exceptional quality and design of their product portfolio, a key strength that has been emphasized since the company's inception and continues to be upheld today. Despite the varying price points of the products, they are all meticulously crafted with a high standard of quality and design, ultimately contributing to the company's overall sales performance.

**Weaknesses**

The firm's product portfolio is characterized by a premium pricing strategy, which may represent a potential vulnerability vis-à-vis rival firm. Nevertheless, Apple's organizational resilience is such that it is not compelled to yield to competitive pressures in this domain. Simultaneously, there exist promotional activities linked to the aforementioned product, which the organization does not accord significant emphasis to and refrains from offering substantial promotions to its clientele throughout the year. The sole exemption pertains to the annual September discount promotion on Apple products, known as "Back to School, which offers a 10% discount on specific products to eligible students and school personnel. This discount is contingent on their status as students or employees of educational institutions. One potential limitation experienced by users of Apple products pertains to the lack of compatibility with alternative operating systems. This is due to the fact that Apple maintains complete control over the design and maintenance of its proprietary system. One potential drawback of the firm is its reliance on external sources for the production of OLED displays and chips utilized in its devices. This could potentially lead to production and sales delays, thereby adversely affecting the company's financial standing.

**Opportunities**

In the current era of rapid technological advancement, businesses are increasingly adopting digital, automated, and robotic processes. In this context, machine learning presents a significant opportunity for technology companies and major market players

such as Apple. By enabling computers to make data-driven decisions and address challenges across diverse industries, machine learning has emerged as a powerful tool for enhancing organizational performance. One potential avenue for the company's growth is to expand its global presence by establishing additional Apple Stores. This is due to the continued demand for the company's products and the appeal of the stores' knowledgeable and proficient staff, who are capable of providing comprehensive guidance and addressing any concerns. The Czech Republic currently lacks an Apple Store, with the closest locations residing in Austria and Germany. This phenomenon is associated with the endeavor to penetrate novel markets and enhance brand recognition in regions where the adoption rate is relatively low, even though the populace still exhibits a keen interest in the commodities.

**Threats**

The potential impact of legislative procedures and governmental actions poses a significant threat to the company. Given its location in the United States, forecasting the trajectory of future legislation is a challenging task. An additional challenge that presents difficulties for companies is the unpredictability of unforeseen circumstances, including but not limited to crises, market contractions, unfavorable social conditions, and global pandemics. The unpredictability of adverse circumstances notwithstanding, the organization can enhance its preparedness and responsiveness vis-à-vis past years by drawing from the lessons learned during the COVID-19 pandemic, which was a significant global crisis.

**Table 1** SWOT analysis of Apple's marketing communications

| Strengths                         | Importance | Score | Score vs importance | Total |
|-----------------------------------|------------|-------|---------------------|-------|
| Strong company                    | 0,5        | 5     | 2,5                 | 6,7   |
| Emphasis on the environment       | 0,5        | 4     | 2                   |       |
| Broad portfolio                   | 0,3        | 4     | 1,2                 |       |
| Quality and design                | 0,2        | 5     | 1                   |       |
| Weaknesses                        | Importance | Score | Score vs importance | Total |
| High price products               | 0,5        | 4     | 2                   | 5,1   |
| Non-provision of actions          | 0,2        | 4     | 0,8                 |       |
| Incompatibility with other OS     | 0,3        | 5     | 1,5                 |       |
| Dependence on limited resources   | 0,2        | 4     | 0,8                 |       |
| Opportunities                     | Importance | Score | Score vs importance | Total |
| Machine Learning                  | 0,5        | 5     | 2,5                 | 6,9   |
| Construction of additional stores | 0,2        | 4     | 0,8                 |       |
| Qualified experts                 | 0,2        | 4     | 0,8                 |       |
| Expansion into other markets      | 0,1        | 3     | 0,3                 |       |
| Threats                           | Importance | Score | Score vs importance | Total |
| Legislation                       | 0,5        | 4     | 2                   | 4,9   |
| Measures                          | 0,3        | 4     | 1,2                 |       |
| Crisis                            | 0,3        | 3     | 0,9                 |       |
| Market downturn                   | 0,2        | 2     | 0,4                 |       |

