How Diversification Strategies Impact the Long-term Business Growth in a Highly Competitive Technology Industry

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"The darkest hour just before the dawn."

-Thomas Fuller

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Abstract

As technology changes fast, companies must constantly innovate to develop diverse products to avoid over-reliance on a single product that would cause them to lose market position and hinder long-term growth. Yet, despite the obvious need for diversification, there are not many research studies that dive into whether diversification truly helps them to achieve sustainable growth and stay competitive. Therefore, this research will explore how diversification strategies can promote companies' growth and maintain their competitiveness over the long run in this ever-fast-paced technology industry. A semi-structured questionnaire was used to interview the senior executive of a major telecommunications company to share the reasons for choosing a diversification strategy, the challenges they faced, and how diversification affects the company's performance. The data were analyzed alongside existing business theories to better understand how diversification supports long-term growth. The findings reveal that investing in R&D and partnering with others are key to success, but diversification can also be expensive and complicated, especially for SMEs.

Keywords- Diversification, Technology Industry, Business Growth, Competitive Advantage, Risk, Innovation.

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Chapter 1: Introduction

1.1 Background

For technology companies, diversifying their products and services by entering new markets is key to keeping up with fast industry changes, sustaining growth and reducing risk. The concept of diversification was first introduced in 1959 within portfolio theory by the renowned American economist Harry Markowitz, whose groundbreaking work revolutionized financial theory by demonstrating that diversification reduces risk. (Hutzschenreuter, 2006)

When companies diversify, they do not depend on a single product for all their revenue. This reduces financial risk and helps them adapt to technology and market shifts. Diversification also creates new growth opportunities by promoting innovation and extending a business's reach into new markets, which makes it easier to develop fresh goods and services. Nevertheless, the potential of losing focus on the core product is one of the difficulties in implementing this strategy into practice. A thorough understanding of various diversification strategies is necessary to attain a strategic equilibrium for both sides.

Apple Inc. illustrates how diversification can be effectively implemented in the technology sector. Apple's original intention was to make personal computing easily accessible to everyone. But as Microsoft became a big player with its software, Apple had to change. In the early 2000s, they started adding new products like the iPhone and iPad, then later added services like Apple TV+ and Apple Pay. This approach not only mitigates risk by reducing reliance on a single product but

also enhances customer loyalty, as the seamless interconnectivity provides ease of use for Apple users to experience unified benefits of all Apple products (Комиссаренко, 2015).

1.2 Research Aim

The research aims to find out how diversification strategies affect a company's long-term business growth in a highly competitive technology industry. Specifically, it will look at how diversification efforts contribute to innovation, and sustained market advantage, as well as its impact on risk mitigation and the challenges companies face in implementation.

1.3 Research Question

The following questions will guide the understanding of the main research topic:

1. In what ways do technology companies use diversification to lower risks?
2. What challenges do they face in implementing a diversification strategy?
3. How does diversification support long-term growth?

1.4 Methodology Overview

The intended outcome of this research is to develop a clear understanding of how diversification strategies shape the long-term success of technology companies. This research was employed qualitative interviews with industry experts and a comprehensive literature review to analyze how diversification strategies contribute to market resilience, and competitive advantage. The findings

provided insights into the effectiveness of diversification efforts and inform best practices for sustainable growth in the technology industry.

1.5 Chapter Overview

Chapter 1: Introduction

This chapter dives into the research topic to shows why studying diversification strategy in the technology industry matters, lays out the background, previews the methods, and frames the upcoming discussion.

Chapter 2: Literature Review

This chapter looks at four key areas: the theoretical framework and key concepts of diversification, the main types of strategies companies use, the impact of these strategies on long-term growth, and the practical challenges companies face when trying to diversify. Understanding these can help companies to stay competitive in the technology industry as diversification strategy reduces dependency on one revenue source and encourage innovation for long-term growth.

Chapter 3: Research Questions

This chapter sets out the main research question and three supporting objectives shaping the research. It explains the research focus, including key areas explored like risk reduction, challenges, and competitive advantage, outlines the scope of companies analyzed, and briefly discusses the limitations of this research.

Chapter 4: Methodology

This chapter explains the methodology used to explore how diversification strategies affect long-term business growth in the competitive technology industry. It covers the research philosophy, sample, instruments, data analysis, and limitations to ensure clear and consistent research of strategic decisions. A qualitative method was used to understand executives' views on diversification and industry impact.

Chapter 5: Analysis and Findings

This chapter looks at information from a major telecommunications company's interviews (Company A) and Google and Microsoft's annual reports to understand how diversification helps them sustain business growth in the fast-paced technology industry.

Chapter 6: Discussion and Conclusion

This chapter discusses the findings from an interview with Company A and reports from Google and Microsoft to show how diversification helps technology companies grow and stay competitive over time. It also covers the key challenges companies face and some recommendations.

Chapter 2: Literature Review

2.1 Theoretical Framework and Key Concepts

2.1.1. The Concept of Diversification

In the business world, diversification is not only a strategy for business growth strategy; but also, a keyway to reducing risk and upholding competitive advantage. Companies diversifying into new markets or new products can spread risk, improve growth prospects, and increase productivity. Numerous studies (Ansoff, 1957; Pitts & Hopkins, 1982; Hutzschenreuter & Gunther, 2006; da Silva Lopes, 2015) show that this concept has undergone significant changes, from a static framework to a dynamic strategy necessary for the survival of modern businesses.

Economist Harry Markowitz established the idea in finance through modern portfolio theory, which reduces risk by diversifying investment across assets (Markowitz, 1959). The diversification principle was then expanded by corporate strategist Igor Ansoff, who applied diversification to the business world to help companies grow through strategies like product development, market penetration, market development, and diversification. Within this framework, diversification means introducing new products into new markets, a move that demands substantial investment but offers high profit potential (Ansoff, 1957). For example, Tesla went the extra mile by focusing beyond cars into solar energy and batteries to spread risk and create a new revenue stream (Naor et al., 2021).

Yet, the framework underemphasizes the need for continuous innovation in volatile markets. Markowitz's focus on reducing financial risk is less relevant in the technology market, where

innovation and the ability to adapt swiftly are more important for long-term success. Similarly, Ansoff's structured approach to diversification works well for regular businesses like grocery stores, where customer needs and market conditions change slowly due to they are necessities. Also, Ansoff's assumes things grow steadily and does not capture the fast-paced changes in technology markets. In the technology industry, new innovative products often make older ones obsolete very quickly. In this manner, it is essential to recognize that simply diversifying is not sufficient for achieving long-term growth.

Pitts and Hopkins (1982) viewed diversification as entering different markets but not necessarily innovating. This static view work less well in today's technology-driven world. The reality is companies that do not evolve are more likely to fall behind. In fast-paced industries, standing still often means losing ground. As Kornelakis and Petrakaki (2024), and Drucker (1985) point out, businesses that fail to adapt risk losing their advantage and missing out on new ways to meet shifting customer needs or keep up with technology trends. Kornelakis and Petrakaki (2024) through a comparative and historical analysis, argue that Nokia's failure that the company's static diversification strategy was unable to change and modify its key skills in response to the move toward smartphones and integrated ecosystems.

To survive, companies must keep innovating, market adaptation, and build connected systems that work together. Hutzschenreuter and Gunther (2006) noted that diversification should be seen as an ongoing process, particularly in industries experiencing technological disruption. Therefore, companies that want to last in the long run have to stay open and adjust their strategies as the market and innovation develop.

Apple and Samsung show how dynamic diversification works. Samsung has expanded its product line by launching different smartphone series, like the budget-friendly Galaxy A series and the high-end Galaxy S series with advanced cameras and foldable screens to targets more affluent customers. This allows Samsung to flexibly meet different customer needs and maintain stable revenue even when the economy shifts. Similarly, Apple's business has moved far beyond computers. It now sells products like iPhone, and Apple Watch, as well as services like iCloud and Apple Music. This mix keeps Apple users in its ecosystem, builds loyalty, and brings in stable income from hardware sales and subscriptions (Kornelakis and Petrakaki, 2024). Both companies use dynamic diversification to maintain long-term growth, which shows that diversification is a survival strategy in a changing business environment and proves that companies can protect themselves and their communities during difficult times, rather than just a means of growth.

