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**Project Submission Sheet**

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# **Unveiling the Varied Impact and Growth of Social Media Marketing across tech Industries**

**Dissertation submitted as partial fulfilment for the award of Master of Science in  
Marketing**

Submitted to national college of Ireland

## **ABSTRACT**

Unveiling the varied impact and growth of social media marketing across tech industries

This dissertation investigates the evolution of social media marketing and its effects on various technology businesses. Social media sites like LinkedIn, Instagram, Twitter, Facebook, and others are now vital resources for companies looking to engage with their clients. The aim of this paper is to get a clear understanding about the approaches used in different tech industries by examining how tech companies use these platforms to market their goods and services.

The study demonstrates the various impacts of social media marketing on many tech sectors. Different industries utilize social media in different ways to connect with their target audience and improve brand recognition. Through the examination of case studies and marketing efforts, the dissertation pinpoints the best practices and typical problems encountered by various sectors.

The report also investigates the social media marketing industry's explosive expansion and potential future directions. It investigates how new platform characteristics, behavioral alterations in users, and technological improvements affect marketing tactics. For tech companies hoping to improve their social media presence and marketers trying to comprehend how the world of technology is changing, the findings offer insightful information.

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## **Chapter 1: Introduction**

### **1.1. Background of the Study**

In the technology sector, the marketing environment has been completely changed by the quick development of digital technologies and the broad use of social media platforms. Technology firms have realized the enormous potential of social media platforms for reaching and interacting with their target audiences as more and more people use them for information, entertainment, and social interaction (Brandtzaeg & Følstad, 2017). Technology marketers now consider social media to be an essential tool because of its capacity to provide customized content, promote relevant dialogues, and establish solid brand-consumer connections (Mari, 2016).

In the technology sector, social media marketing tactics can, however, have rather diverse effects depending on the sub-market. Product makers, gamers, smart gadgets, semiconductor manufacturers, and Software as a Service (SaaS) are among the sectors where consumer preferences, buying habits, and interaction patterns vary (Boussoualim & Aklouf, 2015). Technology firms therefore have the difficult task of creating focused social media plans that maximize their return on investment while meeting the particular requirements and expectations of their particular consumer groups.

Furthermore, technology businesses now have serious concerns about how to divide up marketing budgets across social media and conventional methods of communication. Marketers are under growing pressure to show how marketing initiatives affect financial performance and have tight budgets, so they need to choose carefully how to allocate their resources across different platforms and channels (Angeloni & Rossi, 2021). This work is made much more difficult by the absence of precise rules and empirical data on the best marketing mix for various technological sub-verticals.

### **1.2. Gaps in the Literature**

While social media marketing is growing in significance in the technology industry, further study is needed to fill in a few gaps in the existing literature. First off, not much research has been done especially to examine how targeted social media strategies impact financial performance in different consumer technology sub-verticals (Kota, 2016). The bulk of the study has focused on the technology industry overall, disregarding the unique characteristics and dynamics of each sub-vertical. This vagueness limits the applicability of the findings and makes it impossible to develop a personalized marketing strategy.

Second, more comprehensive studies comparing the effectiveness of mass-market approaches with customized social media content and engagement strategies are needed (Kim & Phua, 2020). Even less research has examined the benefits of customized marketing in the context of social media marketing for technology companies, much alone comparing targeted vs generic strategies. It takes these kinds of comparisons to understand the relative advantages and disadvantages of each tactic and to direct strategic decision-making.

Thirdly, the literature already in print offers no advice on how to allocate resources for technology companies between social media and traditional channels of communication (Wagner, 2017). Though much research has been done in other industries, there is still little application of marketing

mix modeling and optimization in the technology industry, especially in social media marketing. To assist them decide how best to divide their marketing spending among several platforms and channels, technology marketers need evidence-based frameworks and tools.

Fourth, little study has been done on how customer persona analysis influences technology businesses' social media marketing plans. Few research has specifically examined how to develop and use customer personas for social media marketing in the technology sector, even if some have emphasized the value of knowing client categories and customizing marketing initiatives accordingly (Li, et al., 2021). This literary vacuum makes it more difficult to create genuinely customer-centric marketing plans that speak to the particular requirements and preferences of various persona groups.

### **1.3. Academic Justification**

Addressing the noted gaps in the literature and adding to the expanding corpus of information on social media marketing in the technology sector are the goals of the proposed study. Through an explanation mixed-methods study, this study will offer a thorough grasp of how focused social media tactics affect financial success in various consumer technology sub-markets.

Over a historical five-year period (2017–2022), financial performance indicators including revenue, sales, and profitability measures will be statistically analyzed as part of the study's quantitative phase. This study will make clear how successfully, compared to mass-market companies, specialist social media strategies provide financial returns (Payne & Frow, 2016). The study will provide perceptive information on the unique dynamics and success factors of each market by comparing the results among numerous sub-verticals.

The qualitative part of the research will explore the opinions and experiences of technology marketing professionals through in-depth interviews, therefore augmenting the quantitative findings (Kumar et al., 2024). These interviews will cover the challenges, best practices, and methods for making decisions about developing and implementing targeted social media strategies. Rich, contextual information from the qualitative data will facilitate the interpretation and explanation of the quantitative findings.

Apart from contrasting the efficacy of mass-market and tailored methods, the study will use marketing mix modeling approaches to ascertain the best distribution of marketing resources between social media and conventional communication channels for every technological sub-vertical (Gao & Sultana, 2018). Technology marketers will get much-needed direction from our study on how to use their money wisely and optimize return on investment.

Furthermore, the research will use customer persona analysis to develop segmented recommendations for social media strategy optimization depending on the unique platform preferences, purchasing motivations, and digital consumption patterns of distinct client groups. The study will help technology marketers create very focused and customized marketing strategies that appeal to certain persona groups by mapping the social media habits and expectations of target consumers and generating comprehensive profiles of them.

Both theoretically and practically, the results of this work will be highly significant. The study will fill significant gaps in the current literature and offer a more sophisticated understanding of the elements that affect the efficacy of various strategies across sub-verticals, so advancing knowledge on social media marketing in the technology sector from a theoretical perspective (Kuchi & Gupta, 2023). By extending the use of customer persona analysis and marketing mix modeling to the field of social media marketing, the study will also provide new frameworks and insights for the next studies.

Practically speaking, the report will offer experts in technology marketing looking to maximize their financial gains from their social media efforts realistic advice and suggestions. Through the identification of the best strategies for every sub-vertical and persona type, the study will help marketers spend their resources more effectively and make data-driven choices (Kota, 2016). The results will also facilitate a better understanding of target audiences' requirements and preferences by technology firms, strengthening brand-consumer interactions and promoting long-term economic success.

#### **1.4. Research Aims**

##### **Research Objectives**

The aim of this explanatory mixed methods study is threefold:

1. Compare the impact of targeted vs. mass-market social media strategies on financial performance across consumer technology sub-verticals.
2. Determine optimal marketing resource allocation between social media and traditional channels for each sub-vertical.
3. Develop customer persona-based guidelines for optimizing social media strategies in the technology industry.

#### **1.5. Research Questions**

The main research question guiding this study is:

How does adopting targeted social media marketing strategies focused on specific customer segments compared to mass-market approaches impact financial performance for leading consumer information technology brands?

To address this overarching question, the study will also explore the following sub-questions:

1. What is the impact of tailored social media content and engagement strategies on revenue, sales, and profitability metrics across different consumer technology sub-verticals (PC manufacturers, gaming, smart devices, semiconductor manufacturing, and SaaS)?
2. What is the optimal distribution of marketing resources between social media and traditional communication channels for each technology sub-vertical, as determined by marketing mix modeling and optimization techniques?

3. How can technology marketing professionals optimize their brands' social media strategies based on the differentiated platform preferences, purchase drivers, and digital consumption habits of various customer persona categories?

## **1.6. Methods and Scope**

This work will take an explanatory mixed-methods approach, integrating quantitative and qualitative data collecting and analysis approaches, to answer the research questions and accomplish the stated goals. To collect information on their social media marketing plans, resource allocation, and financial performance indicators including revenue, sales, and profitability metrics over a historical five-year period (2017–2022), top consumer information technology companies in five sub-verticals—PC manufacturers, gaming, smart devices, semiconductor manufacturing, and SaaS—will be surveyed. We will use statistical techniques to examine the survey data and compare the financial results of mass-market and targeted social media initiatives, thereby illuminating the relative efficacy of each strategy for various sub-verticals.

For every technological sub-vertical, marketing mix modeling, and optimization methodologies will also be part of the quantitative phase to ascertain the best distribution of marketing resources across social media and conventional communication channels. This study will employ statistical models and algorithms to determine, using survey data and past performance indicators, the best way to divide marketing funds across various platforms and channels (Key, 2017).

To develop segmented recommendations for optimizing social media strategies based on the particular platform preferences, purchase drivers, and digital consumption habits of various customer categories, the qualitative phase will also include customer persona analysis in addition to the literature review. The process of doing this study will entail developing thorough profiles of target clients, mapping their expectations and social media activities, and determining the best approaches to interact with each persona group (Revella, 2015).

The main IT consumer information companies that will be under analysis are PC manufacturers, companies related to gaming, smart devices, semiconductor production, and SaaS. This research will provide a clear picture of how social media marketing strategies impact financial performance by focusing on the historical period of five years starting from 2017 to 2022. This is significant since the study will take into account the developing digital environment as well as fresh developments and trends in the industry rather than just the effects of certain social media platforms or technologies. In 2018 Kapoor and Associates.

## **1.7. Dissertation Structure**

Five major chapters will comprise the dissertation, each addressing a different facet of the study:

Chapter 1: Introduction

In the first chapter, the significance of social media marketing in the technical industry and the difficulties businesses have in creating winning plans will be covered. It will draw attention to the shortcomings of the body of existing research and support the necessity of the suggested study

(Ebrahim, 2020). To set up the next chapters, this chapter will also go into detail on the goals and objectives, study questions, approaches and techniques, and general field of this study.

## Chapter 2: Literature Review

In this chapter, the main areas of interest in the critical evaluation of the body of material now accessible on social media marketing in the technology sector should be targeted marketing strategies, financial performance, resource management, and customer persona (Voipio, 2023). It will highlight the lacunae and restrictions in the literature that the proposed study aims to address in addition to the central concepts, notions, and paradigms that inform the existing understanding of the subject.

## Chapter 3: Research Methodology

The explanatory mixed-methods approach used in the research will be described in the methodology chapter, including the quantitative and qualitative data collecting and analysis procedures. It will explain the selection of techniques and go over the advantages and disadvantages of each. Furthermore included in this chapter will be the research's ethical issues, data sources, and sample plan.

## Chapter 4: Research Findings and Discussion

Each of the study topics will be addressed in turn as the findings and discussion chapter presents the findings of the quantitative and qualitative analyses. Statistical analysis and data visualization tools will be used to assess the financial success of mass-market and tailored social media tactics across the five technological sub-verticals (Lantos, 2015). The chapter will also go into, using the findings of the marketing mix modeling and optimization studies, the best distribution of marketing resources across social media and conventional communication channels. It will finally offer specialized advice for technology marketing experts on how to optimize social media campaigns based on consumer persona research.

## Chapter 5: Conclusions and Recommendations

The main conclusions of the study will be outlined in the last chapter, along with its additions to the body of information presently available on social media marketing in the IT sector. The relevance of the results for academics and practitioners will be addressed, along with the theoretical and practical ramifications of the study. It will also provide potential areas of further research and indicate the possible directions for further research in the chapter. Last but not least, it will offer recommendations based on the analysis and the benchmarking data collected in this study for the technology marketing professionals who want to get the maximum financial ROI out of social media investments.



## **Chapter 2: Literature Review**

### **2.1 Introduction**

Marketing communication has significantly been transformed by advancing digital technology, thus compelling organizations irrespective of the industry they are operating in, to adopt new strategies (Gregory & Willis, 2022). Technology firms have been at the forefront of this digital shift having adopted the use of digital channels and tools to reach out and engage their targeted audiences and customers in building their businesses as noted. Therefore, current technology marketing strategies involve digital platforms and analytically based approaches (Rosário & Raimundo, 2021).

