

ANALYSING DIGITAL TRAILS FOR TARGETED DIGITAL MARKETING

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Dedication

I dedicate this study to my mother (Christy Jose) and Father (Prof. Jose Mathew) who ensured I could resume my studies despite my circumstances and my Wife (Dr. Syamapriya Thampi) who supported me to pursue my studies, research and education.

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ABSTRACT

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Digital trails offer significant potential for enhancing marketing strategies, though their utility in Switzerland is often limited by strict data privacy regulations. This study aimed to establish a framework for leveraging digital trail analysis to provide startups with a competitive marketing advantage. Using an exploratory research design and mixed-methods approach, data were collected via structured questionnaires and semi-structured interviews. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative responses underwent thematic analysis.

Findings indicate a strong positive correlation between digital trail analysis and improvements in return on investment (ROI), customer engagement, and overall marketing effectiveness. The study also found that incorporating personalization and relevance into digital marketing strategies significantly strengthens this relationship. Furthermore, integrating consumer

psychology and product market research allowed deeper insights into customer motivations, enabling improved targeting, segmentation, and product innovation.

Competitor feedback and content marketing strategies were shown to enhance marketing approaches by aligning better with customer needs and optimizing resource allocation. These insights suggest that data-driven decision-making, underpinned by digital trail analysis, can play a pivotal role in elevating the performance of Swiss startups.

In conclusion, the research supports the use of digital trail analysis as a practical and effective tool for market analysis in environments with stringent data constraints. Startups that adopt goal-oriented digital trail strategies are likely to experience measurable improvements in ROI, customer engagement, and marketing effectiveness. Future research could benefit from a larger sample size, particularly by including more marketing professionals, to validate and expand on these findings.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Previous research has given emphasis in differentiating between "digital footprints" and "digital trails" (Feher et al., 2021). Digital footprints refer primarily to individual digital signatures that users create knowingly or unknowingly when interacting online such as website clicks, page views, social media engagements, search queries, online transactions, and content consumption (Priyono et al., 2020). On the other hand, "digital trails" represent aggregated pathways and systematic analytical interpretation of multiple digital footprints, providing businesses with cohesive insights on consumer behaviour, interests, and preferences over time (Kraft et al., 2022; Peter et al., 2020). Throughout this study, "digital trail" has been specifically used to indicate the collective analysed data drawn from multiple individual digital footprints, reflecting strategic insights derived from data analytics rather than specific isolated user actions. Businesses can target certain groups with their marketing efforts by analyzing digital trails derived from social media's vast accumulation of individual digital footprints (Kraft et al., 2022). To maximize this opportunity, examine people's online actions and profiles across many sites. Companies that effectively analyze digital trails derived from digital footprints will better serve customers. Swiss enterprises face major challenges, opportunities, and relevance in this digital footprint evaluation case study for focused digital marketing.

Every internet activity leaves a trail of identifying information. Queries, clickstreams, social media, and transactions leave digital footprints (Priyono et al., 2020). Analysis of digital trails (aggregated data derived from these digital footprints) can assist organizations in understanding this data deluge for digital marketing. Previous studies empirically demonstrate that digital footprint data, when analyzed collectively through digital trails, helps organisations decode customer preferences and significantly improve marketing effectiveness and targeting accuracy (Priyono et al., 2020; Kraft et al., 2022). Successful digital marketing in Switzerland requires digital trails analysis derived from analyzing digital footprints. Clickstream data can help firms

understand their customers and improve their advertising. Customized digital services connect businesses and customers. Digital trail analysis for digital marketing in Switzerland is difficult to start. Large internet data volumes are a challenge. Businesses will need cutting-edge technology and analytics to handle this data flood (Peter et al., 2020). For the Swiss digital footprint study, accurate, high-quality, protected data is necessary. To retain user confidence and comply with Switzerland's Federal Act on Data Protection, legitimate consent must be sought before collecting or processing personally identifiable information. Analyzing clients' digital trails derived from their individual digital footprints may enhance advertising, customer service, product development, cost assessment, and resource allocation. Today's connected world suggests that Switzerland's digital marketing efforts would benefit from digital footprint studies. Customized promotional activities have the potential to maintain and gain customers by examining digital traces. Some of the problems that Swiss firms encounter are volume of data and security. This elaborate case analysis demonstrates that Swiss enterprises require, face, and enjoy the benefits of exploring the digital trail.

Digital marketing and the analysis of digital trails (generated based on the digital footprint of the users) are vital in many ways. Initially, it can assist companies in acquiring information about the customers (Gebauer et al., 2020). This is because digital trails and their analysis may give marketers the opportunity to learn more about the customers through their online trail of digital footprints (visions on the site, purchases, and reading electronically produced content) which provide a better insight into the customer. Through this valuable knowledge of the needs of the consumers, the marketers are able to be more selective in approaching specific customer groups through more attractive strategies hence getting the customers more involved and raising the conversion rates. The second advantage of digital footprint-based digital trail is the increased precision of targeted advertisement (Gebauer et al., 2020) since through analyzing such journeys businesses can customize advertising to individual buyers. As a result, individualized services increase revenue, satisfy customers, and leave them brand loyal. Business can create customer loyalty through satisfying the customer's needs as well as their interests. Lastly, the analysis of digital trails based on the combination of digital footprints can enhance the marketing performance. This is because reply and engagement analytics could assist marketers to analyze

strategies, channels, and messages. This data-driven approach may enhance efficiency, allocation of funds, and ROI in the campaign. Therefore, through determining the success of their promotional activities, businesses can perfect their strategy.

Analysis of digital trails using the digital footprints of every person has advantages and disadvantages. Privacy of sensitive data is hard to maintain. For instance, Buehler et al. (2019) indicated that analysis of the digital trails involves processing of personal data, which has privacy and security concerns. Data protection laws and well-guarded security systems should safeguard the personal information of customers (Buehler et al., 2019). The only viable way to achieve trust and compliance is user privacy and informed consent prior to collecting and analyzing data. Another issue of digital trail analysis is complexity and the volume of individual digital footprints (data points). The emergence of digital touchpoints and online platforms makes businesses accumulate excessive amounts of data that should be gathered, stored, and examined. Sophisticated analytic tools and processes should be developed to process and understand this data and elicit useful insights. Combining data across sources and making sure they are good is not easy as well. One can leave a digital trail on websites, social media, smartphone apps and in real life. Harmonization of these many sources of data can become a challenging task regarding inconsistencies and gaps. Companies will have to merge and cleanse their information to have confidence in digital trail analysis findings. Thus, some digital marketing strategies based on the analysis of digital trails (aggregations and summaries of digital footprints) can be useful. Firstly, it can lead to the improvement of business conversions.

Customizing promotional messages and marketing products to individual customers' needs and interest may increase sales. Moreover, deepening customer digital footprint analysis increases engagement (Gupta et al., 2020). Knowing this, organizations have a chance to serve clients better by changing according to their interests and needs. This personalized strategy enhances customer satisfaction, participation, and loyalty (Gupta et al., 2020). Lastly, research digital footprints on financial planning since the research of digital trails (for example, aggregations of individual digital footprints) enables a firm to optimize its advertising expenditure by correctly identifying appropriate client subgroups. Organizations can produce more and reduce the expenses by

concentrating on net productive clients. Digital advertising in the current competitive industry can be personalized with the aid of the analysis of client digital footprints. Collection and analysis of unimaginable volumes of web information can enable enterprises to learn more about their customer base, develop more focused marketing strategies, and more effectively improve the effectiveness of their campaigns (Desai et al., 2019). There are matters related to data privacy, scale, integration that must be answered for ethical and the success of the digital trail analysis. Thus, the startups in Switzerland who incorporate the use of digital trail analysis productively can enhance the relationships, conversion rate and adapt to the digital transformation of the effectiveness on marketing.

1.2 SCOPE OF THE STUDY

The research aims to change the society of systematic online marketing by deeply analysing digital tracks in the Swiss online environment. The study is devoted to online audiences in Switzerland and their search behaviour, technological consumption, and spending time on social media (Buehler et al., 2019). The study also addresses the ethical dilemmas in data collection and personal protection as a way of ensuring the effective and rightful utilization of individual information. The study will help open the way to more specific marketing in the future by unravelling the preferences, shopping habits, and interests of the Swiss consumers through the analysis of their digital traces.

The research sheds a special light on the cultural diversity of Switzerland and language diversity in the country and enables one to develop advertising campaigns that do not only sell the Swiss values but are also highly appealing to the diverse citizens of Switzerland. It addresses the topic of optimization of digital marketing, especially how marketing work may be refined based on the data which may be gathered according to the activity on the internet. This work is an attempt to blaze a new path toward the enhancement of the efficacy of digital marketing campaigns in Switzerland combining the examples of Swiss companies that have already managed to use digital trail analysis to their advantage with the analysis of the tools and technologies of data analysis that may be of interest in this situation.

1.3 RESEARCH PROBLEM

Digital trails are data traces that people or organisations leave behind when they use digital technologies and systems (Allmann and Radu et al., 2023). According to Karunarathna et al. (2024), digital trails may be a source of opportunities as well as challenges in research depending on the methods used to collect, analyse and safeguard the same. Consumers in the digital age create vast digital footprints through their online activities, such as search queries, interacting through social media, browsing histories, and online buying habits (Aggarwal et al., 2024). According to Shankar et al. (2022), the digital trails provide a relatively rich supply of understanding for marketers looking to target and personalise their efforts, and they contain insightful data that may be used for targeted digital marketing. Switzerland has been encountering severe issues with digital trails with several negative effects on the startup businesses such as on their data privacy concerns, fraud and financial mismanagement risks, and regulatory scrutiny and compliance burdens. The main reasons why digital trails have issues delivering effective marketing and customer engagement, especially for Swiss entrepreneurs is that Switzerland is a country with strict data privacy laws and the restrictions on how businesses collect and utilize digital consumer trails that limit personalized marketing (Goanta et al., 2018). As an example, this study depicted that certain Swiss fintech start-ups are unable to monitor the user behaviour due to the data protection regulations and, therefore, they are not capable of personalizing the fin-products ads. According to Torres et al. (2021), many consumers do not pay sufficient attention to the aspect of digital trail, which can explain poor engage in targeting ads of a luxury watch. This study also noted that a luxury watch company in Switzerland tested the use of focused digital advertisements found that many consumers opted out of tracking implying that contact with the advertisement was minimal. Moreover, Schöni et al. (2017) mentioned that Swiss market is exemplified with diversity of consumer preferences which makes this edition challenging to the developing of uniform digital marketing strategies. Digital trails are not always tied to actual consumer interest and therefore would lead to false decisions in marketing (Basil et al., 2024). An example is that a retailer attempting to appeal to Swiss consumers with a different nationality other than those of different regions of French speaking or German speaking experienced different reaction to the digital trends thus needed a lot of localized marketing (Basil et al., 2024). Besides, despite general awareness of

the possible benefits of utilizing digital trails in targeted digital marketing, some of the research studies have reported that their impact on many domains including the marketing effectiveness of several businesses as well as customer interaction remains troublesome and need to be addressed in empirical studies in the case of Swiss entrepreneurs. As an example, Ritz et al. (2019) stated that even though digital trail analysis is a good instrument of marketing effectiveness, a challenge occurred by efficient assessment and analysis of the massive amount of information to form personalised and thus efficient marketing strategies. In addition, Hakimi et al. (2021) demonstrated that the means to obtain digital trails and utilize them to engage in target marketing has created various ethical and privacy issues. This is because the users do not have information regarding the total extent of data collection and the limited control of data that can be applied to those processes. Furthermore, research by Sakas et al. (2023) has proposed that, although digital trail analysis has been adopted in most of the businesses in Switzerland as a tool influencing the customer engagement, start-ups are met by substantial technical and analytical difficulties in examination of the unstructured multiplatform digital trail information. This is because current data mining technology, machine learning software, and massive data management facilities are required to gainfully combine and test this tool in such operations. Nonetheless, the accurate comprehension of consumer reception toward digitally tracked marketing approaches constitutes essential knowledge for creating strong marketing effectiveness (Gupta et al., 2020). However, this research concluded that consumers might react in two different ways when exposed to personalized deals with relevant content where some experience positive emotions, but others develop negative feelings contributing to a negative impact on application of digital trail. Additionally, the research by Reddy et al. (2024) does not clearly show how marketing effectiveness and consumer engagement succeed when built from available digital trail data. Therefore, as shown in the investigations above, digital trail analysis is an essential tool that is adopted in various businesses' operations. Nevertheless, due to their generalisation, several studies, including Reddy et al. (2024), Nainaar and Masson et al. (2018), and Gupta et al. (2020) , had gaps in their study settings because it was also challenging to identify the specific type of digital trail that some of the involved studies looked at. In addition, considering several studies, such as Nkenfack Wandji et al. (2023) and Briedis et al. (2020), encompassed a variety of digital trail approaches in their research, it is challenging to ascertain how the overall digital trail analysis used in these different studies led to the marketing effectiveness independently. Furthermore, it is challenging to assess how much

digital trail analysis affects marketing efficacy. This is because the influence of digital trail analysis has not been statistically demonstrated in these studies. Additionally, the results of how the digital trail analysis affects business in terms of customer engagement and effectiveness of marketing strategies are also inconsistent. Finally, considering the range of methodologies utilised in the study literature discussed above, it can be challenging to choose the optimal methodology that produces the most accurate results. Consequently, the present research endeavor tries to address these gaps by conducting an exhaustive investigation to establish the extent to which the analysis of digital trails contributes to the improvement in the measurement of other comprehensive marketing data such as customer engagement, marketing effectiveness, and Return on Investment (ROI) in digital marketing.

1.4 PURPOSE OF RESEARCH

The major objective of this project was to develop a trustworthy method for analysing users' digital footprints for the purpose of consumer and market research (Shmatko et al., 2021). The method necessary for the development of a powerful online scraping engine is the collection of user data such as demographics, profiles, comments, and ideas (Wook et al., 2019). Information about a person's demographics, hobbies, preferences, and perhaps even psychological traits might be better understood when linked with other digital footprints left by the same people. Analysing digital footprints provides a basis for developing customer-centric message, positioning, and communication. Further, it builds a product ground up that resonates to the end user and relevant to the built user base since brands may create products that truly meet the needs of their target market if they take the time to learn about their consumer's likes, dislikes, and must-have characteristics. The chances of product success and customer happiness are both boosted by taking a user-centred approach. Tweak an existing product with consumer insights bringing forth a product, existing customers have been looking forward to: Businesses can satisfy the expectations of their current clientele by developing a product that considers their comments and suggestions. Step into the premium market space with ease and minimal spend: With this knowledge, firms may provide products and services that meet the needs of picky consumers without spending a fortune on advertising. Nonetheless, all these advantages were gained without surveying

consumers, markets, or products. Brands may save time and money by analysing digital footprints in depth to learn more about their customers and improve their marketing strategy based on what they discover.

1.5 SIGNIFICANCE OF THE STUDY

The findings of the proposed research approach carry a substantial amount of weight because they have the ability to reduce Customer Acquisition Costs (CAC) while also giving useful insights into the market and consumers (Berman et al., 2022). Using this software, firms can get these kinds of insights in a matter of minutes, rather than investing a tonne of time and money on a large marketing team (Nair et al., 2021). This saves businesses time and money.

The analysis that is supplied by the research instrument makes it possible to attain success on a more advanced level. Businesses may be able to improve their positioning, hone in on their target audience, and increase the effectiveness of their marketing when they have research plans that are backed by data from the tool. When businesses have access to all of the information, they are able to improve their marketing strategies and stay one step ahead of the competition. It is anticipated that the performance metrics that will be generated via the strategic planning of digital marketing approaches in light of user and market data will be equivalent to those that will be generated through face-to-face sales. Businesses are able to obtain conversion rates that are comparable to those achieved through face-to-face contacts by making use of successful tactics offered by digital marketing. Businesses have the opportunity to increase their sales and their likelihood of being successful in the market if they modify their advertising to reflect the tastes of their prospective clients.

The results of this study have the potential to cause a revolution in the business world. We already know that inadequate market and consumer research is to blame for the failure of around 80% of enterprises, therefore the findings of this study might potentially change that. A company's chances of being successful can be considerably improved if it creates and makes use of a powerful research

tool that allows access to detailed information about the industry and its customers at a low cost to the company's advertising budget. New companies can save time and money by following the processes that are indicated by the research tool, rather than wasting time and resources on trial and error strategies that don't work.

This research is notable because it has the potential to provide organisations with a powerful research tool that helps cut Customer Acquisition Costs (CAC) while simultaneously offering vital insights into the market and its customers. Overall, the research is significant because it has this potential. These findings can be utilised to give a company a competitive advantage in the market, serve as a roadmap for future marketing initiatives, and produce results that are comparable to those obtained through in-person encounters (Rosenow et al., 2019). The findings of the study have a great deal of potential application, particularly for new businesses. This is because they could help businesses endure for a longer period of time and reduce their marketing expenditures, thus paving the way for greater long-term success.

1.6 RESEARCH AIM, OBJECTIVES, AND SIGNIFICANCE

1.6.1 Research Aim

This research was conducted with the overarching goal of laying the framework for the development of a powerful marketing instrument that provides an advantage to businesses through a comprehensive analysis of the industry and the purchasing patterns of target consumers supported by data (Miklosik et al., 2020). This study was conducted to provide insight into the critical subject of whether modern businesses really need cutting-edge technology to assist them better categorize their customers and target their advertising. Businesses might potentially improve their market standing and make more well-informed marketing decisions by adopting this shrewd marketing method.

Accurate market and consumer analysis are more important than ever in today's fast-paced corporate climate. According to Miklosik et al. (2020), data-driven techniques are increasingly important for improving decision-making. Access to modern technology for customer information

boosts competitiveness and market positioning (Kaur et al., 2021). As stated by Kaur et al. (2021), markets can be analysed in depth, new trends can be identified, comparative advantages can be measured, and previously untapped opportunities can be found.

Furthermore, this study agrees with a fundamental principle of consumer research. Ahmed et al. (2022) stress the importance of cutting-edge technology like natural language processing and sentiment analysis in gleaning relevant information from a variety of customer contacts. According to Lavuri et al. (2023), using this information to cater to clients' preferences and increase loyalty is a viable strategy. If you want to provide your customers with the kind of tailored content and service that wins their hearts and keeps them coming back, you need a data-driven strategy.

1.6.2 Objectives

- i. To evaluate whether amalgamating consumer psychology analysis with product market research helps to acquire consumer insights that inform data-driven marketing decisions.
- ii. To assess whether digital trail analysis has a relationship with the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing?
- iii. To determine the impact of personalization and relevance in digital marketing on the relationship between digital trail analysis and marketing effectiveness?
- iv. To conduct comprehensive analysis of competitor product feedback, identifying gaps in products and messaging, and formulating strategies to enhance brand offerings and marketing approaches.
- v. To construct a framework for a highly targeted marketing and lead generation software, rooted in the objectives mentioned above.

1.6.3 Research significance

This research highlights the importance of incorporating consumer psychology with marketing decisions to improve marketing tactics and customer engagement. Similarly, Ahmed et al. (2022) stress the significance of well-informed brand message and positioning and believe that customer insights are crucial to the development of effective communication strategies. Competition analysis is essential for bridging the gaps between product and message strategies, which is in line with the modern marketing literature's emphasis on adapting to shifting consumer preferences (Kaur et al., 2021).

1.7 MAIN RESEARCH QUESTION

What strategies can be employed to develop an effective consumer and market analysis tool utilizing internet-derived data in the Swiss startups?

Sub-Questions

- i. How can integrating consumer psychology analysis with product market research enhance the accuracy and effectiveness of data-driven marketing decisions in Switzerland?
- ii. What relationship exists between the digital trail analysis and the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing in Switzerland?
- iii. To what extent does personalization and relevance in digital marketing affect the relationship between digital trail analysis and marketing effectiveness in Switzerland?
- iv. How does a deeper understanding of consumer requirements improve brand messaging, communication, and positioning strategies in Switzerland?
- v. How does the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies enhance brand offerings and marketing approaches?

Generally, this study's goal is to create a state-of-the-art marketing structure that provides firms with data-driven insights for optimal strategic planning. According to Li et al. (2024), adaptability,

growth, and competitive advantage can be fostered in a fast-paced company environment through the incorporation of consumer psychology, market research, and competitor analysis into marketing strategy. The defined goals and research questions offer a thorough road map to accomplishing these vital results.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter delves into the theoretical and practical aspects of evaluating digital footprints for the purpose of targeted digital marketing. The analysis conducted in the given research is supported by the fact that there was a myriad of works done by numerous scholars, intellectuals, and experts, like Rudolph et al. (2021), Frederiks et al. (2015), Twist and Newcombe (2021) in both scholarly and industrial fields, whose works explored the topic of study widely. The aim will be to increase the understanding of the theoretical background of the present study by thorough analysis of already available literature (Kivunja et., 2018). Furthermore, Smela et al. (2023) stated that the literature search is conducted to define key terms and concepts that will serve in the research at hand. Moreover, investigating the approaches used by other researchers, one can now acquire quality information on the interrelation that exists between digital marketing and the study of the footprints. This section also gives an in-depth analysis of several theories which have been used as a base of the research. Finally, the chapter summary, the research gaps identified based on the research studies undertaken, and the conclusive information based on the complete literature section are shown as well.

2.2 THEORETICAL FRAMEWORK

2.2.1 Generational Theory

This study adopted the Generational Theory, created by van Twist and Newcombe (2021), which will help in handling the differences in digital behaviors among various generational groups, which is the identification and segmentation of the most effective market and marketing personalization. According to the principles of generational theory, the historical context of an individual can have a substantial impact on their attitude to life and the principles, in general (Okros et al., 2020). The study conducted by Okros et al. (2020) further stated that the generational theory implies that generations are unionized since they share common characteristics brought about by a social historical conditioning of their upbringing.

The generational theory has substantial implications for digital marketing. As an example, as per Okros et al. (2020), this theory can be used to provide behavioral insight since members of each generation behave differently regarding the use of the internet and the consumption of media content. Furthermore, Rudolph et al. (2021) have indicated that generational theory contributes to the content personalization in that it can help marketers in developing better messages in order to target certain age groups, thus increasing the level of appeal. In addition, this theory is important for platform optimization as it helps the businesses to know the different generations in order to select the right advertising platforms. Lastly, based on this theory, as indicated by, the generational information is helpful in predicting the consumers' behavior which in turn helps in developing the right strategies for the engagement.

As mentioned above, Generational Theory is a consumer behavior theory and as such it can be compared to the various theories. For instance, despite the fact that Generational Theory is used to categorise audiences according to their behavioral age, in a way beneficial for designing long-term goals for marketing teams, it can sometimes mask the differences between generations. Research by Frederiks et al. (2015) revealed the Theory of Behavioural Economics takes into consideration psychological inclination in consuming. However, in contrast to Generational Theory, Theory of Behavioural Economics gives much less attention to the long-term changes across generations. The model of TAM suggests that users adopt a technology based on the level of perceived usefulness and ease of use features (Muchran, and Ahmar et al., 2019). However, unlike generational theory, Lai and Hong et al. (2015) indicated that TAM does not include differences in response to digital technology adoption.