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**SAMSUNG**

**Strengths**

Samsung's competitive advantages lie in its robust brand reputation, which has been established over a prolonged period of time, allowing it to secure a formidable market position. The company exhibits a notable strength in its commitment to innovation and the continuous enhancement and optimization of its technological capabilities. The company places significant emphasis on technological advancements, leading to its ongoing development. Similar to Apple Inc., Samsung boasts a diverse range of offerings, providing customers with a wide selection of products to choose from. The company allocates a significant amount of funds towards research and development endeavours, which have the potential to yield various advantages in the future, encompassing both monetary and non-monetary gains.

**Weaknesses**

The elevated cost of merchandise from the South Korean conglomerate is attributable to the company's extensive user base, which is willing to pay a premium for superior quality, design, and functionality. Regrettably, this phenomenon does not consistently translate to the quality and design of the craftsmanship. Simultaneously, it is imperative for the company to adopt a more customer-centric approach and enhance its communication with them. This can be achieved through diverse events, functions, or the prevalent social media platforms and the internet. Based on this observation, the organization appears to be deficient in implementing loyalty schemes for its dedicated clientele, which would offer them a range of

financial and non-financial incentives.

**Opportunities**

As the company has a large number of customers who buy products, their activities also have an impact on the environment, so there is an opportunity for the company in the future to focus on environmentally friendly processing of products, including unnecessary packaging and plastics, to reduce its overall environmental impact. The company's emphasis on innovation and technology presents the potential for ongoing enhancement and advancement of artificial intelligence and virtual reality. These advancements hold significant promise for future applications, not only in the realm of gaming but also in professional settings. From a marketing perspective, the company can leverage the opportunity to prioritize customer-centricity and cultivate enduring relationships with them. This can be achieved through diverse sales promotions and enhancements to the website's transparency, which serves as a virtual storefront for electronic commerce.

**Threats**

The external environment poses various threats to the company, including legislative measures and unforeseen circumstances that may be difficult for the company to anticipate and prepare for. Given the company's extensive and diversified portfolio, which does not concentrate solely on a specific product segment, there is the possibility of insufficient customer interest in certain products, resulting in significant losses. While this may not necessarily result in the company's collapse, it may weaken its market position in the long run.

**Table 2** SWOT analysis of Samsung marketing communication

| Strengths                        | Importance | Score | Score vs importance | Total |
|----------------------------------|------------|-------|---------------------|-------|
| Strong brand                     | 0,5        | 5     | 2,5                 | 6,9   |
| Innovative technology            | 0,5        | 4     | 2                   |       |
| Broad portfolio                  | 0,3        | 4     | 1,2                 |       |
| Research and development         | 0,3        | 4     | 1,2                 |       |
| Weaknesses                       | Importance | Score | Score vs importance | Total |
| High price products              | 0,5        | 4     | 2                   | 5,1   |
| Public Relations                 | 0,2        | 4     | 0,8                 |       |
| Defects in design and quality    | 0,3        | 5     | 1,5                 |       |
| Loyalty programs                 | 0,2        | 4     | 0,8                 |       |
| Opportunities                    | Importance | Score | Score vs importance | Total |
| Emphasis on the environment      | 0,5        | 5     | 2,5                 | 6,9   |
| Building long-term relationships | 0,2        | 4     | 0,8                 |       |

|                                    |                   |              |                            |              |
|------------------------------------|-------------------|--------------|----------------------------|--------------|
| Website improvements               | 0,2               | 4            | 0,8                        | 6,9          |
| Developing artificial intelligence | 0,5               | 5            | 2,5                        |              |
| <b>Threats</b>                     | <b>Importance</b> | <b>Score</b> | <b>Score vs importance</b> | <b>Total</b> |
| Legislation                        | 0,5               | 4            | 2                          | 5,1          |
| Broad portfolio                    | 0,3               | 4            | 1,2                        |              |
| Crisis                             | 0,3               | 3            | 0,9                        |              |
| Market downturn                    | 0,2               | 2            | 0,4                        |              |
| Market downturn                    | 0,2               | 2            | 0,4                        |              |
| Diversified portfolio              | 0,2               | 2            | 0,4                        |              |
| Pandemic                           | 0,2               | 2            | 0,4                        |              |