Amazon further illustrates this dynamic diversification strategy aligned with Corporate Strategy Theory. Menz et al. (2021) use Amazon's business portfolio as an example to exemplify Chandler's (1962) framework, demonstrating the company’s adaptation of its strategy to both external market opportunities and internal capabilities. For instance, Amazon invests in diverse markets like advertising while continuing to support areas that may initially generate losses, with the long-term goal of optimizing the portfolio for stability and innovation. Instead of just trying to capture value, this strategy is about creating it, which matches Chandler's concept that companies need to constantly adapt and coordinate their resources to make the most of new opportunities.

This further supported by the Resource-Based View, which emphasizes the importance of internal capabilities in achieving successful diversification. This fits with the views of da Silva Lopes (2015) emphasizes the strategic management of resources and internal linkages, like plant capacity and knowledge, to overcome market imperfections and reduce costs. Yet, this positive perspective often ignores the practical challenges that often arise when managing these internal resources. In big companies, especially, bureaucracy can slow down decisions, making it harder to stay flexible. Plus, divisions often operate with conflicting goals, making coordination difficult. BlackBerry exemplifies these challenges clearly. Despite its early dominance, the company's leadership failed to adapt to changing consumer demands and insisted on using physical keyboard design even as touchscreens became the industry standard. This lack of flexibility, combined with internal disagreements and legal interference, undermined its ability to innovate and commercialize effectively (Miller, 2023). This indicates that even when internal resources exist, their strategic potential is often limited by management and structural inefficiencies.

Although managing internal resources can be tough, Kim et al. (2016) found that companies that sharing technological knowledge across R&D projects can lead to improved performance, especially when companies pursue diversification into new technology markets. This tie back to the RBV framework, which reinforces the concept that leveraging core capabilities is crucial for both competitive advantage and sustainable diversification (Wernerfelt, 1984; Barney, 1991; Mutune and Simba, 2018).

However, dynamic diversification does not always work for SMEs. They often lack the financial and staff needed for continuous innovation. Mutune and Simba (2018) arguing that SMEs tend to

gain more from related diversification than from unrelated diversification. Because related diversification allows SMEs to build on what they are really capable, without needing to make huge new investments. Colomba et al. (2014) add that SMEs usually use external knowledge like open-source software to develop products without high costs. This way, SMEs can innovate in familiar areas without hiring large teams.

2.1.2. Ansoff Matrix

The Ansoff Matrix is a framework for companies seeking to grow. It includes four strategies: market penetration, market development, product development, and diversification. These help companies to find new opportunities and understand risks.

- Market Penetration strategy is often employed by companies that seek to increase sales without changing their core products in their current markets.
- Market Development strategy is used when a company wants to expand its main products into new regions.
- Product Development strategy is employed when a company develops new products in its current market.
- Diversification strategy is to enter new markets or offer new products.

Diversification is the riskiest strategy. It forces companies to step out of their comfort zone to develop new products for unfamiliar markets, requiring new capabilities and resources (Ansoff, 1957; Loredana, 2017). Such strategic moves often lead to significant changes in the company structure, increased investment in new product R&D, and challenges like dealing with unfamiliar

market dynamics and competitive environments. These factors can increase the likelihood of strategic missteps, making it necessary for companies to invest additional time, hire expertise, and allocate significant resources to new product development (Loredana, 2017; Meme, 2012).

Ansoff's (1957) framework suggests that diversification can drive growth, but it does not go into much detail about the risks that can come with implementing this strategy. As Drucker (1985) argued a well-structured approach and strategic foresight in innovation can help companies in such industries reduce inherent risks and seize emerging opportunities. Keep innovating and adapting all the time is important in the technology industry where technologies change happens quickly. Without it, companies can quickly lose ground to competitors who are faster and more creative.

Yenidogan and Aksoy (2017) linked Ansoff's strategies to long-term growth and found that the role of innovation and diversification can lead to sustainable competitive advantage. They argue that disruptive innovations (disrupt existing markers by being cheaper) from diversification enable companies to capture new opportunities and reconfigure markets. For technology companies, radical innovation (create something unrelated to the current business) aligned with Ansoff's strategy can help them to reach new customers. Huawei's Vision smart TV is a great example. Known for telecommunications and smartphone businesses, Huawei released new products like the Vision V5 Max 110 in 2024 and achieved 42.3%-48.2% share in the key high-end segment despite the overall decline in the Chinese TV market (Huawei Annual Report, 2024, p.61). This success shows that Huawei's entry into the smart TV field helps it expand into new customers, try different products, and remain competitive outside of its usual telecommunications and smartphone markets.

Loredana (2017) suggests that companies can establish strategic partnerships to leverage external resources and capabilities, reduce the burden on core competencies, and more effectively explore new markets. Supporting this view, Giuri et al. (2004) revealed that companies engaging with external technological partnerships focusing on fewer technologies are likely to achieve outstanding economic performance. Because such alliances concentrate on strengthening the company's core competencies rather than diversifying broadly, enabling companies to absorb external knowledge.

Yet, this optimistic view of strategic partnerships fails to consider the potential leakage of company information. When two companies' partner, they often share intellectual property. Once the partnership ends, one side may use shared information to compete, which could hurt the original company's future success, especially in the technology industry where ideas and knowledge are everything. Schubert (2016) arguing that partnerships can increase the risk that one partner might use the other's ideas without permission because there are often conflicts of interest between partners and some valuable knowledge like skills and experience is difficult to protect formally. Hence, trust or confidentiality often do not work, so important knowledge is more likely to leak and intensify industry competition in the future.

2.1.3. Resource-Based View

If a company wants to grow through diversification and sustain its competitive advantage over time, the resource-based view helps by focusing on its internal resources (Wernerfelt, 1984; Barney, 1991). But just RBV framework is not enough to ensure successful diversification; it must also

consider the company's capability to manage these resources dynamically in response to external forces.

Wernerfelt (1984) developed this framework which was later expanded by Barney (1991). Barney (1991) argues that companies can identify their strengths and continuously refine them until these strengths meet four critical criteria: valuable, rare, hard to imitate, and irreplaceable, then only the companies can sustain competitive advantages. These qualities matter for diversification because having things like advanced technology, talented employees, or exclusive partnerships, make it harder for others to compete. Eventually, companies with these resources can expand into new markets or technologies more successfully.

Kook et al. (2017), analyzing patent data from Korean IT companies, found that companies were more likely to achieve successful diversification when they had strong internal resources like strong R&D, smart use of capital, skilled staff, and patent. But many of these companies also benefited from external government R&D support. This shows that Wernerfelt (1984) and Barney (1991) did not focus much on external factors and overlooks the potential benefits of using outside partnerships, like through open innovation. This can be a weakness in fully showing the way companies sustain and achieve competitive advantage in the highly competitive technology industry. Because such an industry market tends to change quickly, like new ideas popping up, customer tastes keep shifting, and regulatory uncertainty can significantly alter the value of internal resources. Failing to stay updated with these outside changes can turn a company's once-strong advantage into something that no longer matters.

This limitation is well illustrated in the Kodak case. It had valuable patents, a huge share of the film market, and a strong reputation. According to the RBV framework, this should be a recipe for success. But Kodak focused too much on film and failed to adapt quickly to digital photography. This failure to respond to change led to its bankruptcy (Lucas et al., 2009). This shows a strong internal foundation means nothing without the ability to respond to external changes.

Recognizing this, Teece et al (1997) extended the RBV with the concept of dynamic capabilities, emphasizing that companies need more than just good resources but also the ability to adapt to changing market demands. Building on this, Kodua (2019) argues that managing knowledge well can help companies stay flexible and innovative as things change. The author also points out that when companies align their people development with outside challenges through encouraging ongoing learning, rewarding knowledge-sharing, and building a culture of innovation can stay competitive. Kodua's take connects a company's internal strengths with outside changes, offering an adaptable way for technology companies to sustain growth during uncertain times.