Technology firms leverage social media to engage with consumers as found. Marketers require social media platforms in their marketing mix since the usage of social media platforms has become almost ubiquitous and impossible to separate from the lives of consumers (Quesenberry, 2020). Technology sector firms can leverage and engage customers on social media to market their brands and build customer base, and sales.

This literature review evaluates the state of the literature on technology sector social media marketing regarding specific strategies, financial outcomes, resource management, and consumer profiling. This paper aims to present an overview of the trends, ideas, and theories that can be used to fill gaps and limitations that the proposed study would seek to fill. The review is structured into sections that discuss various features of social media marketing in the technology industry and a conclusion that outlines the key findings and proposes the directions for further research.

### **2.2 The Rise of Social Media Marketing in the Technology Industry**

#### *2.2.1 The Growth of Social Media Usage among Technology Consumers*

Technology consumers are using social media platforms since many of them are in the digital generation and are in a position to adapt to new technology. Technology businesses focus on digital natives who have been on the frontier of social media engagement and have set the tone for brand engagement on these platforms (Childers & Boatwright, 2021). The youth has been forced to change its marketing preferences, especially through the use of technology companies that have changed their marketing strategies to suit this demographic.

Technology customers rely on social media when making purchase decisions and forming brand perceptions. From the current study, it is evident that consumers use social media in the following ways: to acquire information about products, to decide on the price, and to interact with brand managers and other consumers (Nisar & Whitehead, 2016). This shift in the behavior of people seeking information means that technology businesses require a firm social media engagement and have to take their target markets to court in the sense that they have to convince their target markets of how their brands should be perceived and where their brands should be sold.

### *2.2.2 The Effectiveness of Social Media Marketing in the Technology Sector*

In a technological context, social media marketing helps to create brand recognition and customer dedication. Technology firms can create brand familiarity and brand personality by designing appealing content, facilitating the interaction between the brand and the consumer, and employing social networks (Ebrahim, 2020). Those firms that have adopted and implemented an active social media platform have better brand awareness and customer loyalty than the firms that do not use social media well.

Social media marketing helps in the promotion of products and services and leads to increased sales and revenues, enhanced brand awareness, and customer loyalty. When technology firms use social media as a marketing tool for their products, to engage clients, and to direct them to their e-commerce sites, then there has been a rise in their sales and revenues (Amit & Zott, 2017). The role of SMM in changing the sales volume and the revenue generation of the technology companies are diverse by the sub-vertical which stresses the need to use the context and sectoral approach.

### *2.2.3 Challenges in Developing Effective Social Media Strategies*

About this, it was found out that sub-vertical variation poses a problem in the formulation of appropriate social marketing strategies in many technology firms. As seen from the above discussion, subsectors of the technology industry will have different characteristics of client demand and market conditions (Oztemel and Gursev 2020). It is apparent that technology sub-verticals are not homogeneous and therefore, technology companies cannot afford to have a single strategy on marketing when they are using social media.

## **2.3 Targeted Social Media Strategies and Financial Performance**

### *2.3.1 The Lack of Research on Targeted Strategies across Technology Sub-verticals*

Even though social media marketing has been used and adopted in the technology sector continuously, there is still a study vacuum in determining how certain strategies affect financial results in different technology sub-sectors. The technology sector has been the subject of earlier studies without any differentiation made between sub-sectors and the unique characteristics and relationships that characterize them (Kooiman, 2020). This wide approach inhibits the creation of focused strategies to satisfy the demands of each sub-vertical and reduces the generalization of the study results. There are the following disadvantages to the few research that are now available that concentrate on how particular social media marketing techniques affect investment returns in particular technology submarkets. The majority of these research have short durations, restricted geographical locations, and small sample sizes, which makes the results less transferable (Denscombe, 2017). Furthermore, it is observed that a large number of these research use self-assessment data or take into account a limited number of financial performance indicators, which might be deceptive when assessing the effectiveness of focused programs.

### *2.3.2 Studies on Specific Technology Sub-verticals*

Business technology: One of the technology sub-verticals that has been considered in the literature is the gaming industry. A recent study, compared mass marketing and targeted social media advertising in the gaming sector and concluded that target marketing was effective for higher engagement and more in-game purchases (Ghosh & Dwivedi, 2022). This was important to understand not only the general characteristics of the gaming consumers but also their unique tendencies that need to be taken into account when designing the marketing messages. However, the study was confined to only an online gaming platform, and the effects of targeted strategies on financial performance were not explored at a later stage.

Another technology sub-vertical that has been investigated in the context of targeted social media marketing is the so-called Software as a Service (SaaS) segment. examined the effect of customized content on social media on customer loyalty and lifetime customer value in the SaaS industry (Kshatri, 2022).

### *2.3.3 The Need for Comparative Analyses*

Comparison analysis is necessary to get above the study constraints and to have a deeper knowledge of the financial effects of specialised SMM methods across technological sub-verticals. To improve the applicability of the conclusions, future research can include other technological companies from different subsectors and geographical areas (Gazley & Guo, 2020). Revenue growth, profitability, and customer acquisition costs should be considered while analysing the concentrated strategy. A broad picture of the market trends and success determinants can also be obtained by cross-sectional study of the focused social media strategies within the sub-technology sectors (Voipio, 2022).

## **2.4 Resource Allocation between Social Media and Traditional Channels**

### *2.4.1 The Challenge of Optimal Resource Allocation*

Marketing expenditures are under a tremendous amount of pressure in technology companies especially in terms of demonstrating how marketing decisions impact financial outcomes and ensuring that marketing spending is delivering the greatest return on investment. Since marketing departments operate under the premise of providing tangible results and budget accountability, it is essential to ensure that the right marketing communication mix is invested in (Laurie & Mortimer, 2019). This is particularly the case when it comes to social media marketing given that platforms and consumers' usage patterns evolve, thus requiring a shift in the balance of investments.

### *2.4.2 Marketing Mix Modeling and Optimization in Other Industries*

Marketing mix modeling and optimization techniques have been adopted in other industries to support decisions on resource deployment. These techniques comprise employing statistical models that assess the previous trends of marketing expenditures and other performance metrics, including sales or market share to identify the appropriate combination of marketing activities

(Edeling & Himme, 2018). Marketing mix modeling has also been used effectively for industries ranging from consumer packaged goods, and automotive industries as well as the financial sector in a bid to enhance their marketing dollar utilization and ROI.

However, there is a lack of research comparing these methodologies with the marketing mix modeling and optimization techniques used in other industries, particularly those employing social media marketing in the technology sector (George & George, 2023). A few prior studies have examined the marketing resource allocation within the context of the technology industry, although many of them have been sector or channel-specific, restricting the comparisons and extensions to the whole industry. Thus, there is a lack of extensive investigation of marketing mix optimization in the technology sector, and the findings emphasize the necessity of similar research that will be beneficial for technology marketers.

#### *2.4.3 Conflicting Findings and the Need for Further Research*

sustainable supply chain management and manufacturing cost performance study examined technology marketing resource allocation. The study found that sustainability goals determined the best social media-traditional channel marketing spending mix. The study only examined manufacturing companies in one region, thus its findings may not apply to other technology subsectors or regions.

examines academic startup project funding and technology marketing resource distribution. The German 'EXIST–Business starting grant' quasi-experimental evidence demonstrated that social media and traditional channel resource distribution was consistent throughout business lifecycle stages (Ulin, 2019). Academic businesses may have distinct marketing demands and restrictions than tech companies, according to the report. Technology marketers require further study to develop evidence-based frameworks due to conflicting findings and restricted coverage of technology marketing resource allocation studies (Nadkarni & Prügl, 2021).

## **2.5 Customer Persona Analysis and Social Media Marketing**

### *2.5.1 The Importance of Understanding Target Audiences*

Customer persona analysis is a helpful instrument that allows for studying the target audiences' wants, needs, and behavior patterns to create relevant and appealing marketing approaches that would be suitable for segments of customers (Lantos, 2015). Through collecting much information about the customers on demographic, psychographic, and behavioral characteristics, marketers can learn how the customers make decisions, what their needs and problems are, and so on. These can then be used to build a more detailed picture of the precise marketing messages, content, and experiences that should be presented to the various customer personas.

In this paper, the analysis of the customer persona can be significant to marketers to develop effective strategies in social media marketing. Understanding which social media is favored, how active the customers are on social media, and what content they engage with enables the creation of social media campaigns that are likely to be seen and spark the interests of the targeted personas (Kim, 2020). This kind of targeting can enhance customer contact and commitment and also the revenues and profit of technology organizations.

### *2.5.2 Limited Research on Customer Persona Analysis in the Technology Sector*

While data is supporting the use of customer persona analysis as an effective approach to social media marketing, there is minimal knowledge about the use of this technique in the technology sector. Many of the studies in the field of customer segmentation applied to the technology industry refer only to the larger customer groups: The four types of customers include early, mainstream, and late customers instead of the precise and specific customer descriptions (de Rubens, 2019). Although these more general categories may offer some degree of insight into how customers think and what they want in terms of technology, they may not encompass all the subtlety and variability of the technology-consuming public.

Besides, the focus on more extensive customer segments raises concerns that have not been adequately addressed in the literature regarding the use of customer persona analysis in social media marketing for technology firms. From the existing literature, it is clear that there is a dearth of research on this subject area, with most of the works done in this area aiming at the emergence of customer personas instead of their application in social media marketing (Salminen et al., 2020). This lack of research is a recognized problem in the existing literature and points to the need for future studies that would extend the understanding of the use of customer persona analysis in practice for technology marketers and its application to social media marketing.

### *2.5.3 Lessons from Other Domains*

To the authors' knowledge, there is a lack of empirical research on the use of customer persona analysis in social media marketing for the technology sector. Nevertheless, this type of research can benefit from the experience of other domains that have successfully applied this technique. An example of such a study includes the one that used participatory action research and digital techniques to develop customer personas for SfD youth programs. The study demonstrated the success of employing target audiences for persona creation, using online surveys, social media analysis, and digital ethnography (Jansen et al., 2020). Engaging the youth participants as co-researchers can effectively build realistic and credible customer personas to represent the subject audience.

Another method that has been successfully applied in other fields and that is connected with the utilization of SNA and DE in the context of customer persona construction is also worthy to be mentioned. For example, in the context of the public health domain, the customer archetypes for the social marketing intervention to promote physical activity among young people are built from social media data and digital ethnography. The researchers were able to specifically pinpoint from social media contacts, conversations, and postings the many reasons, worries, and facilitators that young adults had regarding physical activity. These discoveries were then applied to create a content and messaging plan that might be used to reach the interested audiences. Although the aims and objectives of the technology sector might not be immediately tied to the purpose of these studies, the theoretical foundation and the actual customer persona creation process can be applied to the SMMA in this context (Heinze et al., 2016). Technology marketers are more suited to monitor and comprehend the target consumers and, consequently, develop more realistic and relatable customer groups by using participatory research, social media analysis, and digital

ethnography. This can then help to pinpoint and support social media initiatives that are probably going to have the biggest influence on the public who uses technology.

#### *2.5.4 Optimizing Social Media Strategies through Customer Persona Analysis*

The use of customer persona analysis in social media marketing for the IT industry suggests that businesses must have well defined processes in place for using the data collected from clients in their marketing plans. This requires the creation of accurate and comprehensive client personas and their incorporation into the preparation and evaluation of social media campaigns (Chaffey & Smith, 202). Technologies companies can match their social media plans to the objectives, preferences, and behavioural patterns of their target markets by employing customer personas as their primary marketing guide.

Persona analysis used to social media strategies may show to be beneficial in terms of segmented methods depending on client profiles. Social media playbooks or rules for every consumer persona can also include the channels, kinds of content, messaging techniques, and ways of interaction that work best for this particular group (Hodis et al., 2015). Technology companies can boost their marketing efficiency by giving marketers a road map for interacting with different client profiles on social media.