Thus, based on the aforementioned comparisons with other theories, Generational Theory is widely used in research examining how digital trails have contributed to marketing strategies over generations. Even so, Generational Theory contains a number of criticisms. For instance, Rudolph et al. (2021) indicated that this theory has oversimplification since it works under the assumption that there is a common identity within different generations. Furthermore, there is absence of empirical evidence that support the generational theory in the field of since some suggest that generational gaps are more of an overemphasis and that factors like socioeconomic status (SES)

are more relevant in this case. The rise in technological advancement has as the digital behaviors are constantly dynamic for a given generation than they are stationary across various generations. However, despite these criticisms identified above, Wook et al. (2019) indicated that in the context of digital marketing, generational theory enables organizations to understand the digital footprint, 'footprints' left behind by users in cyberspace, to design the marketing strategies of different generations. Therefore, the aforementioned Generational Theory was applicable to the current research since marketers in startup businesses can better their marketing effectively. Furthermore, these companies can use Generational Theory to comprehend how various customers of different generations use digital trails which as a result impact their engagement with the service of the involved business entities.

2.2.2 Social Network Theory

Georg Simmel (1858–1918) was the first to develop the Social Network Theory, which has origins in anthropology, psychology, and sociology and used it to examine how social interactions impact dynamics among groups and relationships. According to Borah et al. (2022), the social network theory is rooted in the structural principles put forth by notable sociologists like Georg Simmel and anthropologists who have extensively studied the intricate web of human interactions. This theory offers a complete framework for examining the dynamics of relationships. This theoretical framework incorporates connections that extend beyond human beings, encompassing relationships among individuals, animals, and even inanimate objects (Wang et al., 2023).

The Social Network Theory constitutes some implications for digital marketing. For instance, Mallipeddi et al. (2022) suggested that his theory is adopted in influencer marketing since the brands use the most important target nodes (influencers) in networks to broaden their spread. Mallipeddi et al. (2022) further indicated that Social Network Theory assists in viral marketing because content forms naturally from interlinked users, thus finding its way to increase brand visibility. In addition, Akar and Dalgic et al. (2018) stated that Social Network Theory helps in consumer trust & engagement as it offers peer recommendations within networks to strengthen the faith and decision of making purchases. Lastly, through application of Social Network Theory

Shah and Murthi et al.(2021) revealed that there is data-driven targeting since by capturing digital trails, marketers can determine key influencing relationships to optimize ad placement.

The Social Network Theory is comparable with other theories. Social Network Theory details the way influence propagates digitally. However, this theory has the weakness that it can overlook individual consumer psychology. In contrast to Social Network Theory, the theory of Behavioural Economics focuses on the psychological factors behind consumer decision-making. However, the theory of Behavioural Economics places less emphasis on network-based influence rather than the use of digital trail making it inappropriate to be used in the current research. Additionally, Technology Acceptance Model (TAM) offers the explanation of how users adopt the technology as determined by the features of ease of use and perceived usefulness (Ma et al., 2017). However, as Palaniswamy and Raj et al. (2022) indicated, unlike the Social Network Theory, TAM does not take social influence on adoption of digital marketing into considerations.

Another comparable theory was Engagement Influence Theory, which identifies the role of active user interaction (Rachmad et al., 2023). However, this theory has the weakness of being non-formalized in describing network effects and as result cannot be applied in investigating the contribution of digital trail analysis. Therefore, in comparison to discussed theories, Social Network Theory investigates how people's relations and their communication are shaped by involvement with networks (Dania et al., 2021). Therefore, these assertions are applicable in the present study which aims to investigate the intricate interdependencies inherent in social networks, with the purpose of uncovering the patterns, behaviours, and attitudes that arise within these networks.

Studies have provided some critiques of Social Network Theory. For instance, Hald and Spring et al. (2023) indicated that the theory is oversimplified as it assumes that the impact of the connections is equal, and therefore, completely ignoring different cases of influence. Furthermore, Jones et al. (2017) criticised the Social Network Theory in that it does consider data privacy despite digital trails having ethical implications about usage of consumer data. In addition, another critique

of Social Network Theory is that if there is rapid evolution of the platform, social networks change explosively, which makes it impossible while considering the long-term predictions (Hald et al., 2023). On the other hand, Małecka et al. (2022) indicated that despite Social Identity Theory explaining how social groups constrain the buyer behaviour, this theory is less relevant to the case of digital marketing in the field of start-ups. However, an investigation by Mirzaalian et al. (2021), refuted these criticisms by indicating that social network theory plays a pivotal role in the domain of digital marketing. This technology offers marketers a variety of tools that enable them to proficiently assess and interpret the sentiments and viewpoints conveyed by clients on social media platforms, consequently augmenting their capacity to comprehend and address customer feedback (Mirzaalian et al., 2021). These online marketing tools help to spread the word of marketing through the power of influence of others in their circles. Also, Akar and Dalgic et al. (2018) indicated that Social Network Theory can help in the commercial sphere of digital marketing to determine the mechanisms of information flow on social networks and the formation of consumer engagement and brand influence. Additionally, findings of a research conducted by Arora et al. (2020) consistently indicated that people who have the opportunity to exercise influence over others, often referred to as the ‘influencers’, have a significant source of power in various networks, which means that they become central figures in both the spread of information and the shaping of ideas. In accordance with the theory of social networks, Boustani et al. (2023) discerned that social ties can be visualized in the form of the nodes in a network each of which has a different task to perform. The above-mentioned nodes cannot be regarded as autonomous ones, but as a substantial part of the entire network structure, being connected by a range of different mechanisms (Boustani et al., 2023). Moreover, when marketers have a full grasp of the intricate mechanics behind the associations of larger network structure, they are able to position themselves strategically such that they can engage with the significant stakeholders and ultimately maximize the outcomes of their digital marketing campaigns (Su et al., 2023).

In the modern setting of digital marketing, successfully using the power of social networks to the fullest extent is required to maximize their potential (Vicente-Ramos et al., 2022). Moreover, it has been identified that sometimes consumers believe themselves to be closer to some brands, which have a strong connection to their sense of themselves, than to others (Zhu et al. 2020). The

concept can be identified from the social identity theory which states that any person possesses both social and personal identity. The role of social identity of brands is expressed in the business that one identifies with them. Consequently, the owner of a startup business must seek to develop products and services that the consumers can associate with. They can accomplish this by communicating with them on a regular basis to learn what they specifically need and how to provide value that the client can relate to and own improving their engagement (Zhu et al., 2020). Therefore, in the present research, there was integration of social network theory within the framework of digital trails for targeted digital marketing, which highlighted its important implications for understanding consumer engagement and developing effective digital marketing strategies.

2.3 EXAMINATION OF DIGITAL TRAILS FOR OPTIMIZED ONLINE ADVERTISING

The widespread adoption of digital technology has facilitated the smooth incorporation of conventional marketing channels with cutting-edge marketing communications (Chaffey et al., 2022). This section presents an overview of digital trails for targeted digital marketing, emphasizing the various components and significance of digital marketing throughout the discussion. Email marketing emerged as one of the initial forms of digital advertising and remains a highly efficacious approach for enterprises to connect with and captivate their clientele (Yasmin et al., 2015). The task necessitates the transmission of messages to individuals at exact moments. Email marketing is a resourceful way that companies can contact the people they intend to reach effectively and in a timely and relevant manner.

Mobile marketing is an active branch of such a field as digital marketing as it utilizes the use of wireless media channels that provide clients with timely and location-specific information that is relevant to the products and solutions offered by a company as it relates to a specific location (Melovic et al., 2020). Mobile marketing does not only improve the experiences of customers in mobile commerce but also introduces new opportunities for the entire marketing industry to implement mobile advertisement channels (Chaffey et al., 2019). Search engine optimization (SEO) is an essential process of digital marketing because it implies the smart adjustment of the

content of a web platform to the specific needs that a certain business has (Singh et al., 2023). Its major goal is to ensure easy accessibility of contents to not only the target users but also the algorithm that search engines utilize. Adaptation of the content of their site can give the business the opportunity to improve their online presence and so grow the level of organic traffic that lands on their page.

An online advertising concept refers to the interactive way of marketing that utilizes the expansive nature of the internet realm, including displaying ads on online search engines and any other digital media (Jjarvinen et al., 2015). The main goal of such an initiative is to increase the awareness among customers often in cooperation with such aspects like email marketing and other media. The major goal of most internet advertising is to ensure that a user is prompted to act and make an interaction with the advertisement as soon as possible by clicking on the links. This technology plays a highly important role in attaining the communication and marketing goals of a firm, namely, in improving client interaction (Johnson et al., 2017). Viral marketing is a point where all digital marketing business meets. Media utilization is a process that involves a systematic use of various media channels to publicize a piece of information on a specific product or service the goal of which is advertising and educating the potential customers (James et al., 2019). The goal of combining the traditional and digital advertising strategy is to increase brand awareness and allow the passing of information about products and services. The viral marketing utilizes the fact that the natural expansion is fast due to wide dispersal of the content in the online communities.

Within the realms of the given case study of ‘Analysing Digital Trails’ in the market digitally, one is required to investigate the different channels of digital marketing. Marketers can better understand the evolving tastes and requirements of their target audience by monitoring what the consumers are doing on lots of platforms (Vieira et al., 2019). In their further development, the present study will examine the strategic use of these elements to learn more about digital footprints and how to engage specific digital marketing tactics as the digital marketing environment is still transforming.

2.4 USING FOOTPRINTS TO TRACK ONLINE AUDIENCE DIGITAL

The effective functionality of digital marketing as the strategic tool can be measured in the current android-oriented corporate environment. This is because digital marketing can be used to so many different fields, its efficacy can be easily measured. The proliferation of digital marketing channels has made it possible for companies to more precisely gauge the efficacy of their advertising initiatives (Ahmed et al., 2019). Most digital marketing platforms also have analytics tools that a savvy business owner should use. The meteoric growth can be attributed in large part to e-marketing, or the use of marketing technologies. The advent of the digital domain, with its wealth of data and digital platforms, has ushered in a new era of possibility. With more information at their disposal, marketers have a better opportunity to boost return on investment (Jain et al., 2014).

Researchers have investigated digital marketing's potential to help SMEs grow in several different ways. Several scholars, including Onyango (2016, pp. 101-105), have looked at how digital marketing has impacted Kenya's cut flower export industry. To go deeper, we used semi-structured interviews and statistical analysis. These results showed undeniable proof that digital marketing raises sales and market share. Digital marketing has become a convenient way to save time while simultaneously encouraging more people to engage with these companies. Yasmin (2015) looked at the impact of online advertising on companies. The primary data came from a manageable sample of 150 companies and 50 executives. Descriptive statistics and correlation tests were used in our in-depth analysis. Companies' sales were found to rise with the use of advertising, websites, emails, and social media.

Lastly, research projects are graded on how effectively they use systematic data collection to address specific issues and generate useful outcomes. After reviewing relevant research, a convincing plan is developed to bring about the desired effect. Insights from research articles and publications published by different professionals have been integrated to lay the groundwork for the development of a robust methodology. Built on the current understanding of the theory and structure upon which the method is built, this investigation proceeded with the following steps in accordance with established standards. This is because method matters for data collection, processing, and inference (Anon et al., 2007).

In the study's later chapters, researchers delved into the nitty-gritty, outlining which considerations are most important when developing a digital advertising plan. In the second half of my thesis, I present empirical data that connects digital marketing to the growth of SMEs in the Swiss environment. Methods, including the empirical foundation, sample selection, and data collection and analysis, will be discussed in detail to answer the research question in Chapter 3. In the final chapter, we provide the results of numerous studies that demonstrate the significant impact digital marketing has had on the growth of SMEs.

2.5 HYPOTHESIS DEVELOPMENT

2.5.1 Relationship between Digital Trail Analysis and Marketing Effectiveness

The utilization of digital footprint analysis has emerged as a crucial component within contemporary marketing strategies, with the ability to significantly enhance return on investment. In the contemporary interconnected global landscape, possessing a comprehensive comprehension and adeptly harnessing digital footprints is crucial for the triumph of any marketing undertaking (Singh et al., 2020). The fundamental principle underlying this concept is based on the proposition that the examination of digital footprints has the potential to enhance the effectiveness of targeted digital marketing endeavours. The primary objective of Digital Trail Analysis is to monitor and analyse the behavioral tendencies, patterns, and preferences exhibited by users as they transition across various online platforms and services (Nkenfack Wandji et al., 2023). Due to the abundance of available information, advertisers can refine their target audience profile. According to prevailing theories, businesses have the potential to enhance their marketing performance through the utilization of these research findings. Instances of "marketing effectiveness" encompass increased levels of customer engagement, enhanced conversion rates, a heightened return on investment, and the capacity to deliver personalized and relevant information (Huang et al., 2022). The achievement of effective marketing efforts can be attributed to the ability to effectively target and engage the appropriate audience. Therefore, the null hypothesis of the study posits that there is no significant correlation between the analysis of digital trails and the effectiveness of marketing strategies. The essay posits that enterprises might derive advantages from the analysis of digital footprints to enhance marketing outcomes. There exist multiple potential outcomes.

The utilization of clients' digital footprints enables a higher degree of precision in targeting. Through the process of categorizing customers based on their interests and behaviours, advertisers can enhance the likelihood of effectively targeting their targeted audience with their messages (Sun et al., 2022). To optimize the efficacy of marketing endeavours, the incorporation of personalization is vital. A positive relationship exists between a company's utilization of digital footprint research and the subsequent augmentation of consumer engagement and conversion rates. The analysis of digital footprints yields empirically based insights that can be leveraged to enhance real-time marketing operations (Bag et al., 2022). The implementation of techniques that are tailored to user behaviour and preferences is vital in enabling marketers to effectively sustain engaging and prosperous campaigns. To optimize the return on investment (ROI) derived from marketing endeavours, enterprises must ascertain the most efficacious channels and messaging strategies (Khan et al., 2020). The provision of personalized information to users enhances the entire customer service experience. The potential for an increase in consumer loyalty and advocacy may arise, therefore.

H1: The utilization of digital trail analysis positively influences marketing effectiveness.

In summary, the primary assertion posits that there exist notable benefits to be derived from the assessment of digital footprints within the context of marketing effectiveness. The ramifications of the study's findings hold significant importance for marketing, encompassing both strategic and communicative aspects. The significance of data within the contemporary digital marketing environment is underscored, along with the potential for organizations to prosper by leveraging insights derived from digital trails.

2.5.2 Customer Engagement and Digital Trail Utilization

One of the most talked-about topics in modern marketing is the strategic use of customers' digital footprints (Ullah et al., 2021). Customer engagement is crucial to the success of any organization in today's era of ubiquitous digital connectivity (Carmichael et al., 2021). This research investigates the hypothesis that using digital trails which record information gleaned from users'

activities and engagements in the digital realm can increase customer involvement (Anubha et al., 2021). An organization's "Customer Engagement" is a measure of its customers' dedication to the product or service it provides (Arya et al., 2019). Those who put money into a company's expansion are the same people who are likely to increase their purchases and spread the word about their great experiences with the business. Customers who take part in projects are more likely to be loyal to the company (Carmichael et al., 2021).

According to the optimistic hypothesis, a company's customer connection strategy would benefit greatly from the incorporation of digital trail analysis, leading to increased levels of customer engagement (Baklanov et al., 2020). There are several deductions that may be made using this theory. The identification of individualized and tailored interactions with specific clients is made possible through the study of digital footprints (Bapat et al., 2023). Companies can use this information to create content that is more likely to resonate with their target demographic (Saldanha et al., 2017). The quality of future contacts with a consumer could be improved with knowledge of their online behaviour (Behnam et al., 2021). Businesses can create more meaningful connections with customers by using this data to target their communications with them at the most opportune times (Joy et al., 2022). Continuous improvement by way of tweaking and adjusting: By analysing clients' digital footprints, businesses may rapidly adjust their approaches to customer interaction (Kemp et al., 2021). They are attentive to the changing needs of their customers and the demands of the market because of the flexibility they possess.

There has been a discernible uptick in the occurrence of brand loyalty. Customers who are happy with your service will spread the word about it more effectively than any other group (Shin et al., 2015). Regular communication channels, informed by the digital footprint, can increase consumer loyalty and word-of-mouth promotion (Briedis et al., 2020). Relationships can be strengthened by prioritizing client happiness. An increase in customer satisfaction can be observed when interactions are tailored to each client's specific likes and demands. Customers who have a positive interaction with a business are more likely to buy from that business again and to promote that business to others.

H2: Digital trail analysis positively affects customer engagement.

It follows that the null hypothesis better describes the association between Digital Trail Utilization and Customer Engagement (Arya et al., 2019). As a result, it appears that businesses may benefit greatly from focusing on customers' digital footprints. With data's widespread effect in today's world, it's more crucial than ever to provide top billing to projects that use data to strengthen bonds with customers (Venkathaialam et al., 2017). A company's use of customers' digital footprints has the potential to help it forge deeper relationships with them over time.

2.5.3 Personalization and Relevance in Digital Marketing

This research aims to examine the significance of the concept of "Personalization and Relevance in Digital Marketing" within contemporary marketing techniques. In contemporary times, customers possess elevated expectations with regards to the receipt of personalized material that aligns with their individual tastes (Behera et al., 2020). This article explores the proposition that digital marketers can enhance their ability to cater to their target customers by utilizing digital trail analysis. Digital marketers could customize marketing messages, product recommendations, and overall customer experience by leveraging information obtained from customers' online behaviours and purchases, including their interests and demographics (Smith, et al., 2019). To enhance brand loyalty, it is necessary to provide personalized attention to each customer. Ensuring the resonance of digital marketing messaging and content with the target audience holds significant relevance. Individuals are more inclined to engage with and respond to content that is customized to their specific requirements, preferences, and situations (Chandra et al., 2022). The theme's hopeful hypothesis posits that through the analysis of digital footprints; digital marketers could enhance their ability to give individualized and pertinent information to their target audience. This concept exhibits several potential avenues for future advancements. Individuals are more inclined to engage with marketing messages when they are presented with information that is tailored to their unique interests (Darmody et al., 2020), and this facilitates the retention of site visitors over extended periods, resulting in reduced bounce rates

Customer satisfaction is enhanced when their interactions are characterized by a sense of personalization and relevance (Chaffey et al., 2022). When a business effectively addresses the wants of its customers, it is more likely to foster client loyalty, resulting in repeat purchases and positive word-of-mouth recommendations. The mitigation of ad fatigue, which refers to the decline in viewers' interest in advertising due to excessive exposure, can be achieved by presenting viewers with ads that are specifically tailored to their preferences (Figueiredo et al., 2021). Consequently, individuals may hold a more favourable perception of the organization in its entirety. Customers exhibit a higher propensity to maintain allegiance to a company that tailors its offerings to their own preferences. Over time, individuals are likely to exhibit increased commitment towards a business if it consistently fulfils their demands.

H3: Personalization and relevance in digital marketing mediate the relationship between digital trail analysis and marketing effectiveness.

In summary, the hypothesis supporting the notion of "Personalization and Relevance in Digital Marketing" emphasizes the importance of employing data-driven methodologies to establish significant engagements with digital customers (de Groot et al., 2022). Based on the results of this study, it can be concluded that enterprises that do an analysis of their digital footprints are more proficient in delivering individualized recommendations to their clientele. Consequently, this practice leads to an enhancement in conversion rates and an increase in customer satisfaction.

2.5.4 Return on Investment (ROI) in Digital Marketing

Return on Investment (ROI) in Digital Marketing is a key metric for gauging the success and viability of marketing campaigns in the modern online setting. The ROI metric is used to evaluate the financial results of marketing campaigns, providing useful information about the profitability of committing resources to a specific campaign (Lal et al., 2020). The study's overarching goal is to determine whether using digital trail analysis in digital marketing initiatives significantly improves ROI compared to similar efforts that don't make use of this technique. Return on Investment (ROI) is a typical statistic used in the field of Digital Marketing to evaluate the positive and negative monetary impacts of various marketing efforts (Krizanovna et al., 2019). This analysis

considers costs incurred during a campaign's execution and quantifies the money made as a direct result. Campaigns that generate a positive return on investment (ROI) are successful, whereas those that generate a negative ROI are unsuccessful. It is asserted that by analysing users' digital footprints, digital marketers may improve the efficiency of their efforts and increase their return on investment (Nikhil et al., 2021). This hypothesis makes several predictions. To improve the efficiency and effectiveness of their plans in real time, marketers might use digital trail analysis. Allocating resources strategically allows businesses to streamline their processes by putting more emphasis on those that produce the greatest return on investment. This method has the potential to cut down on unnecessary costs and increase efficiency.

Marketers can raise conversion rates by applying data-driven insights gathered from digital trails to refine messaging and targeting strategies (Castiglioni et al., 2022). An increase in conversions directly leads to more money being made from the same amount invested. Strategies and methods aimed at boosting the long-term profit and value received from a customer throughout the course of their whole association with a business are collectively referred to as "enhancing customer lifetime value" (CLV). It is possible to boost consumer loyalty and repeat purchases using customized and relevant information gleaned from the study of digital footprints, hence increasing long-term financial rewards (Nabih, 2019). Marketers can better allocate their resources by collecting and analysing information on which strategies work and which don't. The improved investment decision making that could result from this phenomenon would lead to a greater ROI.

H4: ROI in digital marketing is positively impacted by digital trail analysis.

Reducing Wasteful Spending on Commercials Ineffective advertising efforts can be eliminated and resources reallocated thanks to the study of digital footprints. Reducing wasteful ad spend can be achieved by reallocating budget based on performance evidence from social media ROI tracking (Silva et al., 2020). The positive attitude on "Return on Investment (ROI) in Digital Marketing" highlights, in brief, the critical need of employing data-driven tactics to realize monetary success in digital marketing endeavours. Based on the findings, it appears that businesses who use digital trail analysis see a higher return on investment (ROI) than those that do not.

2.6 Consumer Psychology and Market Research in Marketing Insights

In today's marketing environment, developing successful marketing strategies requires a sophisticated grasp of customer psychological behavior and product market research (Sudirjo, et al., 2023). Nonetheless, as indicated by Basu et al. (2023), the importance of marketing research in shedding light on consumer psychological dynamics to guide marketing decision-making is growing in contemporary marketing settings as it continues becoming more data intensive. Nonetheless, studies have shown that the integration of consumer psychology analysis with product market research contributes to the consumer insights that inform data-driven marketing decisions. For instance, an article by Galvano et al. (2021) explored the consumer behavior patterns and how they significantly impact marketing strategies in a variety of industries. In this research, important marketing tactics that are adapted to these customer insights are thoroughly examined. These involve product positioning, branding, and the growing significance of digital marketing in the technologically advanced marketplace of today. The essay provides case examples from well-known companies like Apple and Nike to clarify how these theoretical frameworks are really applied in practice. The findings of this research illustrate that these examples show that the combination of in-depth consumer information and researching of product market may be turned into successful marketing strategies that affect the decisions of specific audiences and create long-lasting brand loyalty. Therefore, by emphasizing how a strategic combination of comprehending consumer behavior and putting marketing strategies of products into practice can result in sustainable market engagement and improve consumer insights, the essay adds to scholarly and practical discussions. In support of the indications by Galvano (2021), Chou et al. (2020), who based their study on the social theory revealed that the formulation and implementation of marketing strategies are influenced by the integration of personal, psychological, social, and cultural aspects that determine customer behaviors.

