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Data analytics in digital marketing for tracking the effectiveness of campaigns and inform strategy

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A B S T R A C T

The purpose of the study is to present a digital marketing data analytics model to analyze campaign efficacy and inform strategy based on website performance, social media metrics, email marketing performance, customer data for targeting and personalization, and customer journey analysis. This model defines campaign success criteria for strategy. A statistical analysis approach was used to analyze the data for the research. Data was gathered through a survey. This study analyzes demographic parameters descriptively using the structural equation model (SEM). From comprehensive surveys, 125 digital media and 115 online shop subjects responded. Sampled were 240 people. According to the findings, social media data, customer journey research, successful advertising, and informed approaches are highly correlated. Compared to the previous study, website performance evaluation does not match the marketing plan's success. The model's results can be used by any company that communicates with clients online.

1. Introduction

The term “digital marketing” refers to any advertising that takes place entirely online or through digital devices. Companies use internet channels, including search engines, social media, email, and websites, to communicate with their current and potential customers (Kajale & Joshi, 2021). Web marketing or Internet marketing (K. & Kumar, 2021), as its name suggests, refers to using digital tactics and platforms to reach consumers where they spend most of their time online. Websites, digital ads, email marketing, online brochures, and other online promotional materials are just some of the tactics that fall under the umbrella of "digital marketing," which aims to increase a company's visibility in the digital world. Several advertising methods and channels are available in the digital media landscape. Some examples of digital media techniques are engine optimization, search engine marketing, campaign marketing, data-driven marketing, social media marketing, direct email marketing, and display advertising are becoming increasingly common as technology develops (Varadarajan et al., 2022). Based on measurements of website performance, social media metrics, email marketing performance, customer data for targeting and personalization, and an analysis of the customer journey, the study aims to present a model for data analytics in digital marketing for tracking the effectiveness of campaigns and informing strategy. The purpose of this model is to inform strategy by identifying the importance of these factors in the success of campaigns. The model's results are comparable across businesses because they apply to any organization that uses the Internet to interact with current and potential customers and final customers who may place new orders.

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The significance of this research data analytics in digital marketing plays a crucial role in tracking the effectiveness of campaigns, as well as informing strategy. By measuring website performance, analyzing social media metrics, tracking email marketing performance, analyzing customer data for targeting and personalization, and analyzing the customer journey, businesses can gain valuable insights into their audience's behavior, preferences, and engagement levels. This information can then be used to optimize future campaigns and improve the overall return on investment. Data analytics helps marketers to make data-driven decisions and understand the impact of their efforts on the target audience, allowing them to refine their approach and achieve better results.

2. Literature Review

2.1 Measuring website performance

The necessity of accurately assessing a Website's performance rises in tandem with the growth and variety of uses for the Web (website analytics) (Anwyl-Irvine et al., 2021). For organizations, knowing how a website is doing in terms of a specific attribute or process can be aided by using Web Metrics, a quantitative measurement of such things. Measurements are used to evaluate and track a website's performance or an individual's information-seeking habits on the Internet (Fayyaz et al., 2020). Page views, page transitions, and average session lengths are all examples of commonly used metrics on the Web (Fu et al., 2021). The abundance of data and information makes it challenging to isolate critical indicators. It can be observed how well a website performs by tracking the success of a company's campaigns by looking at how many visitors it regularly receives (Papagiannis, 2020). Even if the healthy ranges themselves will vary, the effectiveness of the marketing campaigns will hinge on this. This will be a crucial metric for assessing the health of the site and the company as a whole. If people come to a site and do not stick around to check out the goods or services the owner sells, the trip is a waste of time (Ramezani Nia & Shokouhyar, 2020). The "bounce rate" refers to the proportion of site visitors who only see a single page and leave. The lower the percentage of visitors immediately leaving the site after arriving, the more likely the visitor will stick around and explore the site further (Tasanen, 2021). Generally speaking, especially for commercial and e-commerce websites, the lower the bounce rate, the better. In some circumstances, a high bounce rate is reasonable, such as a website designed to supply customers with all they need on a single page. The percentage of visitors who leave a website without making a purchase is known as the "dropout rate," Its values can provide insight into the allure of a company's online content and the quality of its presentation.