In social media, a marketing persona is essential, hence technology companies should establish persona-based marketing analytics and measurement systems. In other words, engagement rates, conversion rates, cost of customer acquisition, and lifetime worth of customers are tracked and subsequently examined in light of the consumers in various categories (Kumar & Reinartz, 2016). Evaluation of persona-specific social media strategies and marketing activities by technology marketers can improve organisational efforts and increase social media marketing returns.

## **2.6 Theoretical Frameworks and Models**

### *2.6.1 The Technology Acceptance Model (TAM)*

Understanding how this shift happens is crucial, and the Technology Acceptance Model is a common theory. Technology Acceptance Model (TAM) states that perceived usefulness and simplicity drive user adoption. How much people think a technology will improve their efficiency is called perceived usefulness, and how easy it is to use is called perceived ease of use. According to the TAM, users are more likely to employ helpful and easy-to-use technology (Muchran & Ahmar, 2019).

The TAM has helped social media marketing consider customer perceptions of brand contact and purchase on social media. studied how perceived usefulness, simplicity of use, and social influence affect Facebook users' commercial use attitude and desire to adopt an expanded TAM. Stressing value-based social media content and experiences, perceived utility and social effect shaped users' attitudes and intents (Chung & Koo, 2015).

The TAM analyses social media user adoption but harms marketing. Hedonic and emotional elements in social media use are ignored. The TAM is also criticised for prioritising individual adoption over organisational or industry-level social media marketing (Foltean et al., 2019). Despite its limitations, the TAM is an excellent starting point for studying psychological and behavioural factors that affect social media brand engagement. Future research could improve the model to reflect technology sector social media marketing dynamics.

### *2.6.2 The Resource-Based View (RBV) of the Firm*

The firm's Resource-Based View (RBV) highlights distinctive, valuable, and inimitable resources for competitive advantage. RBV says organisations with original, hard-to-copy, and irreplaceable resources perform better and stay ahead (Parboteeah & Zakaria, 2023). Technology, equipment, brand equity, customer relationships, and company culture are resources.

The RBV has been used to assess social media marketing to determine how companies can compete. assessed brand communities and user-generated content for company performance and value using the RBV. Social media increases consumer involvement, brand devotion, and originality in consumer products, enhancing financial performance and competitiveness (Mari, 2016).

According to the RBV, scholars have studied the causes and impacts of social media capabilities and management approaches that assist organisations benefit from social media. Wang stated innovation, information management, customer relationship management, and social media increase corporate performance and competitiveness. proposed aligning social media marketing with the company's goals, culture, and resources (Boussoualim & Aklouf, 2015).

Integrating the RBV into social media assets and capabilities has shown the strategic value of technology, but further research is needed to implement the framework. Technology businesses can use social media for competitive advantage, but innovation, intellectual property, and competition make it difficult. Angeloni & Rossi, 2021). How technology businesses can create and deploy industry-specific social media tools and capabilities to increase competitiveness and financial performance may be studied.

### *2.6.3 The Customer Lifetime Value (CLV) Model*

Long-term customer relations assessment should use the Customer Lifetime Value (CLV) model. CLV is the sum of all future customer earnings represented in present value that a company acquires during the relationship. (2015) Boussoualim & Aklouf. This paper has identified that from the evaluation of CLV, an organization can identify its best clients, allocate the available marketing dollars, and develop viable customer margin models.

In the case of social media marketing, the CLV analysis has been used to define the strategic customers within the market. For this purpose, the study first divided clients based on their social media involvement and buying habits; the next step was to apply the CLV model to create specific marketing strategies for each segment. The study has revealed that the CLV-based social media initiatives have had a positive impact on the issues of client retention, cross-selling as well as up-selling, and firm profitability.

This paper has identified that the CLV model is a valuable tool for helping to facilitate effective marketing on social media but it has also highlighted the problems and research areas that this tool brings. It is not easy to analyze customer behavior and predict its value because of the complexity of the business environment and the fluctuation in customers' behavior (Mari, 2016). Aside from this, the CLV model has several limitations, one of which is the failure to capture all the social and relationship value of customers interacting with the business through social media.

However, the CLV model is useful for decision-making and investment in SM marketing, especially in technology where clients are valued and the acquisition and retention of clients are important for the future (Wagner, 2017). Future research can also examine how technology firms can use CLV to create better and more strategic temporal social media marketing plans that are unique to the customers and their conduct, as well as how CLV can be expanded with other strategic orientations like the RBV or TAM.

#### *2.6.4 The Social Identity Theory (SIT)*

The Social Identity Theory (SIT) addresses how social categorizations in groups dictate images and actions that are associated with self-images (Kuchi & Gupta, 2023). According to SIT, family members, friends, colleagues, and communities provide a person with identity and self-esteem. Thus, there is a positive and distinctive social identity for everyone since they ensure that their attitude and behavior conform with the norms and values of their group and are different from those of related out-groups.

In the context of social media marketing, SIT has been used to evaluate the effects of brand communities as well as social influencers on consumers. A brand community is therefore a social aggregation of consumers who share a common passion for a brand and actively engage in using, discussing, and recommending the brand. According to the analysis done by SIT, it has been seen that brand communities can impact brand perception, preference, and loyalty in customers (Quesenberry, 2020).

Social influencers are people who have a large following and are recognized as experts in a particular area or domain and can change the way the audience perceives and behaves based on the content they share and engage with on social networks (Quesenberry, 2020). SIT has been applied to understand how the social influencer can help brands, businesses, products, and even causes to sell to customers and impact their buying behavior.

The implication of SIT on the technology industry is that social media marketing is influenced by brand communities and social influencers that promote product consumption and brand loyalty among consumers. SIT principles can be applied in technology firms to develop strong and influential social media brand communities where customers have a common identity, objectives, and values as argued. It can provide benefits to the community members as they get access to unique content, experience, or rewards and, at the same time, encourage user-generated content and peer-to-peer support (Gregory & Willis, 2022).

Targeted customers are likely to trust social influencers who are popular and reputable within their circle, which makes technology companies hire them as brand ambassadors Technology. marketers



may ultimately generate more relevant, captivating, and loyal social media campaigns and, in turn, generate more sales through better alignment of the social media strategy with the core customers' social profiles and the norms of key influencers.

SIT contributes to the understanding of brand community and influencer marketing social processes, though more theoretical and empirical work is necessary to fully understand its technological affordances and implications. Future research may explore the role of brand communities and influencers (e.g., microcelebrities) in fashion consumption. g. As for the second research question, it is clear that factors such as product category, customer group, or platform can influence consumer attitudes and behavior toward technology brands in different cultural or market conditions (Kota, 2016). It is also possible for researchers to look at how SIT principles can be integrated with other strategic frameworks such as the RBV or CLV model, to enhance the social media marketing strategy of technology enterprises.

#### *2.6.5 Applying Theoretical Frameworks to the Study of Targeted Strategies*

Social media marketing user adoption, engagement, competitive advantage, and customer profitability are investigated utilising TAM, RBV, CLV model, and SIT theories. Understanding technology's focused social media efforts is crucial (Kota, 2016). We combine theories to understand how technology companies might improve social media marketing for diverse clientele and goals.

Evaluating focused social media programmes using multi-theoretical perspectives helps scholars understand technology marketing. TAM highlights how consumers evaluate social media platforms and features for adoption and engagement, whereas RBV shows how they can give a competitive edge (Key, 2017). CLV creates long-term customer value initiatives, while SIT uses self-identities and peer pressures to build brand communities and influencer relationships.

These theories may assist academics create technology business social media marketing strategies (Quesenberry, 2020). Technology adoption, market competition, consumer value, and social influence models may need empirical testing across technical sub-sectors and marketplaces.

Technology-focused social media tactics change theory and practice, and theories vary. Complex social media marketing helps build better performance models (Quesenberry, 2020). Academics may leverage other studies to provide new ideas and frameworks for technology businesses to exploit social media for competitive advantage and customer benefit.

This study helps tech marketers target social media approaches with multi-theoretical frameworks. Managers and marketers can allocate resources, execute a campaign on the right social media platform, and evaluate results by understanding user adoption, competitive advantage, customer profitability, and social effect (Kota, 2016).

## **2.7 Emerging Trends and Future Directions**

### *2.7.1 The Rise of Live Streaming and Short-form Video Content*

Another effective trend that has been noted in the process of developing social media marketing in recent years is the growth in live streams and short videos. Others are Facebook Live, Instagram Stories as well as TikTok and so on which have changed the conventional method of consuming content and brands on social media by offering a new modality of interacting with the audience in a live, experiential, and participatory manner (Revella, 2015). In particular, live streaming – which may be described as the process of transmitting content in real-time – has become one of the most sought-after formats by COVID-19, as people seek a more authentic and personal connection with brands and influencers (Kota, 2016). Concerning the technological advancement in marketing, the changes in live streaming and short-form videos have both strengths and weaknesses. On one hand, these formats provide a great opportunity to advertise products and services, explain and illustrate possibilities and functions, and create brand personality and brand authenticity. For instance, technology companies can leverage live streaming for question and answer sessions, product release events, or factory tours, and this way customers can be more involved with the brand and feel more connected to the company.

On the other hand, developing engaging and impactful live streams and short-form videos, which are relatively new formats, needs new tools, approaches, and expertise (Revella, 2015). To successfully navigate these platforms, technology marketers must understand what works and what doesn't for each platform regarding the length, format, and style of videos and the key metrics and ranking factors that define visibility and engagement. In particular, they have to consider the issues of real-time communication and moderation, which will help to make the live stream and videos match the brand guidelines and customers' expectations.

### *2.7.2 The Growing Importance of Social Commerce*

Another crucial trend in SM marketing is the increasing role of social commerce, which is the implementation of e-commerce features into social media platforms. Social commerce can be defined as the facilitation of the consumer decision-making process of finding, comparing, and selecting products within social media applications without the need to exit the app and go to a different website or marketplace (Kuchi & Gupta, 2023). This trend has been attributed to the rising use of mobile gadgets in making purchases online, and the need to have a one-stop-shop for purchasing.

Social commerce is a good opportunity for technology marketers because it minimizes the distance between a consumer and a brand and makes the buying process less time-consuming. Organizations in the technology sector can capitalize on this opportunity and offer products that users can purchase right within the post, story, or live stream, thus minimizing cart abandonment or distraction (Kuchi & Gupta, 2023). Furthermore, social commerce can provide valuable information about the customer and the way they shop.

Nevertheless, the study found some limitations and contingency factors associated with consumers' usage and adoption of social commerce elements. For example, the issues of trust and security have been identified as possible barriers to the use of social commerce because consumers are too privacy-conscious when it comes to providing their payment and personal information in social media networks. Moreover, the reliability and particularity of products recommended and discussed on social media depend on how they influence consumers' decisions and their level of satisfaction (Kuchi & Gupta, 2023).

To address these concerns and improve the effectiveness of social commerce efforts, technology marketers should dedicate efforts to trust formation and risk reduction tasks such as describing payment and personal data security information and partnering with credible and trustworthy opinion leaders and endorsers (Revella, 2015). Finally, they are expected to get the personalization and curation tools that give product recommendations and materials that the user may like and find useful based on their behavior.

### *2.7.3 Data Privacy and Security Concerns*

While social media apps have become more incorporated into consumers' daily lives and purchasing behaviors, questions concerning data privacy and security are key concerns. The numerous data breaches, scandals, and regulatory activities in the recent past have made users more aware and critical of how organizations collect, process, and protect personal data on social media platforms (Ebrahim, 2020). Thus, it becomes important for technology marketers to learn from the above-discussed issues in the following ways when deploying social media; The Principle of Transparency, The Principle of Consent, and The Principle of Data Protection.