Kimmel and Kimmel et al.(2018) indicated that the intriguing notion that subconscious psychological elements frequently influence customer behavior opens introduction to psychological market insights. The conclusion of this study was that it is of the utmost importance to identify these fundamental reasons to produce effective strategies in current market research. Moreover, Kimmel and Kimmel et al.(2018) mentioned that the ideas that explain human behavior and the knowledge-based decisions to pursue to achieve success in business are also linked to

psychological market insights. According to an investigation by Basu et al. (2023), it was identified that it is through the implementation of psychological concepts, within the domain of market research, where more insight is gained into what the customers want and prefer, such investigations as emotional responses and thinking biases may provide factors of significant use that traditional methods would not convey to researchers. On the same note, Donthu et al. (2021) determined that companies can tailor their products and marketing activities due to the emergence of psychology and market research, which brings about customer delight and loyalty. Hence, this research arrived at the conclusion that the psychological market insights need to be adopted to understand any driving forces of customer behavior.

According to the research conducted by Ebrahimi et al. (2022), it was established that by infusing the startups companies market research with the psychology ideas, the new businesses can decide which factors drive the preferences and buying behavior. This study also indicated that other key concepts which can be used to give an insight into what customers want and how customers react to inconsistent emotions towards products include the hierarchy of needs developed by Maslow and cognitive dissonance. The same findings enable startup business marketers to effectively personalize their approaches to promote what consumers purchase and how, based on the information presented to them by the findings, not only what they purchase, but how and why as well. In conclusion, this research concluded that resentment by the buyer can be countered by understanding the concern of the buyer during the buying process. In the study by Ebrahimi et al. (2022), it was found out that combining psychological concepts and product market research, it is possible to interpret the data in a more unambiguous manner and establish the trends correlating with consumer behavior. Lastly, this study revealed making in depth customer profiles according to the psychological trait and linking it with product market research makes the segmentation strategies a better one, and it ensures that the right individuals break into the micro targeted marketing efforts.

Based on a bibliometric retrieval of 122 publications identified and retrieved in Scopus, a study led by Faruk et al. (2021) conducted a systematic evaluation of the literature with a focus on the wide area of marketing analytics. This review also serves as a bridge linking the fragmented past, present and future of marketing analytics with its provision of a meaningful framework that points

to the unique theoretical roots of the discipline. Besides the overview of valuable resources, this research also dwells in detail on the most frequent topics in the sphere of marketing analytics such as those journals, authors, nations/territories, organizations as well as themes. The themes that are deduced show their key applications, including the ability to forecast, decision-making, capability building, understanding customer journeys, and gaining a competitive edge. The implications of the study, which identify the importance of marketing analytics as a way of getting to know a consumer better psychologically, deserve to be mentioned as a relevant contributor to the development of the current customer-centric and data-driven environment. Therefore, it is in this light that marketing analytics is useful to engage in psychological nuances, disclose what may be lacking within the usual marketing system, and generate better-educated decisions when it comes to current marketing strategies.

2.7 Analyzing Competitor Feedback, Product Gaps, and Marketing Strategy Development

There is a need to analyze the actions and behaviors of direct competitors to obtain their input regarding the businesses, identify the loopholes based on their communication and develop strategies. Oetzel and Miklian et al. (2017) argue that when an organization fails to monitor the activities of its competitors, then the organization has a risk of proceeding without sufficient insights into a conflict. Managers require competitive knowledge to understand the market, its competitors, identify their weak areas, and evaluate the impact of strategic actions on them (Levine et al., 2017). There are several studies that have been done to demonstrate the advantage that the aspect of competitor feedback on the products has had on the marketing strategies. As an example, Adom et al. (2016) aimed at understanding whether competitor analysis remains a valid strategy management method to use in the contemporary competitive business setting. The research was done using a method of integrative literature review. To generate new perspectives of competition analysis, this necessitated thorough evaluation, judgment, and integration of representative literature to produce new opinions based on availability of literature. The findings reached by the authors of this study were because of their own perusal of the problems that were being addressed. Findings of a study conducted by Adom et al. (2016) indicated that organizations can also learn with competitors and resolve issues related to their industries, which affect the health of their operations by paying attention to the responses of their competitors on the different products and their business operation. Moreover, it was revealed that businesses keeping track of the activities

of their competitors were observed to perform better in business (Adom et al. 2016). A study conducted by Nainaar and Masson et al. (2018), set out to determine the connection that existed between the analysis of competitor feedback on the product feedback and the marketing strategies that business should adopt. As in the case of Adom et al. (2016), the research conducted by Nainaar and Masson et al. (2018) also required past literature to be reviewed and these were extracted through the Internet in the form of online databases accessed in Web of Science, Scopus and search engine Google Scholar. The results from thematic analysis indicate that the competitor feedback analysis helps companies stay in the pace with changing customer preferences and innovations in technology and the industry as well as the new breakthroughs since it will provide an overall view of the trends in the market. Agreeing with the writings provided by Nainaar and Masson et al. (2018), Dalpiaz and Parente et al. (2019) found that competitive analysis contributes to the business comprehending what they have to offer, have not to offer, possibilities, and threats by making a well-reasoned evaluation of the responses to the products given by the rivals. The study also showed that the analysis of competitor feedback and identification of gaps becomes one of the essential parts of strategic planning that allows companies to use the trends in the market, to make informed decisions and minimize potential risks.

An article by Varadarajan et al. (2020) identifies the relationship between the performance of the company, the resources coupled with customer information and the marketing strategy to the opinions of the immediate competitors in the business. This study determined that it is possible through the analysis of the responses of the rivals to identify gaps in the market in the involved businesses. Moreover, this paper has revealed that competitive analysis of the feedback on the commodities ought to support strategic marketing positioning to enable the businesses to differentiate themselves among the other competitors by addressing unmet needs or by offering a differentiated value. Varadarajan et al. (2020) concluded that the review of competitor feedback is a guide to the development of strategies that present enterprises with a competitive advantage and such enterprises are in a better position to make sound decisions and stimulate development when they can identify their own value offer and distinct themselves relative to competitors. The study conducted by Maduranga et al.(2024) determined the necessity of conducting comprehensive competitive analysis in the feedback of the competitors, including all the stages of data collection, result analysis, and competitive intelligence. The conclusions of this article revealed the

importance of conducting competition analysis of feedback from competitors about commodities to enhance business performance as well as strategic decision-making. The results of the research might become a tool that many companies consider when they want to strengthen their positioning and keep a competitive edge over other companies.

Determination of product and messaging gaps is also found to guarantee there is improvement of marketing strategies in a variety of research studies. As an example, an investigation that was conducted by Silva et al. (2020) was meant to establish the role played by the gaps in products and messaging the marketing strategies in the businesses. Based on the findings from this research, it was identified that the interpretation of communications holes is significant in identifying the missing gaps in maximizing product allocation appropriation. Consistent with the opinions of the study by Silva et al. (2020), the objective of the study by Haamann and Basten et al.(2019) was to raise awareness on the methods of overcoming some of the barriers to the knowledge implementation, namely, the role of gaps identification. The results showed that messaging gap analysis is one of the most essential processes that enable businesses to make decisions and arrange resource distribution in their product discussions with maximum efficiency. In addition, it has also been established in this research that examination of gap messaging is relevant to the marketing approach as information given ensures that the needs of the clients are satisfied within the allocated time that the business stakeholders would like to have a specific idea portrayed.

Dabbous and Barakat et al. (2020) reviewed consumer experiences, which helped to estimate the effect of the determining gaps in messaging. This study proved that companies could know more about understanding the effectiveness of their product messages by focusing on the feelings of the gaps of satisfying the needs of the customers. The research of Amrhein et al . (2019) also demonstrated that business may optimize its products and resources, and how relevant and clear are its messages through the interaction with customers based on the identification of the gap areas of their business messages.

The use of marketing in any organization like start-ups in this contemporary digital age has proved to be a critical aspect (Halim et al., 2024). Thus, startups must employ effective marketing techniques that will allow reaching the target audience and raising brand recognition as well as

enhance sales (Hilong et al., 2023). However, marketing has just become more challenging than before because of the rapidity of technological advances and change in consumer behavior (Kumar et al., 2021). Therefore, businesses must keep on updating their marketing strategies to improve their competitive position in the marketplace. Consequently, many studies have also revealed that development of strategies guarantees that marketing effectiveness is enhanced. As an example, a study conducted by Hermayanto et al. (2023) was aimed to explore the effective marketing methods in the era of digitalization through the prism of the best practice and the present trend, to assure the corporate marketing effectiveness. The qualitative research methodology was adopted and interviews with marketing professionals were conducted. The results showed that well-built online appearance, targeted advertising, and consumer-specific messages based on communications are key elements in an effective marketing strategy in the digital era. This study also found out the importance of choosing the most appropriate social media venues and sites that could be used to interact and communicate with the consumers. The other strategies such as search engine optimization, influence marketing, and content marketing were also discovered and proven to be effective strategies that guarantee success in business. The study also pointed out that it is important to revise and amend the determined marketing plans regularly and make sure it should be purposeful toward changing consumer trends and technology by which effective business performance is possible. Qualitative multiple case research conducted by Brown et al., (2020) was aimed at identifying and unraveling a successful marketing strategy employed by small independent insurance agency executives to achieve and maintain profitability. Three independent insurance agents from Fort Lauderdale, Florida, who successfully employed marketing techniques to attain and sustain profitability, made up the participants. Semi structured interviews, corporate websites, and corporate papers were used to gather data. Yin's five-step thematic analysis, which involved gathering, breaking down, analyzing, and drawing conclusions from the data, was used to analyze the information. Four themes of the strategies that were deemed to enhance marketing effectiveness emerged from analysis. These included those focused on clear goals such as referrals, professionalism, customer satisfaction, and targeted and flexible competitive strategies.

The research by Kachouie, Mavondo, and Sands et al. (2018) revealed that dynamic marketing strategies can enhance organizational performance and are crucial in rearranging operational

marketing capabilities. Contrary to the studies above, an investigation by Qureshi et al. (2017) examined the several factors that influence marketing capacity in entrepreneurial new technology-based businesses (NTBFs) in emerging nations. There are 253 small and medium-sized NTBFs that operate in Turkey's METU Technopark, which makes up the research's sample. The finding from this investigation indicated one obstacle to organizational sustainability is that company executives lack the necessary marketing skills and clear goals. This is because business executives who only paid attention to technologies failed to realize that success required more than just technological proficiency (Quresh et al., 2017). Similarly, Kumar et al. (2015) also offered a contrasting view as they determined that to succeed in a changing market, marketers ought to consider consumer profitability as a primary goal without addressing the issues concerning marketing plan accountability.

2.8 Conceptual Framework: Analysing Digital Trails for Targeted Digital Marketing

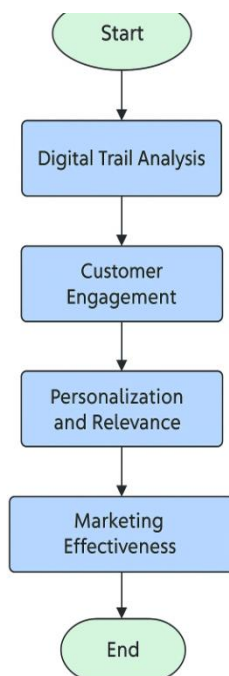


Figure 1: Model structure.

Success in digital marketing can be assessed against predefined goals (e.g., revenue growth, engagement, ROI) (Denga et al., 2023). Common KPIs include conversion rate, ROI, customer retention and customer lifetime value (Lockett et al., 2018; Shah e al., 2021). CPA, CAC and ROI are standard profitability metrics (Silva et al., 2020). Success in digital marketing is measured by

how well predetermined goals (like increased income, consumer engagement, or return on investment) were attained (Denga et al., 2023). Conversion rates, return on investment, client retention, and customer lifetime value are just few of the measurable KPIs used in these analyses (Lockett et al., 2018). Users' actions and activities across various digital assets can be gathered through a process known as "data mining," which comprises analysing the obtained information and drawing conclusions about the users' habits (Astari et al., 2021). Techniques for gathering and analysing data, including the application of appropriate computational hardware and software (Silva et al., 2020). Attention Customers Pay to Digital Marketing Content and Efforts. Number of clicks, number of shares, number of openings, and total time spent with digital assets are all measurable key performance indicators (Al Adwan et al., 2023). Personalizing digital marketing material and communications to each customer's specific preferences, interests, and needs (Gavilanes et al., 2018). Assessments of how well stuff fits together, how relevant it is, and how personalized it is. Analysing the revenue and costs of digital advertising campaigns to determine their profitability (Umunna et al., 2021). CPA, CAC, and ROI are just a few of the marketing metrics that are commonly used.

2.9 CONCEPTUAL MODEL

The fundamental objective of this theoretical approach is to comprehend the impact of analysing digital footprints on the success of marketing campaigns (Pansari et al., 2018). Customer participation, personalization, relevance, and return on investment (ROI) are among the features that have been identified as mediators in this setting (Blinda et al., 2019). Prior work indicates that the effects of digital trail analysis vary by organisational context (Munaro et al., 2021). The conceptual model will elucidate the interconnectedness among the assumptions that form the foundation of your inquiry. This framework enables researchers to systematically structure their data collecting, analysis, and interpretation processes to assess the impact of digital trail analysis on several dimensions of targeted digital marketing.

2.10 CHAPTER SUMMARY AND RESEARCH GAPS.

The above sections have given a proper recap of the different digital trail analysis and its connection with a return on investment (ROI), consumer engagement, and marketing effectiveness. More precisely, research demonstrates that the previously mentioned investigations play a key role in marketing effectiveness, return on investment, and customers' engagement. Nonetheless, the prior reviewed literature points up certain areas that need more research. For instance, although the topic of digital trail analysis and marketing effectiveness strategies is relevant to researchers and academics in the construction sector worldwide, the idea is nevertheless in its infancy, with little scientific research being done in Switzerland. Furthermore, it is important to acknowledge that just a small number of research studies focused on startup businesses making it challenging for researchers to draw quick conclusions about them. This is since much of the research was conducted in other types of businesses and did not take these startup businesses into account. Studies such as Galvano et al. (2021), Nainaar and Masson et al. (2018) and Adom et al. (2016) had gaps in their research settings due to their generalization since it was also difficult to determine which type of digital trail some of the involved investigations examined. Furthermore, it is difficult to determine how the overall digital trail analysis employed in the numerous studies contributed to the marketing effectiveness separately because several of the studies like Nkenfack Wandji et al. (2023) and Briedis et al. (2020) included a number of digital trail techniques in their research. Furthermore, the extent to which digital trail analysis impacts marketing effectiveness is hard to pinpoint because statistics showing the correlation were not provided in some research studies, including Nkenfack Wandji (2023) and Huang et al. (2022). Lastly, it can be difficult to identify the best methodology that yields the most accurate results given that research literature covered above used a variety of approaches. Therefore, it is imperative that these shortcomings be addressed in the current study through appropriate research methods.

2.11 CONCLUSION

In conclusion, the literature has confirmed the various theoretical frameworks such as Generational Theory, the Social Network Theory, and Collective Intelligence Theory are essential in understanding how the implementation of digital trail analysis is related to content marketing strategies. Furthermore, the literature review chapter has shown a comprehensive approach to investigating research problems pertaining to consumer behavior and digital marketing tactics.

More specifically, the findings of the involved studies have shown that there are significant advantages to be gained from implementing digital trail analysis in relation to the marketing efficacy of the business, especially the startups. Furthermore, it can be concluded that from the given literature there was a positive relationship between digital trail analysis and customer engagement. Nonetheless, the research has revealed that the idea that "Personalization and Relevance in Digital Marketing" has effective mediation on the relationship between digital trail analysis and marketing effectiveness is supported, and this highlights the significance of using data-driven approaches to create meaningful interactions with online consumers. Additionally, it has been shown that return on investment (ROI) as one of the most important metrics for assessing the sustainability and profitability of marketing efforts in the contemporary online environment is positively impacted by digital trail analysis. In addition, the studies have illustrated that competitor product feedback, identifying gaps in products and messaging, and formulating strategies enhance the marketing approaches as a result of addressing the industry problems that are harmful to the health of their businesses. Lastly, from the above studies, it can be concluded that combining market research and consumer psychology analysis can improve the comprehension of customer behavior and insights that inform data-driven marketing decisions. Overall, the implications of the included studies' conclusions are crucial for marketing, covering both strategic and communication facets. However, gaps such as adoption of distinct methodologies, lower consideration of the startup businesses, and little scientific research being done in Switzerland have been identified. Therefore, the research methods that are utilized to show how data was collected and examined to close the previously indicated gaps in the literature are described in the third chapter below.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 OVERVIEW OF THE RESEARCH PROBLEM

The research problem that guided the current study is that even while the potential benefits of employing digital trails for targeted digital marketing are widely acknowledged, their impact on various fields such as customer engagement and marketing effectiveness in the case of Swiss startups still face a lot of challenges that need to be addressed. In this regard, Ritz et al. (2019), even though digital trail analysis is one of the tools that lead to marketing effectiveness, it may be quite problematic to analyze and interpret a huge abundance of data to build individual and effective marketing programs. Moreover, Hakimi et al. (2021), stated that various ethical and privacy-related issues have been developed due to the manner of compilation and use of digital trails in targeted marketing. This is because of ignorance of the users as to the extent of data collecting and the inadequate data control that can be with such procedures. Consequently, the research methodology designed below is the study which investigates the extent to which digital characteristics and specified digital marketing techniques impact consumer involvement and marketing performance. The research aims to discern the intricate interrelations to exist among the digital consumer habits and marketing performance metrics in form of evaluating the competitor product responses, identifying the gaps in products and messages, and framing the strategies that would be adopted to improve the product offers and marketing efforts of the brand.

3.2 OPERATIONALIZATION OF THEORETICAL CONSTRUCTS

The operationalization process of theoretical constructs requires the researcher to define abstract conceptions hence modifying them into measurable instrument variables by extracting a research outcome (Eisend et al., 2019). Lambert and Newman et al. (2023) noted that development of the theories relies on conceptualization and operationalization of constructs since they cannot be formed without some degree of significance between abstract conceptualizations and the operations used in operationalizing the constructs.

Qualitative research is focused on knowing the meaning of human behavior, social phenomena,

and lived experiences. According to Hegde et al. (2020), operationalization can be applied in the case of qualitative research to recognize the observable manifestations of abstract conceptions by themes, stories, and patterns. Saunders et al. (2018) defines operationalization in qualitative research as dividing complex, usually subjective concepts into such elements that are observable to make them expose credibility and consistency. Thus, in the given research on the examination of amalgamating consumer psychology analysis with product market research, a qualitative researcher operationalized it based on understanding decision-making processes, consumer behaviour, motivation, attitudes, and perception through semi-structured interviews.

Conversely, quantitative research is meant to quantify relations between variables. The application of operationalization in quantitative research means bringing an abstract construct in numerical or categorical form so that it can be statistically analysed (Andrade et al., 2021). According to Levitt et al. (2022), when an idea is operationalized in quantitative research it reduces subjectivity through translation of abstract concepts into measurable variables, reduces research bias by offering a degree of objectivity, and enhances reliability. For instance, the variable of customer engagement can be operationalized in the present research in the form of a 5-point Likert display reflecting satisfaction with service, capacity to customize offers, and marketing messaging. The operationalization approach for the current research established measurable variables which create clear definitions of theoretical constructs while facilitating empirical interpretation and measurement. The following demonstrate how theoretical constructs were transitioned into quantifiable measurement variables in this study:

Digital Trails Analysis: This research analysed digital user traces of the startup business that arise from activities across various platforms including browser logs, purchasing behaviors, and social media activity records. This variable was determined using various items such as ‘I am quite knowledgeable about the idea of digital trail analysis’ (Appendix A), where participants rate their level of agreement on the 5-point Likert scale. The overall meaning of each participant regarding the included items was used as value for this variable.

Marketing Effectiveness: The current study used marketing effectiveness as a marketing strategy's capacity that produce the intended results in the startup businesses, which include return on investment (ROI), lead generation, conversion rates, and brand recognition. More specifically, items like "Customer segmentation and targeting tactics have greatly improved due to digital trail analysis" (Appendix A), which asked participants to rate their level of agreement on a 5-point Likert scale, were used to ascertain this variable. This variable's value was also determined by taking the average of all participants' scores on the included items.

Consumer Engagement: In the current study, the operationalization of theoretical construct of consumer engagement entailed the degree of communication and emotional bond between the customers and the brand of the involved startup businesses, as determined by their purchase patterns, website usage, and social media participation. Several items were used to measure this variable, including "Utilizing digital trail data has greatly enhanced your capacity to customize offers and marketing messaging." (Appendix A), which asked participants to rate their concurrence on a 5-point Likert scale. The value for this variable was the average of all the participants' scores on the specified items.

Return in income (ROI) in digital marketing: This is the monetary effects of digital marketing initiatives that is determined by cost effectiveness, revenue creation, and conversion rates in the startup businesses. The above-mentioned variable was assessed using a variety of items, including "Digital trail analysis has greatly increased the return on investment for our digital marketing in your business." (Appendix A) using the 5-point Likert scale item, which asked those who participated to rate their degree of agreement. Each participant's overall mean for the included items also served as the variable's value.

Personalization and relevance of digital marketing. The degree of how well marketing initiatives in startup businesses suit the interests and preferences of the customers. A number of items were used to evaluate the variable, such as "Digital trail analysis has greatly increased the return on investment for our digital marketing in your business." (Appendix A) by asking participants to

indicate their level of agreement on a 5-point Likert scale question. The value of the variable was also the average for all the items that were included for each participant.

3.3 RESEARCH PURPOSE AND QUESTIONS

The primary purpose of this research is to analyse whether digital traces analysis have an impact on the targeted digital marketing strategies and consumer engagement. The research questions guiding this study are:

- i. How can integrating consumer psychology analysis with product market research enhance the accuracy and effectiveness of data-driven marketing decisions?
- ii. Does the digital trail analysis have a relationship with the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing?
- iii. In what extent does personalization and relevance in digital marketing affects the relationship between digital trail analysis and marketing effectiveness
- iv. How does the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies enhance brand offerings and marketing approaches?