2.1.4. Corporate Strategy Theory

According to Andrew (1997), corporate strategy is about determining which industries the company wants to develop that are match with its goals and finding the best way to build competitive advantage in these areas. This requires top management to regularly review the company's strengths, like skills and capabilities, and market dynamics, like growth opportunities and risks. When the company has truly understood both internal capabilities and external environments, it can craft effective corporate strategies that support diversification. This is complemented by Chandler's (1962) fundamental insight that "structure follows strategy", which

argues that as a company pursues diversification and growth, its organizational setup needs to evolve as well, like creating new departments to effectively manage the expanded business. If structural adjustments are not aligned with strategic changes, this can lead to inefficiency and missed opportunities for synergy.

Yet, this contrast to Feldman (2020) view. The author argues that corporate strategy should not be a structured plan made by top leaders. Instead, strategy is constantly changing based on what people do, the way decisions are made, and how they collaborate within the company. Therefore, strategy comes from both leaders' and employees' daily behaviors, which makes strategy more flexible and closely linked to the actual operations of the company.

Together, these studies present valuable insights on corporate strategy, but they did not fully capture the reality of how fast-moving technology companies can use diversification to remain competitive. Although these authors emphasize planning and structure, as well as the evolving and day-to-day nature of strategy, none of them delves into the way companies balance these approaches in the face of changing markets and innovation. In technology industry, successful diversification requires this balance: a clear strategic plan to ensure growth is focused and the flexibility to adapt along the way. A clear strategy can help companies identify and leverage core competencies to avoid any financial and operational risks caused by random diversification, like loss-making investments and resource misallocation. Meanwhile, flexibility enables companies to respond to rapid technological changes and changing customer preferences, ensuring that diversification strategies remain relevant and effective. If companies rely solely on fixed plans, innovation will be stunted; moving forward without direction is time-consuming and costly.

This is evident in Arasti et al. (2017) who conducted interviews with managers at Iran's largest car manufacturer. Their findings reveal that the company's lacked a clear corporate strategy, was driven by external pressures, and blindly diversified with poor integration between corporate strategy and technology development, resulting in ineffective risk management, weak synergies, and failure to build sustainable competitive advantages. This shows that neither a focused strategy nor adaptability can be ignored, as neglecting either one can harm the long-term growth of the business in a highly competitive technology-driven industry.

2.2 Overview of Diversification Strategies

Horizontal Diversification:

According to Ansoff (1957), horizontal diversification refers to the strategy of a company that introduces new goods or services related to its current core products, allowing itself to expand without straying too far from its core business. Such strategy is often seen as less risky than diversifying into completely unrelated areas because it builds on the company's existing knowledge, resources, and customer relationships to expand product lines without spending additional time and resources to develop an entirely new production system. Hence, it can improve the company's efficiency in terms of operational costs and resource utilization.

Dhir (2015), and Sekerli and Akcetin (2018) support this, arguing that companies diversifying into related areas work best as it supports the company's core business. Sekerli and Akcetin (2018) use Google's acquisitions as an example. In the fast-evolving technology industry, products do not last long, and new opportunities comes up all the time, therefore timing is extremely important to stay

ahead. Google recognized this and quickly diversified into areas closely related to its core business after launching Gmail by acquiring companies like YouTube, and Keyhole Inc. (the basis for Google Maps). These acquisitions let Google roll out new products faster, boost innovation, and gain access to customers' data from acquired companies as it uses existing knowledge and resources instead of starting from zero.

Despite Dhir (2015) acknowledging the limitations of horizontal diversification, like limited flexibility where companies remain vulnerable to the same market risk. Yet, the arguments of Ansoff (1957), Dhir (2015), and Sekerli and Akcetin (2018) overlook a key issue shortcoming: resource cannibalization. Companies adopting horizontal diversification strategies to diversify their businesses into related fields can indeed shorten development time and reduce costs, but they still need to invest resources in integration, employee training, and internal coordination. Because the acquired company often has its own culture and system, which may not match the parent company. Integrating these differences takes time and effort. If not handle well, they may suffer from internal resource constraints, reduced efficiency, and even overlapping product lines. Such issues can slow growth and innovation, undermining the competitive advantage that diversification is meant to secure.

Roberts and McEvily (2005) support this with data from the pharmaceutical industry, showing that new products often compete with existing ones for limited resources. Sales teams usually prioritize new products as it need more time and resources to manage and coordinate, leaving older products with less attention. Thus, existing products lose market share, weakening the company's overall performance.

However, their findings may not be a good fit to explain resource competition in the technology industry. As the pharmaceutical industry move slower with strict rules, while technology industry face shorter product life cycles, and different sales processes. Therefore, how diversification strategies affect long-term growth cannot be fully understood from their study.

Vertical Diversification:

Vertical diversification diversifies the business into related areas by expanding either forward or backward along the supply chain. Instead of buying the raw materials from external suppliers, the company chooses to produce these inputs itself to take control of distribution and sales and being closer to customers (Ansoff, 1957; Dhir, 2015). Ansoff (1957) argued that this strategy usually presents two possible results: when industry demand increases, the strategy seems to be very advantageous, thereby strengthening the company's market position; conversely, when the market demand for the industry shrinks, this strategy may not be a long-term sustainable strategy for the company. But there is no further explanation from Ansoff (1967) that why this happens. This is important to take note because it can help companies determine whether such strategy is right for them in the fast-paced technology industry.

Dhir (2015) and Bresnahan and Levin (2012) looked more closely at vertical integration, a key part of vertical diversification. These authors argue that companies often choose to take control of their supply chain mainly to reduce risks like negotiating difficulties with external suppliers. Controlling these parts helps companies work better together, protect their investments, and innovate more smoothly, especially in the complex technology industry, where careful

coordination pays off in components arriving on time and at a consistently high quality to meet customer demands. For example, Samsung Electronics Co. works closely with its subsidiaries Samsung Electronics-Mechanics, SDI (specializing in making batteries and panels), and Samsung Corning to secure key parts, which helps expand its products range, speed up development, and reduce reliance on external suppliers, allowing Samsung to invest more in R&D and strengthen innovation to meet customer needs (Lee and He, 2009).

Dhir (2015) and Bresnahan and Levin (2012) also argue that such strategy comes with high fixed costs from owning and operating specialized equipment, as well as reduced flexibility to adjust quickly. This can place a heavy financial burden on companies when market demand slows down, which makes doing everything internally less efficient and sustainable over time. Yet, Intel and IBM case reveal a different challenge: both companies' failures were largely due to an inability to respond quickly enough to rapidly changing market demands as they controlled everything themselves. IBM was slow to react to the personal computer market, and Intel's delays in entering new markets like smartphones (Cortada, 2019, pp. 439-451; Božić, 2021, pp. 161-162). This means that in a fast-moving industry, vertical diversification can lead to rigidity and missed opportunities, so adaptability is just as important as efficiency.

Concentric Diversification:

Concentric diversification means expanding into related markets to reach out different customer segments by using its existing core competencies to build the things that companies are already familiar with, thereby reduce risks, and enhance the overall performance (Dhir, 2015; Kim et al., 2017; Wegwu et al., 2020)

Though the core idea is shared, these studies highlight different aspects. Dhir (2015) sees this strategy as a response to external pressures like competition and technology changes. Kim et al. (2017) view this strategy can drive companies to be more innovative and efficient because they can reuse their core competencies, like knowledge to develop products faster and reduce costs. Wegwu et al. (2020) focus on performance outcomes, arguing that such strategy helps companies improve profitability and market position.

Most of these points fit with NVIDIA's strategic decision to diversify concentrically, leveraging its core competencies to drive long-term success. NVIDIA started out making graphics cards but saw the growth potential in general-purpose computing. It then developed the CUDA software tools that enable its chips to handle more complex tasks like AI training than just graphic processing. This proactive move lets NVIDIA expand into related fields like AI and data centers. Hence, many companies needed powerful AI and data processing tools, and they began to demand more NVIDIA chips, resulting data center revenue growing from $340 million in 2017 to nearly $7 billion in 2022 (Niero, 2024). This reflects Kim et al.'s (2017) view that expansion into related markets facilitates innovation and efficiency, as well as supports Wegwu et al.'s (2020) view that such strategy can improve profits and market position.