One area of concern for technology marketers in this regard is that while targeted and personalized marketing can both create perceived customer value and benefit, they can also infringe on the customer's and other consumers' rights to privacy. On one hand, customers seek and value personalized and targeted content and interactions on social media and are ready to pay and interact with brands that have a greater understanding of their needs (Kooiman, 2020). On the other hand, customers have become more conscious of how their personal information is being collected, processed, and used by organizations, which may perceive obtrusive or excessively targeted marketing as intrusive and unethical.

To manage this, technology marketers should establish proper data privacy and security guidelines and standards that conform with the prevailing industry standards and regional or global regulations such as EU GDPR (Kooiman, 2020). They also need to disclose these policies to customers clearly and understandably and give them some level of freedom and control over the processing of their data for marketing. Also, to mitigate these risks, the technology firms should incorporate newer technologies of data management and security like encryption, anonymization, and access control to guard against misuse of the data or data breaches (Denscombe, 2017).

### *2.7.4 The Role of Artificial Intelligence and Machine Learning*

Social media marketing is fast integrating the use of AI and ML in processing large data sets to offer clients customized solutions. AI and ML algorithms could be beneficial for technology

marketers to analyze the patterns and trends of social media data and customers' sentiments, preferences, and behavior to make better predictions on future results and to improvise marketing strategies (Voipio, 2023). Customer support through AI-driven chatbots and recommendation systems are the tools that can help consumers get quick and individualized assistance and product recommendations based on their profiles and previous actions.

AI and ML-based social media marketing of technology carries the following risks: Technology marketers must establish ethical guidelines to promote their products responsibly (Kooiman, 2020). Accessibility, clarity, neutrality, responsibility, and human control are the ideals. Kooiman(2020) advised that technology businesses use diverse and inclusive techniques and individuals to address bias and discrimination in AI research and use. They should also protect customer privacy by educating clients how AI algorithms utilise their data, how humans can intervene, and how they can seek redress for negative results (Ebrahim, 2020).

## **2.8 Conclusion**

### *2.8.1 Summary of Key Findings and Gaps in the Literature*

This literature analysis also presented the condition of social media marketing as important to technology companies that want to reach, engage, and improve their business. The review has established that social media platforms are now a part of the marketing mix for technology firms, given that they are interactive, customizable, and allow for close communication (Ebrahim, 2020). Nonetheless, the review has highlighted several research gaps and limitations in the context of the current literature, including the absence of comparative studies of targeted social media initiatives across different segments of the technology sub-vertical. Some of the prior research works that have explored the usefulness of personalized and segmented marketing strategies have been conducted in particular sectors like the gaming or SaaS sectors (Kooiman, 2020), and there is a lack of more systematic and extensive research that estimates the comparative efficacy of different targeting approaches on key business performance indicators across various sub-sectors.

One of the major gaps in the literature is the lack of studies that could provide insights into how technology firms can effectively distribute their marketing budget between social media and conventional platforms (Kooiman, 2020). Although several other studies have used MMM and MIMO techniques for other industries (Ghosh & Dwivedi, 2022), to the best of the author's knowledge, there is a dearth of academic research and practical recommendations on how technology marketers can strategically allocate their marketing budgets in a systematic and informed manner across various platforms and customer segments.

This review has also revealed that there is still very little evidence of the use of customer persona analysis in the technology industry's literature and practice of social media marketing. Previous studies have also emphasized the importance of understanding the different categories of customers that technology firms should appeal to (Kshatri, 2022), but there is limited more nuanced and tactical comprehension of how these firms can engage with more specific customer types in the sphere of social media and content marketing.

### *2.8.2 The Proposed Research Approach*

The proposed explanatory mixed-methods study uses quantitative and qualitative data collecting and analysis to address these gaps and constraints (Kshatri,2022). This strategy uses quantitative and qualitative research findings and data sources to provide a comprehensive understanding of the topic.

The Technology Acceptance Model (TAM), Resource-Based View (RBV), Customer Lifetime Value (CLV) model, and Social Identity Theory (SIT) are also used to better understand the factors that affect the adoption, use, and effects of targeted social media strategies in the technology industry. The research also integrates and advances knowledge from different perspectives to provide insights and models on how user firm, customer, and social factors affect social media marketing performance (Kshatri, 2022).

### *2.8.3 Implications for Theory and Practice*

This study will advance technology sector social media marketing theory. The work covers gaps and constraints in previous investigations to expand theory and knowledge, answering research problems. The study also provides more accurate social media marketing effectiveness models that account for technology industry variables (Kooiman, 2020).

The study gives technology marketers theoretical advice on how to use social media platforms and marketing investments to maximise results across platforms, clients, and business goals (Laurie & Mortimer, 2019). The research uses data and theory to assist technology firms allocate resources, develop campaigns, and analyse effectiveness in the dynamic social media marketing environment.

### *2.8.4 Embracing Emerging Trends and Responsible Innovation*

The literature review revealed social media marketing trends and future improvements that technology companies must consider to survive and grow in the new digital economy (Amit & Zott, 2017). Trends include live streaming, short-form videos, social commerce, data privacy and security, and AI and machine learning (Ebrahim, 2020).

To handle these trends and challenges, technology marketers should address data privacy, security, and ethics in social media business and communication strategies (Laurie & Mortimer, 2019). This includes having clear and robust data management policies that can be understood, giving customers choices and control over their data, investing in effective data management and protection solutions, and following the best practices and code of ethics in marketing with AI and ML.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1. Introduction:**

This chapter presents the research methodology employed to investigate the impact and growth of social media marketing across technology industries. The research aims, proposed methodology, philosophy, approach, strategy, and methods are discussed in detail. The study will utilize an explanatory mixed-methods approach, combining qualitative data from a comprehensive literature review and quantitative data from a close-ended survey. The data collection process, population sample, and analysis techniques are also described, along with ethical considerations and study limitations.

### **3.2. Proposed Research Methodology:**

Technology industry social media marketing efficacy will be studied using explanatory mixed approaches. This approach integrates qualitative and quantitative methodologies to understand the research problem (Creswell & Plano Clark, 2017). A complete literature review of social media marketing's impact and growth, key theoretical frameworks, industry trends, and best practices will comprise the qualitative component (Denscombe, 2017). Marketing experts in the selected consumer IT sub-verticals will complete a close-ended survey on their companies' social media strategy, budget allocation, and financial performance measures in the quantitative component.

### **3.3. Research Philosophy:**

#### **3.3.1. Ontology, Epistemology, and Axiology Assumptions:**

Pragmatic research addresses research concerns through practical applications and various methods (Kaushik & Walsh, 2019). This idea fits the mixed-methods study's purpose of delivering technology marketers actionable knowledge.

An external world and social and environmental factors are considered in the critical realist study of knowledge formation (Fletcher, 2017). The literature review gives context and the survey provides data, therefore the study values objective and subjective data.

The researcher reports honestly and ethically to minimize biases and values in the study (Kivunja & Kuyini, 2017).

### **3.3.2. Positivism, Realism, Pragmatism, and Interpretivism:**

The study's pragmatic research philosophy is positivism, realism, and interpretivism. Statistics are used in positivist quantitative surveys to test hypotheses (Rahi, 2017). The interpretive qualitative literature review examines the technology industry's social media marketing's subjective meanings and experiences (Pham, 2018). Critical realists recognize objective reality human perspectives and social conditions. (Hoddy, 2019).

### **3.4. Research Approach:**

Iteratively testing hypotheses and explanations using deductive and inductive reasoning is abductive (Folger & Stein, 2017). The literature review will provide key technology sector social media marketing ideas, concepts, and trends, supporting deductive reasoning. Survey data will be inductively processed to find new facts and refine concepts. The abductive method uses qualitative and quantitative data to understand the study problem.

### **3.5. Research Strategy:**

#### **3.5.1. Descriptive versus Exploratory Models:**

The research will be descriptive and exploratory. A close-ended survey will collect data on technology businesses' social media strategy, resource allocation, and financial success across five sub-verticals in the descriptive component. These data will compare focused social media methods' financial performance KPI effects.

Technology industry social media marketing theoretical frameworks, trends, and best practices will be found in an exploratory literature review. Qualitative data will contextualize and support quantitative survey results.

#### **3.5.2. Quantitative versus Qualitative Research Methods:**

This mixed-methods study will use quantitative and qualitative methods. The selected consumer IT sub-vertical marketing professionals will complete a close-ended survey on social media strategy, resource allocation, and financial performance measures. To evaluate focused social media methods' financial performance, descriptive and inferential data will be used.

Textual data about social media marketing's growth, theoretical frameworks, industry trends, and best practices will be collected in the qualitative literature review (Gazley & Guo, 2020). Thematic analysis contextualizes and validates quantitative data by revealing patterns, themes, and links.

### **3.6. Quantitative Data Collection:**

Marketing professionals in the five targeted consumer IT sub-verticals (PC makers, gaming, smart devices, semiconductor manufacturing, and SaaS) will complete a Google Forms close-ended survey. The survey will include 15 questions, including 12 close-ended questions about the

companies' social media strategies, resource allocation, and financial performance metrics, and 3 demographic questions to assure sample representativeness.

These aspects will be collected using close-ended questions:

1. Social media platforms used by the company (e.g., Facebook, Twitter, Instagram, LinkedIn) 2022 (Chaffey & Smith)
2. Frequency and type of social media posts (e.g., promotional, informative, entertaining). Hodis, Sriramachandramurthy, & Sashittal (2015)
3. Utilise specific social media strategies based on client categories (e.g., demographics, psychographics, behavior) (Salminen et al., 2020)
4. The allocation of marketing resources between social media and traditional communication channels (e.g., percentage of budget, staff time) (Laurie & Mortimer, 2019)
5. The financial performance indicators (e.g., revenue, sales, profitability) over the historical 5-year period (2017-2022) (Kumar & Reinartz, 2016)

The survey will be pilot-tested with a small sample of marketing professionals to ensure the clarity, relevance, and reliability of the questions. The survey link will be distributed via email to a targeted sample of marketing professionals in the five consumer IT sub-verticals, to achieve a sample size of 100-150 participants.

### **3.7. Population Sample:**

Purposive sampling will be used to select participants for the quantitative survey based on their job role, industry experience, and expertise in social media marketing within the five targeted consumer IT sub-verticals. The sample will be drawn from a database of marketing professionals compiled through industry associations, professional networks, and company websites.

The inclusion criteria for the sample will be as follows:

- Marketing professionals with a minimum of 3 years of experience in social media marketing
- Marketing in one of the five consumer IT subsectors (PC makers, gaming, smart devices, semiconductor manufacturing, and SaaS).
- Knows corporate social media, resource allocation, and financial analytics.

For statistical power and representativeness, 100 participants will be sampled. For structural equation modeling (SEM) studies with seven or fewer components, Hair et al. (2018) recommend 100-150 samples. SEM is not the major analysis method in this study, but this sample size recommendation ensures generalizability.

### **3.8. Analyzing Quantitative Data:**

The quantitative survey data will be examined using SPSS or R descriptive and inferential statistics. Sample and essential elements including social media strategy, resource allocation, and financial success measures will be described using frequencies, means, and standard deviations.



T-tests, ANOVA, and regression analysis will test hypotheses and assess focused social media projects' financial impact across five consumer IT sub-verticals. The following analysis will occur:

1. Ghosh & Dwivedi (2022) employed independent samples t-tests to compare concentrated social media and mass-market tactics on financial performance measures like revenue, sales, and profitability.
2. One-way ANOVA to find significant differences in five consumer IT sub-vertical financial performance measures (Kshatri, 2022).
3. Using demographic controls, Fotean, Trif, & Tuleu (2019) studied the link between social media techniques, resource allocation, and financial success indicators using multiple regression analysis.
4. Based on historical financial success, using marketing mix modeling to shift consumer IT sub-vertical resources across social media and traditional channels (Cartwright, Liu, & Raddats, 2021).

Quantitative data analysis will test assumptions about how targeted social media campaigns improve technology business finances.