The rate of abandonment, or “bounce rate”, is expressed as a percentage. A single-page exit is reported when someone leaves a website without interacting with the content or viewing any additional pages. Rocket Fuel found that the average website had a 26%-70% abandonment rate (Nguyen, 2022). According to the research, a bounce rate between 40% and 60% is typical. The bounce rate is deemed high if it is greater than 60%. Finding out how often content on the Internet is updated is essential for judging how well the indication of the freshness of marketing content performs within predetermined parameters (Nguyen, 2022).

Average time spent on site, like bounce rate, is an excellent measure of user involvement. Data box found that for most sites, the average session lasts between 2 and 3 minutes (Zaric, 2022). No matter how beautiful or exciting a website may be, visitors will not spend much time there if visitors do not find it helpful or interesting. However, excessive time spent on a site may indicate UX issues, depending on the company. Site owners should look into potential bottlenecks if swiftly guiding clients through a procedure is a priority. Conversions can be configured in Google Analytics to track various actions, not just purchases. The most common forms of engagement that lead to conversion include forms, email subscriptions, and click-to-chat features (Huidobro et al., 2022). Because every enterprise is unique, it is essential that they set up the conversions that have the most significant impact on the bottom line. While not all conversions result in an immediate increase in revenue, they all represent vital milestones in the customer's experience. Recent studies show that many businesses need to realize the total return on their investment in web analytics because they need to follow the fundamental best practices in this area (Saura, 2021).

2.2 Metrics analysis in social media

Despite the wealth of information available on social media, marketers have traditionally used these sites solely to reach their target audiences (Aljukhadar et al., 2020). Although it is crucial to use it as a means of advertising, this view needs to account for the wealth of information that can be mined from social media. Individual customers and consumer networks can be better understood with the help of social media data. As such, it is clear that social media data can be a goldmine of customer insights that can inform and strengthen marketing campaigns (Palalic et al., 2021). Collecting and analyzing data from social media sites is known as “social media analytics”, It is used to boost the performance of paid and organic promotion. Overgoor et al. (2019) note that firms can use social media analytics to determine if their advertising plan is successful. All of this points back to a truism that every marketer knows: there is no sustainable way to enhance results without first monitoring and analyzing content and its performance (Wibowo et al., 2021). Marketers in social media need a data-driven road plan to show them the way and provide direction. In contrast to conventional methods of market research, social media data is freely provided by users, allowing businesses to hear the “voice of the consumer immediately” (Khan et al., 2021; Ramšak, 2022). Managers

nowadays are tasked with making sense of a deluge of social media data, but they often need a framework. Companies are reassessing their marketing communication strategies in light of increased competition to improve brand value by increasing consumer relevance, fostering two-way contact, and forming enduring ties with customers (Fatma & Khan, 2023; Teshager, 2021). Across industries, social networking has shown to be a more flexible tool for improving two-way communication between companies and their customers (Klein & Todesco, 2021). The social network structure and democratic nature of social media set it apart from traditional and other online media in fundamental ways. In order to conduct an accurate analysis and implement effective management, it is necessary to use a unique method of measurement to account for these distinctions. The correct social media metrics can only be produced by establishing a comprehensive framework that incorporates marketing, psychological, and sociological ideas to address the many facets of social media (Li et al., 2021). Developing an effective social media dashboard is not only tricky but also required. Metrics for social media reveal how effective the business campaigns have been (Tarsakoo & Charoensukmongkol, 2020). Some examples of social media indicators that reveal a company social media strategy's success include awareness, engagements, videos, customers, the share of voice, and sentiment (Gkikas et al., 2022). Metrics provide the foundation for constant development and progress, from the number of people who view a company's content to the amount of money it generates via social media. Social media analytics uses information gleaned from online forums like Facebook and Twitter to inform operational decisions (SMA). This technique provides a deeper understanding of the social consumer than either regular monitoring or fundamental analysis of retweets (Mirzaalian & Halpenny, 2019). Both corporations and universities can benefit significantly from analyzing user-generated data. There is valuable information in these numbers, such as customer comments on their perceptions and suggestions for new products or improvements to existing ones, which may be used to shape strategy and measure the results of an advertising campaign.