Yet, NVIDIA also reveals Dhir (2015) conceptual framework may be too limited in explaining the full potential of concentric diversification as a growth strategy. The author argues that companies mostly diversify in response to external pressures like competition or market disruption. But in the case of NVIDIA, the move into AI and data centers was not just a reactive response, but a proactive

choice based on the company's own vision and innovation. Rather than waiting for pressure to come, NVIDIA created future demand by coming up with tools like CUDA and demonstrating the ability of its GPU technology can be more than just graphics. This shows such diversification is not just about defense, it can also be a forward-thinking, long-term growth strategy.

Conglomerate Diversification:

Conglomerate diversification refers to entering entirely new industries where the company may lack experience. The main goal is to spread risk; if one part of the business struggles, losses can be balanced out by the stability of unrelated ones (Amit and Livnat, 1988; Dhir, 2015).

Both studies also emphasize this strategy comes at a cost. Expanding into unrelated areas, new expertise, specialized equipment, and management systems in these unrelated areas require the company to make significant investments, which increase costs and operational complexity. Gopalratnam (2022) employed a case-based approach to analyze the failed diversification strategy of the General Electric (GE) conglomerate. GE started with electrical products but later diversified into several unrelated fields like healthcare, and aviation. GE thought its managers could handle these different businesses easily, but this did not work out as each businesses required diverse expertise and resources. This led to coordination issues and high expenses. Consequently, GE's revenues fell sharply, and it had to split into separate companies to improve growth.

Although conglomerate diversification does come with inherent operational complexity and higher cost challenges, the GE failure cannot be fully attributed to these strategic challenges alone. Instead, the quality of the leadership and effective internal management are far more critical when

implementing the strategic decisions. Diversification is only a tool; its ultimate success depends on how well it is executed. GE overestimated its ability to manage diverse businesses without strong coordination or expertise, proving that poor leadership and lack of integration can significantly hinder a company's growth. Particularly relevant in today's rapidly evolving technology industry, which often faces even faster innovation cycles and higher demand for specialized knowledge, resulting in greater risks in mismanaging diversification.

This contrast becomes clearer when compared to Amazon's conglomerate diversification into Whole Food grocery. According to Livingstone and Knezevic (2020), the goal was to turn Amazon into a one-stop shop for everything, even groceries. Amazon's strong team, use of data, and forward-looking planning helped it connect Whole Foods with its website and delivery network. Jeff Bezos' leadership was key to the smooth success of this transformation, showing that with the right coordination, conglomerate diversification can lead to sustainable growth.

Not all conglomerate diversification is just about spreading risk. In Amazon's case, it is crystal clear that this strategy was used to build a long-term vision of becoming a one-stop platform for all consumer needs, strengthening its control over consumer behavior, and expanding its market dominance. Amit and Livnat's (1988) and Dhir's (2015) views on conglomerate strategy may be too superficial. In the highly competitive technology industry, underestimating the full impact of diversification can limit understanding of how companies truly succeed over time.

2.3 Diversification: Opportunities and Challenges for Long-term Growth

Most companies often try to reduce risk and create profits through diversification. However, being diversified does not mean a company can thrive in the long run. It still depends on factors, like the company's internal resources, ability to innovate, and how the company executes such strategy to meet market demands.

Naor (2021) compared the strategies of Tesla, EV1, and Better Place through interviews and secondary data. Tesla diversified successfully mainly because it had strong R&D teams and government support. These internal and external factors drove Tesla long-term growth by producing batteries at the Nevada Gigafactory and securing raw materials through partnerships, which lowered production costs, and reduce market risks, like supply delays and price changes, enabling it to speed up innovation to seize current market demand. In contrast, EV1 and Better Place failed because neither had strong internal capabilities and external backup, which limited their ability to respond effectively to market changes. This supports the core idea that having good resources internally and external support can help the company sustain growth.

Yet, creating a lasting value may still largely depend on how wisely companies use these resources. As discussed earlier, Amazon's success was shaped by Jeff Bezos' leadership, which has led to the company's diversification and sustained long-term growth. Therefore, it can be said that Tesla's success also comes from its thoughtful execution of strategy.

Andres et al. (2017) agree the value of diversification depends on how resources companies are used. They used the data from US companies (1984-2014) to analyze Growth-Options and Asset-in-Place diversification and found that companies using GO diversification tend to grow more

sustainably. Such approach allows companies to observe competitors to test the market before deciding to diversify, thereby minimizing costly mistakes and guiding diversification in a planned way.

Conversely, companies pursue AiP diversification are less likely to sustain long-term growth and value creation because it limits their flexibility, requires large upfront investments in existing assets, and reducing the ability to explore opportunities. This can lead to internal resource conflicts and lower adaptability. Therefore, a successful diversification strategy must be well-planned and resource efficient.

Naor's (2021) data did not explore the potential risks of over-diversification or provide a clear roadmap on how other companies can adopt the strategy, making it less helpful for technology companies trying to plan for long-term growth while effectively managing risks. Likewise, Andres et al. (2017) relied on old data that did not reflect the current technology industry trends, and their purely quantitative method cannot fully explain how diversification works in practice, weakening diversification’s role in driving long-term growth.

Chapter 3: Research Question

“How Diversification Strategies Impact the Long-term Business Growth in a Highly Competitive Technology Industry” will be the main question of this research.

This research aims to understand how technology companies use diversification strategies to keep growing and stay ahead in a fast-paced industry. It will look at how these strategies are put into practice, the problems companies face, and how they affect things like risk, and overall success.

The scope of the research will first focus on large technology companies operating globally, like Apple, Samsung, Google, or Microsoft, as well as SMEs based in Ireland. This can help explore how diversification strategies can affect companies of different sizes, leading to different diversification outcomes for their business growth.

Data for this research will be collected through semi-structured interviews with higher-level management, including strategic managers, executives, and any individual involved in the diversification decision-making process. To answer this question, the research will focus on three main objectives:

Objective 1: Find out how diversification helps technology companies lower financial and market risks.

Objective 2: Understand the challenges technology companies face when trying out these strategies and how they deal with them.

Objective 3: Look at how diversification improves competitive advantage and sustains growth.

However, this research has some limits. It may be hard to reach key individuals in multinational companies due to company rules, and privacy issues. Time is also a problem, as there may not be enough of it to follow up with those who do not respond. Furthermore, contact details for certain companies or individuals may also be missing, which could reduce the number of interviews. Thus, the findings might come from a smaller group that does not fully represent the industry, which could affect the reliability of the results.

Chapter 4: Methodology

4.1 Research Philosophy

Since technology changes fast and competition is intense. Hence, companies that only focus on a single product or service can fall behind when the market shifts. Diversification is therefore important for technology companies to achieve long-term growth because it helps companies mitigate these risks by exploring new markets and creating new revenue streams. Understanding the decision-making processes of technology leaders is essential to identifying the factors that drive sustainable growth in a fast-paced industry (Teece et al., 1997, pp. 516-518).

As such, this research is based on an interpretive philosophy that recognizes diversification decisions come from the way leaders think, the company's culture, and industry-specific conditions. A purely empirical or positivist approach cannot capture these dynamic and socially constructed realities, as it tends to present a static view of social life that overlooks the interpretative processes individuals use in making decisions (Bryman, 2016, pp. 178-179). The value of interpretive research in capturing such complexities is evident in Hochschild's (1983) study on emotional labour, demonstrating qualitative methods to uncover the deeper reasoning behind individuals' actions and workplace experiences (Bryman, 2016, p. 382). Through interviews and observations, Hochschild was able to reveal that employees navigated emotional expectations in their roles, which is something numbers or surveys cannot capture.

Epistemologically, this research fits well with interpretivism because it acknowledges the reasons behind strategic decisions and rationalizes diversification strategies in a business context, rather

than simply measuring statistical correlations. Therefore, this research will employ qualitative interviews with technology leaders to gain an in-depth understanding of their perspectives and experiences.