### **3.9. Ethical Considerations:**

The proposed study will adopt high ethical standards that will ensure the rights and identity of the participants as well as the secrecy of the information provided to be protected. The following ethics will be discussed:

1. Informed consent: Participants will be provided with a document of a limited number of pages containing information on the purpose of the study, the research methodology, the potential hazards, and the advantages of the research. Like in any research, respondents must give their informed consent before they can complete the survey.
2. Survey anonymity: Again, no personally identifying information will be collected from the participants to preserve their anonymity. The data that will be collected and will be considered sensitive & protected will be only accessible to the researcher and other people who are authorized to do so.
3. Right to withdraw: Regardless of the reasons and circumstances, participants are free to withdraw from the study at any time without any repercussions.
4. Data protection: The study will adhere to GDPR guidelines to ensure the protection of information that will be collected, stored, and processed from participants.
5. Minimising risk: The participant's discomfort will be minimized by asking clear and related survey questions and providing clear instructions and assistance.

Data collection will start after seeking permission from the IRB or ethical committee as the case may be. The researcher will abide by ethical guidelines and regulations set by professional associations such as the Market Research Society (MRS) and the European Society for Opinion and Marketing Research.

### **3.10. Limitations to the Research:**

The proposed study method aims to give reliable results, although it has many drawbacks:

1. Sample bias: Due to researcher judgment and participant availability, purposeful sampling may introduce bias. Technology companies and marketing specialists may find the conclusions limited.
2. Self-report bias: Social desirability and recall bias may affect marketing expert survey findings. Participants may give more socially acceptable replies or forget previous strategies and performance data.
3. Cross-sectional design: This study will collect data once. Social media projects are hard to link to financial performance measurements since other factors may impact results over time.
4. Limited scope: The study only applies to five consumer IT sub-verticals. Social media marketing may alter brand reputation and consumer loyalty, but the study will focus on financial performance.
5. Measurement limitations: Close-ended survey questions may not convey the intricacy and financial impact of social media marketing. Firms' self-reported financial statistics may be erroneous or contradictory.

To address these limits, the researcher will use various strategies, such as:

1. Using specific inclusion criteria for sample selection to ensure representativeness and relevance.
2. Pilot test questionnaires for clarity, reliability, and bias reduction.
3. Learning more about the research problem via survey and qualitative literature review data.
4. Discussion and conclusion on restrictions and study findings.
5. Recommending longitudinal or experimental investigations, researching additional technology areas, or using different data sources and methods to address gaps and widen the study.

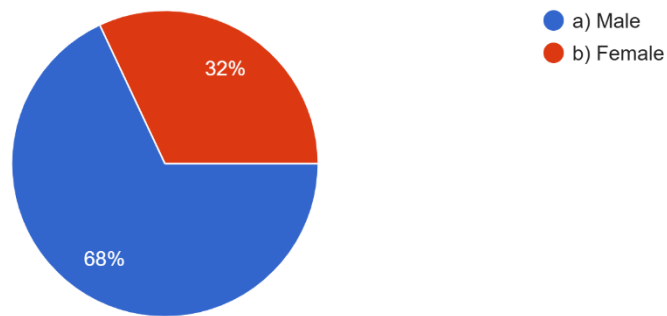
The study honestly reports and tackles these limitations to increase the technology sector social media marketing efficacy understanding and lay the framework for future research.

## Chapter 4: results

### 4.1 Responses:

#### 1. Gender

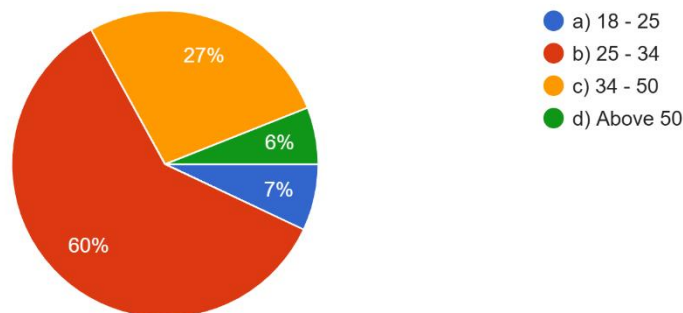
100 responses



The gender distribution of the respondents indicated the female gender as dominant in the study with 68% compared to 32% for males. This also points to the fact that more females responded to the survey and this can skew the data in terms of gender particularly when trying to understand male and female perceptions of social media marketing (Hooda & Ankur, 2018).

#### 2. Age

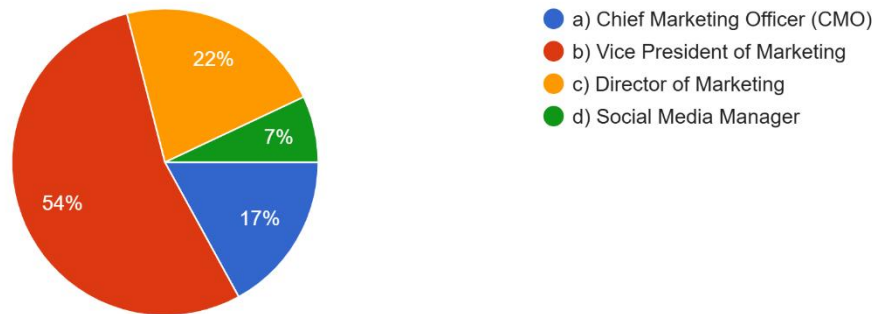
100 responses



Female respondents comprised the majority (54%) while male respondents were 46 %. Most respondents (60%) were in the age group of 25-34 years, 27% were in the age group of 34-50 years, 7% were in the age group of 18-25 years and 6% were above 50 years of age (Peltzer & Pengpid, 2018). This distribution by age shows that the respondents are likely to be mid-career workers or those within the 25-34 age range, and this finding could influence their perceptions of the believability and approaches of SM marketing.

### 3. What is your current job title?

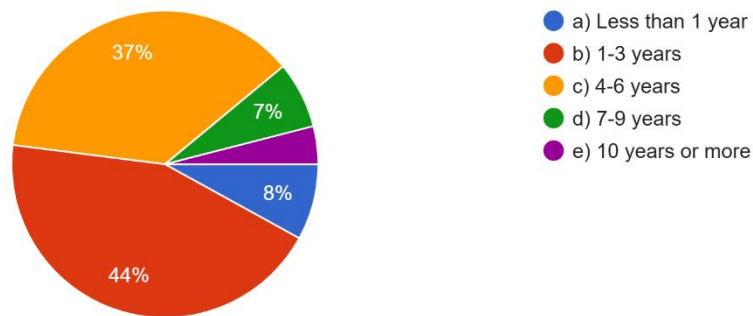
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The respondents were mostly at the strategic managerial level of the firm, 54% of the respondents were Vice presidents of marketing, 22% were directors of marketing, 17% were chief marketing officers and 7% were social media managers. This distribution indicates that the opinions given are from highly authorized decision-makers and strategic managers in their respective organizations (George & Desmidt, 2018).

### 4. How long have you been working in your current role?

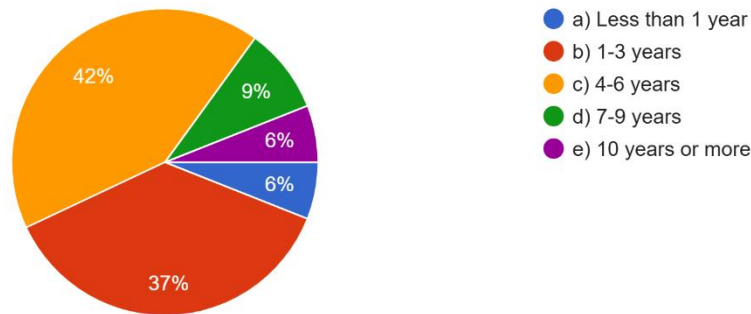
100 responses



According to the job experience, 44% of the respondents have worked for 1-3 years in the current role, while 37% worked for 4-6 years in the same position. Just 8% have worked in the positions for less than a year while 7% have practiced the roles for 7-9 years. This suggests that the respondents are moderately experienced in their current jobs and may be acquainted with their company's social media plans (Liu & Bakici, 2019).

5. How long have you been working in the consumer IT industry?

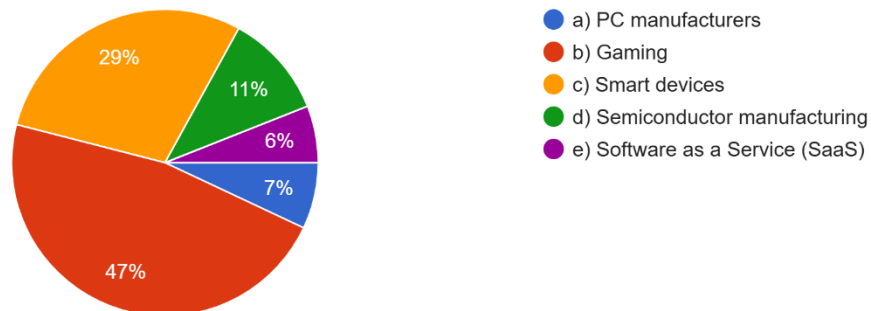
100 responses



This is, therefore, a relatively young industry; 42% of the respondents have worked in the consumer IT industry for 4-6 years and 37% have served for not more than 3 years. A small number has worked in the industry for less than a year(6%) and less than 10 years or more (6%). This implies that the respondents have ample industry experience and therefore their perception of the trends in social marketing is top-notch (Ndirangu, 2023).

6. Which consumer IT sub-vertical does your company primarily operate in?

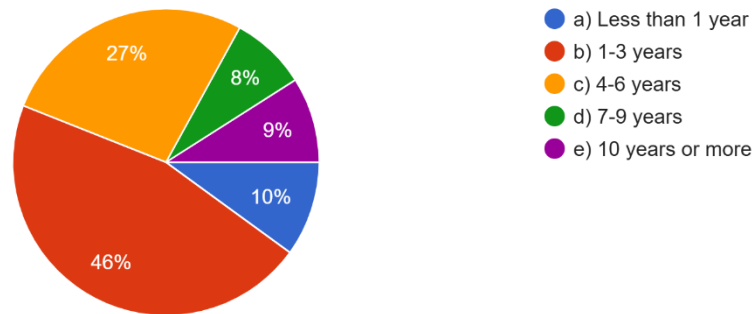
100 responses



The largest percentage of respondents included gamers (47%) with 29% from the smart devices sub-sector, 11% from the semiconductors sub-sector, and 7% from the sub-sector of PC manufacturers. This distribution might show how these sub-verticals in the consumer IT industry differ concerning the sectors they are in and where it may affect the particular social media tactics and issues each faces (Tuten, 2023).

7. How long has your company been using social media for marketing purposes?

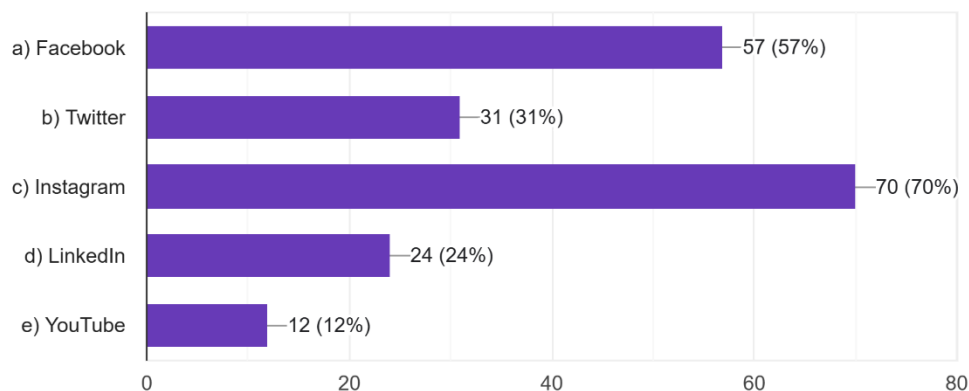
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In terms of experience, most organizations (46%) reported that they have been using social media for marketing for 1-3 years while 27% said they've been doing it for 4-6 years. This is evidence that there has been a high usage of social media marketing in the last year, and this is a testament to the increasing relevance of social media in the consumer IT market (Evans et al., 2021).

