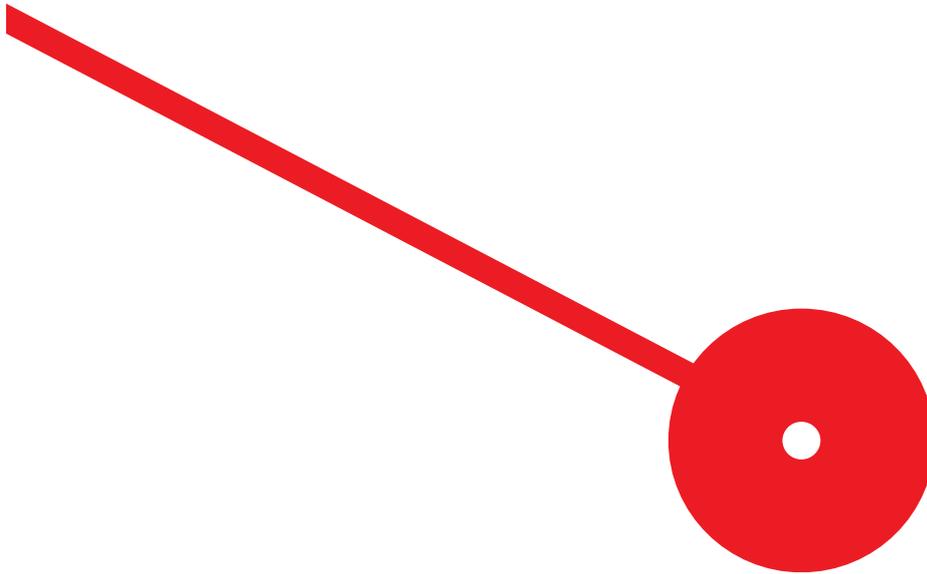




The impact of Data-Driven Marketing on the consumer spectrum

Inês Isabel Vasconcelos Mainzel

06/2024





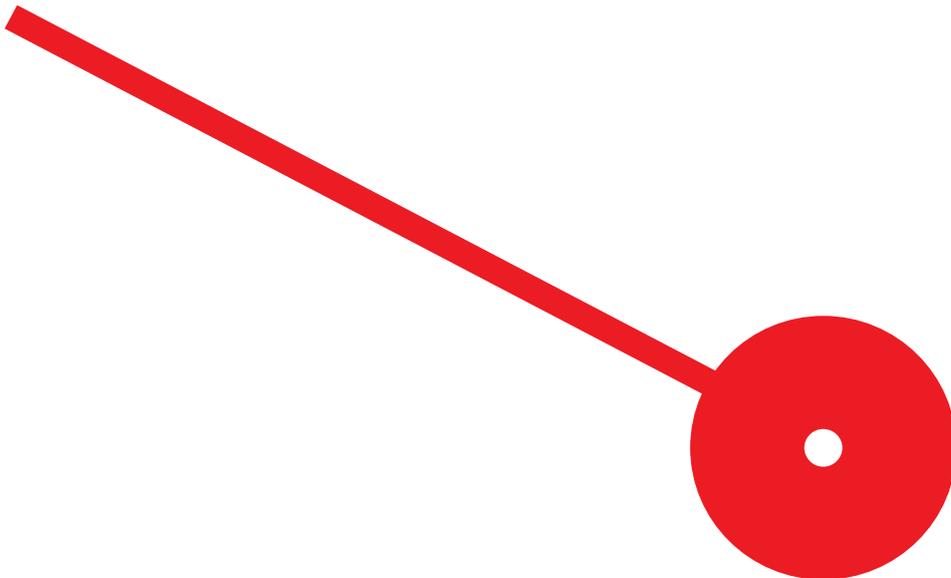
MASTER'S DEGREE IN DIGITAL MARKETING
DATA DRIVEN MARKETING

The impact of Data-Driven Marketing on the consumer spectrum

Inês Isabel Vasconcelos Mainsel

Master's Dissertation

**presented to the Instituto Superior de Contabilidade e
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Abstract:

Companies must put themselves in the role of the customer and map out the customer journey, which allows them to capture the customer's attention more effectively and fully optimize the experience. This practice helps companies better understand their customers, identify possible obstacles during the purchase and conversion process, and thus improve performance. By thinking like the customer, it is possible to personalize campaigns and loyalty actions and offer added value over the competition. This customer-centric approach helps ensure that the company's actions are developed to meet the customer's needs and expectations, resulting in a more meaningful and satisfying experience.