## XIAOMI

### Strengths

The primary advantage of Xiaomi lies in the highly competitive pricing strategy implemented across the majority of its product offerings. One of the notable strengths of the company is its pricing strategy, which is often accompanied by a satisfactory level of quality. While the quality may not always be optimal, it is generally deemed acceptable in light of the competitive pricing. The organization has exhibited a relatively brief tenure in comparison to its industry counterparts yet has demonstrated substantial and swift expansion throughout its operational history. Consequently, the organization boasts an extensive range of products and endeavours to cater to the needs of the wider populace. The organization possesses a substantial social media following across various regions, which can effectively surmount linguistic obstacles for certain individuals and foster a closer relationship between the company and its customers, irrespective of the language they currently speak or comprehend.

### Weaknesses

Beyond the markets of India and China, where the adoption of the product is most prevalent, the brand's global recognition is comparatively limited, and the general populace exhibits minimal familiarity with the brand. The company's product portfolio exhibits a weakness in terms of quality, as previously mentioned. However, it is noteworthy that the pricing remains fixed, which may imply that customers ought to anticipate a potential compromise in quality. Despite the contemporary inclination towards online shopping, individuals still exhibit a positive attitude towards visiting physical retail establishments to engage in product testing and evaluation. In light of this circumstance, it is noteworthy that Xiaomi's retail presence is limited to China and India, thus prompting the consideration of future expansion opportunities. The security of the products and system of the company has been subject to criticism. The occurrence of multiple instances of confidential user data breaches reflects unfavourably upon the company.

### Opportunities

Xiaomi's innovation and technological capabilities have led to the incorporation of artificial intelligence and machine learning, which are also present in the aforementioned companies. With the surge in demand for the products, there exists a prospect to establish additional physical retail outlets, where patrons can experience the products first-hand and receive expert guidance from qualified personnel in the event of any queries regarding device selection. The identification of a company's weakness can potentially present an opportunity for future growth. In this regard, it is imperative for the company to prioritize the enhancement of product security and system integrity. This measure aims to prevent data breaches and enable customers to seamlessly transfer vital information across their devices. The sustained development of the enterprise is also associated with diversification into additional markets and acquiring a larger pool of prospective clientele globally.

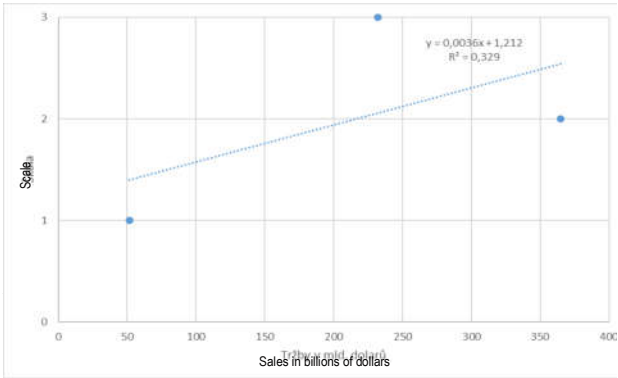
### Threats

Similar to the aforementioned technology behemoths, Xiaomi encounters analogous challenges. However, this corporation may be exposed to greater jeopardy due to its relatively shorter tenure in the market and a comparatively smaller customer base, in contrast to established entities such as Apple Inc. and Samsung. The aforementioned hazards could encompass statutory measures, emergency situations, economic recession, and worldwide epidemics. Nevertheless, the enterprise's competitive edge in this aspect could potentially stem from their prior experience in navigating through various unfavourable circumstances and emergencies throughout their tenure in the industry, thereby equipping them with the knowledge and readiness to tackle any future challenges that may arise.