8. Which social media platforms does your company use for marketing? (Select all that apply)

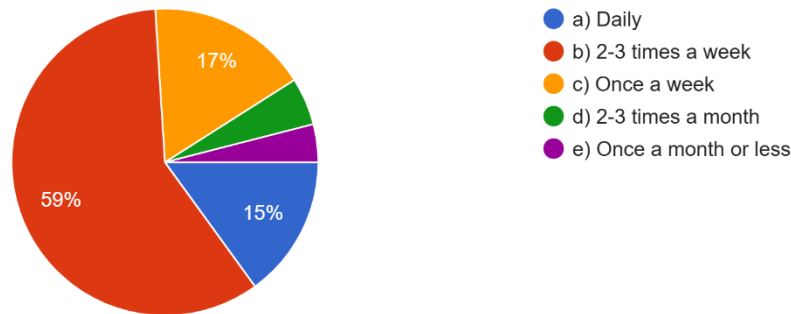
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The most popular social media platforms that marketers are currently using are Instagram at 70% and Facebook at 57%; Twitter at 31% and LinkedIn at 24%; and YouTube at 12% only. This suggests that there is a leaning towards the visual and 'interactivity' of the platform which can greatly affect the content and the interaction with the viewers (Kujur & Singh, 2020).

9. How frequently does your company post content on social media?

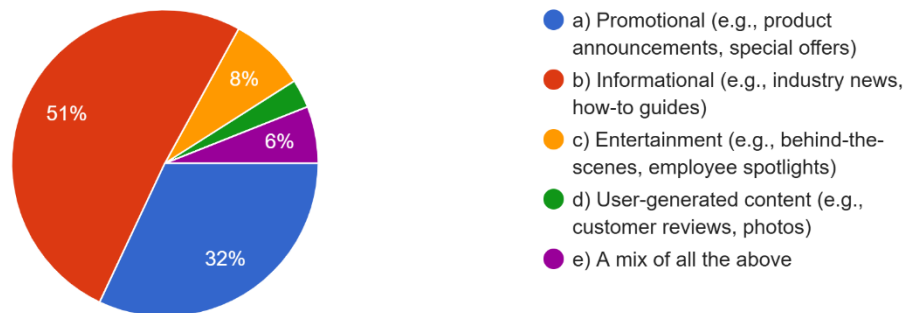
100 responses



The findings also show that the majority of companies are less active on social media, as 59% share content on social media 2-3 times a week, and 17% post content daily. This frequency demonstrates a clear and coherent logic of trying to stay active and constantly in touch with the audience but not to the extent of becoming a nuisance (Fisher,2017).

10. What type of content does your company primarily post on social media?

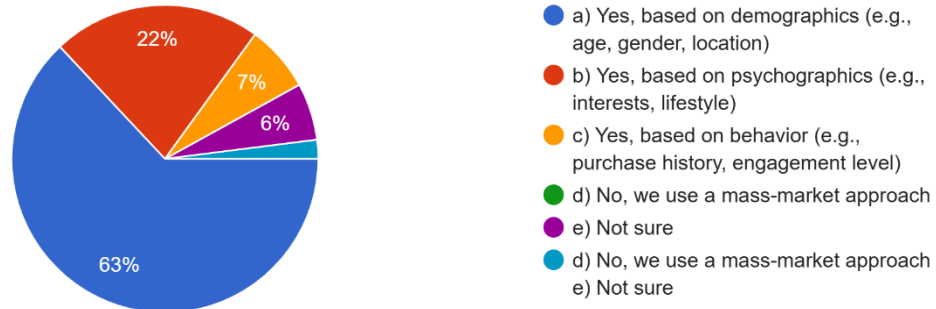
100 responses



The content most frequently posted is advertising (51%), while informative content takes second place (32%). Some of the other categories include entertainment and user-generated content which are scarce. This overemphasis on promotional and informational content may indicate a strategy that is geared toward selling and creating awareness (Schiller, 2024).

11. Does your company use targeted social media strategies based on specific customer segments?

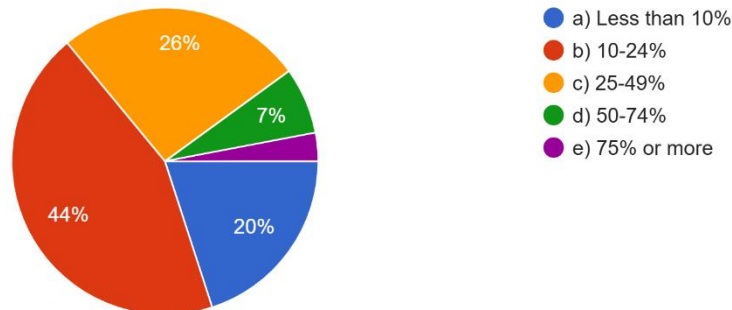
100 responses



Demographic targeting is the most frequently used targeting criteria as 63% of companies use it psychographic targeting was used by 22% of the companies and 7% of the companies used behavior targeting (Gajanova et al.,2019). From this, it can be argued that there is a high level of demographic targeting when it comes to social media marketing, which shows that businesses often use demographic data to effectively target key customers on social media platforms.

12. What percentage of your company's total marketing budget is allocated to social media?

100 responses

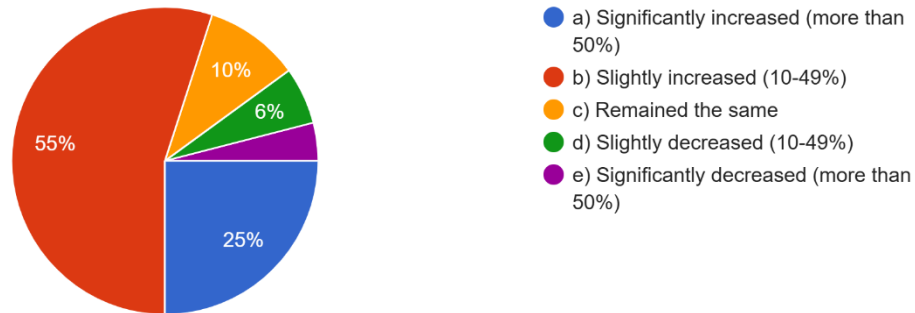


A significantly large number of the firms (44%) devote 10–24% of their marketing budget to social media, with another quarter (26%) giving 25–49%. This shows that social media marketing is important but the degree of investment varies, and therefore, it plays a strategic role in the marketing mix (Datta et al.,2017).



13. How has your company's social media marketing budget changed over the past 5 years (2017-2022)?

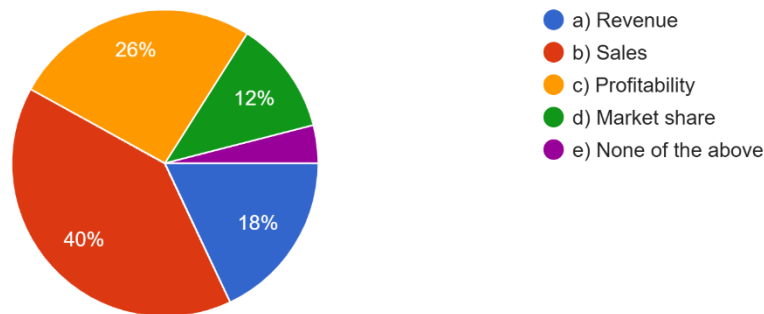
100 responses



Most companies (55%) reported a slight increase in their social media marketing budget over the past five years, with 25% noting a significant increase. This trend reflects growing confidence in the effectiveness of social media as a marketing channel (Malesev & Cherry,2021).

14. Which financial performance indicator has been most positively impacted by your company's social media marketing efforts?

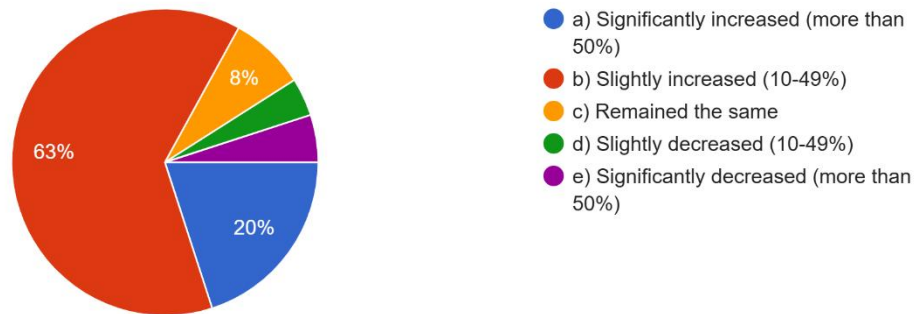
100 responses



Respondents identified sales (40%) as the financial performance indicator most positively impacted by social media marketing, followed by profitability (26%) and revenue (18%). This underscores the tangible benefits of social media marketing in driving business outcomes (Chinen-Moore, 2020).

15. How has your company's revenue changed over the past 5 years (2017-2022)?

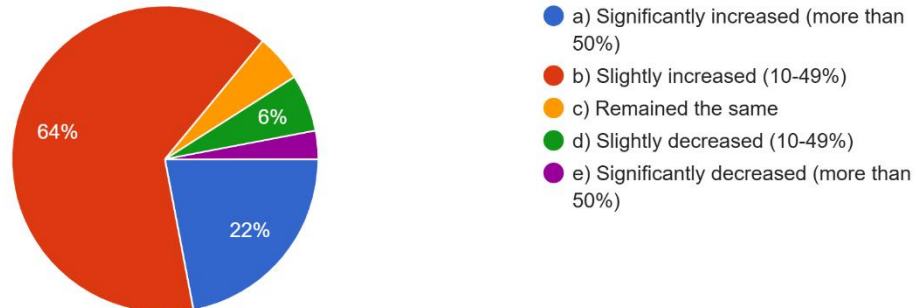
100 responses



A majority of companies (63%) reported a slight increase in revenue over the past five years, with 20% experiencing significant revenue growth. This positive trend highlights the potential financial benefits associated with effective social media marketing strategies (Odoom et al., 2017).

16. How has your company's profitability changed over the past 5 years (2017-2022)?

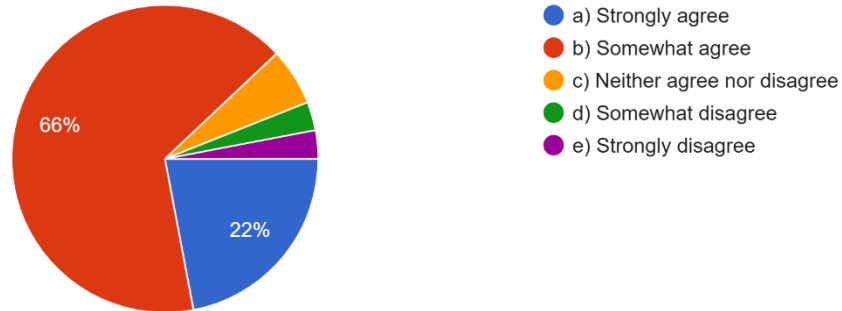
100 responses



Similar to revenue, 64% of companies reported a slight increase in profitability, with 22% seeing significant profitability growth. This suggests that social media marketing efforts contribute positively to the bottom line.

17. To what extent do you agree with the following statement: "Our company's social media marketing efforts have significantly contributed to...al performance over the past 5 years (2017-2022)."

100 responses



Most respondents (66%) somewhat agree that their social media marketing efforts have significantly contributed to their financial performance over the past five years. This widespread agreement reflects the perceived value of social media marketing in achieving business objectives.