2.3 Monitoring the success of email campaigns

Due to the importance of digital marketing in boosting businesses' a wide variety of companies across industries have begun utilizing big data and data mining applications to categorize better, and target marketing offers to members based on their specific and individual needs, all while capitalizing on members' browsing habits (Ajah & Nweke, 2019; Shahzad et al., 2022). As a result of the customer's profile, personalized email marketing sends the correct offer to the right person at the right time (Goic et al., 2021). In order to be successful, personalized email marketing must first determine what each customer wants and then provide them with information about available options. Marketers require and desire more insights for a channel as potent as email marketing. Businesses can constantly refine their strategies by keeping tabs on how successful each marketing effort is. The most fantastic method for businesses to learn about their audience, expand on what works, get rid of what does not, and fine-tune their email marketing approach is tracking and evaluating performance. Measuring, evaluating, and analyzing strategies should be integrated into a campaign (Das, 2022). In addition, marketers should consider scalability at every turn. Marketers can create more efficient campaigns by learning which measures will serve as key performance indicators (KPIs), effectively interpret measurement results, and assess continuing performance (Ghahremani-Nahr & Nozari, 2021).

Key performance indicators in the email are measurements that assist organizations in evaluating the success of their campaigns. A company may see how many people have opened, clicked, and engaged with their emails using a marketing platform. Reports consolidate this information to demonstrate how effective the emails have been over time concerning one another and email marketing industry standards (Păvăloaia et al., 2020). In order to make the most informed decisions, managers must understand the significance of each key performance indicator (KPI). The open rate is calculated by dividing the total number of emails sent by the number of emails opened. This helps companies learn more about what makes email recipients click through (Chung, 2019). Moreover, it can aid companies in gauging employee interest. The percentage of the campaign's overall audience engaged with link tracking data is represented by the click rate. It is also helpful to keep tabs on things like which contacts click on which links, how many clicks each link receives, how many clicks each unique open receives, how many times someone opens a link, and which link receives the most clicks overall (Lorente-Páramo et al., 2020). When a server rejects an email, it is called a bounce. This information helps maintain an ordered readership and monitor mail delivery. With a low bounce rate, businesses can build a solid reputation as a sender. The sender's reputation is damaged when there is a significant rate of undelivered (unseen) content (López García et al., 2019). Marketers can learn much about their audience and how they interact with their emails by analyzing device information. Content design must consider the variety of devices that will be seeing it and optimize for the most likely of those (Óskarsdóttir et al., 2019). How often the business's contacts report their emails as spam is calculated on a scale from 0 to 100. The higher the spam score, the less likely the recipients will read what the business has sent them. The actual test of evaluating expertise is gaining actionable insights from the data (Ma & Sun, 2020).

2.4 Utilizing client data analysis for segmentation and customization

The pace of study on the impact of digital and technological developments on the knowledge potential of companies in meeting customer wants and providing products, and services has increased dramatically recently (Crittenden et al., 2018; Kumar et al., 2019). When marketing departments formulate plans based on meticulous data analysis, they engage in "data-driven marketing" (Johnson et al., 2019). A marketing campaign's success is affected by several factors, and this study will shed light on those factors, including customer preferences and more significant trends. Data analysis has become increasingly important in marketing campaigns in recent years due to the proliferation of niche media outlets and shifting customer expectations (Du

et al., 2021). Companies can now benefit from a data-driven media planning strategy because of the abundance of data at their disposal. Through each touch point, marketing teams can use attribution modelling to collect data from applications and websites to trace the customer's journey from first exposure to the brand. After collecting and analyzing this data, marketing teams will better understand which creative assets were most responsible for generating engagements and which channels delivered the best return on investment. The data will help businesses fine-tune their strategies for optimal customer satisfaction and marketing ROI (Saura et al., 2021).

These days, customers need help with brand marketing and message. Thus, people choose the messages they will respond to more carefully than ever before. In order to maximize the likelihood that their intended audience will take the desired action (e.g., click on an ad, sign up for a webinar, read a blog post), marketing teams can benefit significantly from adopting a data-driven approach (Yerimpasheva & Balgabayeva, 2020). By focusing on data, businesses can better meet their customers' needs and strengthen their brand's reputation. Furthermore, conversion rates are increased due to data-driven marketing's ability to provide more relevant and engaging messages to individual consumers. Market predictions are improved, and cross-channel customer engagement is boosted by analyzing customer data (Rasool et al., 2020).