3.4 RESEARCH DESIGN

The present study was done in accordance with a sequential exploratory research design. This type of research design is adopted because it is perceived that in studies, it starts with the assessment of numerical data, and shifting to quantitatively obtained data later to increase the reliability of the conclusions made based on the analysed quantitative data (Walker and Baxter et al., 2019). The arguments of Walker and Baxter et al. (2019) are especially useful in the current research as they suggest the importance of starting with the assessment of numerical data and shifting to quantitatively obtained data which helps to evaluate how digital trail analysis affects consumer engagement and targeted digital marketing efforts. According to Bougie and Sekaran et al. (2019), the applied research design facilitates and decentralises the project in a way that the interconnection among the various parts is done systematically and logically and the research topic

is covered sufficiently. As a result, the research design adopted was crucial to identify the logic interconnection between digital trail analysis and the factors such as customer engagement, marketing effectiveness, and return on investment using the collected data.

The results of Bairagi and Munot et al. (2019) gave the conclusions that an exploratory form of data collection, analysis and interpretation is characterized by the mode of the research process steps mentioned above. In the study of Dannels et al. (2018), it was established that exploratory study design allows a researcher to describe the topic of research in question in the shortest way possible using the essential minimum of facts and professional judgement of predicting the possible results where there is an entire scope of where the research took place. Thus, the claims made by both Bairagi and Munot et al. (2019) and Dannels et al. (2018) on sequential exploratory research design are significant because the current study strives to collect the necessary information, which helps in answering the research questions to describe the topic of the investigation.

An investigation conducted by Casula et al. (2021) indicated that the aim of an exploratory design is to acquire information about the topic of research and invent some innovative ideas to apply them in the development of working hypotheses. The opinions of Casula et al. (2021) are related to the situation of the current research as there was formulation and testing working research hypothesis of whether the use of digital trail analysis has a beneficial effect on marketing, return on investment in digital marketing and consumer engagement. According to Makri and Neely et al. (2021), the rationale for using this sequential exploratory research design is that this approach can combine the perception of an individual with experience, and the quest for measuring objectiveness. Thus, from the benefits described above in contrast to other designs, exploratory research design has been precisely applied to enable the collection of first-hand insights from a group of people with experience in digital trail analysis. As such, this makes it easier to assess the achievement of the objectives of analysing the needs of the implementing the digital trail analysis for customer engagement and marketing effectiveness. In this study, the digital trail analysis and personalization and relevance in digital marketing were the independent variables and customer engagement, marketing effectiveness, and return on investment (ROI) in digital marketing were the dependent variables.

The current research project was based on pragmatic research philosophy. For any investigation, as per Kaushik and Walsh et al. (2019), this type of research philosophy is adopted to improve the functioning of the investigation by the implications of the many design decisions to support the study into how the most suitable information can be gathered and applied to solve the research questions. In their research, Mitchell et al. (2018) indicated that, due to pragmatism and research philosophy, new ways and approaches to solve the problem are developed. Pragmatism suits this investigation because it prioritises methods that best answer the research question. Prior work positions pragmatism as a flexible, outcome-oriented stance for mixed methods (Mitchell et al., 2018, Tavory et al., 2019 & Kelly et al., 2020). Mitchell et al. (2018) further added the argument that for the exact goal of investigation and obtaining valid results it is useful to refer to the pragmatic philosophical orientations. Consequently, the goal of any research endeavour is to achieve a basic appreciation of the rooted facts of the examined issues regarding the subject or the environment under analysis. Thus, this philosophy was deemed appropriate for the present research due to enhanced flexibility as the investigator can undertake the research in a manner in accordance with the most suitable approach that satisfactorily answers the research question. Therefore, apparently adopting the pragmatist ontological and epistemological standpoint had more credible implications to address the given questions and achieve the three research objectives to uncover the foundation for the creation of an effective marketing tool that gives companies a competitive edge by thoroughly examining the market and the data-supported buying habits of target customers.

In this investigation, the abductive research approach was adopted. Earl et al. (2021) stressed that in the research adopting abductive approach, the formation of hypotheses regarding the ordinary occurrence is mediated by socio-cultural context, language and meanings, and identity processes. Furthermore, the investigation that follows this kind of research approach, as highlighted by Tavory and Timmermans et al. (2019) is ideal because, unlike other approaches which is characterised by the evaluation of more systematic disorderly features, this research approach begins with no prejudice and from this aspect, the experience can be utilised to frame experience as a research process as it unfolds. In addition, Rahmani and Leifels et al. (2018) stated that, this

approach is used to expound on the research process and classify it properly. Nonetheless, Kelly and Cordeiro et al.(2020) asserted that the pragmatic notion of abductive research is relevant in real-world scenarios in the social realm. Kelly and Cordeiro et al.(2020) further noted that other researchers employ the abductive method because it can justify the guess and uncertainty in-built in studies establishing a line of analysis to follow throughout an investigation. According to the assertions by Rahmani and Leifels et al. (2018), the abductive method is useful in research as it ensures that the researchers generate evidence that is reliable to the issue being investigated. An abductive approach iterating between data and theory was selected as it pragmatically combines inductive and deductive reasoning. Thus, the abductive research was essential for the purpose of conducting this study with a view of establishing a powerful marketing instrument that provides an advantage to businesses through a comprehensive analysis of the industry and the purchasing patterns of target consumers supported by data.

3.5 RESEARCH METHODS

The current research used a mixed-methods approach, combining both the quantitative and qualitative research method to give a broader examination of the use of digital trails in the marketing of products. As mentioned by Dawadi et al. (2021), the mixed-methods approach improves data gathering because it reduces any bias tendency present in single methodological systems. De Almeida Andrade and Portella et al. (2018) also stated that such a combination of quantitative and qualitative data provides first-hand data that are relevant to the focus of research. Another important finding outlined by Guetterman et al. (2019) is that the mixed-method designs combine the depth of qualitative data and breadth of quantitative data, providing a more comprehensive view.

In a narrower sense, qualitative methods are applied to investigate individuals of different social groups in their natural settings to have an interpretative and local knowledge of the matter of investigation (Aspers and Corte et al., 2019). As underlined by Baškarada and Koronios (2018), qualitative research can explore the feelings, thoughts, and experiences of the participants providing a more profound understanding of the phenomena to be considered. This study therefore utilized qualitative data to determine customer insights that can be used in making data driven

business decisions, make comprehensive competitor product reviews, find gaps on product and messaging, and formulate strategies that can help improve its products and marketing tactics.

On the contrary, quantitative methods imply the formal gathering of data in numerical form, where statistical analysis establishes the relations between the variables and the inferential value (Apuke et al.,2017). According to Bamberger and Ang et al. (2016), quantitative research refers to a developed investigation of narrow events in their native settings and provides statistically vital details. Therefore, this study used quantitative techniques to allow the use of surveys in the collection of measurable data to analyze how the utilization of digital trails connects with customer engagement and defining the important contribution of digital trail analysis, personalization of data, and relevance towards marketing effectiveness.

Integrating these mixed method approaches into the research design not only provides a structured approach to analysing digital trails but also enhances the robustness of the findings by grounding them in established theories. This alignment ensures that the study addresses both the 'what' and the 'why' aspects of digital trail utilization in marketing, offering a holistic perspective on the subject matter leveraging the strengths of theoretical frameworks, qualitative and quantitative data, leading to nuanced and actionable insights.

3.6 POPULATION AND SAMPLE

The target population for this study comprised marketing professionals in the different startup businesses within Switzerland considering that they will be important in comprehending the dynamics of digital marketing. These professionals consist of professionals working on planning, executing, and examining the digital marketing campaign and utilize their proficiencies and business skills to achieve consumer interest and company performance in their startups. Their experience is especially important in understanding the use of digital tracks and targeted marketing in real-life situations. In particular, the sample population included digital marketing managers who undertake the planning and implementation of online market strategies, social media strategists who have a strong understanding of utilizing the social media platforms to reach people,

and content marketers who are involved in the creation and sharing of content that is customer valued in order to attract and retain customers.

3.7 PARTICIPANT SELECTION

The selection was done in a way that participants could be represented across all genders, and the age range of twenty-five and more was entered as well as the extent of their experience in digital trail analysis in Swiss startups. The method of a simple random sampling was used to choose the participants in the study giving equal chances to people to participate (Sharma et al., 2017). This approach reduces the sampling bias, and it makes it easy to analyze the data because there is an equal likelihood of the selection of any subgroup of the population. Such a strategy helped to involve an extensive and heterogeneous range of participants that not only revealed their interest in the study but also demonstrated their individual insights based on their subjective experiences. Consequently, the researcher successfully recruited an adequate sample of personnel from Swiss startups, who voluntarily participated and shared their experiential insights. Social media platforms such as Facebook and LinkedIn were utilized to recruit qualified participants, capitalizing on these platforms' ability to collect and retrieve personal information, thereby enabling researchers to assess everyone's suitability for the study and reach a significant portion of the relevant population.

In determining the sample size, Apuke et al.(2017) suggests that a cohort with a total population of 100 or more is considered significant in quantitative research. Accordingly, the survey was completed by 177 individuals from the target population of marketing professionals. Additionally, a subset of ten participants from the initial sample was selected to provide feedback through semi-structured interviews, offering deeper qualitative insights to complement the quantitative data collected.

3.8 INSTRUMENTATION

The mixed-methods (qualitative and quantitative) approach of primary data collection instruments was used in gathering the needed information in this research. The various methods are outlined below.

3.8.1 Survey Questionnaire

The quantitative data was gathered through survey questionnaires (See appendix A: survey questionnaires). According to Story and Tait et al. (2019), the investigators can gather standardised data from sizable populations by using survey questionnaires. As a result, a sizable sample of 177 people was involved in the current research in filling out the questionnaire. Mohajan et al. (2020) further indicated that scholars can quickly find trends, correlations, and patterns by applying statistical analysis to numerical information obtained from surveys. As such, the surveys adopted in the present study were essential in finding trends, relationships, and patterns from information that was given by respondents which helped to understand the contribution of digital trail analysis. The survey questionnaires play a key role as data collection tools as they are intended to have answer options that make the respondents find it quite easy to make decisions (Stantcheva et al., 2023). In connection to the current research, the participants were required to choose from five straightforward choices making it easier to answer more effectively. According to Fife-Schaw et al.(2020), it is possible to ensure anonymity when designing survey questionnaires and this is often conducive to result in more truthful and straightforward descriptions. It was especially significant in the current study when it was critical to cover a sensitive or controversial issue like gender of the participants or the opinions on their startup companies. Nonetheless, using different media such as email and online platforms, surveys can be distributed to a wide population. This broad scope helps in the gathering of different opinions and data in numerous geographical locations.

Microsoft Forms were also used as the dissemination tool of the research questionnaire to enhance the internal validity of an investigation. The Microsoft Forms have an impact on the quality of the final data as the form provides a possibility to develop a survey that may include only the questions necessary to investigate that the research will be perfectly and effectively carried out (Cross et al., 2021).

Gharaibeh et al. (2017) also found that the use of Microsoft Google Forms in developing questionnaires is helpful in terms of simplifying the process of gathering the needed information,

which strengthen the participation's realism and safeguard the obtained data. The implementation of Microsoft Forms in the current research followed several steps as illustrated below:

Step 1: Access Microsoft Forms

This step involved logging into the Microsoft account through the browser to access Microsoft Forms which resides under the Microsoft Office collection.

Step 2: Creating a New Form

The second step begins with selecting "New Form" to begin designing the form. This was then followed by giving it a title and description under "Research Data Collection." Furthermore, there was adding of the question types including multiple-choice, text, rating, and ranking until there was full satisfaction with the form layout. The form included an additional feature which enabled branching logic (optional) to provide the respondents with specific guidance depending on their answers. Lastly, in this step the designing of the form was accomplished by adding visual elements and themes to enhance its appearance in this step.

Step 3: Test the Form

The above phase entailed reviewing the form with the Preview option before moving on to check functionality then conduct a test response to verify user experience. The process also entailed form sharing by creating a link or generating a QR code. Lastly, there was sending the link through email or adding it to web pages or sharing it on social networks with custom recipients. The form link was also shared open for anyone with access to it.

Step 4: Collect Responses

In this step, there was monitoring of real-time responses via the "Responses" tab interface. You can set up response options through settings by choosing either multiple responses or form closure based on time duration.

Step 5: Analyse Results

The Microsoft Forms provided the option to convert the survey results into Excel files for more in-depth investigation as well as viewing summaries together with charts and insights on Microsoft Forms without leaving this platform's built-in tools section. Therefore, the adoption of such media

was made possible to enhance the smooth flow of the response as well as the less chance of mistakes in the answer to the questions.

3.8.2 Semi-structured Interviews

As a type of data gathering technique, the current research also employed semi-structured interviews with a view of attaining primary qualitative data (See appendix B: Sample semi-structured interviews). According to Roulston and Choi et al. (2018), semi-structured interviews are used by scholars because the approach provides for an oratory method of handling and dealing with significant and subjective issues of the research. Therefore, in line with the current study, the semi-structure interviews helped in determining the research issue of whether combining product market research and consumer psychology analysis aids in gathering customer insights that guide data-driven marketing choices. Additionally, Roulston and Choi et al. (2018) determined that despite investigators having a list of planned queries during semi-structured interviews, they additionally possess the freedom to delve into subjects that come up during the discussion. In connection with the current study, the application of semi-structured contributed to discussion of research issue that was known to the participants but unknown to the research, and therefore, improving the knowledge regarding whether the analysing competitor product feedback comprehensively, identifying gaps in products and messaging, and formulating strategies that enhance the marketing approaches.

Knott et al. (2020) also revealed that based on the participant's answers during semi-structured interviewing, the interviewer can modify the questions to keep the discussion interesting and pertinent with research issues. Nonetheless, to better grasp the participant's viewpoint, interviewers doing semi-structured interviews can ask clarifying questions about unclear responses (Roberts et al., 2020). Hence, for the purpose of this study, the set semi-structured interviews were beneficial in achieving the purpose of obtaining accurate information since the researcher was able to request clarifications or modify the questions for better understanding on issues being discussed during the time of the interview to gain more details and comprehensiveness from the participants. Elhami et al. (2024) further suggested that semi-structured interviews encourage more open responses because of its conversational style, which fosters a relationship between the interviewer and the participant. Therefore, in contrast to structured interviews, the semi-structured interviews provide

participants in current research the chance to go into greater detail about their responses, resulting in richer, more in-depth information and deeper insights on whether amalgamating consumer psychology analysis with product market research help to acquire consumer insights that inform data-driven marketing decisions.

Research Ethics

Throughout the selection process, ethical considerations were meticulously observed, given the involvement of human participants. Prior to data collection, approval was obtained from the Institutional Ethics Committee of the Swiss School of Business and Management Geneva to ensure the welfare and informed engagement of the participants. This ethical approval outlined the protocols for handling human subjects and the categorization of records. Participants were provided with comprehensive information about the study's rationale, aims, and significance through an information sheet and consent form. The written consent form detailed participants' rights to withdraw without obligation to provide explanations (Drolet et al., 2023). Assurances were given regarding the confidentiality of collected information, with data anonymization achieved by using generic labels such as 'Participant' or 'Respondent' during qualitative data presentation. Data security measures included secure storage electronically (using dual-factor authentication and unique credentials) to maintain confidentiality. Only authorized research personnel had access to the data, and collection was limited to information necessary to fulfil the research objectives. In alignment with Drolet et al. (2023), the study ensured compliance with the General Data Protection Regulation (GDPR). Participants were informed that their responses would be analysed solely for research purposes and that all personal data would be deleted post-analysis within one year after the research has been completed.

3.9 DATA COLLECTION PROCEDURE

A semi-structured interview is a qualitative research technique that blends pre-planned questions with the freedom to delve deeper for more information. The initial step comprised a series of leading questions that provide scope for open-ended responses, preparation and design where the research objectives are established, and participant selection regarding study relevance. Along with conducting the interview, the method involves using prepared questions to ensure

consistency, allowing for impromptu follow-ups with respect to responses from respondents, and keeping a conversational tone while making sure important subjects are covered. During the interviewing process, to answer the asked questions in the interview process, the researcher and those who consented to participate in this investigation conversed virtually via Zoom. The strength in using this conversation media is that the hosts can moderate and archive all the sessions without having to install other software (Williams et al., 2019). The data collection was done on 28th February 2025 after receiving appropriate data from the questionnaire. The process involved clarifying to the suitable participants about its purpose and areas that interview concentrated. Each of the five (5) out of ten (10) participants who consented to participate was administered with a semi-structured interview which some of the queries included: *“Could you give an instance where you used competitor product feedback to identify an important trend or insight?”* and *“Please identify the techniques you employ to comprehend the psychological aspects that affect the behaviour of the consumers”* (see Appendix B). The interview process took between half an hour to one hour, and this interview was recorded on audiotape. The recorded information was converted into transcription and thematic analysis was applied for identifying patterns and important themes to gain efficient knowledge into the consumer psychology analysis with product market research to acquire consumer insights that inform data-driven marketing decisions, the semi-structured interview approach was applied.

On the other hand, the procedure of data collection for the quantitative information using questionnaire involved the author of the current study constructing a set of structured closed-ended questions to elicit response from a diverse group working in different startup businesses in Switzerland and one that could be quantified to allow comparison in the evaluation of change. A systematic strategy was usually taken during the process of undertaking the survey to guarantee precise data collecting and insightful analysis. Initially, the process entailed the survey's planning and design to establish the study's goals and purpose, determining the target population and sampling strategy, and creating a questionnaire that was clear and pertinent. The second phase in the dissemination and data gathering process included distributing the survey to the respondents which required using an online survey technique while maintaining their confidentiality and anonymity. Lastly, there was guaranteeing that the replies were gathered using structured formats. The period of data collection started on 15th February 2025, and the respondents were required to

provide their feedback before 28th February 2025. The data collection was conducted through online platform. More specifically, the Microsoft form with the link to the questionnaire was the tool/material used while conducting the data collection. This form was sent to the emails of the participants. There was only one main questionnaire that constituted three sections in the questionnaire. The initial part consisted of the introduction of the designed survey questionnaire. This introductory section aimed at giving the participant a summary of the research and his or her role in the subsequent sections of the research is provided in the Appendix A. The second part of the survey questionnaire involved information on demographics of each of the participants that were involved in this research, including age, sex, number of working years, role in the firm, and kinds of digital trail data analysed (see Appendix A). The objective of the other three sections was therefore to provide information about the relationship between digital trail utilisation and customer engagement and assess whether digital trail analysis and personalization and relevance are essential in the achievement of marketing effectiveness, respectively. The survey questionnaire included closed-ended questions that were displayed as statements, such as “*Digital trail analysis has made it possible to better integrate data and increase the efficacy of marketing*” and “*I provide digital trail data a high rating for efficacy in raising customer engagement metrics related to the acquisition and retention of the customers*” (see Appendix A). As a result, every respondent was provided with the option to make a choice which would represent his or her emotional and cognitive perception of the issue under discussion (see Appendix A). The results of the poll were obtained by use of a 5- Likert scale with the responses being: “1= Strongly Disagree”, “2= Disagree”, “3= Neutral”, “4= Agree”, and “5= Strongly Agree” (see Appendix A). Therefore, the assignment of this data collection tool fitted the stated aims and objectives of the research and, consequently, enhanced the validity and dependability of the questionnaire. The filling of the questionnaire was to be done in a time frame of between 10-20 minutes.

3.10 DATA ANALYSIS

In the present investigation, the data gathered from qualitative instrumentation was analysed by performing a thematic analysis. As reported by Castleberry and Nolen et al. (2018), thematic analysis is a qualitative data analysis method component of which are, bringing out and reporting on, various datasets across the board. Similarly, in the views of Sivakumar et al. (2020), they identified that thematic analysis was presented as a useful strategy for resolving data and this can

be done by coding the data and by a subject specialist constructing themes from classifications. Nonetheless, the data analysis procedures recommended by Kiger and Varpio et al.(2020) were carried out in their entirety. These procedures include getting to know the data, coding it, creating themes, going over the names and descriptions of the topics, and then summarising and analysing the themes that surfaced. Consequently, an illustration of these phases of thematic analysis practically in the current study is shown in the discussions below.

Step 1: Data familiarisation

The first process in analysing the qualitative data collected from marketing professionals was to read and reread the participants' transcripts. This step entailed checking all the transcripts given by the participants that were involved in the interviewing process to be sure about the totality of the entire data corpus.

Step 2: Coding the collected data

The next phase that was involved in qualitative data analysis dealt with the actual data and how the researchers begin to accommodate that data into some sort of coherent form. Coding was applied to decrease large quantities of data into small digestible data portions depending on the viewpoint and the proposed research objectives. A sample of code book from the feedback provided by the participant.

Table 3.1: Sample Code Book

Codes	Raw Data
	To evaluate whether amalgamating consumer psychology analysis with product market research help to acquire consumer insights that inform data-driven marketing decisions.
Needs	Participant 1: "In my opinion, creating successful marketing strategies requires combining consumer psychology analysis with product market research needs." "Product market research can yield valuable information about the characteristics, motivations, and purchasing patterns of consumers. Analysis of consumer psychology, on the other hand, delves

Motivations	further, examining the underlying motivations, feelings, and mental
Mental processes	processes that influence customer behavior.”
Targeting	Respondent 2: “You may learn what people are purchasing through
Segmentation	market research, but you can also learn why by studying consumer psychology. For instance, market research may show that consumers are becoming more interested in eco-friendly goods. Consumer psychology, on the other hand, delves further and examines the reasons underlying this trend. Are buyers motivated by a feeling of social obligation, an urge for healthier products, or environmental concerns? By comprehending these fundamental psychological factors, we can better customize marketing messaging and product creation to appeal to the target demographic. To comprehend the fundamental requirements and values influencing consumer behavior, we go beyond cursory observations” ... “customers may be targeted by region, income, or age in traditional market research.” “We may nevertheless generate more complex segments by adding psychological elements like values, personality traits, and lifestyle. For example, we could pinpoint a market niche that is strongly driven by prestige and status.”
	Participant 3: “By using consumer psychology, we have been able to segment up our audience into groups according to emotional triggers and behavioral characteristics. By going beyond conventional demographic segmentation, this strategy enables us to cater to the unique requirements and preferences of every group.”
	Respondent 4: “We now have a better understanding of why customers make particular choices because to the integration of consumer psychology. This knowledge extends beyond demographics and enables us to access the psychological and emotional motivations that influence behavior.” ... “We can develop more precise and thorough consumer segments by comprehending the psychological factors that influence consumer behavior. This has made it possible for us to target particular

	demographics with customized marketing messages that are highly relevant to their needs and objectives.” Participant 5: “Through examining psychological trends, we have improved our ability to predict and satisfy customer wants. As such, customer loyalty and satisfaction have increased as a result of this proactive strategy.”
	To evaluate whether the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies enhance marketing approaches
Competitor messaging Content Marketing	Participant 1: “We now have a far better understanding of our target market due to the feedback from competitors.” ... “We have a ton of content marketing ideas thanks to the feedback from our competitor.” Participant 2: “Rather than just asserting that we are "the best," we might point out certain benefits based on the areas in which our rivals are lacking.” ... “Our content marketing can directly compare our product with others in the market by stating our benefits while answering complaints about alternative offerings.” Respondent 3: “We've been able to create more engaging marketing campaigns because to messaging from our competitors.” ... “The content strategy offered by our competitor feedback aids in our comprehension of the types of content that appeal to our target market.” Participant 5: “Knowing the typical grievances made about rivals allows us to proactively address them in our marketing collateral.” ... “...messaging is also influenced by this, enabling us to emphasize our advantages and the special ways in which we address client issues regarding the products” ... “Our content marketing development usually addresses the unmet requirements from competitor feedback to show ourselves as the solution choice for potential customers.”