The study highlights the importance of strategic data use in marketing and the need to adapt business practices to the digital world. Moreover, this study aims to understand how Data-Driven Marketing influences the consumer spectrum in an online environment. A data-driven marketing strategy is essential for understanding consumer behavior and making informed decisions. Data analysis, strategy personalization, and customer-centric practices are fundamental to companies' success. The content covers crucial aspects of adapting to a constantly evolving digital environment and understanding the impact of data-driven marketing.

As a result, the main findings show the importance attributed by marketing professionals to decision-making through the development of data-driven marketing components. The data's applicability level and, consequently, the influence on the consumer varies between companies. It is affected by proximity and sensitivity to the public and sector of activity.

The conclusions, therefore, show that companies shape themselves according to the imposed culture, openness, and the possibility of implementation. It was also concluded that, in general, the development of these capabilities positively impacted performance and the achievement of marketing objectives.

Keywords: Consumer spectrum; Customer-centricity; Data-driven marketing; Strategic planning

Resumo:

As empresas devem colocar-se no papel do cliente e traçar o percurso do cliente, o que lhes permite captar a atenção do cliente de forma mais eficaz e otimizar totalmente a experiência. Esta prática ajuda as empresas a compreender melhor quem são os clientes, a identificar possíveis obstáculos durante o processo de compra e conversão e, assim, a melhorar o desempenho. Ao pensar como o cliente, é possível personalizar campanhas, ações de fidelização e uma oferta de valor acrescentado, em relação à concorrência. Esta abordagem centrada no cliente ajuda a garantir que as ações da empresa são desenvolvidas, tendo em conta as necessidades e expectativas do cliente, resultando numa experiência mais significativa e satisfatória.

Ao longo do estudo, é destacada a importância da utilização estratégica dos dados no marketing e a necessidade de adaptar as práticas empresariais ao mundo digital. Além disso, este estudo tem como objetivo compreender de que forma o Data-Driven Marketing influencia o espectro do consumidor num ambiente online. Uma estratégia de marketing baseada em dados é essencial para compreender o comportamento do consumidor e tomar decisões informadas. A análise de dados, a personalização de estratégias e a implementação de práticas centradas no cliente são fundamentais para o sucesso das empresas. A adaptação a um ambiente digital em constante evolução e a compreensão do impacto do marketing baseado em dados são aspectos cruciais abordados no conteúdo.

Assim, como principais resultados surge a importância atribuída pelos profissionais de marketing à tomada de decisão, pelo desenvolvimento de componentes de Data-Driven Marketing. Bem como o nível de aplicabilidade dos dados e, conseqüentemente, a influência no consumidor varia entre empresas e é afetado, pela proximidade, sensibilidade ao público e sector de atividade.

Logo, as conclusões mostram que as empresas se moldam consoante a cultura imposta, a abertura e a possibilidade de implementação. Concluiu-se ainda que, de uma forma geral, o desenvolvimento destas capacidades teve um impacto positivo no desempenho e na concretização dos objetivos de marketing.

Palavras-chave: Espectro do consumidor; Foco no consumidor; Marketing orientado por dados; Planeamento estratégico

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Abbreviation's list

AI – Artificial Intelligence

AIR – Agile, Inventive, Reflexive

B2B – Business-to-business

B2C – Business-to-consumer

CRM – Customer Relationship Management

WOM – Word-of-mouth

CHAPTER I - INTRODUCTION

Introduction

Developing efficient marketing strategies has become challenging in an increasingly digital world, with technological advances and easy access to information. To thrive, it is essential to capture and understand data to optimize it for use in creating a connection with the target audience (Rosário & Dias, 2023).

So, the question remains: How do Data-Driven Marketing practices directly influence consumer behavior in an online environment? In Portugal, the primary failure to answer the question has been understanding the benefit of implementing Data-Driven Marketing. This is extremely important since the approach under study makes it possible to identify patterns, trends, and preferences just by analyzing quantitative data and making informed decisions (Tripathi & Bagga, 2020).