Marketers generally agree that it is preferable to base decisions on facts than intuition, especially when using a data-driven marketing approach (Nell et al., 2021). Because of the insights gleaned by data analysis, marketers may make decisions grounded in practice rather than speculation. Nonetheless, data-driven marketing does not ignore the role that consumers' feelings play in making purchases. In order to strike the right balance between intellectual and emotional decision-making, marketing teams must examine data within a specific framework.

2.5 Analyzing customer journey

Analyzing customer behavior across channels and time to see how it affects business outcomes is known as "customer journey analytics" (Kuehnl et al., 2019). Business organizations are increasingly adopting this method as they see the usefulness of using customer journeys to track how their customers perceive their services and where they can improve. "The practice of recording and evaluating how customers use combinations of channels to connect with a business" (Zaki & Neely, 2019) is what Gartner calls “customer journey analytics”. Information from many sources is combined to give a complete picture of the client. The analysis of the customer's journey is a continuous one. In real-time, the analytics platform compiles and analyses customer behavior, including the, who, what, where, and when (Bhatt, 2021). Accurate data is used in customer journey analytics, one of its main benefits. It combines data from many sources and incorporates feedback from end users. Data is compiled through customers' experiences with various company touch points and channels. It is a valuable analysis for keeping tabs on campaigns and making well-informed decisions because it reveals the interconnectedness and impact of various activities on customers' final verdicts (Terho et al., 2022).

Careful examination of the customer's journey allows for creating a journey map, a visual representation of the numerous mechanisms a customer has with a company and its offerings or services. Awareness is the first step on the road map, leading to thought, interest, purchase, service, and loyalty (Berman, 2020). By highlighting potential weak spots, pain points, and bottlenecks and providing an overall perspective on consumer behavior, customer journey mapping can help improve the quality of the user experience. There are multiple points of contact at each juncture in the mapping, allowing for in-depth exploration of customers' attitudes, routines, and inclinations by the marketing team.

The analysis of the consumer journey, from initial exposure to the product to post-purchase satisfaction, can help businesses better target their marketing efforts (Ajah & Nweke, 2019). Businesses can segment their consumer base by creating user profiles that reflect the demographics of each segment's interests, demands, job titles, and expected budget. Corporations can be granular and tailor their marketing to each customer (Even, 2019). This is made possible by the adaptability of digital advertising for businesses. It is much easier for companies to provide people with a variety of ad recommendations and content recommendations. By analyzing customers' paths, firms gain insight into what information to provide to customers. Consumer journey analysis is a data-driven approach to improving a company's customer interaction (Micheaux & Bosio, 2018). Furthermore, it aids in developing marketing programs and the in-depth study of their efficacy by tracking consumer behaviour at every stage.

3. Hypothesis

H_1: *Metrics such as page views, bounce rate, and time on site give businesses insight into how their website is performing, allowing them to make any necessary adjustments, monitor the efficacy of campaigns and guide future decisions.*

H_2: *Tracking the success of campaigns and shaping strategy are aided by thoroughly examining social media metrics.*

H_3: *The open rate, click-through rate, and conversion rate are just a few metrics organizations can track using data provided by email marketing platforms. Analyzing data for email marketing allows for better campaign performance, subscriber understanding, and content personalization.*

H_4: *Customers' demographics, locations, and purchase histories are just some types of information that businesses may use to target their advertising better and provide a more customized experience.*

H_5: *Businesses can increase conversion rates and enhance the customer experience by monitoring the customer's path from initial awareness to final purchase. By mapping the customer's experience with the brand, a business can learn what those customers want and need from the company at every stage. It aids companies in designing journeys that encourage customers to complete a desired action.*

4. Research Methodology

This research set out to create a framework for assessing the myriad data analytics factors used in digital marketing to measure the success of campaigns and direct future efforts. Consequently, various approaches were used to ensure that all relevant information was provided during the various phases of model development, allowing for thorough conversations to occur. By analyzing digital marketing research articles, the research looked at the indicators used to gauge the success of ongoing digital campaigns. The quantitative information was gathered using an online survey. Two hundred online retailers and managers in marketing, advertising, public relations, and digital media received it, and it was distributed to another 200 random email addresses. The survey asked respondents to select from five main data analysis components in digital marketing to help them create successful marketing campaigns and guide their strategy, with each question corresponding to a different stage or scenario, such as attracting customers, keeping customers, and building relationships with customers. A combination of indirect observation and polling helped experts form an opinion and appraisal that were crucial to the model's success. In terms of marketing, advertising, public relations, digital media, and managerial decision-making, 125 participants reacted positively to the poll, while 115 online shop representatives did so. A total of 240 people were used as the sample size.