Step 3: Development of themes from the initial concepts

In this phase, the researcher derived the theme from the sought codes that are precisely connected as shown in table 3.2 below.

Table 3.2: Converting Codes to Themes

Codes	Themes
Needs	
Motivations	Comprehending consumer motivations and needs
Mental processes	Targeting and segmentation of consumers
Targeting	
Segmentation	
Competitor messaging	Messaging from their competitors
Content Marketing	Content marketing strategy

Step 4: Themes Reviewing and Revising

The themes identified in Step 3 were reviewed in this stage to refine them further and to consider if they make any sense concerning the research questions. Thus, it plays the important role of accumulating all the data related to the topics distinguished in the further course of the work.

Step 5: Composing a Report on Thematic Analysis

The final step of thematic analysis involved analysing a theme which entails defining what is ‘at the heart’ of the research issue. That is, such components of thematic importance are indicated at this stage as well. It also ensures that the sub-theme revealed is related to and can interface with the other in the main theme. However, defining themes as the final phase also serves as a way of making some provision for construction of a connection or link between the ideas and the study questions or objectives.

In the present investigation, the thematic analysis was designed to recognising and classifying the primary themes obtained from the qualitative data with the goal of meeting the defined research objectives. Consequently, the customers’ insights that guide data-driven marketing choices and to carry out in-depth research on competitor product feedback, find product and message gaps, and

develop plans to improve brand offers and marketing techniques was evaluated with the help of thematic analysis.

On the contrary, an Excel spreadsheet was used to assemble all the respondents' quantitative data. The next step was to perform the normality test to confirm that each questionnaire field was correctly coded and that any missing values were verified. This was done using the following steps in SPSS as follows: Analyse<Descriptive Statistics<-Explore<- Select variables that you are checking for normality into the Dependent List<- Plots<-Histogram box<-Normality plots with tests <-Continue. The questions that contained half of the values undetermined were left out. The goal was to remove any chance of bias that might result from insufficient data during cleaning. The questionnaire administrations of all the quantitative responses were keyed into Statistical Product and Service Solutions (SPSS) v.26 for analysis. The steps involved in using this tool involved launching it and opening a new file from an existing excel file with all the variables for all the questions in the survey which included demographic information and Likert scale items. Further, there was specifying measurement scales for these questions which included scale, ordinal, or nominal assigning numeric codes to the categorical variables such as demographic information. According to Morgan et al. (2019), the determination of the variables and the creation of meaningful statistical groupings from the data that was supplied necessitate the use of SPSS. Therefore, SPSS was an important tool in the current research as it made easier the evaluation of raw quantitative data statistically easier. The analysis of data for this research involved the use of both descriptive as well as inferential statistical techniques. Initially, descriptive statistics, which entailed frequency tables were utilised in analysing the demographic data collected. The steps for performing descriptive in SPSS were as follows: Analyse< Descriptive Statistics< Frequencies< Insert 'age', 'years of working with digital trails', 'roles in the firm', and 'Digital Trail Data Analysed'< OK (See Results Section). In the inferential statistics, both correlation and linear regression analyses were further applied as the methods of identifying the relationship between the digital trail analysis and personalization and relevance in digital marketing with variables of the customer engagement, marketing effectiveness, and return on investment (ROI) in digital marketing. The direction and intensity of the linear connection between two variables are measured

by Pearson's correlation. The formulae of calculating the correlation entailed the following:

$$r = \frac{\sum (x_i - \bar{x}) (y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Where:

r = correlation coefficient

$x_{\{i\}}$ = values of the x-variable in a sample

$\bar{x}$ = mean of the values of the x-variable

$y_{\{i\}}$ = values of the y-variable in a sample

$\bar{y}$ = mean of the values of the y-variable

The steps for performing correlation analysis in SPSS entailed the following: Analyse< Correlation< Bivariate < Insert “Digital trail analysis in businesses”, “Marketing effectiveness”, “Customer engagement” “Return on investment (ROI) in digital marketing”. Furthermore, for testing the hypotheses designed in this research, the linear regression analyses were conducted to show the extent or the impact size of the digital trail analysis on the customer engagement, marketing effectiveness, and return on investment (ROI) in digital marketing. The formulae for calculating regression analysis involves $y = \beta_0 + \beta_1 x + \epsilon_y$

Where:

- y = dependent variable (e.g., customer engagement, marketing effectiveness, etc.)
- x = independent variable (digital trail analysis)
- β_0 = intercept
- β_1 = slope
- ϵ_y =error (assumed to be zero)

Nonetheless, the steps for performing this regression analysis while applying the SPSS tool included: Analyse< Regression< Linear< Insert “marketing effectiveness” or “customer engagement” under dependent variable and digital trail analysis under Independent (s) (See Result Outputs). Lastly, a stepwise regression analysis was conducted to test whether there was an influence of personalization and relevance on the relationship between digital trail analysis with

marketing effectiveness. According to Silhavy et al. (2017), stepwise regression analysis is a technique that fit regression models in which an automated process selects the predictive variables. Therefore, when working with numerous predictors such as personalization and relevance that have an indirect impact on the dependent variable (marketing effectiveness), stepwise regression analysis is an especially useful technique for choosing variables and model construction. The steps of doing this analysis entailed the following: Analyse< Regression< Linear< Insert “marketing effectiveness” under dependent variable and digital trail analysis under< Independent (s)< Next< personalization and relevance in digital marketing.

3.11 RELIABILITY AND VALIDITY

This research involved the determination of both the reliability and validity of theoretical constructs. Heale and Twycross et al. (2015) explained that reliability is discussed as a measure used to determine the consistency and accuracy of results obtained from tests. Furthermore, reliability, as described by Sürücü and Maslakçi et al. (2020), refer to the ability of a research method to produce the same results each time the method is used repeatedly. The reliability of a study backed up by quantitative analysis is determined using Cronbach Alpha and Kuder-Richardson. However, understanding the concept of validity is critical because it sets out how the conclusions of the studies help a researcher to make computations (Cypress et al., 2017). Consequently, for the researcher, the assessment of the validity of the questionnaire questions is of paramount importance. Therefore, for the samples selection, the Kaiser-Meyer-Olkin (KMO) statistic was used first to assess sampling adequacy for factor analysis. However, an analysis of the principal components (PCA) is usually carried out in a bid to assess the adequacy of items used for component extraction. The data collection instruments, and the measurements used in this study have been retrieved from recent research whereby the validity and reliability of the measurements were affirmed thus making them appropriate for employment in the current study.

A distinct epistemological framework was also adopted in conducting qualitative research, which places a strong emphasis on subjectivity, contextual awareness, and the investigation of lived experiences. More specifically, the stability of the qualitative data in this research was guaranteed by making sure the data was trustworthy and dependable. Cypress et al. (2017) claims that the phrase "dependability," which refers to the stability of the data, is commonly used interchangeably

with the term "reliability." Conversely, the foundation of the evaluation of qualitative data was based on confirmability, which Houghton et al. (2013) define as a phrase that refers to the accuracy and neutrality of the data. However, according to Levitt et al. (2021), the case study should be transferable, which refers to the capacity of specific findings to be adapted to a different, comparable context or situation while maintaining the implications and conclusions of the study.

According to this framework, validity is about accurately capturing the viewpoints, interpretations, and meanings of the participants. The fundamental objective is still to conduct thorough, reliable, and perceptive research that significantly advances the knowledge of intricate social phenomena of the current research. This entails making certain that the research methodology and results are reliable, genuine, and exact. Often called trustworthiness, validity in qualitative research was used to evaluate how accurate results reflect the data, respondents' lives, diverse cultures, and situations. The overall quality and integrity of conducting qualitative research and concluding results were reflected in the concept of trustworthiness, which included both credibility and transferability. It denotes that the study is carried out in an ethical, thorough, and open manner.

3.12 RESEARCH DESIGN LIMITATIONS AND DELIMITATIONS

There are various limitations and their respective Delimitation that was associated with methods adopted in the current study. Firstly, the chance of extrapolating study results depends on the gaps that stem from the integration of qualitative and quantitative data (Dawadi et al., 2021). Therefore, the limitation of analysing two collected raw dataset was eliminated in the present study in that each of the two raw collected datasets were subjected to separate analysis work in line with their initial objectives. Addition, given that mixed-methods research requires the integration of two methodologies for both data collection and analysis techniques, it may prove challenging to plan and carry it out. This flaw is addressed by meticulous planning and a well-defined research design that employs a comprehensive research strategy outlining every stage of the investigation, which include the integration of quantitative and qualitative data. Moreover, there is a limitation of participants that are unwilling to complete the mixed-method research that arises from a long interval of quantitative methods followed by the successive qualitative questioning approaches (Hong et al., 2020). Nevertheless, this research has managed this constraint by ensuring that more

closed-ended questions were asked so that to obtain the quantitative data while only 11 semi structured questions were used to obtain descriptive data.

3.13 CONCLUSION

In summary, the chapter on research methodology has outlined a thorough and methodical strategy for examining the study issue surrounding digital marketing strategies and consumer behaviours. The study collected and analysed data using both qualitative and quantitative research methodologies. Therefore, the use of a mixed-methods approach has allowed the study to gain a thorough grasp of the topic and how to strategically handle it. The methodology's strengths have been demonstrated to provide a reliable and solid process of data acquisition. Adopting tools such as semi-structured interviews and survey questionnaires were deemed appropriate to collect data that provides the findings that are dependable and well-rounded because of the comprehensive dataset that they produced. Nonetheless, statistical data analysis methods involving both descriptive (frequencies) and inferential statistics (correlation and regression) were determined to help evaluate the quantitative data. On the other hand, a thematic analysis was shown to be effective in analysing qualitative data collected from semi-structured interviews. All things considered, this chapter has given a strong basis for the examination and discussion of the research findings that will follow. Nonetheless, in the next chapter, there is presentation of research findings of the data that was gathered based on the above elicited research methodology.

CHAPTER 4:

RESULTS

The results of the research that pertain to the respondents' demographic information and the assessment of the research objectives are detailed in the current section. This section also entails the results of the data that was gathered from the survey questionnaire or that which was quantifiable and that which is qualitative collected through semi-structured interviews.

4.1 DEMOGRAPHIC INFORMATION

The general information was collected with the intention of ascertaining the participants' degree of engagement with marketing management to ascertain their potential to offer additional perspectives into the study topic being studied. This process was carried out to guarantee verification of the trustworthiness and validity of the information gathered from the survey. Priorities in the study included age, roles in the workplace, and length of years working in the relevant startup firms. The collected outcomes were subsequently acquired and examined, as illustrated below.

4.1.1 Age

The study ascertained the breakdown of participants by their age as shown in Table 4.3. The data indicates that those who were in the age group of 36-45 years were the most represented by a proportion of 35.0% (n=62). Nonetheless, those who were within the age group of above 55 years came second with a proportion of 23.2% (n=41). In contrast, the participants who were within the age range of 25-35 years and 46-55 years were the least with a proportion of 20.9% (n=37), each. According to the results of this study, a significant proportion of the participants fell within the age bracket of personnel working in the digital analysis industry. This improves the accessibility of precise information regarding inquiries concerning the digital trail analysis and its effectiveness in marketing performance.

Table 4.3: Range of Participants' Age

Age Range

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-35 years	37	20.9	20.9	20.9
	36-45 years	62	35.0	35.0	55.9
	46-55 years	37	20.9	20.9	76.8
	Above 55 years	41	23.2	23.2	100.0
	Total	177	100.0	100.0	

4.1.2 Years of working with digital trails

In accordance with this research's findings shown in Table 4.4, a significant number of respondents (27.7%, n=49) had above 10 years of experience in working with digital trails. Those who came second were those with below a year of working with digital trails, making up 24.9% (n=44). In addition, the findings have shown that 23.7% (n=42) of those who participated had an experience with digital trails for between 1 and 5 years, which was like those with 6 and 10 years. Based on these findings, it follows that a considerable percentage of the working personnel at startups in Switzerland have more than one year in their association with digital analysis. Thus, because of their experience, they might be able to provide precise insights into the effectiveness of its implementation.

Table 4.4: Years of adopting digital trail analysis

Years of Digital Trail Analysis					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below a year	44	24.9	24.9	24.9
	1-5 years	42	23.7	23.7	48.6
	6-10 years	42	23.7	23.7	72.3
	Above 10 years	49	27.7	27.7	100.0
	Total	177	100.0	100.0	

4.1.3 Roles in the firm

The group's membership included workers with different levels in their roles. As shown in Table 4.5, the majority were digital marketing managers personnel represented with a proportion of 54.8% (n=97). The findings further indicate that 23.2% (n=41) of the participants were social media strategists, while those who the least represented role with a response rate of 22.0% (n=39) were the content marketers. The findings show that this demographics characteristic under study was well represented, which supports deeper answers about the research question being looked at.

Table 4.5: Role in the firm

Role in Firm					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Content Marketer	39	22.0	22.0	22.0
	Digital Marketing Manager	97	54.8	54.8	76.8
	Social Media Strategist	41	23.2	23.2	100.0
	Total	177	100.0	100.0	

4.1.4 The digital trail data analyzed in the business

This research also identified the digital trail data that the involved participants have analysed in their businesses. Based on descriptive statistics shown in table 6 below, majority had analysed the customer reviews and feedback data which was represented by 21.5% (n=38). Furthermore, the analysis of the email marketing engagement was the second with a proportion of 20.9% (n=37). Nonetheless, those who analysed the online purchase behaviour data was represented by 19.8% (n=35), while 19.2% (n=34) were those who were analysing the data for website analytics. However, the least proportion representing a proportion of 18.6% (n=33) were those who were analysing the data for social media interactions. These findings suggest that given that the startups adopt digital analysis in their business, there is almost equal type of the digital trail data analysed. This is because startups can learn about user patterns, preferences, and behaviour by examining these digital traces. Therefore, more knowledgeable strategy planning and decision-making are made possible by this data-driven strategy.

Table 4.6: Digital Trail Data Analyzed

Digital Trail Data Analysed					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Customer reviews and feedback	38	21.5	21.5	21.5
	Email marketing engagement	37	20.9	20.9	42.4
	Online purchase behaviour	35	19.8	19.8	62.1
	Social media interactions	33	18.6	18.6	80.8
	Website analytics	34	19.2	19.2	100.0
	Total	177	100.0	100.0	

4.2 RELIABILITY OF THE RESEARCH VARIABLES

In this investigation, the Cronbach's alpha coefficient was employed to assess the reliability of the variables. Cronbach's alpha is a reliability coefficient with a range of zero to one. To be more specific, a coefficient equal to or near zero signifies a reduced level of internal consistency, while a coefficient approaching 1 suggests that the variables exhibit a heightened degree of internal consistency. A coefficient over 0.9 is regarded as exceptional; an index value over 0.8 is regarded as good; an index value over 0.7 is regarded as acceptable; an index value over 0.6 is regarded as dubious; an index value over 0.5 is regarded as poor; and an index value below 0.5 is regarded as unsatisfactory. Table 4.7 displays the results of the reliability assessments performed on the variables of digital trail analysis, personalization and relevance in digital marketing, the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing.

Table 4.7: Reliability tests of Variables

Variable's Name	Number of Items	Cronbach's Alpha
-----------------	-----------------	------------------

Digital trail analysis	4	0.857
Personalization and relevance in digital marketing	5	0.787
Marketing effectiveness	5	0.871
Customer engagement	4	0.738
Return on investment (ROI) in digital marketing	4	0.847

In accordance with above findings, the internal consistency of the variable of digital trail analysis was deemed good, as evidenced by the Cronbach's Alpha coefficient of 0.857. Consequently, the assessment of the variable's dependability produced positive outcomes. Furthermore, it was observed that the components utilized to evaluate the variable of personalization and relevance in digital marketing exhibited a satisfactory degree of internal consistency, as indicated by a Cronbach's Alpha coefficient of 0.787. In addition, the internal consistency of the variable of marketing effectiveness was deemed as good, as evidenced by the Cronbach's Alpha coefficient of 0.871, which indicate that the evaluation of the variable's dependability produced positive results. Furthermore, it has been illustrated that the components used to evaluate the variable of customer engagement exhibited a satisfactory degree of internal consistency, as indicated by a Cronbach's Alpha coefficient of 0.738. In addition, it was observed that the items used to evaluate the variable of return on investment (ROI) in digital marketing exhibited a good degree of internal consistency, as indicated by a Cronbach's Alpha coefficient of 0.847.

4.3 INFERENCE STATISTICS (QUANTITATIVE DATA ANALYSIS)

4.3.1 Correlation Analysis

A correlation analysis is conducted to establish the association between variables before evaluating the specified research objectives that used survey data. As an extensively employed statistical technique, this form of analysis is utilized to determine the connection between a number of the continuous variables. As stated by Lemenkova et al. (2018), a multitude of techniques are commonly utilized when performing correlation analyses, including Pearson's correlation, Kendall

correlation, and Spearman correlation. The findings of Koerner and Zhang's et al. (2017) study indicate that Pearson's correlation is employed by an overwhelming number of researchers as a comparatively simple technique to understand the variable they use in their research. Consequently, utilizing the collected data, Pearson's correlation analysis is executed to determine the nature of the association between the variables. In general, three factors are assessed in correlation analysis: significance, strength, and level of correlation. P-value, representing significance, must be less than 0.05 at the 95% confidence interval in this case. A p-value below 0.05 indicates that the association between the two variables under consideration is of statistical significance. Even so, the interconnection remains significance whether the level is positive or negative if significance value is lesser than the critical one. To be more specific, Schober et al. (2018) revealed that the variable-valued statistic known as Pearson's correlation coefficient (r) can take values between -1 and +1. Any presence of the '-' symbol in the coefficient denotes a negative relationship, whereas its absence indicates an association that is positive in nature. The final factor in determining strength is the coefficient value, which can be anything from zero to one. Quite strong association is indicated by scores between 0.5 and 0.7, whilst values between 0.1 and 0.4 show a very weak degree of correlation. However, a stronger relationship is shown by values greater than 0.7. Table 4.8 below presents the findings of the correlation coefficients regarding the items and main factors that were explored in the present study.

Table 4.8: Correlation between Items of Variables

Correlations					
		Digital trail analysis in businesses	Customer engagement	Marketing effectiveness	Return in income (ROI) in digital marketing
Digital trail analysis in businesses	Pearson Correlation	1	.782*	.630**	.566**
	Sig. (2-tailed)		.015	.000	.000
	N	177	177	177	177

Customer engagement	Pearson	.782*	1	.059	.139
	Correlation				
	Sig. (2-tailed)	.015		.439	.065
	N	177	177	177	177
Marketing effectiveness	Pearson	.630**	.059	1	.767**
	Correlation				
	Sig. (2-tailed)	.000	.439		.000
	N	177	177	177	177
Return in income (ROI) in digital marketing	Pearson	.566**	.139	.767**	1
	Correlation				
	Sig. (2-tailed)	.000	.065	.000	
	N	177	177	177	177

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

As shown in the table 4.8 above containing the results of the correlation analysis between the variables, Pearson Correlation Coefficient of $r = .782$ $p < 0.05$ indicates that digital trail analysis in businesses and the factor of customer engagement is positively and significantly correlated. Based on the findings of this coefficient involved, this value specifically illustrates a strong strength between the variables. Moreover, the correlations between digital trail analysis in businesses and customer engagement was deemed statistically significant and positive since $r = .630$, $p < 0.01$. Furthermore, the findings indicate that the correlation coefficient between digital trail analysis in businesses and the return in income (ROI) in digital marketing was calculated to be $r = 0.566$, $p < 0.01$ (Table 4.8). Therefore, in accordance with the results of this coefficient, digital trail analysis in businesses and return in income (ROI) in digital marketing exhibited a significant and positive correlation of a strong strength. Therefore, the results obtained from the current inquiry indicate that improvement in the digital trail analysis in businesses is positively correlated with constructive changes in the various dependent variables of customer engagement, return in income (ROI) in digital marketing, and marketing effectiveness. This suggests that there is a tendency for both variables to move in the same direction. Therefore, the implications mean that benefits accrue to the variables of customer engagement, return in income (ROI) in digital marketing, and

marketing effectiveness among the stakeholders whenever there is an improvement in the adoption of digital trail analysis in their businesses.

Research Objective 1: *To assess whether digital trail analysis have a relationship with the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing.*

The initial objective of this study was to determine whether the adoption of digital trail analysis by startup business in Switzerland was related with marketing effectiveness, customer engagement, and return on investment (ROI). The research objective was identified using a simple regression analysis where digital trail analysis was independent variable while the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing were dependent variables. The findings of each relationship are presented below.

Relationship between digital trail analysis and customer engagement

This study initially aimed to assess the relationship that exist between digital trail analysis and customer engagement among the startup businesses in Switzerland. The results in Table 9 depict the outputs from a regression analysis that illustrates the observed relationship

Table 4.9: Regression coefficients

		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	14.015	.759		18.473	.000
	Digital trail analysis in businesses	.123	.050	.182	2.452	.015

a. Dependent Variable: customer engagement

The findings in Table 4.9 indicate there was a positive and statistically significant association that existed between digital trail analysis in businesses and the customer engagement which is evident from the positive regression coefficients of $\beta = 0.123$, $p < 0.05$. These results indicate that the customer engagement was raised by .123 in the Swish startups units whenever that the digital trail analysis in these businesses changed by a unit.

Relationship between digital trail analysis and marketing effectiveness

Furthermore, this research sought to establish the extent in which digital trail analysis in businesses affect the customer engagement. The findings of regression analysis shown in table 4.10 depict this association.

Table 4.10: Coefficients of regression

		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	5.535	1.207		4.585	.000
	Digital trail analysis in businesses	.856	.080	.630	10.745	.000

a. Dependent Variable: Marketing Effectiveness

As shown in Table 4.10, the findings indicate that there was a positive and statistically significant relationship between the adoption of digital trail analysis in the startup businesses and the marketing effectiveness. This is supported by regression coefficient value of $\beta = .856$, whose p-value was less than 0.05. The findings of this study indicate that there was an increase in the marketing effectiveness by the respective units of .856, whenever there was a change in one unit of tendency of the digital trail analysis in the businesses.

Relationship between digital trail analysis and return in income (ROI) in digital marketing.

The objective also sought to investigate the relationship between the protective implementation of digital trail analysis in the businesses and return in income (ROI) in digital marketing. This assessment's results are presented in Table 4.11.