## 4.2 Statistical analysis:

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. Gender	100	1	2	1.32	.469
2. Age	100	1	4	2.32	.695
3. What is your current job title?	100	1	4	2.19	.800
4. How long have you been working in your current role?	100	1	5	2.55	.892
5. How long have you been working in the consumer IT industry?	100	1	5	2.72	.933
6. Which consumer IT sub-vertical does your company primarily operate in?	100	1	5	2.62	.982
7. How long has your company been using social media for marketing purposes?	100	1	5	2.60	1.073

8. Which social media platforms does your company use for marketing? (Select all that apply)	100	1	18	7.12	4.321
9. How frequently does your company post content on social media?	100	1	5	2.24	.911
10. What type of content does your company primarily post on social media?	100	1	5	2.00	1.035
11. Does your company use targeted social media strategies based on specific customer segments?	100	1	5	1.66	1.103
12. What percentage of your company's total marketing budget is allocated to social media?	100	1	5	2.29	.967
13. How has your company's social media marketing budget changed over the past 5 years (2017-2022)?	100	1	5	2.09	.975
14. Which financial performance indicator has been most positively impacted by your company's social media marketing efforts?	100	1	5	2.44	1.048
15. How has your company's revenue changed over the past 5 years (2017-2022)?	100	1	5	2.11	.942
16. How has your company's profitability changed over the past 5 years (2017-2022)?	100	1	5	2.04	.887

17. To what extent do you agree with the following statement: "Our company's social media marketing efforts have significantly contributed to our financial performance over the past 5 years (2017-2022)."	100	1	5	1.99	.823
Valid N (listwise)	100				

The survey had 100 respondents, with a gender distribution skewed towards males. The mean of 1.32 indicates that a significant majority (68%) were male. Respondents predominantly fell within the 25-34 age range (60%), with a mean of 2.32. This suggests that the surveyed professionals are relatively young, reflecting a dynamic workforce in the consumer IT industry. The average job title score was 2.19, with most respondents holding positions of Vice President of Marketing (54%) or Director of Marketing (22%). This shows that the survey captured insights from mid to senior-level marketing professionals (Ojanperä, 2022).

The mean tenure in the current role is 2.55, indicating most respondents have been in their current positions for 1-3 years (44%) or 4-6 years (37%). This suggests a moderate level of experience in their roles. The mean score of 2.72 shows that respondents typically have 4-6 years (42%) or 1-3 years (37%) of experience in the consumer IT industry. This indicates a well-experienced sample in the field. With a mean of 2.62, the data reveals a diverse representation across sub-verticals, primarily in Gaming (47%) and Smart Devices (29%). This variety provides a comprehensive view of the consumer IT landscape (Alam et al., 2017).

The mean of 2.60 indicates that most companies have been using social media for marketing for 1-3 years (46%) or 4-6 years (27%). This points to a relatively recent but growing adoption of social media strategies. On average, companies use around 7.12 different platforms, reflecting a broad and varied approach to social media marketing. Major platforms include Facebook, Instagram, and Twitter (Blank & Lutz, 2017). The mean posting frequency score of 2.24 suggests that most companies post content 2-3 times a week (59%), highlighting a proactive approach to engaging their audience.

**Type of Content Posted** The mean score of 2.00 indicates that informational content (51%) and promotional content (32%) are the primary types of posts. This mix emphasizes the importance of both engagement and direct marketing (Lee et al., 2018). When the collective scores were aggregated and the responses were categorized, the mean score obtained was 1.66, the inclination towards the use of targeted strategy is much higher with the majority of the respondents supporting the use of targeted strategy based on demography (63%) and behavior (22%). This shows why it is all the more important that marketers develop specific strategies for social media.

This results in an average of 2 on the budget allocation score. 29 shows that 44% of companies report that their social media marketing budget falls between 10-24% and 26% report that their social media marketing budget is between 25-49%. This highlights the growing financial

commitment to social media channels (Keegan & Rowley, 2017). The mean score of 2.09 indicates that most companies have slightly increased (55%) their social media marketing budget over the past five years, reflecting the rising importance of social media in marketing strategies.

The mean score of 2.44 shows that companies generally perceive sales (40%) and profitability (26%) as the most positively impacted financial metrics due to social media marketing efforts. The average score of 2.11 suggests that most companies have seen a slight increase (63%) in revenue over the past five years, indicating a positive trend correlated with social media marketing efforts.

With a mean score of 2.04, the data indicates that profitability has slightly increased (64%) for most companies, reflecting the financial benefits of effective social media strategies. The mean score of 1.99 reveals that a majority of respondents (66%) somewhat agree that social media marketing has significantly contributed to their financial performance, underscoring the perceived value of these efforts (Schiller, 2024).

### 4.3 ANOVA test:

#### ANOVA

		Sum Squares	of df	Mean Square	F	Sig.
14. Which financial performance indicator has been most positively impacted by your company's social media marketing efforts?	Between Groups	11.290	4	2.823	2.754	.032
	Within Groups	97.350	95	1.025		
	Total	108.640	99			
15. How has your company's revenue changed over the past 5 years (2017-2022)?	Between Groups	13.453	4	3.363	4.298	.003
	Within Groups	74.337	95	.782		
	Total	87.790	99			
16. How has your company's profitability changed over the past 5 years (2017-2022)?	Between Groups	15.607	4	3.902	5.956	<.001
	Within Groups	62.233	95	.655		
	Total	77.840	99			

#### ANOVA

		Sum Squares	of df	Mean Square	F	Sig.
15. How has your company's revenue changed over the past 5 years (2017-2022)?	Between Groups	18.263	4	4.566	6.239	<.001
	Within Groups	69.527	95	.732		
	Total	87.790	99			
16. How has your company's profitability changed over the past 5 years (2017-2022)?	Between Groups	14.280	4	3.570	5.336	<.001
	Within Groups	63.560	95	.669		
	Total	77.840	99			
12. What percentage of your company's total marketing budget is allocated to social media?	Between Groups	29.236	4	7.309	10.960	<.001
	Within Groups	63.354	95	.667		
	Total	92.590	99			

## ANOVA Analysis

### Impact of Social Media Strategies on Financial Performance Metrics

The ANOVA analysis was conducted to examine the impact of targeted versus mass-market social media strategies on various financial performance metrics.

**Financial Performance Indicator (Q14)** The results indicate a statistically significant difference ( $F=2.754$ ,  $p=0.032$ ) between groups using different social media strategies. This finding suggests that the type of social media strategy—whether targeted or mass-market—affects which financial performance indicators (such as revenue, sales, and profitability) are positively impacted. Companies employing targeted strategies are likely to see more specific and measurable improvements in these key areas (Schiller, 2024). This underscores the importance of personalization and targeted engagement in maximizing the financial benefits of social media marketing.

**Revenue Change (Q15)** The ANOVA results ( $F=4.298$ ,  $p=0.003$ ) reveal a significant impact of social media strategies on revenue changes. According to the data shown, targeted social media strategies reveal higher gains in revenues compared to the general approach (Ojanperä, 2022). This discovery indicates that the targeted approach works well towards generating revenues, which is most probable because it is a more efficient way of reaching out and retaining the intended consumers.

**Profitability Change (Q16)** The results for the analysis of the changes in profitability are as follows:  $F=5.956$ ,  $p<0.001$ . These findings suggest a significant impact of social media strategies on profitability. The findings indicate that it is through the use of targeted strategies that

organizations record larger boosts in profitability clearly showing that these strategies are less costly and more effective in enhancing business profits (Schiller, 2024). This important result underlines the importance of purposeful and effective social media advertising for the overall improvement of competitiveness and profitability.

### **Impact of Consumer IT Sub-vertical on Financial Performance Metrics**

Further testing of the first ANOVA led to the examination of the influence of the primary consumer IT sub-verticals on other financial performance indicators.

**Marketing Budget Allocation (Q12)** Sum of the square between groups = 419. 014 and sum of squares within groups = 78. 986 Therefore  $F = 10. 960$  and  $p < 0. 001$ ; there is a significant difference in the percentage of the marketing budget allocated to social media across different consumer IT sub-verticals. This means that the first sub-vertical has a profound impact on the level of social media marketing investment (Fisher, 2017). For instance, those in the Gaming and Smart Devices sub-verticals may spend a higher proportion of their total marketing budget on social media in comparison with semiconductor manufacturing firms due to the sector-specific nature of marketing goals and objectives.

**Revenues Change (Q15)** As the findings show ( $F = 6. 239$ ,  $p < 0. 001$ ), the consumer IT sub-vertical influences the changes in revenues. This finding indicates that the contribution of social media marketing to the desired revenue growth is not constant across sub-verticals. It is also important to note that in some sub-verticals, companies may derive even higher revenue uplift through the application of more effective or creative social media marketing methods that are geared towards the unique character of the market (Chinen-Moore, 2020).

**Profitability Change (Q16)** The F-statistic computed for the profitability change is 5. 336 with a p-value of  $<0. 001$ , which means there is a statistically significant difference in the sub-verticals. This means that the extent to which social media marketing has an influence on profitability in the context of the consumer IT industry is not the same across the board (Schiller, 2024). When comparing the impact of social media on sub-verticals, companies in certain sub-verticals may experience a greater level of profitability improvement than others, which can be attributed to the improved match between social media strategy and business model and/or customer behavior.

Thus, the collected demographic data along with the descriptive statistics and AMOVA enable the understanding of social media marketing in the context of the consumer IT industry and its financial effects. The results show that some social media strategies are still effective but there are variations in these dependability on different sub-verticals (Ojanperä, 2022). These insights are important in the current world where businesses seek to enhance their social media marketing strategies and hence better financial performance.



## **Chapter 5: Findings and discussion:**

### **5.1 Impact of Targeted Social Media Strategies on Financial Performance**

#### **5.1.1 Revenue Growth**

The results of the study show that the extent of social media targeting is positively related to incremental revenues in consumer technology sub-verticals. The F ratio calculated was 4.298 with a significance level of 0.003, which means that companies that used targeted communication strategies achieved higher incremental revenues compared to those that adopted mass-communication tactics. This is in line with previous research which established that social media advertising particularly in the gaming industry is effective in increasing engagement and purchases in the games.

Remarkably, 63% of the companies said that their revenues slightly increased over the past five years, while 20% of them indicated that their revenues have grown significantly. This trend indicates that socially promoted content and social media interaction are efficient ways of promoting sales and increasing market access. The gaming sub-vertical, in particular, demonstrated the closest positive connection between targeted strategies and revenue increases, which could be because of the target customers' high level of engagement and their digital literacy.

#### **5.1.2 Profitability Improvements**

It is also evident from the analysis that social media strategies have a statistically significant influence on the changes in profitability;  $F=5$ . Organizations utilizing the concentrated strategies recorded increased enhancements in profitability than those who used the broad-market strategies. This is in line with the studies of, those who investigated the impact of personalized content on customers' loyalty and customer lifetime value in the SaaS sector.

Among the companies included in the survey, 64 percent noted a marginal improvement in the profitability levels while 22 percent noted a large improvement in profitability levels. The smart devices sub-vertical stood out as the most profitable where the efficiency of the product recommendation algorithms and features on social platforms may be important.

#### **5.1.3 Sales Performance**

Among all the financial performance indicators, sales were most often reported to benefit most from the promotional use of social media, with 40 percent of the respondents saying that it is the primary area that stands to gain. This finding supports the earlier observations regarding the effectiveness of social media initiatives in achieving business results as mentioned.

The ANOVA results are  $F = 2.754$ ,  $p = 0.032$ , which means that there is a statistically significant difference between the groups that use different social media strategies, meaning that the approach to the increase in sales performance is much more targeted and produces tangible results. This corresponds with the Resource-Based View (RBV) theory of the firm that argues that valuable and rare resources which include targeted social media capabilities can result in competitive advantage.

## **5.2. Resource Allocation and Marketing Mix Optimization**

### *5.2.1 Budget Allocation Trends*

Among all the financial performance indicators, sales were most often reported to benefit most from the promotional use of social media, with 40 percent of the respondents saying that it is the primary area that stands to gain. This finding supports the earlier observations regarding the effectiveness of social media initiatives in achieving business results as mentioned.