4.1. Sampling strategy

Data analysis is essential to the statistical methodology of research. Statistical analysis is sifting through data and searching for trends and patterns to help guide judgment calls. The Sample was put together using standard procedures for between-subjects studies. Purposive sampling, a non-probabilistic technique, was used to collect the sample. This allowed the sample to consist of a carefully chosen subset of the population.

4.2. Participants

Out of a total sample size of 240, 125 were recruited from sales management, marketing, advertisement, digital media, and public relations roles. The other 115 are associated with online retail marketing. Any individuals meeting the criteria mentioned above who were willing to participate in the study were considered for inclusion.

4.3. Style of the questionnaire

This research aimed to create a framework for assessing the factors of data analytics in digital marketing to monitor the efficiency of campaigns and guide strategy. Questions posed to participants served as the primary data collection method. Companies' use of analytics to monitor the efficacy of campaigns and guide choices was investigated in this survey study. The types of analytics studied included website analytics, social media analytics, email marketing analytics, and customer data and journey analytics. An evaluation through various scenarios and situational questions using the five variables in the option was included in determining the frequency of use and importance of each analytics in the foundation of campaigns, guaranteeing that the survey results are as accurate as possible. 240 people were enrolled in the study and split into equal groups. A Likert scale with five points, ranging from "strongly disagree" to "strongly agree," was utilized for several of the survey questions. With the help of the Likert scale concept, the overall responses can be converted into numerical components [1 = strongly disagree, 5 = strongly agree].

5. Study, Outcomes, and Discussion

Independent variables that impact campaign tracking are evaluated statistically so businesses can make educated decisions based on the findings. The study considers five independent factors (measuring website performance, analyzing social media metrics, tracking email marketing performance, utilizing customer data to inform targeting and personalization, and analyzing the customer journey) that influence the dependent variable (tracking of Effectiveness of campaigns and inform strategy). This study seeks to evaluate whether the variables above affect campaign tracking and strategy, as well as people's opinions on this. The questionnaire serves as the basis for the study. Researchers questioned online and offline marketers. After determining which responses would be helpful in the study, the researchers settled on 240 participants as their sample.

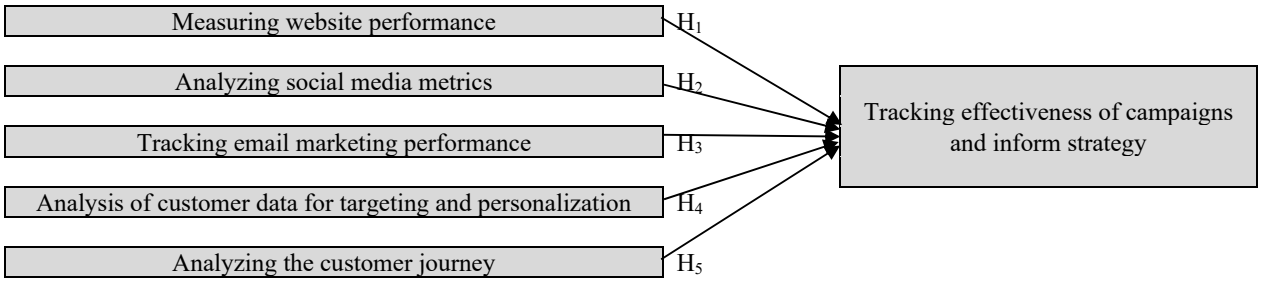

Fig. 1. Hypothesis model

5.1. Analysis

This section thoroughly analyses the research data, focusing on first-order methods like percentage, correlation, and structural equation modelling (SEM). Table 1 displays the respondents' demographic data. There were 400 questionnaires sent out, but only 240 were usable. 87% of the responders were male, while only 13% were female, as shown by their profiles. Only 12% of the sample were between the ages of 24 and 29, while 24% were between the ages of 30 and 35, 36% were between the ages of 36 and 39, and 24% were older than 40, between 19% and 45%, roughly. About 52% of the group consisted of people working in marketing, but only about 48% shopped online. Expertise and departmental affiliation were used to further categorize the sample of marketing professionals into the following groups: marketers (40%), advertisers (25%), public relations (PR) professionals (9%), digital media professionals (21%), and managers (5%). Seven percent of the professionals in the sample had less than two years of experience, fifteen percent of them had experience ranging from three to seven years, twenty-five percent had experience ranging from eleven to fifteen years, and thirty-two percent had experience exceeding fifteen years.