Table 4.11: Regression coefficients

		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.627	1.003		5.608	.000
	Digital trail analysis in businesses	.601	.066	.566	9.086	.000

a. Dependent Variable: Return in Income (ROI) in Digital Marketing

The results presented in Table 4.11 indicate that digital trail analysis in businesses significantly and positively predict the return in income (ROI) in digital marketing of the startup business in Switzerland since ($\beta = 0.601$, $p < 0.05$). According to the deduced results, a one-unit change in the digital trail analysis in businesses as a tool of marketing is associated with .601 units increase in the performance of return in income (ROI) in digital marketing of Switzerland's startup businesses.

Thus, based on the results that are presented above, it is apparent that the study performed investigated the proposed research objective and offered the confirmation that digital trail analysis in businesses as a type of digital marketing tool has a significant and positive impact on the Return in income (ROI) in digital marketing, marketing effectiveness, and consumer engagement among the startup firms in Switzerland.

Research Objective 2: *To determine the impact of personalization and relevance in digital marketing on the relationship between digital trail analysis and marketing effectiveness*

Secondly, this research sought to identify whether the relationship between digital trail analysis and marketing effectiveness was impacted by personalization and relevance in digital marketing. The findings of the stepwise regression analysis were used to assess the objective as shown in the tables below.

Model Summary

As the initial table derived from the results of the regression analysis, the model summary was presented. The model summary incorporates the R-squared value, representing the coefficient of determination that quantifies the extent to which the variable that is independent explains the dependent variable.

Table 4.12: Summary of the Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630 ^a	.397	.394	4.108
2	.684 ^b	.468	.462	3.870

a. Predictors: (Constant), Digital trail analysis in businesses

b. Predictors: (Constant), Digital trail analysis in businesses, Personalization and relevance of digital marketing

According to the findings presented in the model summary Table 4.12, digital trail analysis in businesses comprised as the independent variable was responsible for 39.4% of the total variability in the model while the remaining variability was ascribed to the undocumented or remaining factors. However, after the introduction of personalization and relevance of digital marketing, there was 46.2% in the total variability in the model. This indicate that personalization and relevance of digital marketing insert positive impact on the relationship between digital trail analysis in businesses and marketing effectiveness.

Regression Coefficients

The findings of the last table from the outputs of the regression analysis are Regression Coefficients. The investigation usually considers the unstandardized Beta coefficients when interpreting the statistics from this table.

Table 4.13: Coefficients of Regression

		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.535	1.207		4.585	.000
	Digital trail analysis in businesses	.856	.080	.630	10.745	.000
2	(Constant)	1.497	1.413		1.060	.291
	Digital trail analysis in businesses	.630	.088	.464	7.118	.000
	Personalization and relevance of digital marketing	.383	.079	.314	4.818	.000

a. Dependent Variable: Marketing Effectiveness

The findings presented in Table 4.13 suggest that digital trail analysis in businesses has a significant and positive effect on the marketing effectiveness among the Swiss startup businesses when mediated with the personalization and relevance of digital marketing since ($\beta = .630$, $p < 0.05$). Specifically, the results of this research demonstrate that the use of the personalization and relevance of digital marketing as mediator provided a significant impact of the digital trail analysis lowered from the initial of 0.856 to the value of 0.630. This indicates due to its positive impact that it enacts on marketing effectiveness, this contributes to lowering the effect of digital trail analysis due to the variability of the impact of both variables.

4.4 Qualitative Data Analysis

The semi-structured interview questions transcripts were compared to the main question they primarily addressed to make sure they aligned with the following research objectives. Presenting the findings from the qualitative data analysis was done to skillfully express the information in an understandable, well-structured, and captivating way to assess the objectives.

Research Objective 3: *To evaluate whether amalgamating consumer psychology analysis with product market research help to acquire consumer insights that inform data-driven marketing decisions.*

This research was designed to assess whether consumer insights that inform data-driven marketing decisions contributed by amalgamating consumer psychology analysis with product market research. Participants who participated in the interview discussed how combining consumer psychology analysis with product market research might improve the precision and potency of data-driven marketing choices. Below are some important themes that were deduced:

Theme 1: Comprehending consumer motivations and needs. The feedback from the participants confirmed that amalgamating consumer psychology analysis with product market research helped in comprehending consumer motivations and needs. For instance, Participant 1 provided the following viewpoints: ***“In my opinion, creating successful marketing strategies requires combining consumer psychology analysis with product market research needs”*** ... *“Product market research can yield valuable information about the characteristics, inclinations, and purchasing patterns of consumers. Analysis of consumer psychology, on the other hand, delves further, examining the underlying motives, feelings, and mental processes that influence customer behavior”* (**Participant 1, a Male Social Media Strategist**). Respondent 2 narrated these assertions, *“You may learn what people are purchasing through market research, but you can also learn why by studying consumer psychology. For instance, market research may show that consumers are becoming more interested in eco-friendly goods. Consumer psychology, on the other hand, delves further and examines the reasons underlying this trend. Are buyers motivated by a feeling of social obligation, an urge for healthier products, or environmental concerns? By comprehending these fundamental psychological factors, we can better customize marketing messaging and product creation to appeal to the target demographic. To comprehend the*

fundamental requirements and values influencing consumer behavior, we go beyond cursory observations.” (Participant two, a Male Digital Marketing Manager). Respondent four supported the views of the above respondents by indicating the following, *"We now have a better understanding of why customers make particular choices because of the integration of consumer psychology. This knowledge extends beyond demographics and enables us to access the psychological and emotional motivations that influence behavior.” (Participant four, a Female Digital Marketing Manager).* Furthermore, in line with identified theme, Participant 5 narrated, *“Through examining psychological trends, we have improved our ability to predict and satisfy customer wants. As such, customer loyalty and satisfaction have increased because of this proactive strategy. (Participant five, a Male Content Marketer).*

Theme 2: Targeting and segmentation of consumers. More advanced segmentation and targeting of the consumers have been found to be made possible through the integration of market research and consumer psychology. To back the theme, Respondent 2 narrated the following viewpoint, *“...customers may be targeted by region, income, or age in traditional market research. We may nevertheless generate more complex segments by adding psychological elements like values, personality traits, and lifestyle. For example, we could pinpoint a market niche that is strongly driven by prestige and status. We may use this consumer psychology information to guide our marketing and product development initiatives. To appeal to this market, we can emphasize high-end features, unique designs, and inspirational content. This strategy enables us to establish a more profound and psychological connection with customers by going beyond just demographics. (Participant two, a Male Digital Marketing Manager).* Participant three also offered supporting views which were delineated as follows, *“By using consumer psychology, we have been able to segment up our audience into groups according to emotional triggers and behavioral characteristics. By going beyond conventional demographic segmentation, this strategy enables us to cater to the unique requirements and preferences of every group. (Participant three, a Female Social Media Strategist).* Similarly, Participant 4 gave the following assertions: *“We can develop more precise and thorough consumer segments by comprehending the psychological factors that influence consumer behavior. This has made it possible for us to target demographics with customized marketing messages that are highly relevant to their needs and objectives.”*

(Participant four, a Female Digital Marketing Manager). Nonetheless, Participant 5 provided these viewpoints: *Our segmentation has improved in depth. We can now effectively engage niche segments by identifying them and creating highly targeted strategies.* (Participant five, a Male Content Marketer). Therefore, from the above assertions, it is essential to indicate that targeting and segmenting of consumers was a way in which amalgamating consumer psychology analysis with product market research helped to acquire their insights that inform data-driven marketing decisions.

Theme 3: Product innovation and development. Innovation and product creation may additionally benefit from the integration of consumer psychology and market research. As illustration, Respondent 1 suggested the following: *We can find unmet requirements and create goods that genuinely connect with the market by getting a deeper grasp of consumer demands and motivations. For instance, market research may show that there is a rising need for customized goods. We can better understand why customers are lured to customization by using consumer psychology. Is it a matter of personal expression? A feeling of mastery? We may create customized items that genuinely satisfy the demands and preferences of our customers by comprehending these driving forces.* (Participant one, a Male Social Media Strategist). In Addition, Participant 2 narrated these viewpoints: *"We were able to uncover unmet demands and pain spots that were not readily apparent using conventional research approaches by combining psychological analysis with market research. This realization has inspired innovative proposals for enhanced and new product features."* (Participant two, a Male Digital Marketing Manager). On the similar vein, Participant 3 revealed these viewpoints: *"We have been able to create solutions that genuinely connect with our customers by comprehending their psychological demands and motivations. This is because highly innovative and enticing products that satisfy both practical and emotional demands have resulted from this consumer-centric strategy...."* *We may prioritize product features based on what motivates customer loyalty and happiness thanks to consumer psychology. As a result, we have been able to concentrate on the most significant developments.* (Participant three, a Female Social Media Strategist). Furthermore, Participant 4 revealed the following: *Through the incorporation of consumer psychology, we may produce genuinely new products rather than just little, incremental upgrades. We can spot the chances for disruptive innovation by*

comprehending the underlying requirements and driving forces of customers. Understanding the psychological desire for self-expression that is associated with innovation, for instance, may result in the development of hitherto unthinkable customized goods or services. By knowing how consumer values and ambitions are changing, we can predict future trends. (Participant four, a Female Digital Marketing Manager).

Research Objective 4: *To evaluate whether the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies enhance marketing approaches*

Lastly, the current study aimed to investigate how marketing approaches was improved by the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies. The subsection below illustrates themes that were deduced from how each of the considerations improved marketing approaches.

4.4.1 Competitor product feedback

Firstly, the objective sought to identify how the brand offerings and marketing approaches was improved by the competitor product feedback. The themes identified below show this assessment: ***Theme 1: Messaging from their competitors.*** The feedback provided revealed that competitor product feedback enhanced marketing approaches through messaging them. For instance, Participant 1 gave these assertions, *"We now have a far better understanding of our target market due to the feedback from competitors. We can better customize our communications because we have a deeper understanding of their motives and areas of discomfort (Participant 1, a Male Social Media Strategist).* On a similar note, Participant 2 narrated these viewpoints, *"We now know how to strategically place ourselves. Rather than just asserting that we are "the best," we might point out certain benefits based on the areas in which our rivals are lacking."* (Participant two, a Male Digital Marketing Manager). Furthermore, Respondent 3 also offered supporting views as follows: *We have been able to create more engaging marketing campaigns because of messaging from our competitors. We can directly answer client concerns and show them how our product addresses their issues (Participant 3, a Female Social Media Strategist).* In line with the assertions of the above respondents, Participant 4 indicated, *"We now have greater faith in our advertising claims. Our claims are supported by statistics which increase potential clients' faith in us. (Participant four, a Female Digital Marketing Manager).* Additionally, Participant 5

indicated, *"We are able to predict objections. Knowing the typical grievances made about rivals allows us to proactively address them in our marketing collateral."* ... *"...we can give priority to developing a feature for the product in if competitor reviews frequently point out its absence, giving us a definite competitive edge. Our messaging is also influenced by this, enabling us to emphasize our advantages and the special ways in which we address client issues regarding the products."* (**Participant five, a Male Content Marketer**).

Theme 2: Content marketing strategy. The responses provided also highlighted that competitor feedback led to indications that there was managing of content strategy. As an illustration, Respondent 1 narrated the following, *"We have a ton of content marketing ideas thanks to the feedback from our competitor. We can produce insightful material that meets the needs of our target audience because we are aware of their queries and worries."* (**Participant one, a Male Social Media Strategist**). Furthermore, the following views were given by Respondent 2: *"Our content marketing can directly compare our product with others in the market by stating our benefits while answering complaints about alternative offerings."* (**Participant 2, Male Content Manager**). Respondent three also gave these viewpoints, *"The content strategy offered by our competitor feedback aids in our comprehension of the types of content that appeal to our target market. We may adjust our content approach based on what subjects they are interested in on rival sites."* (**Participant three, Female Social Media Strategist**). Participant four also gave supporting viewpoints by indicating the following, *"We can create content that addresses the unmet needs identified in competitor feedback, positioning ourselves as the solution provider."* (**Participant four, a Female Digital Marketing Manager**). Lastly, Participant 5 supported the identified theme by revealing the following, *"Our content development usually addresses the unmet requirements from competitor feedback to show ourselves as the solution choice for potential customers."* (**Participant five, a Male Content Marketer**).

4.4.2 Identification of gaps in products and messaging

The themes below offer a summary of possible participant interview comments regarding how finding a product and messaging gaps improves marketing strategies.

Theme 1: Optimized resource allocation. Allocating resources optimally is made possible by identifying gaps, which guarantees that marketing initiatives are focused on areas that have the strongest opportunity to increase market share and customer satisfaction. In line with these deductions, the participants provided distinct views when asked to indicate how the knowledge on the product and messaging gaps improves marketing strategies. For instance, Participant 1 revealed these viewpoints, *“Finding gaps in our products aids in setting priorities for our development work. We concentrate on the features that will genuinely benefit our clients and provide us with a competitive advantage rather than allocating resources to an extensive list of features. Therefore, we save a great deal of time and money with this focused strategy.”* (**Participant one, a Male Social Media Strategist**). In addition, similar assertions were made by Participant 2 who provided the following narration: *“We can prevent resource waste on features that no one wants by using gap analysis. We have learnt from previous errors in which we invested a lot of money in creating a feature we believed would be crucial just to discover that users did not find it useful. Now, before making significant investments, we use gap analysis to confirm the assumptions made in our business.”* (**Participant two, a Male Digital Marketing Manager**). Furthermore, the feedback provided by Respondent 4 also offered supporting views as follows: *“Finding messaging gaps enables our business to distribute funds across various marketing initiatives in an efficient manner. We can redirect resources from content development to content promotion, for instance, if we discover that the content marketing adopted in the business is not working as well as it should.”* (**Participant four, a Female Digital Marketing Manager**). Lastly, Respondent 5 indicated, *“We may strategically distribute resources across the product lifecycle by identifying messaging gaps. We can determine which developmental stage requires the greatest attention and direct resources appropriately.”* (**Participant five, a Male Content Marketer**).

Theme 2: Helped in meeting customer needs. The feedback from the participants also suggested that businesses can more successfully draw in new clients and hold on to their current clientele by addressing their problems and offering solutions that better meet their needs. Respondent one supported this theme by revealing, *“We identified our messaging weaknesses through the gap analysis thus we improved our marketing materials which generated substantial customer involvement rates.”* (Participant one, a Male Social Media Strategist). Furthermore, Participant 2 delineated the following, *“We used information from product and messaging gaps to create new*

features that resolved customer needs which led to both improved customer satisfaction and loyalty.” (Participant two, a Male Digital Marketing Manager). On similar vein, Participant 4 supported the identified theme by indicating, *“Marketing trend analysis through the comprehensive identification of gaps offered us useful information to direct our marketing operations better toward relevant customer groups and their needs.” (Participant four, a Female Digital Marketing Manager).*

4.4.3 Formulating strategies

The following themes provide an overview of potential participant interview feedback on how formulating strategies enhanced marketing tactics.

Theme 1: focusing on clear goals. The responses from respondents confirm that Formulating strategies helped the business to focus on clear goals. A number of participants (3 out of 5) supported this theme. For instance, Respondent 2 revealed the following: *"A well-defined marketing plan and clear focus are similar to a road map. They direct our activities and guarantee that everyone is pursuing the same objectives. We used to do a lot of things, but they were not always leading us in the proper way."* (Participant two, a Male Digital Marketing Manager) Furthermore, Respondent 3 gave the following assertion, *"We can better prioritize when we have a clear plan and goal. Instead of trying to tackle everything at once, we can concentrate and focus our resources on the projects that have the most impact."* (Participant three, a Female Social Media Strategist). Lastly, Participant 5 provided supporting feedback to the identified theme by stating the following, *"Formulating strategies makes our messaging to be clear. Instead of merely distributing information at random, we are now creating communications that are relevant to our audience. (Participant five, a Male Content Marketer).*

Theme 2: Selection of the best channels. The participants were also found to support the idea that the strategy ensures that the best channels are selected. For instance, Respondent 1 narrated these viewpoints, *"We can select the best marketing channels with the aid of strategy. We're concentrating on the channels where our target audience is most likely to be found rather than merely using all of them."* (Participant one, a Male Social Media Strategists). Moreover, similar views were provided by Respondent 3 as follows, *"Strategies guarantees the integration of our marketing initiatives. In order to strengthen our message and provide a unified brand experience,*

all of our channels are cooperating." (**Participant three, a Female Social Media Strategist**). On a similar note, Respondent 4 also supported the theme by indicating that they usually spend money on channels that are selected to produce significant outcome. These are the assertions given: *"We are not more squandering money on ineffective outlets. We are spending money on the channels that will yield the greatest outcomes."* (**Participant four, a Female Digital Marketing Manager**).

4.5 Summary of Findings

Overall, the above results have revealed that digital trail analysis have a significant relationship with marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing. In addition, it can be summarized that there was positive impact on the relationship between digital trail analysis and marketing effectiveness due to adoption of personalization and relevance in digital marketing. The results have also confirmed that there was product innovation and development due to combining product market research and consumer psychology analysis which as a result allowed for the acquisition of insights that guide data-driven marketing choices. Furthermore, it can be concluded that creating a thorough and well-defined marketing strategy is crucial to the success of the business. This is because it offers a focus on clear goals and a selection of significant marketing channels for well-informed decision-making, which eventually results in improved company outcomes and more successful marketing. Furthermore, the indications provided above have also confirmed that feedback from competitors on messaging and products and content marketing strategy are potent tools for improving marketing strategies. This is because they enable companies to sell more strategically, effectively, and with greater precision. Businesses may increase their ROI in marketing and succeed more by concentrating on the fields such as their strategies in content marketing and here they can have the largest influence compared to their competitors. In addition, from the illustrations provided above, it can be concluded that finding gaps in messages and products yields insightful information that can maximize resource allocation through helping in meeting the customer needs and optimizing the allocation of resources. As a result, startup businesses in Switzerland may increase their return on investment, marketing effectiveness, consumer engagement, and succeed by concentrating on the most crucial issues.

CHAPTER 5: DISCUSSION

5.1 INTRODUCTION

The chapter provides the explanation, interpretation, and implications of the above deduced findings. In addition, this section shows the connection between the results of the current research with the findings and implications of work of other scholars.

5.2 Digital Trail Analysis and Its Impact on Marketing, Engagement, and ROI

The findings that were deduced illustrated that digital trail analysis in businesses had a positive and statistically significant impact on the customer engagement which is evident from the positive regression coefficients ($\beta = 0.123$, $p < 0.05$). The findings suggest that higher digital trail analysis practices which involve tracing consumer digital traces lead to a better customer engagement since the analysis shows a positive relationship that is statistically significant toward customer engagement levels. This was evidence from the results that they revealed these outputs $\beta = 0.123$ ($p < 0.05$). The observed relationship has a statistical significance because the p-value falls under the generally accepted limit of 0.05. The measurement of relationship strength demonstrates a moderate value which proves the effectiveness of customer tracking technologies toward improving interactions among the customers. The statistical tests show that digital trail analysis directly influences customer engagement because the obtained p-value remains very low. Therefore, digital trail analytics can be incorporated with confidence by the startup businesses who want to improve their customer engagement because the relationship proves reliable. This is because the operators of this business can leverage digital footprints such as website visits and clicks and social media engagement to advance their market targeting methods which results in tailored and successful marketing campaigns. These findings imply that given that digital trails analysis enables firms to predict consumer actions effectively, they can achieve better interaction results by tailoring their recommendations and communications. Numerous academic works supported the implications of the determined above results. For example, a study carried by Bag et al. (2022) concluded that the use of a digital footprint by a business is positively correlated with

the increase in customer engagement and conversion rates. Furthermore, Baklanov et al. (2020) suggested that the positive hypothesis states that the use of digital trail analysis would significantly improve a company's customer connection strategy and raise customer engagement levels and as result offering support to the current findings. In support of the current identified findings, Bapat et al. (2023) indicated that through analyzing digital footprints, it is possible to identify customized and unique interactions with certain clients. Additionally, Saldanha et al. (2017) indicated using the knowledge of digital trail analysis, businesses may produce material that will appeal to their target audience more, which as a result might improve their engagement. In another supporting research, Behnam et al. (2021) determined that the understanding of a customer's online activity can help the startup business owners make better future interactions and engagement with those involved clients. Joy et al. (2022) similarly provided backing to the results of the present investigation as they narrated that businesses could create more meaningful connections with customers by using this analysis of digital trails to target their communications with them at the most opportune times. In addition, Kemp et al., 2021) suggested a support viewpoint as they indicated that continuous improvement by way of tweaking and adjusting that is associated with analyzing clients' digital footprints, businesses may rapidly adjust their approaches to customer interaction since they are attentive to the changing needs of their customers and the demands of the market because of the flexibility they possess. Shin et al. (2015) identically supported the current investigation's findings by indicating that due the digital trail analysis, there has been a discernible uptick in the occurrence of brand loyalty since customers who are happy with the business service usually spread the word about it more effectively than any other group which as result improve customer engagement. Therefore, from the discussion, making customer engagement a top priority helps improve relationships. This is because adapting interactions to the unique preferences and needs of each client has been shown to boost customer satisfaction. As a result, consumers who have satisfying experience with a business are more inclined to recommend it to others and make additional purchases from it.

Results further showed that the adoption of digital trail analysis in the startup businesses had a positive and statistically significant relationship with the marketing effectiveness ($\beta = .856$, $p < 0.05$). These results mean that startups achieve their marketing effectiveness goals by integrating

digital trail analysis into their business strategies because of improved customer outreach and conversion rates. Furthermore, the statistical significance gives proof that the analysis results were not random which makes digital trail analysis an essential tool for enhancing marketing results. Therefore, the quality of startup marketing effectiveness improves as the organizations increase their adoption of digital data trails. The findings also mean that given that digital trail data allows limited marketing funds at startups to allocate resources more effectively toward targeted audiences, this results in startups ability to refine marketing campaigns which leads to their effectiveness. Furthermore, the identified findings imply that given that user behavioural monitoring through digital trail analysis allows startups to process user details including website methods, social media approach, and purchase operations, this helps them improve their customer grouping and create more relevant marketing materials. An investigation by Singh et al. (2020) offered supporting views to the identified results by indicating that with the potential to greatly increase return on investment, the use of digital footprint analysis has become an essential part of modern marketing tactics. This is because the success of any marketing endeavor in the modern, globally interconnected world depends on having a thorough understanding of and skill in utilizing digital footprints. Furthermore, Nkenfack Wandji et al. (2023) also confirmed that digital trail analysis is an effective factor that has contributed to the marketing effectiveness as they indicated that the premise that the analysis of digital footprints can improve the efficacy of focused digital marketing initiatives forms the basis of this concept's basic framework. This is because monitoring and analyzing user behaviour patterns, preferences, and inclinations as they move between different online platforms and services is the main goal of digital trail analysis. In line with findings of the current study, Huang et al. (2022) revealed that as per the prevailing theories, business entities such as the startups have the potential to enhance their marketing performance through the utilization of the analysis of digital trails since the instances of marketing effectiveness encompass increased levels of customer engagement, enhanced conversion rates, a heightened return on investment, and the capacity to deliver personalized and relevant information. Therefore, both findings confirm that the achievement of effective marketing efforts can be attributed to the ability to effectively target and engage the appropriate audience associated with the digital trail. Additionally, an investigation by Sun et al. (2022) provided concurring views to the findings of the present study as they indicated that more targeted precision is made possible by using the digital footprints of clients since by classifying consumers according to their preferences and

actions, marketers can increase the possibility that their communications will be successfully received by their intended audience. Lastly, a study carried by Bag et al. (2022) indicated insights derived from the examination of digital footprints can be used to improve marketing operations in real time. The research offered backing views since the study concluded that for marketers to successfully maintain captivating and successful campaigns, it is essential to apply strategies that are adapted to user behavior and preferences. In summary, the primary claim is that there are significant benefits to be gained from assessing digital trails in connection with marketing effectiveness. The study's conclusions have major implications for marketing, including strategic and communication aspects. This is because based on the discussed findings, the importance of data in today's digital marketing landscape is highlighted, as is the opportunity for organizations to thrive by exploiting insights obtained from the analysis of digital trails.