There is a need for these companies to adapt to a new digital reality and incorporate new strategies to achieve success. Therefore, a competitive advantage is necessary, and it refers to a competitive position in the market, efficiently improving its resources and services, obtaining profits and substantial improvements, and allowing the implementation of changes (Hu, 2022). Moreover, it is essential to work on the Data-Driven approach, given that allocating financial resources to marketing is still considered skeptical (Massiera et al., 2018). In this sense, for companies to evolve consistently, it is necessary to measure growth at different scales and connect these to the number of resources acquired. It is also confirmed that small companies tend to have lower growth and efficiency, given the use of the few resources they have acquired (Joensuu-Salo et al., 2023). In other words, the profitability challenge is more remarkable given the marketing capabilities of big companies, such as the ones studied, which are defined as interrelated routines used to participate in specific marketing-related activities (O’Cass et al., 2012).

In this age of data-driven strategies, digital channels have a fundamental role, especially in e-commerce companies (Gbadegeshin, 2019). Despite the importance of this topic, not many companies invest in it and are aware of the results this approach can achieve (A. T. Rosário & Dias, 2023). Therefore, in a country like Portugal, which lacks it, it is urgent to empower and acknowledge the importance of digital marketing.

We are moving towards a world governed by data, so we must honor the challenges of digital by adapting business practices. This will improve decision-making based on data, offering, and promoting added value to the strategies developed by the results (Elezaj et al., 2018). For companies to be efficient and use resources correctly, they must invest in better marketing to achieve better performance and, therefore, become more competitive. Thus, the scope and benefits of data-based strategies must also be mentioned. Moreover, data use is rapidly increasing the creation of relevant and opportune marketing purposes (Borges et al., 2021; Micheaux & Bosio, 2019).

In this sense, given the “tsunami” of data and considering the potential that analytics in marketing represents, companies admit that there are quite a few challenges attached to this adaptation (Pour & Emami, 2023). Therefore, to embrace the Data-Driven approach, as opposed to intuition-driven decision-making, it is necessary to understand that strategic and management problems lead to the failure of implementing data-driven strategies (M.-H. Huang & Rust, 2021).

Concerning the Portuguese Economy, this study is motivated by the fact that, according to the Global Skills Index (Coursera, 2022), Portugal is rated as one of the worst countries in the world regarding business, technology, and data science. Therefore, this research project is an awakening to the Portuguese reality, suggesting changes to apply and achieve better performance and competitiveness. The challenge has also been to embrace digitalization (Jorge-Vázquez et al., 2021).

To this end, a literature review was carried out on data-driven marketing, as well as related terms, and a framework was developed that connects practices in this area to the impact on the consumer spectrum. As a research method, a qualitative methodology, such as semi-structured interviews was used, so, ten in-depth interviews were then created with different companies and became relevant to study the entire process of applying these techniques, from beliefs, processes, and forecasts of some of the best companies based in Portugal in different sectors. The results and discussion are afterward presented, contributing to assessing the state of companies and concluding this study.

CHAPTER II – LITERATURE REVIEW

1 Literature Review

1.1 Data-Driven Marketing

Data-driven marketing impacts companies' decision-making capacity (Tripathi et al., 2021), emphasizing the importance of understanding that it uses data to make marketing decisions, from a creative to an analytical approach. Understanding the importance of following processes in decision-making to achieve a positive result is an essential insight in this study, the one described by Peter Drucker, which is that we can't manage what we can't measure.

Therefore, there is an urgent need to understand what Data-Driven Marketing is and how it can be helpful. This strategic approach uses data to inform and optimize personalized content, leveraging advanced data tools to collect, analyze, and use information about consumer behavior and preferences (Ishida et al., 2023). On the other hand, data-driven marketing can be perceived as an essential component of data-driven decision-making, as it can evaluate historical data, identify customer touchpoints, help companies accurately understand consumer trends, and develop targeted promotional activities (Cohen, 2018). It can even be considered a method based on data analysis that describes, predicts, analyzes, and guides consumer behavior. It uses appropriate content for a specific audience to conduct marketing activities (Braverman, 2015).

This approach must be implemented to align every goal and process, for example, between teams. To be successful in marketing strategy, marketer professionals must recognize the pivotal role of Data-Driven Marketing. Incorporating this approach into organizational processes is not merely beneficial; it has become necessary for businesses striving to thrive in an increasingly data-centric landscape. The strategic utilization of data in marketing decisions is paramount, fostering a more informed, targeted, and ultimately successful approach for companies in the modern business environment.

Moreover, based on their research, Borges et al. (2021) affirm that the data-driven approach consists of a data-based analysis enabled by technology that contributes to a better understanding of consumer needs and competitors' current offerings.