Table 1
Demographic detail

Demographic Indicia	Characteristics	Frequency	Percentage
Sex classification	Male	209	0.87
	Female	31	0.13
Age	24 to 29 years old	29	0.12
	30 to 35 years old	58	0.24
	36 to 39 years old	46	0.19
	≥ 40 years old	108	0.45
Category	Marketing professionals	125	0.52
	Online store owners	115	0.48
Department	Marketing	96	0.4
	Advertisement	60	0.25
	PR	22	0.09
	Digital media	50	0.21
	Managers	12	0.05
Experience	1-2 years of experience	17	0.07
	Expertise Level: 3-7 Years	36	0.15
	Expertise Level:7-11	50	0.21
	Expertise Level:11-15	60	0.25
	Expertise Level: Above 15 years	77	0.32

5.2 Composite reliability and correlation

Cronbach's Alpha can be seen in Table 2. Keeping tabs on the efficacy of email marketing: 0.852; analyzing customer data for targeted and personalized marketing: 0.841; gauging the effectiveness of a website: 0.883; assessing the metrics generated by social media: 0.781. Additionally, 0.821 in customer journey analysis. Meanwhile, the values of the Composite Reliability are as follows: measuring website performance (0.894), analyzing social media metrics (0.873), analyzing the customer journey (0.868), and tracking email marketing performance (0.893). There is sufficient evidence to infer that all employed variables are trustworthy. Table 2's outer loading values suggest that the accuracy of this indicator is good. For indicators to meet their dependability standards, their external loadings must be at least 0.708. The table shows that the values of the loading for monitoring email performance range from 0.740 to 0.865, those for analyzing customer data from 0.725 to 0.840, those for monitoring website performance from 0.744 to 0.905, those for monitoring social media from 0.773 to 0.876, and those for monitoring customer journeys from 0.771 to 0.860. The measurement model's outcomes are presented in Table 2. Convergent validity can be attributed to the outcomes since they are confirmed by AVE, item reliability, and construct reliability (CR) (Hair et al., 2017). The CR, which measures how well constructed indicators reflect the underlying construct, exceeded 0.708, ranging from 0.873 to 0.894. Because the AVE was more significant than 0.50, this construct should be used. The AVE ranged

from 0.613 to 0.985. If the AVE is more significant than 0.5, then the constructs have achieved convergent validity. These findings support the conclusion that the measurement model has high convergent validity.

Estimated path loadings and Table 2 values are used in the structural model evaluation (R^2). The path loadings show the intensity of the independent variable-dependent variable relationships, while the R^2 value measures the structural models' capacity to follow the independent variables. R2 indicates the proportion of variance explained by the exogenous variables in a multiple regression analysis. In this case, the constructs may need to be more adequately distinguishable due to the high degree of correlation between them (above the square roots of their AVE).

Table 2
Measurement Model Synopsis

Variable	Item	Path Loadings	Avg. Variance Extracted	Composite Reliability	Reliability
Measuring website performance	E1	0.798	0.681	0.894	0.883
	E2	0.80			
	E3	0.744			
	E4	0.905			
	E5	0.843			
Analyzing social media metrics	E6	0.773	0.697	0.873	0.781
	E7	0.876			
	E8	0.852			
Tracking email marketing performance	E9	0.775	0.625	0.893	0.852
	E10	0.865			
	E11	0.774			
	E12	0.795			
	E13	0.74			
Analysis of customer data for targeting and personalization	E14	0.755	0.613	0.888	0.841
	E15	0.76			
	E16	0.725			
	E17	0.84			
	E18	0.829			
Analyzing the customer journey	E19	0.86	0.669	0.868	0.821
	E20	0.771			
	E21	0.843			