**Table 3** SWOT analysis of Xiaomi marketing communication

| Strengths  | Importance | Score | Score vs importance | Total |
|--|------------|-------|---------------------|-------|
| Low price  | 0,4        | 5     | 2                   | 6,5   |
| Fast growth                                      | 0,4        | 4     | 1,6                 |       |
| Wide portfolio                                   | 0,3        | 4     | 1,2                 |       |
| Social networks                                  | 0,5        | 4     | 2                   |       |
| Weaknesses                                       | Importance | Score | Score vs importance | Total |
| Little brand awareness (outside China and India) | 0,3        | 5     | 1,5                 | 6,2   |
| Quality issues                                   | 0,5        | 4     | 2                   |       |
| Small number of branches                         | 0,3        | 4     | 1,2                 |       |
| Low product and system security                  | 0,3        | 5     | 1,5                 |       |
| Opportunities                                    | Importance | Score | Score vs importance | Total |
| Development of artificial intelligence           | 0,5        | 5     | 2,5                 | 6,9   |
| Construction of new branches                     | 0,2        | 4     | 0,8                 |       |
| Increasing product security                      | 0,2        | 4     | 0,8                 |       |
| System interconnection                           | 0,1        | 3     | 0,3                 |       |
| Threats  | Importance | Score | Score vs importance | Total |
| Legislation                                      | 0,5        | 4     | 2                   | 5,1   |
| Broad portfolio                                  | 0,3        | 4     | 1,2                 |       |
| Crisis   | 0,3        | 3     | 0,9                 |       |
| Market downturn                                  | 0,2        | 2     | 0,4                 |       |
| Pandemic   | 0,2        | 2     | 0,4                 |       |



**Figure 1:** Correlation analysis

The data presented in Figure 1 exhibits a robust positive correlation, as evidenced by the calculated Pearson correlation coefficient of  $r = 0.57356721$ . This demonstrates that a company's sales performance is positively correlated with the effectiveness of its strategic planning and its ability to align with prevailing market trends. A limitation that arises is the restricted number of companies. To conduct a comprehensive correlation analysis that demonstrates the association between the utilized trends and sales, it would be imperative to incorporate a greater number of sizable technology companies. Notwithstanding the aforementioned

limitations, it is feasible to employ correlation analysis in any given organization provided that pertinent data is available, and the Pearson's linear correlation coefficient  $r$  is computed, thereby substantiating the association between the variables under investigation.

The findings suggest that utilizing current technology trends in a precise and effective manner is crucial for companies to generate a favourable impact on prospective clients. A well-implemented trend strategy has the potential to yield favourable outcomes for a company in terms of future sales and impact on both financial and non-financial aspects.

**DISCUSSIONS**

By examining the trends of technology companies based on observations of social networks, websites and internal documents of Apple Inc., Samsung and Xiaomi, we can now un-answer the predetermined research questions.

**RQ1: What are the three most prevalent contemporary trends among the technology firms that were surveyed?**

Due to the changing environment, global market leaders say trends change constantly. Companies must monitor their competitors to avoid falling behind. In a

volatile corporate climate, long-term stasis is bad. This paper examined Apple Inc., Samsung, and Xiaomi's strategic directions and market trends using in-depth content analysis and observation. To understand these IT giants' development and competitiveness. Businesses are increasingly using machine learning and artificial intelligence. Nikitha and colleagues (2022) believe artificial intelligence will become more convenient. The car sector is using AI to assess driving conditions to reduce accidents. Self-driving cars, drones, and robots may soon make human intervention redundant. Machine learning and artificial intelligence breakthroughs may increase job prospects in several fields. Sustainability is a major trend in society's impact on the environment. Zhao and Huang (2022) claim that sustainability and environmental practices greatly impact firm success. Sustainable business techniques improve our climate due to pollution. Ullah et al. (2022) show that organizations are adopting ecologically sustainable practices, which boost revenue and sales. Sustainability was less important before. Large corporations must emphasize environmental effects due to climate change and environmental impact. People may improve themselves and the environment. The final trend is product variety and quality. Consumers are willing to pay more for a product that meets their durability, aesthetic, and usefulness needs. Dang et al. (2023) found that clients are increasingly interested in quality and continuous improvement, requiring quality investments to develop the firm. Ke, Shin, and Yuc (2022) found that design affects customers' purchasing decisions. A company's growth and competitiveness in a diverse market depend on the above variables.