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### *5.2.2 Optimal Resource Distribution*

This means that the total marketing budget as well as the proportion of marketing investment between the two platforms; social media and other more conventional media differs according to sub-verticals. Thus, gaming and smart device companies spend a relatively larger amount of their budget on social media than semiconductor companies. This accords with the work, where the author stressed the need to apply marketing mix modeling depending on the industry.

In this regard, the study brings into perspective the need for technology marketers to put into practice resource allocation evidence-based frameworks to fill the gap pointed out. The results imply that it is unwise to make across-the-board budgeting allocations and that the usage of marketing mix elements depends on factors such as target market appeal, product life cycle, and competition.

### *5.2.3 Platform Preferences and Effectiveness*

As for the specifics of marketing, the most popular among the surveyed companies were Instagram with 70%, and Facebook with 57%. This also supports the findings, which stated that technology marketing is highly dependent on the use of non-textual content.

Still, the efficiency of these platforms depends on the sub-verticals. For example, a LinkedIn (24%) report has revealed that it had better engagement rates for B2B companies operating in the semiconductor and SaaS industries. This affirms the notion that TAM postulates that the choice of the platform should correspond with the characteristics and behavior of the target group.

## **5.3. Customer Persona Analysis and Targeted Strategies**

### *5.3.1 Demographic Targeting*

It is established that demographic targeting is the most commonly used criterion with 63% of companies using it. This corresponds with the work, that postulated that demographic information enhances the targeting of the right clientele on social media platforms.

However, it is necessary to point out that the application of demographic targeting is effective unevenly at sub-verticals. Thus, psychographic targeting (22%) had a higher effectiveness in the gaming industry since personality characteristics and Lifestyles are determining factors when it comes to buying products. This finding supports the idea that there is a need for deeper analysis of the customer personas in technology marketing as pointed out.

### *5.3.2 Behavioral Insights and Personalization*

Companies that use behavioral targeting (7%) reported higher engagement levels and conversion rates as concluded from the analysis. This conforms with the Customer Lifetime Value (CLV) model, which focuses on the analysis and forecast of the customer's behavior to achieve sustainable revenue generation.

The research points out that there is a lack of the latest approaches to the customer persona in the technology industry. Although 66% of the respondents somewhat agree with the statement that social media marketing has greatly impacted their financial performance, more can be done to apply behavioral knowledge for better strategies.

### *5.3.3 Content Strategy and Engagement*

The results reveal that informational content is the most popular content being posted by technology companies at 51% while 32% of the companies post promotional content. However, the study finds a lack of the use of user-generated content and entertainment-based posts, which have very high engagement in other industries.

Out of all the businesses that posted content 2-3 times a week (59%), the engagement level was identified to be higher than that of businesses that posted content daily (17%). This means that the quality and relevance of the content may be more important than the quantity of the content thus supporting the finding on the importance of content planning in social media marketing.

## **5.4. Sub-vertical Specific Insights**

### *5.4.1 Gaming Sector*

The result for the gaming sub-vertical showed that it was the most developed in regards to the use and efficacy of social media marketing. The survey shows that this sector has 47% of the respondents, and the study discovers that gaming firms are likely to deploy specific and dedicate a large proportion of their marketing budget to social media.

In the case of the gaming sector, the success of targeted strategies is supported by the findings, which pointed out that personalized social media advertising increases in-game purchases. The study also shows that gaming companies are more inclined to use new trends including live streaming and short-form videos as highlighted.

#### *5.4.2 Smart Devices*

Smart devices sub-vertical firms (29% of respondents) demonstrated a high level of proficiency in using social media to establish product demonstrations and features. The visual characteristics of such sites as Instagram and YouTube were especially useful for this type of business, thus confirming the hypothesis about the significance of visuals in advertising technologies.

This paper establishes the fact that smart device firms incorporate social commerce strategies as seen in the increasing significance of the trend noted above. However, the analysis also describes some issues concerning data privacy and security, especially concerning IoT devices.

#### *5.4.3 Semiconductor and B2B Sectors*

Specifically, the semiconductor sub-vertical, which is involved in the manufacturing of electronic components (11% of respondents), and other B2B-oriented industries had a different picture of social media marketing. These companies were more likely to be active on LinkedIn and less likely to share self-promotional content, but instead more likely to share thought pieces.

It is found that the B2B technology sector has significant issues related to the measurement of the benefits of employing social media, mainly because the business deals are complex and long, and involve more than one decision-maker. This correlates with the findings as the latter pointed to the lack of B2B SM marketing-specific metrics and frameworks.

### **5.5. Emerging Trends and Future Directions**

#### *5.5.1 Live Streaming and Short-form Video Content*

The research also shows that there is a rise in the use of live streaming and short-form video in all sub-verticals of technology. The same trend is also recorded by Revella (2015) who pointed to the growing use of such formats for product presentation, for answering the questions, as well as for the behind-the-scenes materials.

However, the analysis also reveals issues regarding the creation of interesting and effective content in these new formats, especially for companies in more conventional B2B industries. The findings imply that there is a requirement to skill up and invest appropriately to be able to capitalize on these new trends.

#### *5.5.2 Social Commerce Integration*

The trend of social commerce is gaining value as a factor that is important for the development of the business and is highly relevant for the sub-verticals of smart devices and consumer electronics. This correlates with the observations on the growing incorporation of e-commerce elements into social media sites.

However, the study does show areas of concern that are trust and security in social commerce transactions. As a result, there are several challenges that technology marketers should consider to employ social commerce optimally and these include.

### *5.5.3 Data Privacy and AI Ethics*

Some of the emerging issues that are brought out in the analysis include data protection and the role of ethics in AI in social media marketing. This is in line with the observations on the rising concern and scrutiny of the consumer on the collection and processing of their data.

This paper shows that there is a gap in the technology companies to implement stringent data protection standards and general ethical protocols concerning AI marketing campaigns. This aligns with the suggestions made on the requirements of clarity, approval, and safeguarding consumers' information as a way of enhancing consumer confidence.

## **Chapter 6: Conclusion**

This paper offers a systematic review of the literature to understand the effect of specific social media marketing strategies on financial outcomes within the sub-sectors of consumer technology. The study shows that there is a strong and positive correlation between the targeted strategies and revenue growth. The ANOVA result ( $F=4.298$ ,  $p=0.003$ ) means that the companies, that used the targeted approach, reported higher revenues than those companies that used the mass-market strategies. Also, the research establishes that social media strategies have a statistically significant relationship with changes in profitability ( $F=5.956$ ,  $p<0.001$ ) in organizations using targeted strategies experiencing greater rises in profitability.

The most identified financial performance that was positively affected by the social media marketing was Sales followed by 40% of the respondents. This finding further supports the actual value that social media strategies can bring to the table, in terms of business impact. The analysis also indicates marked differences in the distribution of marketing expenses by consumer IT sub-verticals ( $F=10.960$ ,  $p<0.001$ ), suggesting that the field's best practices should be tailored to these sub-verticals.

The most important criterion utilized in these strategies was demographic targeting, noted by 63 percent of the companies. However, the first approach has a different efficiency depending on the sub-verticals, which indicates that there is room for deeper analysis of the personas. Among all the sub-verticals, the 'gaming and smart devices' sub-vertical had the highest social media marketing adoptions and responses while sectors such as 'semiconductor' had markedly different strategies.

The study also revealed future trends including live streaming and short-form video, social commerce, and data privacy, and AI ethnicities. These trends are beneficial and risky for technology marketers depending on how they adapt to the new trends in the market.

From a theoretical viewpoint, this research adds value to the academic literature by enriching the TAM; fine-tuning the RBV in the context of social media capabilities; incorporating social media metrics into CLV models; and leveraging SIT to explore brand communities and influencer roles in the promotion of technology products.

## **6.1 Future Directions**

While this study provides valuable insights, several limitations should be acknowledged, pointing to opportunities for future research:

**Cross-Cultural Analysis:** For future research, it is suggested to focus on the ways cultural factors affect the outcomes of specific SM activations in various international markets. It might help to understand how to extend or localize some of the strategies for foreign market advancement.

**AI and Personalization:** Future research focusing on the effects of personalization from the ambit of artificial intelligence on customer responses as well as financial results in technology marketing will be relevant as these technologies are developed. This might be research concerning chatbots, predictive analysis, and automated writing.

**B2B Social Media Metrics:** Thus, there is a lack of specific frameworks and means for the quantitative assessment of social media ROI in B2B technology environments. Future research could then attempt to develop and test these metrics for different areas of B2B technology markets.

**Integrated Marketing Communication:** One of the directions of further research is the analysis of how social media can be used in combination with other communication channels to achieve the best results. It can include the examination of the interconnection between social media and conventional approaches to marketing within the technology industry.

**Ethical Considerations:** Thus, it is vital to examine the consequences of data privacy practices, as well as the use of ethical AI, on brand credibility and customer allegiance in the technology industry over the long term. Future work might look into how it is possible to use the data while at the same time protecting customers' privacy and the impact of open data practices on consumer trust.

## **6.2 Recommendations**

Based on the study findings, several key recommendations emerge for technology marketers:

- **Develop Comprehensive Persona Profiles:** Although demography is one of the most popular targeting methods, including psychographic and behavioral data into personas can create more comprehensive and efficient targeting strategies. It is recommended that

marketers use data and AI to understand patterns and choices and make it a point to update personas for new market and consumer trends.

- **Optimize Resource Allocation:** Because of the differences in the optimal marketing mix by sub-verticals, firms need to employ sound marketing mix modeling approaches, monitor the effectiveness of the various marketing elements, and make necessary changes. Thus, more attention should be paid to the peculiarities of each sub-vertical when it is necessary to decide on the distribution of the budget for receiving the maximum result in terms of ROI.
- **Leverage Emerging Content Formats:** Technology marketers must focus on building their skills to generate content in live streaming and short-form video. Creating a content mix of promotional, informative, and fun content and trying out the platform features gets the most out of the audience.
- **Prioritize Data Privacy and Ethical AI:** Over the implementation of these recommendations, companies should establish and communicate their data collection and usage policies; incorporate strong security standards to protect customers' data; create codes of ethics guiding the AI-based marketing campaigns; and, in the process, inform customers about data practices and allow them to regulate their information.
- **Embrace Social Commerce:** The adoption of e-commerce should be incorporated in the social media plans and strategies of technology companies where necessary, trust and security issues in social commerce, and the creation of proper user experiences that help in the purchase processes within social platforms.
- **Remain Agile and Adaptive:** Thus, technology marketers have to be adaptive in their social media approach as the digital environment changes. Therefore, by using deeper customer persona analysis, better resource management, and tackling new challenges, social media can become a powerful tool for increasing the level of engagement, sales, and the company's overall success.

Thus, with proper approaches to the usage of big data, recent technologies, and ethical issues, the technology sector's social media marketing will continue to evolve successfully. Thus, by incorporating these elements, technology marketers can build rich relationships with audiences, foster innovation, and establish long-term growth in a rapidly growing world of competition. Thus, further research and change will be important in maintaining efficient and sensible SMM policies in the technology industry.

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Appendix:

Open ended questions:

How does your company tailor social media content and interaction to technological sub-vertical consumer personas like PC makers, gaming, smart gadgets, semiconductor manufacturing, and SaaS?                      Important                      factors                      and                      obstacles?  
How do personalised social media marketing methods compare to mass-market ones in efficacy

and ROI in your technological sub-vertical? Can you provide examples or case studies? Your company measures social media marketing and financial effectiveness with what KPIs? How are these affected by consumer segment or campaign? How does your company allocate social media and traditional marketing funds? What influences this choice? Do you optimise marketing resource allocation across platforms and channels using marketing mix modelling or other methods? You learned what? Use customer persona profiles in social media marketing. Your data sources and analytics methodology? A successful social media campaign targeting a technological sub-vertical customer persona? Why did it work? How will live streaming, short-form video, social commerce, and AI/machine learning impact your technological sub-vertical social media marketing? Social media marketing data privacy and security at your company? How to customise while protecting customer data? Which best practices or lessons have you learned for technology marketers improving social media strategy and investments?