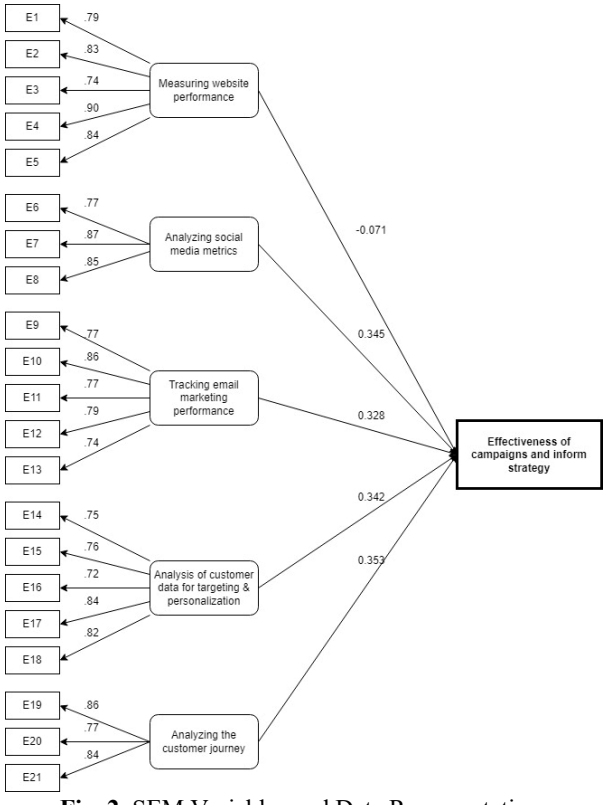

Fig. 2. SEM Variables and Data Representations

5.4 Discussion and Results

Finding this study's results for H1 disprove the hypothesis that a correlation exists between assessing website performance and monitoring the success of campaigns and informing strategy (T value=0.92, ß=0.071, p>0.05). Previous research has shown a correlation between evaluating website performance and the success of a campaign's tracking efforts, but these results contradict that conclusion (Huidobro et al., 2022; Papagiannis, 2020). According to research by Papagiannis (2020), the first step in establishing the website's overall success in measuring a business's campaign effectiveness is to measure the website's total traffic. Nonetheless, the study by Saura (2021) reveals that assessing website performance has a minimal impact on when it comes to social media analytics, businesses are not following the basics of what works in web analytics and are not reaping the full benefits of this field.

This data lends credence to Hypothesis 2 when looking at social media metrics that significantly affected campaign tracking and planned development (T value=4.080, ß=0.350, p≤0.05). Intensely examining social media metrics has been linked to monitoring the success of campaigns and informing strategy, which is supported by these results as per Aljukhadar et al. (2020). According to Palalic et al. (2021) and Overgoor et al. (2019), evaluating social media data can be used to monitor the success of campaigns and shape future decisions.

Results suggest that H3 is true, with tracking email marketing success positively affecting the efficacy of campaigns and informing strategy (T value=2.82, ß=0.3, p≤0.05). The results corroborate prior research on the topic as per Păvăloaia et al. (2020), Chung (2019), demonstrating the value of tracking email marketing performance in improving campaign efficacy and informing strategic decisions.

Using customer data to influence targeting and personalization was found to positively impact the efficacy of campaigns and inform strategy (T value=2.95, ß=0.342, p≤0.05), lending credence to Hypothesis 4. These results agree with prior research by Kumar et al. (2019) and Johnson et al. (2019). Du et al. (2021) found that current marketing campaigns are more successful when customer data is used to inform targeting and personalization.

To summarize, hypothesis 5 predicts that if the business analyzes the client journey, the campaigns will be more successful, and the business strategy will be better informed. This is supported by the study's results (T Value=2.98, b=0.353, p= 0.001). The results of this study are connected to those of Zaki and Neely (2019) and Terho et al. (2022). According to Bhatt's research (Bhatt, 2021), businesses can learn the “hows”, “whats”, “whys”, and “when” of customer behavior by examining customer journeys.

Table 3
Findings Synopsis

Path	T statistics	Original sample (β)	Sample mean	Standard deviation	p - Value	Hypothesis
Measuring website performance	0.918	0.071	-0.058	0.076	0.359	Not significant
Analyzing social media metrics	4.08	0.345	0.350	0.085	≤0.001	Accepted
Tracking email marketing performance	2.818	0.3[13]	0.319	0.116	0.005	Accepted
Analysis of customer data for targeting& personalization	2.947	0.342	0.345	0.116	0.003	Accepted
Analyzing the customer journey	2.977	0.353	0.276	0.077	≤0.001	Accepted

6. Implications

The findings of this study will be helpful for people looking for work in marketing. The study's overarching goal is to gain a deeper understanding of how data analytics using AI affects digital marketing approaches. The study's findings will make AI more approachable for marketing professionals. The authors hope that disseminating their findings will spur other marketing experts to expand their knowledge of the rapidly evolving discipline of digital advertising. Finally, the research and writing of the thesis will assist the writers in advancing their careers by expanding their understanding of data analytics and digital marketing from various perspectives, as well as the latest developments in digital marketing.