From a constructivist ontological stance, the success of diversification strategies cannot be understood by only looking at the external market conditions. Internal organizational factors, like leadership decision-making, stakeholder dynamics, and established institutional practices, play a crucial role in shaping how strategies are interpreted and carried out. Reality is shaped by human perception and experience, making it flexible rather than fixed (Berger and Luckmann, 1966, pp. 38–42). That means even companies operating in the same market with similar strategies may experience very different outcomes because of internal differences and how strategies are implemented. This idea fits well with technology companies, where strategies are affected not just by competition, but also by changing customer needs, new technology, and the leaders' vision. Institutional theorists like DiMaggio and Powell (1983, pp. 150–151) back this up by arguing that company strategies are shaped by institutional rules, the need to specialize, and copying others when things are uncertain. Therefore, this supports the idea that diversification strategies are not just about hard facts; social and cultural factors also shape them.

4.2 Research Sample

The interviewee was chosen through purposive sampling, targeting individuals with rich knowledge and leadership experience in the technology industry. The interviewee is the Head of Public Relations at a major telecommunications company's Ireland branch, who has over three years' experience handling media relations, corporate social responsibility initiatives, and working

with industry associations. The interviewee also executes key strategies from the company's headquarters, providing relevant insights for leadership decisions within the Irish and European markets. This helps to reveal patterns of leadership behavior, effective decision-making frameworks, and strategies for coping with industry uncertainty to sustain its business growth.

4.3 Research Instrument

A semi-structured interview was conducted as the primary research instrument to gain a better understanding of the impact of diversification strategies on the business growth of technology companies. Open-ended questions were used to get the interviewee's explanation of the reason they chose certain strategies, how they think those strategies influenced the company's growth and ability to compete, and what challenges they faced along the way. Prompting techniques were also used to make sure the interviewee gave detailed responses (Bryman, 2016, pp. 212–224). The interviews also look at other variables that might have affected their diversification decisions, like market trends and technological advancements. At the end, the interviewee was asked to reflect on the overall effectiveness of diversification and advised companies considering using this strategy for expansion.

In addition to the interview, annual reports from Microsoft and Google were also analyzed. These reports gave extra information about how these companies diversify and what is happening in the market. This helped to compare and support the interview and the overall analysis.

4.4 Data Analysis Method

The data was analyzed using theoretical thematic analysis, which involves identifying significant themes based on theoretical frameworks related to diversification strategies in this research. This makes sure that the analysis is guided by predefined concepts rather than simply emerging from the data (Braun and Clarke, 2006, pp. 12–13).

The interview was done online via Microsoft Teams, as preferred by the interviewee for convenience, and lasted around 17 minutes. Afterwards, the interview recording was written down exactly as spoken and reviewed multiple times to get familiar with the data. Relevant non-verbal cues observed during the interview were noted, as well as the verbal responses, to enhance accuracy (Davidson, 2009).

Next, themes predefined in the theoretical framework, like core competency, innovation, market expansion, challenges, and strategic partnerships were systematically coded according to their fit with theoretical constructs on diversification strategies. These themes were checked and refined by comparing them across interviews to maintain consistency. Since only one interview was conducted, secondary data from Microsoft and Google's annual reports were also reviewed using the same theoretical themes to support the analysis. Thus, each theme had a precise definition and was named according to its importance and relationship to the theoretical framework.

After identifying themes, the final report used direct quotes from the interview to keep authenticity and support the theory. It also included insights from secondary data. Quotes were grouped by theme to show their connection to diversification strategies. Patterns and contrasting perspectives were highlighted to enhance the discussion and provide a theoretically driven understanding of the research topic. However, these findings were not meant for all technology companies but offered

useful insights for similar cases by sharing detailed about people, processes, and relevant context (Lincoln and Guba, 1985, p. 316).

4.5 Ethics

Before the interview, the purpose of the research and how the data would be used were clearly explained to the interviewee, and consent was given by signing the form. The interview was conducted via Microsoft Teams to provide a convenient communication environment. The recording was stored in a password-protected file on the laptop, and the name of the interviewee was not revealed in the research. The secondary data used in this research were obtained from the public annual reports of Microsoft and Google, which did not involve other ethical issues.

4.6 Limitations

Several limitations were identified in this research. Despite multiple invitations through LinkedIn, company websites, and personal emails, it was difficult to reach participants extensively. These selected technology companies and individuals did not take part due to the high volume of interview requests they receive daily, as well as the different time zones made scheduling hard. Hence, fewer interviews happened than expected, which made the research outcomes less reliable. Because of that, the research used secondary data from Microsoft and Google annual reports to support the analysis; still, these sources did not provide enriching insider insights, as there were no personal opinions.

Chapter 5: Analysis and Findings

5.1 Key Findings Overview

Based on the primary interview with a senior executive from Company A and a review of Google and Microsoft's annual reports, the findings show that companies can achieve long-term growth through diversification when they combine strong core competencies in R&D and innovation with strategic partnerships and a deep understanding of customer demands. Company A has used its background in telecommunications and continuous R&D investment to expand into electric vehicles and solar energy fields; Google used its strong advertising database and alliances with telecommunication operators to diversify its digital services; meanwhile, Microsoft improved its cloud and software platforms as a base and partnering with others to explore new markets. Still, findings also point to diversification being resource-intensive and requiring careful planning to cope with the complex regulatory environment and adapt products to diverse customer bases.

5.2 Thematic Analysis and Discussion

5.2.1 Core Competency

Company A’s core competencies lie in its unique heavy investment in R&D, with over 207,000 R&D personnel and about $25 billion invested in 2024 to keep innovation and meet customer demands now.

“Continually investing in R&D has allowed us to innovate. Then diversify into different business segments if you like. The strategy has always been to be cutting edge innovative…” (Senior Executive)

This shows that continued investment in R&D is a key strength of Company A, as it creates a distinct, hard-to-copy innovation capability. Such capability builds market leadership and makes it easier to diversify into new markets, which helps spread risks and opens up several avenues to sustain long-term growth.

So do Google and Microsoft, both of which have effectively diversified due to their outstanding R&D skills. Google has been spending a lot on R&D. This helps its innovation in core areas like Search, YouTube, and Android, while also working on AI, Google Cloud, and other projects like Waymo and Verily. All these efforts made Google stronger in AI and data and also reduced its dependency on advertising revenue by diversifying into high-growth markets (Alphabet 10-K, pp. 30-34). Likewise, Microsoft invested heavily in R&D to make its core products like Windows, Office 365, and Azure better. This has helped them stand out from software and cloud services, letting them grow by trying new things (Microsoft, 2024). This also points out that ongoing investment is not always realistic for SMEs, since their budget are tight, which slows down their ability to diversify and maintain long-term growth.

As Company A invests heavily in R&D, it boosts innovation and supports its move into new fields. Company A uses its existing technical knowledge of power units and heat management to diversify into related fields like solar energy.

“We have deep sectoral knowledge of power units or batteries and… how heat dissipation works... using that technology, we decided to move into solar space, so we built a solar inverter.” (Senior Executive)

Company A shows that when technology companies use their existing knowledge to enter related fields more smoothly, and with potentially lower costs. Company A’s diversification makes sense because they are expanding on what they already know. Since Company A’s core product is in telecommunication, entering the solar energy field is an advantage because there is no need to learn something unfamiliar. This way, not much expense and time are needed to devote, allowing more investment in R&D.

These patterns can also be seen in Google’s strategy of diversifying into related areas, like Google Cloud, using its core AI Gemini. By integrating Gemini into Google Cloud, the company offered better AI features that customers demand, leading to more subscriptions and hence increased revenue for Google Cloud (Alphabet 10-K, p. 33). Microsoft has done something similar. It combined its core software expertise with Office 365 to make things more convenient for users, which led to stronger customer loyalty and expanded revenue streams without straying from its strengths (Microsoft, 2024).

Even as Company A expands into new markets, it ensures that it stays grounded in its technical skills and innovative ideas, which help guide its moves into new markets.

“It’s listening to the customers, but then also now it’s predicting what the customers might need. In 5 to 10 years in the future, we can put resources on R&D into those sectors, so we can diversify in a quite nimble way.” (Senior Executive)

This reveals that Company A’s diversification strategy is well thought out, driven by long-term market forecasts and strategic R&D investment. It expands to achieve lasting growth by using internal resources and innovation capabilities rather than merely following trends.