**RQ2: In what ways do these trends impact sales?**

Business growth requires a well-defined plan and persistent adherence to key trends. A correlation study showed that organizations with better strategies and market trends are more likely to succeed and sell more. Babu et al. (2020) agree, stressing the need for trend monitoring and strategic adaptability to changing market conditions. These developments may boost a company's market performance and sales. Kaira, Vaschenko, and Vaschenko (2020) found that a solid plan boosts business competitiveness. They say such a plan can boost sales and give you a competitive edge. Given the large number of technology organizations and firms that use trends to gain visibility, the paper's narrow scope may be a drawback. Although the approaches may apply to all market-operating organizations, the paper is constrained by the tiny sample size. This paper could benefit technology corporations and other companies trying to adapt to current trends. Strategy specialists and small businesses need continuing trend education. Because such education improves theoretical understanding and helps organizations apply trends, it yields favorable results. Thus, excluding them from this category is improper. This project's ultimate benefit is that it can help students who like to combine academic and practical knowledge to better understand complex situations. The data collected can be used to broaden research into other technological problems. Future scholars may investigate non-technology firms. This

paper used net profit and firm turnover for correlation analysis, which could be applied to all market-operating companies.

**CONCLUSIONS**

The significance of strategy cannot be underestimated, as it holds both theoretical and practical value for all enterprises functioning within the market. The implementation of effective strategies and strategic management practices can have a significant impact on a firm's competitive advantage and financial performance. The objective of this paper was to discern prevailing patterns in sales and to ascertain the predominant trends employed in the technology sector. The theoretical framework of this paper draws upon data extracted from scholarly articles to elucidate the concepts of quality, innovation, and access to contemporary market trends and their significance for contemporary businesses. Furthermore, the diverse contemporary tendencies in the realm of employee benefits were explained, which have the potential to confer a substantial edge on organizations in the coming years. During the practical component, an analysis was conducted on the internal data, websites, and social media platforms of the chosen companies. Three prominent technology corporations, namely Apple Inc., Samsung, and Xiaomi, were chosen for the project. It is noteworthy that the aforementioned three corporations are presently among the foremost manufacturers of technological apparatuses worldwide. Contemporary enterprises are actively engaging with prevailing market trends and endeavouring to satisfy the demands and desires of their clientele. The data utilized in this paper was sourced from the official websites, internal documents, and social media platforms of the companies under investigation. The findings of the paper indicate that enterprises that possess a well-defined and unambiguous strategy and effectively address contemporary trends and advancements exhibit elevated levels of revenue. Regarding market trends, Samsung is the leading company with the second-highest sales, while Apple Inc. and Xiaomi occupy the second and third positions, respectively. It is noteworthy that Xiaomi's tenure in the market is comparatively shorter than that of the other two entities under consideration. Organizations are endeavouring to capitalize on prevailing trends; however, only the most exceptional ones are implementing them in a marginally distinct and superior manner, thereby manifesting their efficacy in their financial outcomes. It is noteworthy that even the most exceptional corporation, such as Samsung, possesses prospects and limitations that could be addressed to further enhance its prosperity. Simultaneously, I would evaluate all the examined entities in a favourable light for their strategic approaches and innovative practices in comparison to other rival firms. Given the vast number of technology companies operating in the market, it is exceedingly difficult to sustain a foothold in this market segment. These companies have managed to remain in the market for an extended period, not solely due to their high-quality products but also

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due to their adept public image management. It is imperative to consistently monitor market trends, not only in product and service development but also in marketing communication, as it has the potential to significantly enhance a company's sales and maximize its potential and brand recognition. The paper is subject to limitations due to the restricted number of subjects examined and the narrow focus solely on technology companies, thus indicating the need for additional research. The paper incorporates both theoretical and empirical data that can serve as a basis for future research and can be extrapolated to other companies operating in the market beyond the technology sector. The paper makes a significant contribution in both theoretical and practical domains, with implications that extend beyond technology companies to encompass all types of organizations. The findings obtained have broad applicability and the potential for practical implementation.

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## CONFLICT OF INTERESTS

The authors declare no conflict of interest.

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