1.1.1 Fundamentals of Data-Driven Marketing

Firstly, defining the path to applying a Data-Driven Marketing strategy is essential. As Jeffery (2010) mentioned, there is a process that we need to respect so companies can obtain success when delivering strategic investment. From all the research, the process of creating a data-driven marketing strategy can be understood as it is presented in Figure 1, with a framework that establishes the plan to follow (Jeffery & Jeffery, 2010).

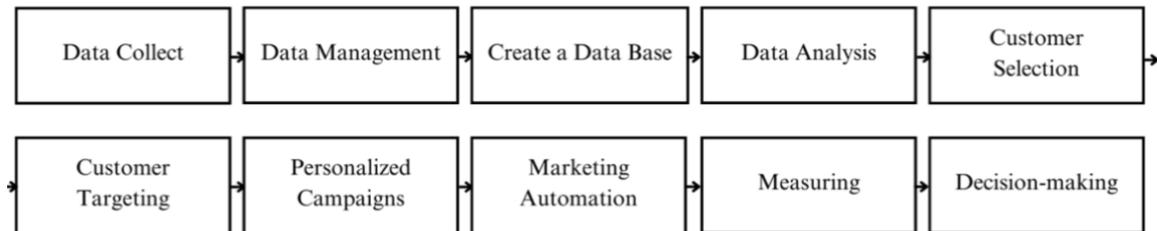


Figure 1 - A framework with the Data-Driven Marketing Strategy

Source: Self-elaboration, adapted from Jeffery (2010)

Regarding a successful marketing organization, four elements describe the essence of one: being the first one the capabilities, meaning the organization process, information or data, skills, and activities collected to achieve success in the marketing environment (Länsipuro & Karjaluo, 2021); the second one the culture, which allows setting the basis for action inside the organization; the third one being the configuration, like the system, metrics, and structure; and, finally, the last one, as Länsipuro (2021) mentioned the human capital, the employees' contribution that will incorporate the enterprise' performance and strategy from scratch (Länsipuro & Karjaluo, 2021; Moorman et al., 2016). According to this perspective, it becomes clear that it is essential to have a structural scheme to rely on when it comes to improving or getting a competitive position. Following Moorman et al.'s (2016) research, there are some data-driven marketing constraints that companies need to pass through and be concerned about, as represented in Figure 2.

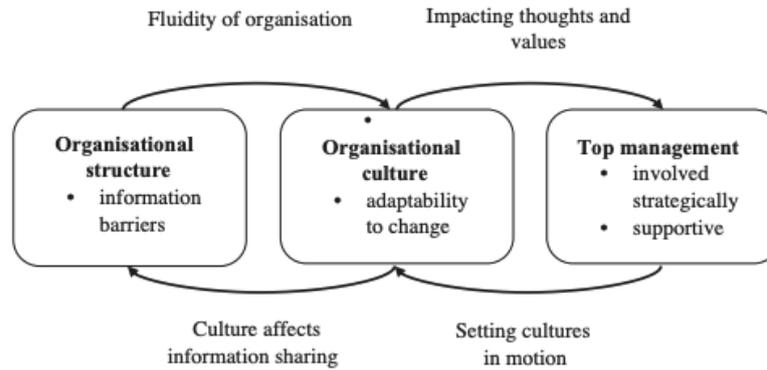


Figure 2 - Data-Driven Marketing Constraints

Source: (Moorman et al., 2016)

There is a need to narrow the gap between data collection and the organization of data before its use (Grandhi et al., 2021). Applying this perspective, companies can gain some advantage by anticipating desires through analyzing historical data, cross-network, data aggregation, and behavior analysis, which can increase consumers' desires and needs (Liu et al., 2020). Thus, a data-driven approach can help companies understand consumer preferences in purchasing decisions and channels, providing a personalized experience (Guo et al., 2019). Accordingly, analytical tools assist in marketing analysis and allow adjusted marketing decisions, focusing on a brand's consumer indicators (Miklosik et al., 2019).

Also, according to Tripathi and Bagga (2021), and as can be seen in Table 1, the capabilities resulting from implementing Data-Driven Marketing are delimited by three different phases: tracking, which will trace the path and help recognize the audience needs; targeting, by developing strategies with orientation; and, finally, the forecasting phase, by anticipating behaviors and acting in accordance.