5.2.2 Innovation

Strong innovation capabilities can maintain a company’s long-term competitiveness in the technology industry. Company A’s successful diversification is due to its cutting-edge innovation capabilities through constant investment in R&D.

“I suppose, again, to reiterate the R&D part, it has allowed Company A to innovate over the past 30 years. The constant investment in R&D for 20-plus years has allowed us to innovate. In addition, we hold over 150k patents globally, the largest number of patents in the world. So, we have deep industrial know-how that’s all been because of R&D…” (Senior Executive)

At this point, it is pretty clear that innovation does not just happen suddenly; it comes from deliberate and sustained strategy focused on keep researching, testing, and improving technologies. Such strategy shows up in Company A’s strong patents, which serve as concrete proof that the company consistently develops breakthroughs through dedicated R&D. These patents also act as

a powerful shield to protect its inventions and keep motivating the company to innovate to stay ahead of the curve. Because of this, Company A can enter new industries more flexibly.

"Back to the main point about our focus on R&D and a massive amount of money we spent on that has allowed us to diversify into different sectors, and being quite nimble." (Senior Executive)

This once again proves that Company A's heavy investment in R&D has done more than just enter new markets; it has also kept itself flexible along the way, which is key for sustaining the long-term growth in the technology industry. The term "nimble" has shown that Company A's ability to adapt its technologies and capabilities to meet emerging market opportunities quickly. More broadly, this implies that technology companies that can blend agility with long-term innovation can improve their chances of growing sustainably and being competitive when diversifying.

As mentioned earlier, both Microsoft and Google invest tons in R&D to keep innovating, but they handle it differently than Company A. Microsoft holds over 63,000 patents and licenses them to other technology companies. Such approach helps Microsoft to facilitate innovation, reduce lawsuits, foster relationships with other companies, and generate extra revenue. (Microsoft, 2024).

On the other hand, Google patents lots of its innovations as well, but shares these innovations, like Gemini and Google Cloud, widely through popular platforms like YouTube and Android to

encourage more innovation and use. Through this strategy, Google has kept it products competitive and successfully diversify into new markets (Alphabet 10-K, 2024, pp. 5-10).

Overall, each technology company uses innovation in ways that suit their business models and goals, but they all see innovation as critical to entering new markets.

5.2.3 Market Expansion

Knowing what its customers want was described as an important part of Company A's strategy for expanding into different markets.

"Our focus is primarily driven by the needs of our customers. ... Each market will have products that are relevant to that market… Different products only work in different markets... and also insights... on future trends." (Senior Executive)

When Company A recognizes the needs of customers in each market, it can tailored products to fits those needs better. Such focus on customizing products to customer gives Company A's a distinct advantage as it able to set itself apart, helping Company A meet customer expectations and build stronger presence in that market. Because of this, it was able to identify the global market for electric vehicles and pursue expansion opportunities.

"We saw a growth market globally. ... We diversified into providing units for electric vehicles. ... So, related markets would be Solar... an unrelated market would be EV's." (Senior Executive)

Company A was able to quickly spot new markets and take the time to determine how closely these markets align with its core business. The move into the unrelated EV market was seen as evidence of a willingness to take risks to pursue greater expansion. At the same time, Company A could lean on what they already knew and the resources they had built up to make this move easier. These points show that strategic diversification helps Company A grow by exploring opportunities across related and unrelated markets.

This is not something unique to Company A; Google has also made similar moves. It has a group of projects called “Other Bets”, which focus on businesses outside its core products, like healthcare technology and transportation. These unrelated areas went through significant investment in R&D phases before they were fully launched, showing that Google takes measured steps into new areas (Alphabet 10-K, p. 8). By contrast, Microsoft’s annual report presents a gap, as it does not specify how it prepared for the unrelated areas like Xbox gaming.

5.2.4 Challenges

Diversification can open up new growth paths for companies, but it is not without its challenges. The need for substantial of financial capital, efficient resource allocation, and the complexity of complying with multiple rules and regulations may limit the success of diversification efforts and ultimately affecting a company’s ability to sustain growth in the technology industry.

“When implementing diversification, it takes time... money and awful lots of resource allocation.” (Senior Executive)

This response indicates that diversification is neither a quick process nor a low-cost effort. Instead, it is a big, demanding bet that comes with considerable opportunity costs. Companies must devote significant effort and investment to prepare for new products and systems and figure out what succeeds and what does not. The longer this process continues, the greater the risk that by the time the company is ready to diversify, the ideal opportunity will have passed. Additionally, since many resources are devoted to the diversification efforts, the company may not be able to allocate the same level of resources to its current core business, which may struggle to maintain its growth over the long run in the fast-paced technology industry.

Google's diversification journey reflects this. It costs a good amount of time and money on securing its patents, trademarks, etc. to protect innovation that important for its growth into new areas. However, because each country has varying rules and regulations, Google patents protection often faces extra obstacles, like fighting patents challenge, dealing with invalidations, or adapting local regulations. As a result, even more time and money have to be spent on this, which distracts its focus from Google's core business and slow down its growth (Alphabet 10-K, p. 13).

This further illustrates the multitude of rules and regulations challenges that companies must navigate when entering new markets.

"When you're entering into new markets, there a whole new barrier to overcome. ... It's new regulatory issues... because we're in over 170 countries." (Senior Executive)

At this point, Company A's experience shows that when a company expands into more markets, like over 170 countries, the different rules and regulations that have to be followed will eventually become more complicated and costly. In other words, such expansion requires more time, money, and resources than before, which can stress out the company and slow its overall growth even further. It is a reminder that global diversification is not just about new customers, but also about handling complex challenges that can affect long-term success.

5.2.5 Strategic Partnership

To reduce the risks that come with diversification, establishing strategic partnerships can help the company more effectively address challenges and keep growing over the long run.

"Another key element is to have strong strategic partnerships. ... Partner with big brands to share knowledge and resources. ... Good partners with aligned values make your proposition stronger." (Senior Executive)

A strong insight that emerges from this response is that Company A seldom relies solely on its internal resources when pursuing diversification into multiple new markets, meaning diversification should not occur in isolation; it needs engagement with external partners to succeed. As discussed earlier, diversification often requires substantial resources for the new markets and involves complex geographic regulatory challenges that are difficult for any single company to handle alone. Company A indicates that by partnering with well-known companies, the company can gain access to additional resources and knowledge. Such approach can make the company's

business plan more appealing to others and reduce the need to invest significant capital in its diversification challenges, thereby increasing the likelihood of sustained growth over the long term.

The case of Microsoft and Google illustrates this point well. Google did not shoulder the burden of market expansion on its own. Instead, it partnered with browser providers, mobile operators, original equipment manufacturers (OEMs), and software developers to leverage the resources of other companies to expand its reach and improve the quality of service while minimizing the substantial time and money required for diversification efforts (Alphabet 10-K, pp. 58-59). Microsoft, in turn, has expanded its customer base by partnering with renowned OEMs like Dell, HP, and Lenovo without having to bear the cost of producing all the devices itself (Microsoft, 2024).

Chapter 6: Discussion and Conclusion

6.1 Discussion

The findings of this research show clear evidence that diversification can help technology companies reduce risk and ensure lasting growth when it combines constant investment in R&D with strategic partnerships.

The ongoing R&D investment emerges as one of the major contributors to unlocking strong diversification strategies. Based on the primary data gathered from Company A, the company invests over $25 billion annually, with more than 207,000 staff in R&D. This steady spending helps Company A create unique technology and build up many patents. These patents protect its invention from being copied by competitors and make it difficult for them to catch up and giving Company A an advantage in the market. This lines up with Barney's (1997) RBV theory, which argues that a long-term competitive advantage comes from resources that are unique and hard for rivals to replace.

The deep technical knowledge Company A gains from all this R&D helps it enter into new markets more easily and at a lower cost, as there is no need to reinvent fundamental technologies from a blank slate. This sharing and application of technological knowledge across R&D projects saves time and cost, putting it ahead of companies that lack such capabilities. For instance, Company A uses its expertise in power units and heat management has successfully enter the related solar energy business, accelerating new product development. This supports Kim et al. (2017) that companies that share technology knowledge in R&D tend to perform well when diversifying into

new markets. It also supports the work of Mutune and Simba (2018), which related diversification lets companies grow more smoothly by building on what they already excel at, thereby minimizing risks and large investments.