Lastly, the result illustrated that digital trail analysis in businesses also significantly and positively impacted the return in income (ROI) in digital marketing of the startup business in Switzerland as shown by $\beta = 0.601$, $p < 0.05$. These findings mean that the Swiss startup business that successfully monitor digital footprints have a greater return on their investment in digital marketing. In addition, the interpretation of these findings is that digital trail analysis is a trustworthy indicator of marketing success, though, as the result is statistically significant ($p < 0.05$), proving that this effect is not the consequence of chance offering a validation to the predictive link. This guarantees that results are reliable and relevant for entrepreneurs looking to improve return on investment through digital trail tactics. The findings imply that given that digital trail analysis, which includes user clicks, browsing behavior, and engagement patterns, enables the startup business to create more intelligent and profitable campaigns, adjust to local nuances, and make the most of every marketing dollar, they can greatly increase return on investment (ROI) in digital marketing for Swiss startups. Khan et al. (2020) suggested that to maximize the return on investment (ROI) from marketing efforts, businesses must identify the most effective channels and messaging techniques. These assertions are supportive of the current research as they mean that efficient channels and messaging techniques used in digital trails analysis are essential in maximizing the return on investment (ROI) from digital marketing. According to Lal et al. (2020), the ROI metric is employed to assess the financial outcomes of marketing efforts and offers valuable insights into the profitability of allocating resources to a particular campaign. The main objective of the research

is to ascertain whether applying digital trail analysis to digital marketing campaigns increases return on investment when contrasted with comparable endeavors that do not employ this method. In digital marketing, return on investment (ROI) is a common metric used to assess the financial benefits and drawbacks of different marketing initiatives (Krizanova et al., 2019). This analysis calculates the money earned directly from a campaign while considering expenses paid during its execution.

Nikhil (2021) indicated that digital marketers are said to be able to boost their return on investment and raise the effectiveness of their efforts by examining users' digital footprints. Furthermore, Nikhil (2021) suggested that marketers may employ digital trail analysis to enhance the efficacy and efficiency of their strategies in real time. Similarly, Castiglioni et al. (2022) provided supporting conclusions as they revealed that by using data-driven insights obtained from digital trails to improve message and targeting tactics, marketers can increase conversion rates since these rate rise, more money may be generated with the same amount of investment. An investigation by Nabih (2019) also supported that digital trail analysis contributes positively toward the ROI as it indicated that by using tailored and pertinent data obtained from the analysis of digital footprints, it is feasible to increase customer loyalty and repeat business, resulting in higher long-term financial returns.

5.3 The Role of Personalization in Marketing Outcomes

The findings from the assessment of the research objective illustrated that the use of the personalization and relevance of digital marketing as mediator provided a significant impact on the relationship between digital trail analysis and marketing effectiveness. This is because the influence of digital trail analysis on marketing effectiveness was lowered from the initial of 0.856 to the value of 0.630. The interpretation of these results suggest that the evaluation of digital footprints demands the startup businesses to combine marketing strategies with personalized along with relevant elements for maximal utilization of digital trail information. Furthermore, these results suggest that through personalization and relevance in digital marketing as a connecting element, the Swiss companies enhance the quality of their messages while enhancing their targeting methods which results in better marketing success. Statistical confirmation demonstrates that personalization and relevance in digital marketing acts as an active component which

determines how well digital trail analysis leads to successful marketing results. The implication of the findings illustrates that even though digital trail analysis creates valuable information, personalization and relevance in digital marketing brings about effective implementation of these insights. A further implication deduced is that despite digital trail analysis by itself yields significant impact, a more effective influence of this factor is ensured by personalization and relevance in digital marketing. For example, these findings mean that tailored advertisements highlighting sustainable products boost relevance and boost engagement rates if digital footprints reveal a user's desire for eco-friendly products. Additionally, the mediating effect implies that the influence of digital trail analysis on marketing efficacy can be less pronounced in the absence of personalization and relevance in digital marketing. These results have a further implication that to properly utilize digital trails, businesses need to concentrate on implementing insights through personalization and relevance rather than just gathering data. Therefore, companies that use customized marketing techniques are far better than those who use generic digital outreach. As a result, the customers have a closer bond with brands when marketing communications seem personally relevant, which increases retention rates. Numerous earlier empirical investigations have backed up the previously mentioned results' implications. A study carried by Bag et al. (2022) indicated that since personalization is essential for maximizing the effectiveness of marketing initiatives, it inserts positive contributions on the influence of digital trail analysis. Khan et al. (2020) indicated that the supply of personalized and relevant information to users improves the overall customer service experience. As a result, there is the possibility that consumer loyalty and advocacy will increase. Behera et al. (2020) further suggested that customers have elevated expectations in recent years regarding receiving customized content that suits their own preferences. In this article, the idea that digital marketers might use digital trail analysis to better serve their target audience is examined. Smith et al. (2019) revealed that by using data from consumers' online activities and transactions, such as their demographics and interests, digital marketers can tailor marketing messages, product recommendations, and the entire customer experience. To increase brand loyalty, each customer must receive individualized care. It is highly relevant to make sure that the target audience finds resonance in the messaging and content of digital marketing. According to Chandra et al. (2022), people are more likely to interact with and react to content that is tailored to their individual needs, tastes, and circumstances. This is because digital marketers could improve their capacity to provide their target audience with relevant and

personalized information by analyzing digital footprints, according to the theme's optimistic premise. There are numerous directions for further development on this idea. The research by Darmody et al. (2020) suggested that people are more likely to interact with marketing messages when they are given information that is specific to their interests and this makes it easier to hold onto site visitors for longer periods of time, which lowers bounce rates. Customizing information to match each user's unique preferences and interests can increase click-through and conversion rates. Chaffey et al. (2022) indicated that when interactions are marked by a feeling of relevance and personalization, customer satisfaction is increased since a company is more likely to develop customer loyalty and encourage repeat business and favorable word-of-mouth referrals when it successfully meets the needs of its clients. Figueiredo et al. (2021) revealed that exposing viewers with commercials that are carefully suited to their tastes can help mitigate ad fatigue, which is the term used to describe the reduction in viewers' interest in advertising caused by excessive exposure. As a result, people might have a more positive opinion of the company. An investigation by de Groot et al. (2022) determined that the theory underlying the concept of "Personalization and Relevance in Digital Marketing" highlighted that it is crucial to use data-driven approaches in order to create meaningful interactions with online consumers and using the findings of this research, it is possible to conclude that businesses that analyze their digital footprints are better at providing their customers with tailored recommendations. As a result of this strategy, conversion rates are improved, and customer happiness rises. This discussion centers on how contextualization and personalization might improve the results of digital advertising and, in turn, the performance of businesses in the Internet age.

5.4 Consumer Psychology and Market Research in Data-Driven Marketing

The results from the evaluation of above research illustrated that amalgamating consumer psychology analysis with product market research helped in comprehending consumer motivations and needs which as a result inform data-driven marketing decisions. This method – using analysis of consumer psychology as well as product market research – is useful for Swiss startups with the concept of accuracy and innovation being the key to success. These findings mean that given that the consumer psychology study determines the way in which Swiss consumers think, feel, and act regarding products and brands, it looks at emotional triggers, cognitive bias, and decision making

patterns. Nonetheless, the finding also means that if product market research gives details on the trends in the market, strategies of competitors and demographics of the customers, in this way it helps businesses to make the offers more precise. Therefore, when the consumer psychology analysis and product market research are combined, the startups get comprehensive insights into the consumer intentions and can work out their strategies that play on the mentality of the consumers on a deep level. The interpretation of the identified results is that Swiss startups that take this two-way blend will be in a better position to understand consumer motivation, either from sustainability concerns, luxury, or tech innovation since when the needs understanding gets better, this allow businesses to respond proactively to the demands of consumers rather than respond to the market changes. The insights obtained guarantee that the decisions that are made on marketing are based on data-driven approaches hence eliminating guesswork and increasing effectiveness. However, the findings imply that given that the Swiss consumers believe in quality and precision, it is through knowing their psychological motivations that startups can develop very personalized campaigns. Furthermore, the result has the implication that the Swiss startups can create such products that would meet the expectations of consumers regardless of whether it is about Fintech, biotech, or luxury goods. The findings of a number of previous studies were in line with those of the current study. For instance, Basu et al. (2023) suggested that incorporating psychological principles into market research allows for a greater knowledge of client demands and preferences. Furthermore, Chou et al. (2020) found that the integration of personal, psychological, social, and cultural factors that impact consumer behavior has an impact on the development and use of marketing strategies. In addition, an investigation by Ebrahimi et al. (2022) revealed that by integrating psychological concepts into their research, startup companies can ascertain what drives preferences and buying decisions. Furthermore, a study by Galvano et al.(2021) demonstrated that in-depth consumer data and product market research can be combined to produce effective marketing strategies that influence the choices of certain audiences and foster enduring brand loyalty. The above supporting studies collectively revealed the combination of consumer psychology analysis and product market research help in acquiring consumer insights required for informing data-driven marketing decisions as they impact the choices of a number of audiences, drives their preferences, and foster enduring brand loyalty.

The findings from the assessment of the research question demonstrated how combining consumer psychology analysis with product market research aided in customer targeting and segmentation, which in turn informed the data-driven marketing choices. The explanation of these results indicate that fusing consumer psychology analysis and product market research refers to the process of combining an understanding of why consumers act in a specific way (motivations, perceptions, attitudes etc.) with the information on what consumers buy, who they are, market trends, and competitive landscapes. These findings further mean that given that consumer psychology analysis entails the psychological reasons behind consumer decisions, it applies principles of psychology to analyze consumer requirements, needs, desires, motivations, among other things, on how they view products, brands and the process that their mind undergoes before, during and after purchasing something. Furthermore, since product market research is concerned with the collection and analysis of information concerning the target market for a particular product or service, it comprises information on market size, trends, analyzes of competitor analysis, channels of distribution, prices sensitivities and demographic and behavior patterns of consumers in relation to purchase and uses of products. Methods include market surveys, analysis of sales data, comparisons with competitors' performance, and analysis of trends. Therefore, a Swiss startup business can understand its potential customers a lot better and in a much more complex and detailed way by combining these two domains. Market research may show a group of consumers seeking sustainable products and consumer psychology may explain why they are interested (for example, the values of the environment, social duty, perceived benefits of their health) and what the exact psychological stimuli may lead to their purchase decisions within the category (for instance, frames' effects, social proof, scarcity). The interpretation of these results is that this amalgamation usually gives the Swiss startup a multi-dimensional outlook of their potential customer base which would result in deeper customer insights since beyond the basic demographics, the startup is able to obtain insight on the psychological levers of consumer action on their product category. This entails knowing their needs (both functional and emotional), their values, lifestyle, their pain points, and the way they perceive startup's products as opposed to those by competitors. There is also identification of meaningful segments due amalgamation since rather than sweeping demographic or geographic spaces, the startup can define finer-sized segments that involve a composite of psychological profiles (e.g., "eco-conscious pragmatists," "status-seeking innovators") as well as applying of their actual purchase behavior and preferences that have

emerged out of market research. Furthermore, due to amalgamation, startup businesses receive insight in decision making on purchases of products like theirs by various consumer segments. This involves the information sources they believe, criterion they employ for evaluation, influence behind social, and cultural factors and role of emotion toward their decision. Numerous earlier empirical investigations have backed up the previously mentioned findings. As an illustration, a study by Faruk et al. (2021) indicated that the most prevalent topics in marketing analytics emphasize its fundamental applications, which include capability building, forecasting, and decision-making, understanding client journeys, segmentation and gaining a competitive edge. Similarly, an investigation by Ebrahimi et al. (2022) supported the identified results as the researchers revealed that creating comprehensive customer profiles based on psychological traits and combining them with product market research enhances segmentation strategies and ensures that the right targeted marketing campaigns reach the right people. Conclusively, the strategy of merging consumer psychology analysis and product market research is a powerful perspective lens to Swiss startups. It goes beyond the surface knowledge to get the undercurrent motivations and tastes of the consumers hence more concrete targeting and segmentation. This, in turn, strengthens data -driven marketing decisions that are more effective, efficient and at the end promote the growth of the startup in the competent Swiss market.

5.5 Refining Marketing Strategy via Competitor Feedback and Product Gaps

5.5.1 Competitor product feedback and marketing approaches

The findings from the evaluation of the above research issue revealed that competitor product feedback improved the brand offerings and marketing approaches through messaging from their competitors. The explanation deduced from these results portray that start-up firms usually benefit so much from the analysis of feedback on competitor products because they improve their products and marketing strategies. Therefore, through scrutinizing favourable and unfavourable customer feedback on rival brands, start-ups found it possible to identify market expectations and adjust their product. These results show the benefits of gathering information on competitors for the start-ups. This is since unlike more experienced organizations, start-ups tend to suffer from a lack of direct customer feedback to understand customer needs. Furthermore, start-up's can analyse the reception of competitors' products by consumers to discover market opportunities, learn from

mistakes made by competitors, and adapt communication to the needs of consumers. The key implications from these include that when a competitive product is shown to have problems according to consumers' feedback, start-ups are provided with useful advice to create superior solutions. The findings also imply that due to analysing what makes the offering popular in competitors, this can help start-ups bring in the winning tactics in their own campaign through revamping marketing strategies. The findings additionally suggest that when start-ups learn how responsive their audience is from competitors, they can adapt their communication strategies to suit it which build a relevant brand messaging. Numerous prior empirical research studies have provided supporting evidence for the findings. For instance, the findings of a research by Nainaar and Masson et al. (2018) was consistent with aforementioned results of the current study as it showed that by providing a wide view of market trends, competitor feedback analysis helps the businesses stay up to date with changing consumer preferences, new technology developments, and industry shifts. Briedis et al.(2020) further indicated that frequent communication channels with competitors can boost word-of-mouth advertising and customer loyalty when they are informed by the digital footprint which as a result improves the marketing approaches and brand offerings.

Further, the findings illustrate that competitor feedback improves the brand offerings and marketing approaches since it led to managing of content strategy. The given results mean that given that the feedback received has resulted in improved content strategy management, this suggests that startups are able to define their message, increase audience engagement, and optimize their marketing strategies. The results suggest that competitor feedback was essential in enhancing startup businesses' brand propositions and marketing strategies. The interpretation deduced from these results is that due to managing content strategy from competitors' feedback, the startups gain an insight into their industry standards, what the customers prefer as well as successful messaging tactics. The findings also means that from the perception of customers of competitor products, the Swiss startup businesses are able to determine the weaknesses in quality level of their content, thus allowing them to create more relevant and interesting materials; develop their brand voice and messaging considering expectations of their audience; take advantage of the strengths of competitors, and avoid common traps, meaning better marketing; and optimize content distribution

channels, so that the messages get to the right audience at the right time. The findings imply that given that there is a refined content strategy, startups can build a data-driven strategy and positioning for content, which means better brand positioning. Further the findings suggest that provided that through what the competitors are saying in their feedback, businesses can produce content that will be better received by their targeted market and as a result lead to improved consumer engagement. Furthermore, the results have an implication that given the fact that the feedback offers awareness of competitors' successes and failures, this enables the startups to create unique value propositions which result in the marketing strategy of competitive differentiation. In addition, the findings imply that if content management does not require one to spend hard-earned dough to waste his/her time through ineffective delivery of messages, there is efficiency in resource management. Lastly, these results further imply that whenever the startup businesses use competitor feedback in a smart way, they can gain greater brand credibility and trust in their industry. In support of the determined findings of the current research, Dalpiaz Parente et al.(2019), through systematically evaluating the competitors' opinions on the products, demonstrated that a key element of strategic planning that helps businesses capitalize on market trends, make informed decisions, and lower potential risks is the analysis of competitor input. Similarly, Saura et al.(2021) highlighted that there is significance of using competition analysis feedback from competitors regarding commodities to improve the performance of businesses and guide strategic decision-making. The conclusions from the studies by Dalpiaz and Parente et al.(2019) and Saura et al.(2021) consistently support the deduction of the current research in that competitor feedback improves the marketing approaches as it guides strategic decision-making and provides competitors' opinions on the products.

5.5.2 Identification of gaps in products and messaging and marketing approaches

The results show that there is maximization of resource allocation due to the identification of product and message gaps which prompt better marketing strategies. The explanation of these findings is that startup businesses in Switzerland can invest their time and money into areas that need respective improvement instead of spending money on tactics that do not work. The interpretation of these findings is that companies can, through analyzing product offers and messaging gaps use, reduce product features to address demands from consumers better, customize

marketing tactics to reach those messages to target individuals, cut unwarranted spending on poor campaigns by focusing on high impact areas, and improve the consumers' engagement by resolving pain points where the enemies may have missed out. The results have an implication that through prioritizing high-value openings, the Swiss startup companies ease their marketing efforts, and do not unnecessarily spread themselves thin. Furthermore, these results suggest that through the identification of gaps, there is enhanced resource allocation, which results in greater ROI on marketing undertakings, and thereby integrating cost efficiency on campaigns. In addition, the filling of gaps in the product and messaging enables businesses to distinguish themselves on the market, by providing solutions that meet consumer needs. The implications have been supported by a number of previous empirical studies. For instance, Dalpiaz and Parente et al. (2019) through systematically evaluating the competitors' opinions on the products found that competitive analysis aids the company in understanding its advantages, drawbacks, opportunities, and threats associated with resource allocation. In addition, an essay by Varadarajan et al. (2020) revealed that companies can analyze the comments from their competitors to identify market gaps that they can exploit and this competitive analysis of commodity feedback aids in strategic marketing positioning, which helps organizations differentiate themselves from rivals by meeting unmet needs or offering a unique value proposition. Silva et al. (2020) found that identifying gaps in product allocation optimization requires an awareness of message gaps. In accordance with the findings of the present study, Haamann and Basten et al. (2019) stated that the examination of message gaps is an essential process that helps companies maximize the use of resources in their product talks. Similarly, a study by Amrhein, Greenland & McShane et al. (2019) also demonstrated that companies may improve the relevance and clarity of their communications, as well as the optimization of their products and resources, by engaging with customers and identifying any gaps in their company message.

The findings also illustrate that the identification of gaps in products and messaging, through helping in meeting customer needs, improves marketing strategies among Swiss startups. These findings mean that Swiss startups have a lot to gain in terms of discovering spaces where they can improve on products and messaging to refine their marketing approach to better satisfy consumers. Therefore, when the start-ups identify areas where offerings fall short or the messaging does not

have the desired impact, they are able to address targeted areas and increase customer satisfaction and business strategies through the identification of gaps in the products and messaging. Nonetheless, the interpretation of these results is that Product and messaging gaps filling for Swiss startups means a tendency of adherence to customer expectations so that to make products and services reflect changing consumer tastes, fine-tuning brand communication in an effort to customize messaging that articulate value and points of differentiation, enhancing customer engagement while developing marketing plans that really appeal to the intended audience, and increasing competitiveness which assist the startups in innovatively positioning themselves in a much specialized Swiss market. The results have an implication when start-up business improve their marketing efforts from the determination of product and messaging gaps to suit the actual needs of consumers, these consumers see reason to be loyal to the brand. The findings have a further implication that since the identification of gaps in products and messaging, through helping in meeting customers' needs helps in optimized marketing spend, efficient targeting reduces inefficiencies in wasted resources and maximizes return on investment. These implications were backed by various scholarly works. As an illustration, Varadarajan et al.(2020) concluded that examining competitor feedback can be used as a guide to develop strategies that give businesses a competitive edge. When businesses can identify their unique value proposition and differentiate themselves from competitors, they are better able to make informed decisions and promote growth. Furthermore, research by Haamann and Basten et al.(2019) demonstrated that gap messaging analysis is important to marketing strategy since it guarantees that consumers' wants are satisfied promptly and that stakeholders in the firm feel a certain notion is expressed. In addition, Dabbous, and Barakat's et al. (2020) study that examined consumer interactions to assess the impact of identifying messaging gaps demonstrated that by focusing on the perception of gaps in consumer needs, companies can gain a better understanding of how well their product messages are conveyed.

5.5.3 Formulating strategies and marketing approaches

Results showed that the focus on clear goals as a formulated strategy was essential in enhancing marketing tactics in Swiss startup businesses. The findings mean that the clear objectives as devised strategy is of critical significance in improving marketing strategies in Swiss startup

companies. As a result, through setting clear objectives, startups could focus on structured marketing efforts instead of aimless and reactionary ones and they would then be able to deploy their resources on viable methods instead of scattered and reactive ones. These results can be interpreted that given that specific goal-setting gives directions and other consistent marketing tactics, this can result into strategic decision-making – through the startup's ability to focus on the high impact marketing channels, majoring points can be made in place of smearing effort and resources thin, efficient resource allocation since well-defined goals allow for efficient budget allocation in marketing endeavors and sparing on unfriendly costs. The implication of these findings is that since the targeted strategies make sure that messaging conforms to market needs, this improves the identity of the brand which results in enhanced brand positioning. Additionally, the findings suggest that given that the quantifiable measures of success are achieved through set goals, they help startup businesses to be able to monitor their progress and adjust their strategy where necessary. The implication of the identified findings was supported by a number of studies. For instance, Hermayanto et al.(2023) underlined that it is important to regularly update and adjust the identified marketing plans and make sure they stay focused on specific objectives in order to stay up to date with changing consumer trends and technological advancements that are essential for efficient business operations. In addition, the findings of an analysis by Adom et al. (2016) offered supporting views as they demonstrated that managers can recognize their competitors' input regarding the different goods and their business practices in order to learn from them and address industry issues that are detrimental to the health and the needs of their companies. Furthermore, Adom et al. (2016) indicated that businesses that keep their terms on their competitors' actions have been demonstrated to have superior commercial performance. These illustrations suggest that competitors' actions of focusing on the goal of up-to-date performance contribute to this research to be consistent with findings of the current study. Contrary to the findings of the current study, a study conducted by Qureshi et al. (2017) found that a lack of marketing expertise and well-defined objectives among business executives is a barrier to organizational sustainability.