The results imply that marketing managers should prioritize gaining insights from the metrics and using analytical tools to correlate and apply those insights to developing campaigns and strategies. Doing this right and keeping a close eye on it will help their business's marketing, conversion rates, and customer loyalty. It would be difficult and inefficient to manage campaigns and construct strategies based solely on gut feeling rather than thoroughly analyzing the vast data available.
Because of this research, we now know what kinds of data analytics are necessary to monitor advertising campaigns' efficacy. Marketers also need a solid understanding of how intelligent computers function and how to use the outcomes and output data they produce. Marketers need technical know-how to interpret and appraise this data to understand how to use all of AI's capabilities, such as different realms and possibilities for evaluating enormous volumes of data. As a result, they will need access to technical knowledge.

Marketers also need to be imaginative since it's their job to come up with new ways of doing things, come up with new products, and come up with new ways of advertising them. As the importance of businesses grows thanks to AI in marketing, the creative aspect of the marketing specialist's role will remain crucial. A delicate balancing act between statistics and imagination will be required of marketing professionals. The need for human creativity will decrease when AI is developed to understand more of the creative process. Moreover, the research findings must match previous studies regarding website analysis. Previous studies suggest that website analytics provide essential information regarding the campaign's success. This is again because of the marketers' need for knowledge about AI and how it works. Website analytics are complex, and sound knowledge is required to derive useful information from them. So as the knowledge and competency of the marketers in AI will increase, the gap between the previous studies and this study will reduce. So, the research will help current marketers find areas of improvement and potential marketing professionals to channel the knowledge gained in marketing and the understanding of AI.

7. Future Studies

Using both primary and secondary sources, this research examines the value of data analytics in modern digital marketing for businesses. However, more research may be done to determine whether or not AI, its function in data analytics, and the efficacy of marketing campaigns have been appropriately explored. This study opens the door to further inquiry. Research can be expanded by utilizing data from other areas, states, countries, or organizational tiers. Results from additional participants can broaden the scope of this investigation. Digital marketing experience surveys can also gauge customers' impressions of marketing automation and AI tools. As a result, you'll have a comprehensive understanding of how the introduction of new technologies has changed the face of the marketing industry in today's economy.

8. Limitation

Inadequate representation of non-responders is a common problem in scientific inquiry. Lack of responsiveness on the part of respondents leads to invalid or useless responses. As for the second, that would be deliberate faking of data. Respondents may purposefully provide inaccurate information or misinterpret the questions to account for their shortcomings. Regulating the respondents' responses makes it harder to overlook such constraints.

9. Conclusion

Several researchers and business owners have provided distinct definitions for the study's primary focus: monitoring the performance of campaigns in order to advise future moves. Various definitions have emerged due to the varying strategic, financial, and customer relevance of tracking successful campaigns and creating educated decisions. According to Ma & Sun (2020), "the actual expertise with evaluation is pulling insights from the metrics and applying them in beneficial ways," which is the most comprehensive and practical definition to date. There need to be more quantitative studies investigating its constructs based on reliable empirical evidence, notwithstanding the wealth of conceptual and operational definitions and models for successful campaigns and creating informed strategies. Therefore, this study aimed to assess elements such as measuring website performance, analyzing social media metrics, tracking email marketing performance, analyzing customer data for targeting and personalization, analyzing the customer journey on successful campaigns, and making educated strategies. Conclusions can be drawn on the significance of evaluating social media data for assessing campaigns' success and informing strategy. Similarly, this research confirms the importance of customer data analysis for targeting and customization to run successful campaigns and develop a sound strategy. The results demonstrated a strong positive link between the analysis of social media metrics, the analysis of the customer journey, and effective campaigns and informed tactics. Results reveal no beneficial correlation between assessing website performance and successful campaigns or formulating informed plans, in contrast to the prior study.

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Conflicts of Interest

The authors declare no conflict of interest.

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