Because of the strong expertise from constant R&D investment, it also helps Company A stay ahead by figuring out what customers will want next. Given that R&D teams regularly research new technologies, they can get a better sense of current market demands and keep track of competitors' innovations, enabling them to spot new trends early and focus on developing potential products that will be in demand in the future. This is similar to what Naor (2021) found, that Tesla has a strong R&D team that helps the company innovate quickly to meet market demands.

However, when Company A entered the electric vehicle business, it faced more unknowns and had to learn much more. Google combining AI with Google Cloud and Microsoft bundling Office 365 with other software show the same idea: using core strengths in new areas brings in more money and keeps competitors away. But doing this well means companies must be large and financially stable to handle the complex regulations and error that comes with it.

The same goes for Google and Microsoft. Both have invested heavily in R&D to create new advanced technologies and build strong patents. Google's "Other Bets" project reflects a diversification strategy of investing heavily in R&D before entering unrelated markets like healthcare (Verily) and self-driving cars (Waymo). Such move shows Google went the extra mile beyond its core ads and search businesses to actively explore new opportunities leveraging its own unique innovations through its R&D investments. This strongly supports Hutzschenreuter and

Gunther (2006) and Teece et al. (1997) see diversification is a dynamic strategy that pushes companies to keep innovating and adapting in the fast-paced technology industry. Microsoft holds 63,000 patents, reflecting its big investment in R&D. This massive collection of unique technologies lets it diversify into different areas and effectively fend off competition.

Together, three companies reflect well Kornelakis and Petrakaki (2024) point that without constant innovation and renewal, technology companies can fall behind just like Nokia, reinforcing that continuous innovation is important for the long-term success of diversification.

The findings also point to some of the challenges diversification presents. Diversifying costs a lot and requires managers to pay close attention to many moving parts. Company A operates in over 170 countries, which creates a lot of extra work to meet different rules and regulations, as well as legal and administrative expenses. Google dealt with similar challenges of protecting its intellectual property in many areas. The ability to keep adjusting and reorganizing resources as technology changes is vital, but it also adds complexity and demands a lot of focus. Even diversifying can help companies grow over time, but it could also raise the possibility of overstretching the company's resources and losing focus on its core business.

Building strategic partnerships is another major contributor to supporting diversified growth and managing complexity and costs. Company A has formed a partnership with other large companies to share resources, knowledge, and investments when entering new business areas. So does Google, which established strategic partnerships with other companies to reach more customers and minimize the costs of achieving diversified growth. This combination of strong internal skills and

external partnerships is consistent with Naor's (2021) findings that successful diversification relies on a combination of excellent R&D teams and external collaborations to reduce risks and accelerate innovation.

Finally, while most of the examples in this research involve large technology companies, it is important to remember that this is not always possible for SMEs. SMEs often lack the resources to invest billions of dollars in R&D or to form large partnerships. So, diversification for SMEs may mean choosing a narrower focus or growing in smaller steps to avoid spreading themselves too thin.

Besides that, certain limitations existed in this research. Time was a major issue as the topic needed plenty of information, but the deadline came fast. Information on SMEs is also quite scarce compared to large companies, as less information was publicly and the existing data was often incomplete or fragmented. With more time and resources, a wider sample and deeper look could have been done.

From what have been discussed, here are some recommendations for technology companies looking to diversify. Companies should first have a clear roadmap that lists out their goals and make sure the new markets match with them. At the same time, weighing the pros and cons of the new areas and diversification to understand if the potential ROI justifies the resources needed. Because diversification often require huge costs and deal with unexpected challenges, like different rules and regulations in various regions. As Company A’s example has made it clear that successful diversification does not happen overnight, it takes years of planning and investment.

Partnerships can indeed be a strategic tool in diversification strategies because they help share costs and resources. Yet, companies also need to be cautious before partnering, as they understand well that the other company's technology and operations can turn that partner into a potential competitor in the same industry. To avoid this, clear communication and agreements should be made before beginning any partnerships.

6.2 Conclusion

This research dives into insights from a qualitative interview with a senior executive at Company A and public reports from Google and Microsoft to explore how diversification strategies impact long-term growth in highly competitive technology industry. It found that the success of a diversified company in sustaining growth over the long term depends on its strong core competencies in R&D, innovation, strategic partnerships, and listening to customer needs.

High resource needs, complex regulations, and the risks of spreading resources too thin are the key challenges pointed out by the findings. Large companies tend to manage these challenges well by leverage their extensive resources, whereas SMEs face more constraints due to fewer resources, which affects their ability to diversify broadly.

These findings also support existing research by showing that continuous innovation and partnerships are key for growth in the fast-paced technology industry, supporting theories like RBV and dynamic capabilities. Even so, the findings still cannot be completely applied to technology companies due to the small sample size and few SME data available.

In short, this research proves that diversification can support a company's growth over the long run in the fast-paced technology industry, but on the premise, success highly depends on having substantial resources, strong innovation capabilities, and effective partnerships, as diversification is a resource-intensive and complex strategy.

Bibliography

Alphabet Inc. (2024) UNITED STATES SECURITIES AND EXCHANGE COMMISSION. Available at: https://abc.xyz/assets/77/51/9841ad5c4fbe85b4440c47a4df8d/goog-10-k-2024.pdf

Amit, R. and Livnat, J., 1988. A concept of conglomerate diversification. Journal of Management, 14(4), pp.593-604.

Andrews, K. R. (1997). The concept of corporate strategy. In N. J. Foss (Ed.), Resources, firms, and strategies: a reader in the resource-based perspective (pp. 52-59). Oxford University Press.

Ansoff, H.I., 1957. Strategies for diversification. *Harvard business review*, *35*(5), pp.113-124.

Arasti, M., Khaleghi, M. and Noori, J., 2017. Corporate-level technology strategy and its linkage with corporate strategy in multi-business companies: IKCO case study. Technological Forecasting and Social Change, 122, pp.243-252.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99–120.

Berger, P., and Luckmann, T., 1966. The social construction of reality. *A Treatise in the Sociology of Knowledge* (pp. 38-42).

Božić, D., Buchberger, L., Bakotić, A., Andrešić, M. and Ančić, M., 2021. THE CASE STUDY OF INTEL CORPORATION (INTC). COMPANY ANALYSIS, pp. 161-162.

Braun, V., and Clarke, V., 2006. Using thematic analysis in psychology. Qualitative research in psychology, 3(2), pp. 77-101.

Bresnahan, T.F. and Levin, J.D., 2012. Vertical integration and market structure (No. w17889, pp. 11-010). Cambridge (MA): National Bureau of Economic Research.

Bryman, A., 2016. Social research methods. Oxford University Press.

Chandler, A.D. (1962), Strategy and structure: chapters in the history of the industrial enterprise. Cambridge, [Mass.] M.I.T. Press.

Cortada, J.W., 2019. IBM: The rise and fall and reinvention of a global icon. MIT Press.

da Silva Lopes, T., 2015. A Systems View of Corporate Diversification: The Case of the Global Alcoholic Beverages Industry. International Studies of Management & Organization, 45(4), pp.342-358.

Davidson, C., 2009. Transcription: Imperatives for Qualitative Research. International journal of qualitative methods, 8(2), pp. 35-52.

de Andrés, P., de la Fuente, G. and Velasco, P., 2017. Does it really matter how a firm diversifies? Assets-in-place diversification versus growth options diversification. Journal of Corporate Finance, 43, pp.316-339.

Dhir, S. and Dhir, S., 2015. Diversification: Literature review and issues. Strategic Change, 24(6), pp.569-588.

DiMaggio, P.J., and Powell, W.W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), pp. 147-160.

Drucker, P. F. (1985). Innovation and entrepreneurship: Practice and principles. Harper & Row.

Feldman, E.R., 2020. Corporate strategy: Past, present, and future. Strategic Management Review, 1(1), pp.179-206.

Giuri, P., Hagedoorn, J. and Mariani, M., 2004. Technological diversification and strategic alliances. The economics and management of technological diversification. London: Routledge, pp.116-51.