The findings of this research further showed that choice of best marketing channels under a formulated strategy were crucial in enhancing marketing tactics for the Swiss startup businesses.

These results mean that through being selective of the most effective platforms, whether digital or traditional, startups could maximize visibility, direct their reach to the target audience efficiently, and make the best use of the resources available. The interpretation of these results is that for Swiss startups, channel selection determines the engagement of the audience since selecting platforms with which the target customers are most active increases outreach, ensure brand awareness since optimized channels create higher notoriety and credibility, and enhancing cost efficiency due to fact that high impact channels for marketing focus are more cost effective. The findings also mean that due to formulated strategy, there is competitive positioning in that startups can position themselves through the constructive interaction of proper platforms which include social media, influencer collaboration, or SEO. The implication of these results is that through carefully and strategically selecting channels, conversion rates and customer engagement improve. Further, the deduced result implies that since startups businesses make the best use of their budgets through formulated strategies, they do not waste resources on inadequate platforms. The use of the appropriate channels allows startups to develop better ties with their audience, this as a result improves customer relations. The finding suggests that given that a lot of Swiss startups focus on specific industries, this means a pinpoint accuracy in channel choice is pivotal to successful branding. Also, the finding also implies that given that a good, structured marketing strategy guarantees the ability to scale in the long run and remains relevant amidst changing market situations, this ensures that the startup business involved has sustainable business growth. Furthermore, the findings of a study by Hermayanto et al. (2023) offered supporting views since it indicated that a successful marketing strategy in the digital age requires a strong online presence, targeted advertising, and customized consumer communications as well as choosing the most effective social media platforms and channels was crucial to engaging and communicating with customers. Additionally, it was discovered that content marketing, influencer marketing, and search engine optimization are beneficial company techniques. In line with findings that various tactics were employed to improve marketing strategies for the Swiss startup businesses, an investigation by Brown et al. (2020) revealed the tactics that were thought to improve marketing performance which included customer pleasure, professionalism, referrals, and focused, adaptable competitive strategies.

CHAPTER 6:

CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

6.1 CONCLUSION

The aim of this study entailed providing insight into the critical subject of whether modern businesses really need innovative technology to assist them better categorize their customers and target their advertising through developing a trustworthy method for analyzing users' digital footprints for the purpose of consumer and market research. The research outcomes demonstrated the ability to evaluate the suggested research objectives. First, the evaluation of the first research objective led to the conclusion that there was a positive and statistically significant association that existed between digital trail analysis in businesses and customer engagement. It is also crucial to conclude that the adoption of digital trail analysis in the Swiss startup businesses had a positive and statistically significant impact on the marketing effectiveness. Lastly, from the findings, one can make the conclusion that digital trail analysis in businesses significantly and positively predict the return on income (ROI) in digital marketing of the startup businesses in Switzerland. Additionally, the second research objective was examined and led to the conclusion that digital trail analysis in businesses has a positive and statistically significant effect on the marketing effectiveness among the Swiss startup businesses when the factor of personalization and relevance of digital marketing is used to mediate the relationship. The results of the third objective also led to the conclusion that there was comprehending consumer motivations and needs, targeting and segmentation of consumers, and product innovation and development due to combining product market research and consumer psychology analysis which as a result allowed for the acquisition of insights that guide the data-driven marketing choices. Lastly, this research was able to evaluate the fourth objective and concluded that brand offerings and marketing approaches were improved by the competitor product feedback through messaging from their competitors and adoption of content marketing strategies such as social media and influencer collaboration. Furthermore, the evaluation of this objective also led to the conclusion that through meeting customer needs and the optimization in resource allocation, the product and messaging gaps provide an improvement on the marketing strategies which because of focusing on the most important concerns, startup companies in Switzerland may improve their efficacy in marketing, consumer engagement, and return on investment. Nonetheless, the conclusion deduced from the assessment of this objective entails that developing a comprehensive and clear marketing plan is essential to the company's

success. This is since it provides a clear focus on objectives and a selection of important marketing channels for informed decision-making, which leads to better business outcomes and more effective marketing.

Moreover, it may be deduced from the above indicated conclusions that the hypothesized research questions were addressed. Firstly, in response to the first question, it was demonstrated that integrating consumer psychology analysis with product market research can enhance the accuracy and effectiveness of data-driven marketing decisions in Switzerland, as evidenced by comprehending consumer motivations and needs, targeting and segmentation of consumers, and product innovation and development. Additionally, the response to the second question indicated that there exists a positive and significant relationship between the digital trail analysis and the marketing effectiveness, customer engagement, and return on investment (ROI) in digital marketing in Switzerland. Furthermore, the third question's response indicated that there is a positive extent in the impact of personalization and relevance in digital marketing on the relationship between digital trail analysis and marketing effectiveness in Switzerland. Nonetheless, the last question of the research was answered and concluded that the comprehensive analysis of the competitor's product feedback through through messaging from their competitors and adoption of the content marketing strategies, identification of gaps in products and messaging via comprehending consumer motivations and needs, targeting and segmentation of consumers, and product innovation and development, and formulating strategies such as meeting customer needs and the optimization in resource allocation enhance brand offerings and marketing approaches.

On overall, the results of this study significantly expand on the body of prior and current research by supporting the notion that successful digital trail analysis and their personalization and relevance as marketing strategies can be employed to develop an effective consumer and market analysis tool utilizing internet-derived data in the Swiss startups which contribute significantly and positively to their marketing effectiveness, customer engagement, and return on investment in marketing.

6.2 IMPLICATION OF RESEARCH

The research offers a number of practical and theoretical implications. More specifically, by selecting this topic, I was able to bring new views to existing knowledge while also filling in some gaps observed while studying techniques used to create a successful consumer and market analysis tool using internet-derived data in Swiss startups. However, completing this study provides the scholar and other stakeholders from the startup businesses with advanced and critical skills such as problem-solving, analytical, and marketing management competencies. In addition, the results of this research assist marketing professionals such as digital marketing managers, social media analysis used in modern product marketing in these industries. Furthermore, this research contributes to the understanding of personalized advertising benefits from digital footprints which show user preferences for eco-friendly products because such advertisements become more relevant to users and therefore drive higher engagement since when digital trail analysis lacks personalization factors it diminishes its ability to boost marketing success. This research is important to the startup firms that need to move past data accumulation alone to concentrate on personalization-based application for digital trails to achieve maximum benefits. This is because a personalized approach to marketing gives businesses better results than general digital advertising methods and customers form deeper bonds with brands when marketing messages match their personal needs which results in better retention statistics.

The results are further useful to the startup may therefore spot the opportunities for product innovation, distinguishing service, and creation of one-of-a-kind value propositions with which particular consumer segments could so deeply resonate due to knowing the psychological needs and pain points as well as market gaps that is contributed by the amalgamation of product research market and consumer psychological analysis. The results are also useful in the essence that given that the amalgamation of consumer psychology insights and product research market are good for the startup to identify the language, the messaging and channels that they will want for targeting and influencing the desired segments helps in the understanding of their values, hopes, and the heartstrings more likely to work. Furthermore, the amalgamation of psychological analysis and market research provides a strong foundation for data-driven marketing decisions due to the improved targeting and segmentation yielded from the same, this contributes to the understanding

of each breakdown's psychological setup and preference in a more in-depth and as a result the startup can capitalize on this and come up with highly personalized marketing campaigns such as customized messaging, offers and material that will most likely convert.

A further application of this research is that there is an understanding that due to optimized resource allocation, the startup can then target more promising and defined segments with its marketing budget and resources as it will be spending less or no resources on less receptive audiences, therefore, saving costs. Additionally, another contribution deduced from the findings of amalgamation product research market and consumer psychological analysis is that there is improved customer acquisition and retention since focused and customized marketing campaigns from this amalgamation will translate into a higher customer acquisition ratio because the message will be more appealing. Furthermore, the key to understanding loyalty psychology will enable the startup to put in place more effective strategies to enhance customer relations and retention. The study helps in providing knowledge regarding resource optimization among –Existing market knowledge enables startups to strategize in a more effective and efficient manner than through random experimentation. The findings of the current research contribute to acknowledging that the efficient use of feedback from competitors helps early-stage businesses go ahead faster and create more customer loyalty and engagement which result in marketing strength. Additionally, the present research will be a valuable academic resource for researchers, adding to the body of existing knowledge and offering theoretical and practical implications for those wishing to examine the crucial topic of whether or not contemporary companies actually require state-of-the-art technology to help them better classify their clientele and target their advertising by creating a reliable technique for evaluating consumers' digital footprints for consumer and market research.

6.3 RECOMMENDATIONS FOR PRACTICE

The identified results have certain recommendations for practice. For instance, this research recommends stakeholder of startup businesses to invest in digital trail analysis as a goal-centered strategy to get increased response and conversion rates which might lead to a higher marketing return on investment (ROI), customer engagement, and marketing effectiveness. The findings

recommend startup businesses to define a well-defined approach to alter plans appropriately in accordance with market shifts which might enhance adaptability. Furthermore, this study recommends the development of well-defined objectives and adequate goal setting in the market to enable the Swiss startups to compete in the niche markets and to maintain a competitive advantage. This is because ensuring a competitive advantage in product creation that startups will gain from analysing consumer perspective about competitors will maximize their product development and remain on the lead. Additionally, this research recommends the Swiss startup business to embrace competitive messaging since one area that can take advantage is concentrating on what feedback competitors are receiving and inform start-ups how to develop marketing campaigns that will stand out while addressing key issues of consumers. The research recommends startups to ensure data-driven product development since from the insights on unmet needs and psychological preferences, future product development and innovations can be guided to be in congruence with the desires of the key target segments. The study recommends enhanced marketing measurement and analysis since targeting the specific well-segmented target audience with targeted campaigns will help the startup better assess the efficiency of its marketing efforts and assign outcomes to strategies and audiences' qualities. This is perpetual optimization for marketing ROI. The businesses in Switzerland are advised to define their predictive analytics for customer behavior since over the time, with tracing back behaviors of psychologically distinct segments, the startup can use these predictive models for anticipating future purchase patterns, recognizing other potential churn risks and future optimization of marketing efforts. This research further advises the startups stakeholders to conduct thorough and constant assessment of gaps so that they keep the startups' offerings aligned with the desires of Swiss consumers.

6.4 LIMITATIONS OF STUDY

Despite providing valuable insights into how digital analysis has aided in return on investment (ROI), consumer engagement, and marketing effectiveness of a startup firm in Switzerland, the study's investigation had several limitations. Firstly, although the study's sample size (n=177) for survey and n=5 for semi-structured interviews were sufficient to guarantee significant results, it is possible that the findings will not be fully extrapolated to larger stakeholders of startup businesses throughout Switzerland. Additionally, it can be challenging to locate comprehensive and reliable

data about digital trail analysis because the participating Swiss startup businesses may be unwilling to divulge sensitive information about their digital footprint. An additional limitation of this study was its complete reliance on primary data from survey questionnaires while evaluating some of the research objectives that were created with the researcher's viewpoint in mind. Therefore, because they were unable to submit their own opinions on the given question, the participants were restricted to what the researcher had determined. Nonetheless, this research relied entirely on the overall digital trails, which indicate the several types of digital trails were not taken into consideration. As a result, it is hard to conclude which among these digital trails has more impact on marketing effectiveness and customer engagement. Finally, since this study focused on the Swiss startup businesses, which means the results can only be applied as implications in other businesses in Switzerland.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Based on the drawbacks of the current research and drawing upon the knowledge gathered from this investigation, there are a number of suggestions that could lead to a more thorough understanding. For example, to guarantee an improvement in the generalizability of the findings, this study suggests that prospective investigators increase the sample size through incorporating more marketing professionals from various startup businesses in Switzerland but embrace or change comparable methods. Furthermore, investigators who want to conduct similar studies are encouraged to assess how the digital trail analysis has affected the customer engagement, marketing effectiveness, and return on investment (ROI) individually and use various digital trail metrics, such as search engine queries (for instance, phrases entered and keywords), social media activities (for example, hashtag, likes, shares, comments, follows), and web browsing behaviors (e.g., page visits, time spent). However, it is suggested that researchers that need to carry out comparable investigations employ different case studies, including construction services, and contrast the results with the present research. Furthermore, the present investigation suggests that future researchers conduct comparable research while assessing the combined impact of the various digital trails, including on the customer engagement, marketing effectiveness, and return on investment (ROI). In addition, researchers can employ other data analysis techniques, including structural equation modelling (SEM), to examine data and determine whether the accuracy of the findings gained has improved. Finally, future investigators are advised to test the results delineated

from qualitative data using quantitative data analysis methods to assess how comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies contribute to marketing approaches statistically.

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APPENDIX A SURVEY COVER LETTER AND INFORMED CONSENT

Introduction

Dear {Respondent First Name},

I am a Doctor of Business Administration student at Swiss School of Business and Management Geneva. I am conducting a research investigation entitled: ***Analysing Digital Trails for Targeted Digital Marketing***. Therefore, due to your knowledge with the digital trails analysis while engaging with various customers in your workplace, I would like to invite you to be a part of this research study. The data that will be used in the study will be the opinion that you will express whenever you are answering the survey questions shown in the questionnaire below. Also, your information will not be released to any other third party for any reason other than for purposes of this current study and will be disposed of after a period of one year from the time this research would be concluded. In addition, the use of personal identity data during results presentation is prohibited to protect the identity of all the respondents who will participate in the study. Hence, it is important for you to provide the right answers to the questions that are asked so that you can contribute positively to the overall study and of course, the outcome and the deduced conclusion. I would also like to take this opportunity to graciously thank you for the few minutes that you have or will spend to answer the numerous questions in the questionnaire. Finally, if you have any additional questions, the researcher is available to respond through the following details:

Sincerely,

Siddharth Jose

sid@dainin.co.uk

APPENDIX B SURVEY QUESTIONS

Survey Questions

Instructions: Provide an indication on the relevant box with either a checkmark (X) or a tick (✓) in the questions provided below.

Part A: Demographic Information

1) Please indicate your gender?

❖ Female { }

❖ Male { }

2) What is your age range?

❖ 25 -35 years { }

❖ 36 - 45 years { }

❖ 46 -55 years { }

❖ Above 55 years

3) What is your role in the firm?

❖ Digital Marketing Managers { }

❖ Social Media Strategists { }

❖ Content Marketers

4) Years you have engaged with digital trail analysis in your business

➤ Below a year { }

➤ 1-5 { }

➤ 6-10 { }

➤ Above10 year { }

5) The kinds of digital trail data analyzed in your company?

➤ Customer reviews and feedback { }

➤ Online purchase behaviour { }

➤ Email marketing engagement { }

➤ Social media interactions { }

- Website analytics { }

Part B: Questions that assess the relationship between digital trail analysis and marketing effectiveness within the business operations

6) Digital trail analysis has greatly increased the efficacy of our marketing.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

7) Customer segmentation and targeting tactics have greatly improved due to digital trail analysis.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

8) Digital trail analysis has made it possible to better integrate data and increase the efficacy of marketing.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

9) I am rather pleased with how digital trail analysis has affected the marketing initiatives of the business.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

Part C: Questions that assess the effectiveness of digital trail utilization on customer engagement

10) I provide digital trail data a high rating for efficacy in raising customer engagement metrics related to the acquisition and retention of the customers.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

11) Utilizing digital trail data has greatly enhanced your capacity to customize offers and marketing messaging.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

12) Digital trail analysis has greatly improved our capacity to customize interactions with customers.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

13) The adoption of digital trails has had the biggest beneficial effects on the element of improved user experience on apps and websites.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }

5. Strongly agree { }

Part D: Questions that assess the extent in which personalization and relevance in digital marketing enhance marketing effectiveness

14) Personalized marketing content works wonders for keeping your clients interested.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

15) The digital marketing content is really pertinent to our target group in the market.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

17) Sales income is a metric that has been greatly impacted by the personalization of digital marketing in the campaigns.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

18) Click-through rates were a metric that had been affected by the relevance of digital marketing in the campaigns.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

19) Personalized marketing content usually gets more responses from consumers than generic information.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

Part E: Questions that assess the extent in which return in income (ROI) in digital marketing is positively impacted by digital trail analysis

20) Digital trail analysis has greatly increased the return on investment for our digital marketing in your business.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

21) Through the use of digital trail analysis, a significant percentage increase in return on investment has been seen.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

22) The factor of digital trail analysis has greatly increased the amount of money made from digital marketing initiatives in terms of return on investment?

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }

5. Strongly agree { }

23) The digital trail analysis has greatly increased the digital marketing campaigns' effectiveness in terms of budgetary control and resource allocation.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

24) The use of digital trail analysis is highly regarded since it is thought to increase the return on investment for digital marketing.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

Part F: Questions that assess the overall adoption of digital trail analysis in businesses.

25) I am quite knowledgeable about the idea of digital trail analysis.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

26) Digital trail analysis is occasionally employed in the company's operations.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

27) Analysing the digital trails has improved the company's operations.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

28) Several departments, including product development, customer service, sales, and marketing, use digital trail analysis.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

Part G: Questions that assess the overall view of personalization and relevance of digital marketing.

29) In my experience, the personalized material works incredibly well to engage the intended audience.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }
5. Strongly agree { }

30) A key component of the digital marketing approach is its relevancy.

1. Strongly Disagree { }
2. Disagree { }
3. Neutral { }
4. Agree { }

5. Strongly agree { }

31) The relevancy of the digital marketing material is assessed by customer feedback, data analytics, and insights.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

32) All things considered, the company's digital marketing material is extremely pertinent to the intended demographic.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

33) Overall, I attest that the marketing efforts have been much enhanced by personalization and relevance in digital marketing.

1. Strongly Disagree { }

2. Disagree { }

3. Neutral { }

4. Agree { }

5. Strongly agree { }

**I APPRECIATE YOUR SUPPORT IN PARTAKING IN THE CURRENT SURVEY.
THANK YOU**

APPENDIX B INTERVIEW QUESTIONS

Questions pertaining to the comprehensive analysis of competitor product feedback, identifying gaps in products and messaging, and formulating strategies to enhance brand offerings and marketing approaches.

1. What techniques do you employ to get input on rival products, and how do you make sure the information is accurate and complete?
2. Could you give an instance where you used competitor product feedback to identify an important trend or insight? What impact did it have on your approach?
3. Describe how you find gaps in your items when compared to those of your competitors.
4. Could you give a scenario of the gaps you experience in your messaging or product line?
5. Give an example of a plan you produced based on competitive analysis to enhance your brand's product offerings. What were the results?

Questions that pertain the consumer psychology analysis with product market research to acquire consumer insights that inform data-driven marketing decisions.

1. Kindly explain how you pinpoint the main psychological factors that influence customers to buy a specific good or service?
2. Please identify the techniques you employ to comprehend the psychological aspects that affect the behaviour of the consumers.
3. Please describe how you plan to combine consumer psychology with product market research.
4. Kindly explain how you make sure the psychological elements of customer decision-making are appropriately captured by your market research techniques.
5. Explain how you can make sure your marketing choices reflect the changing demands and tastes of your target audience.
6. Please provide any further indication on how you believe that you enhance brand messaging, communication, and positioning among the consumers

APPENDIX C SAMPLE INTERVIEW CODE

Codes	Raw Data
	To evaluate whether amalgamating consumer psychology analysis with product market research help to acquire consumer insights that inform data-driven marketing decisions.
Needs Motivations Mental processes Targeting Segmentation	Participant 1: In my opinion, creating successful marketing strategies requires combining consumer psychology analysis with product market research needs ". Product market research can yield important information about the characteristics, motivations, and purchasing patterns of consumers. Analysis of consumer psychology, on the other hand, delves further, examining the underlying motivations, feelings, and mental processes that influence customer behavior. Respondent 2: "You may learn what people are purchasing through market research, but you can also learn why by studying consumer psychology. For instance, market research may show that consumers are becoming more interested in eco-friendly goods. Consumer psychology, on the other hand, delves further and examines the reasons underlying this trend. Are buyers motivated by a feeling of social obligation, an urge for healthier products, or environmental concerns? By comprehending these fundamental psychological factors, we can better customize marketing messaging and product creation to appeal to the target demographic. To comprehend the fundamental requirements and values influencing consumer behavior, we go beyond cursory observations. Our ...customers may be targeted by region, income, or age in traditional market research. We may nevertheless generate more complex segments by adding psychological elements like values, personality traits, and lifestyle. For example, we could pinpoint a market niche that is strongly driven by prestige and status. We may use this consumer psychology information to

	guide our marketing and product development initiatives. To appeal to this market, we can emphasize high-end features, unique designs, and inspirational content. This strategy enables us to establish a more profound and psychological connection with customers by going beyond just demographics. Participant 3: By using consumer psychology, we have been able to segment up our audience into groups according to emotional triggers and behavioral characteristics. By going beyond conventional demographic segmentation, this strategy enables us to cater to the unique requirements and preferences of every group. Respondent 4: We now have a better understanding of why customers make particular choices because of the integration of consumer psychology. This knowledge extends beyond demographics and enables us to access the psychological and emotional motivations that influence behavior. ... We can develop more precise and thorough consumer segments by comprehending the psychological factors that influence consumer behavior. This has made it possible for us to target particular demographics with customized marketing messages that are highly relevant to their needs and objectives. Participant 5: Through examining psychological trends, we have improved our ability to predict and satisfy customer wants. As such, customer loyalty and satisfaction have increased as a result of this proactive strategy.”
	To evaluate whether the comprehensive analysis of competitor product feedback, identification of gaps in products and messaging, and formulating strategies enhance marketing approaches
	Participant 1: We now have a far better understanding of our target market due to the feedback from competitors. ... We have a tonne of content marketing ideas thanks to the feedback from our competitor.

Competitor messaging Content Marketing	Participant 2: Rather than just asserting that we are "the best," we might point out certain benefits based on the areas in which our rivals are lacking." ... Our content marketing can directly compare our product with others in the market by stating our benefits while answering complaints about alternative offerings. Respondent 3: We have been able to create more engaging marketing campaigns because of messaging from our competitors. ... The content strategy offered by our competitor feedback aids in our comprehension of the types of content that appeal to our target market. Participant 5: Knowing the typical grievances made about rivals allows us to proactively address them in our marketing collateral." ... "...messaging is also influenced by this, enabling us to emphasize our advantages and the special ways in which we address client issues regarding the products ... Our content marketing development usually addresses the unmet requirements from competitor feedback to show ourselves as the solution choice for potential customers.
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APPENDIX D SAMPLE RAW DATA

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to	st	st	r	so	r	l	c	p	I	I	d	I	o	c	ra	p	er	r	r	r	ra
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er	m	m	x	al	et	s	-	ns	n	ig	et	e	le	si	o	t	l	et	et	et	M
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