Gopalratnam, M., 2022. The Decline of Conglomerates: Case Studies on GE, Johnson and Johnson and Toshiba. IUP Journal of Business Strategy, 19(1).

Gurcaylilar-Yenidogan, T. and Aksoy, S., 2018. Applying Ansoff's growth strategy matrix to innovation classification. International Journal of Innovation Management, 22(04), p.1850039.

Hutzschenreuter, T. and Günther, F., 2006. Diversification research: overview and outlook.

Kim, H., Hong, S., Kwon, O. and Lee, C., 2017. Concentric diversification based on technological capabilities: Link analysis of products and technologies. Technological Forecasting and Social Change, 118, pp.246-257.

Kim, J., Lee, C.Y. and Cho, Y., 2016. Technological diversification, core-technology competence, and firm growth. Research Policy, 45(1), pp.113-124.

Kook, S.H., Kim, K.H. and Lee, C., 2017. Dynamic technological diversification and its impact on firms' performance: an empirical analysis of Korean IT firms. Sustainability, 9(7), p.1239.

Kornelakis, A. and Petrakaki, D., 2024. Technological innovation, industry platforms or financialization? A comparative institutional perspective on Nokia, Apple, and Samsung. Business History, pp.1-26.

Lee, K. and He, X., 2009. The Capability of the Samsung Group in Project Execution and Vertical Integration.

Lincoln, Y.S., and Guba, E.G., 1985. Naturalistic inquiry. Sage.

Livingstone, C. and Knezevic, I., 2020. From Online Cart to Plate: What Amazon's Retail Domination Means for the Future of Food. Journal of Agriculture, Food Systems, and Community Development, 9(4), pp.311-329.

Loredana, E.M., 2017. The use of Ansoff matrix in the field of business. In MATEC Web of Conferences (Vol. 44, p. 01006). Les Ulis, France: EDP Sciences.

Lucas Jr, H.C. and Goh, J.M., 2009. Disruptive technology: How Kodak missed the digital photography revolution. The Journal of Strategic Information Systems, 18(1), pp.46-55.

Markowitz, H., 1959. Portfolio Selection: Efficient Diversification of Investments, Wiley, New York.

Meme, L.M., 2012. Challenges of Diversification Strategy at Safaricom Limited (Doctoral dissertation, University of Nairobi).

Menz, M., Kunisch, S., Birkinshaw, J., Collis, D.J., Foss, N.J., Hoskisson, R.E. and Prescott, J.E., 2021. Corporate Strategy and the Theory of the Firm in the Digital Age. Journal of Management Studies, 58(7), pp.1695-1720.

Microsoft (2024) Microsoft 2024 Annual Report, Microsoft.com. Available at: https://www.microsoft.com/investor/reports/ar24/index.html#

Miller, R., 2023. Explaining the Downfall of BlackBerry in the Smartphone Market: The Role of Leadership.

Mutune, J., and Simba, F., 2018. Diversification strategy impact business Performance of Kenyan SMEs. International Journal of Management and Commerce Innovations, 6(1), pp.181-203.

Naor, M., Coman, A. and Wiznizer, A. (2021) 'Vertically Integrated Supply Chain of Batteries, Electric Vehicles, and Charging Infrastructure: A Review of Three Milestone Projects from Theory of Constraints Perspective', Sustainability, 13(7), p. 3632.

Niero, B., 2024. NVIDIA's AI Revolution: A Comprehensive Strategic Analysis.

Pitts, R. A. & Hopkins, H. D. (1982). Firm diversity: conceptualization and measurement. In: Academy of Management Review, 7(4): 620-629.

Roberts, P.W. and McEvily, S., 2005. Product-line expansion and resource cannibalization. Journal of Economic Behavior & Organization, 57(1), pp.49-70.

Schilling, M.A., 2016. Strategic management of technological innovation. McGraw-Hill

Schubert, T., 2016. Infringement of intellectual property in innovation partnerships. R&D Management, 46(S2), pp.596-611.

Şekerli, E.B. and Akçetin, E., 2018. Diversification Strategy in Internet Industry: Case of Google Inc. Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi, 20(3), pp.271-289.

Teece, D.J., Pisano, G. and Shuen, A., 1997. Dynamic capabilities and strategic management. Strategic management journal, 18(7), pp.509-533.

Wegwu, M.E., 2020. Diversification strategies and business performance in a competitive industry. JournalNX, 6(08), pp.190-199.

Wernerfelt, B., 1984. A resource-based view of the firm. Strategic management journal, 5(2), pp.171-180.

Who is Huawei? (2024). Available at: https://www.huawei.com/minisite/annual-report-download/annual_report_2024_en.pdf

Appendices

Appendix A: Interview Questions

1) Could you briefly describe your role at the company and how long you have been with the company?
2) What does your day-to-day work involve, especially in relation to business strategy or product planning?
3) Can you describe your company's diversification strategy and its primary objectives?
4) What types of diversification has your company pursued, and why were these strategies chosen?
5) How has your diversification helped your company reduce risks in this fast-paced technology industry?
6) What challenges has your company faced when implementing the diversification strategy?
7) How do you balance diversification efforts with maintaining focus on your core competencies or products?
8) What advice would you give to other companies considering diversification for long-term growth?

Appendix B: A Thematic Analysis of a Major Telecommunications Company's Strategic Diversification Decisions

A Thematic Analysis of a Major Telecommunications Companys' Strategic Diversification Decisions

Core Competency	"Continually investing in R&D has allowed us to innovate. Then diversify into different business segments if you like. The strategy has always been to be cutting edge innovative…" "We have deep sectoral knowledge of power units or batteries and… how heat dissipation works... using that technology, we decided to move into solar space, so we built a solar inverter." "It's listening to the customers, but then also now it's predicting what the customers might need. In 5 to 10 years into the future, so we can put resources on R&D into those sectors so we can diversify in a quite nimble way."
Innovation	"I suppose, again, to reiterate the R&D part, it has allowed Company A to innovate over the past 30 years. The constant investment in R&D for 20-plus years has allowed us to innovate. In addition, we hold over 150k patents globally, the largest number of patents in the world. So, we have deep industrial know-how that's all been because of R&D…"

	"Back to the main point about our focus on R&D and a massive amount of money we spent on that has allowed us to diversify into different sectors, and being quite nimble."
Market Expansion	“Our focus is primarily driven by the needs of our customers. ... Each market will have products that are relevant to that market… Different products only work in different markets... and also insights... on future trends.” “We saw a growth market globally. ... We diversified into providing units for electric vehicles. ... So, related markets would be Solar... an unrelated market would be EV’s.”
Challenges	“When implementing diversification, it takes time... money and resource allocation.” (Senior Executive) “When you’re entering into new markets, there a whole new barrier to overcome. ... It’s new regulatory issues... because we’re in over 170 countries.” (Senior Executive)
Strategic Partnership	“Another key element is to have strong strategic partnerships. ... Partner with big brands to share knowledge and resources. ... Good partners with aligned values make your proposition stronger.” (Senior Executive)

AI Acknowledgement Supplement

[Capstone Project]
[How Diversification Strategies Impact the Long-term Business Growth in a Highly Competitive Technology Industry]

Your Name/Student Number	Course	Date
X23150271	Capstone Project	20/2/2025

This section is a supplement to the main assignment, to be used if AI was used in any capacity in the creation of your assignment; if you have queries about how to do this, please contact your lecturer. For an example of how to fill these sections out, please click here.

AI Acknowledgment

This section acknowledges the AI tools that were utilized in the process of completing this assignment.

Tool Name	Brief Description	Link to tool
ChatGPT	To help me generate ideas, refine my work and grammar, and provide academic references for my work.	https://chatgpt.com
Quill Bot	Enhance and correct my vocabulary and grammar more accurately.	https://quillbot.com/paraphrasing-tool

Description of AI Usage

This section provides a more detailed description of how the AI tools were used in the assignment. It includes information about the prompts given to the AI tool, the responses received, and how these responses were utilized or modified in the assignment. **One table should be used for each tool used**.

[AI]	
[Generate Ideas]	