Phases	Definition
Tracking	Data-Driven Marketing allows companies to track and measure consumer behavior in an individualized and precise way. (Kakatkar et al., 2019a)
Targeting	Based on the campaigns carried out, measured, and strategically placed, companies are able to follow consumer patterns and behaviors. (Shah et al., 2020)
Forecasting	Given the track record of campaigns, with search and purchase records, Data-Driven Marketing platforms can predict and anticipate customer needs and suggest marketing campaigns that resonate accordingly. (Kumar et al., 2006)

Table 1 - Data-Driven Marketing Phases

Source: (Tripathi et al., 2021)

In this sense, with all its advantages, Data-Driven Marketing significantly impacts decision-making, directly affecting the company's performance (M. Jorge et al., 2016).

In conclusion, data-driven marketing has been a great ally in the marketing industry. It is the whole process of understanding existing and potential data and organizing, analyzing, and applying it to improve marketing outcomes, such as predicting customer behavior from their previous engagement based on the insights gained from data analysis.

1.1.2 The power of organized data: main tools

1.1.2.1 Big Data Analytics

In an era governed purely by data, with 40 trillion gigabytes of data produced yearly, it is urgent to use it to the advantage of organizations¹. Thus, only some organizations will be untouched by this phenomenon (Lohr, 2012).

Big Data is everywhere these days, in the form of structured data, such as customer databases. Sometimes, the capture and processing of this data is not due, for example, to inadequate information system architectures (Manuela et al., 2018). Data collection, structured or unstructured data from various sources, must constitute a data-driven approach's first and most crucial phase. This way, the following steps filter, harmonize and eliminate extraneous data (Kenza et al., 2023).

In this sense, the term Big Data appears to have different approaches and can be linked to various authors, as shown in Table 2.

Author	Approach
Heisterberg et al. (2014)	A new approach makes possible to create agility in companies, considering the analysis of data from various sources, as well as a new source of competitive advantage.
Kumar et al. (2006)	Given the track record of campaigns, with search and purchase histories, Data-Driven Marketing platforms can predict and anticipate customer needs and suggest marketing campaigns that resonate accordingly.
Şen et al. (2016)	Can become the next stage of innovation in companies and take companies to a higher level of strategic and competitive management, allowing them to generate future opportunities.

Table 2 - Approaches of Big Data

¹ <https://exame.com/carreira/dados-uso-favor/>

So, as technology has become part of our daily lives, digitalization has become crucial (Gale, 2018). Consequently, data management and subsequent distribution in a Big Data environment is essential to achieving system education and decision-making support. This process has three crucial phases: a descriptive phase, a forecasting phase, and a perspective phase (Frazzetto et al., 2019). To stand out in the market and interact with their customers, companies must understand how they feel about their products/services and marketing actions (Wedel & Kannan, 2016). As well as start working with Big Data so that it can support the companies' decisions.

To classify data, Lansley initially mentioned three "Vs" in data management: volume, variety, and velocity. However, recently, it has been proven that two more factors are included: Variety and value (Monroe, 2013). These characteristics can be managed and analyzed to create insights to improve organizations' competitiveness (Wamba & Edwards, 2015). With a focus on including Big Data best practices, researchers have increasingly developed methods for collecting, processing, analyzing, and visualizing data (C. L. P. Chen et al., 2014). However, such a system will only be efficient if the company uses the correct process forms, such as collecting data and applying knowledge, to support the decisions made (Sharda et al., 2014).

In marketing, big data can solve problems, such as identifying customer needs and responding actively. Interactive reports can also be created for data visualization to uncover current trends and insights (Lacoste, 2016). That being said, Big Data can be considered an essential aspect of marketing support, analysis, and decision-making (Sharda et al., 2014).

As mentioned before, technology and innovation are strategic priorities for the companies' growth, and among them is Big Data, which will be one of the main factors contributing to gaining competitiveness (Maroufkhani et al., 2019; Şen et al., 2016). It can also lead to greater flexibility, efficiency, responsiveness, and the ability to anticipate and meet customer needs, thus giving organizations a competitive advantage (Şen et al., 2016). Even McKinsey Global Institute's analysis report states that big data helps organizations to make more efficient demand forecasting, shaping and supply planning, and sensor data-driven operations analytics (Manyika & Manyika, 2011).

In addition, an interesting topic to be added, that contributes to excellent data management is Data Quality, referring this term to accurate, appropriate, and contextualized data for the intended use in the organization's operations or decision-making (Janssen et al., 2017) before any analysis, it is pertinent to consider its quality, so it is crucial to confirm the importance for the matter. In this way, Data Quality is the perception users get of their own (Merino et al., 2016). As Cai e Zhu (2015) mentioned, there are some essential foundations to cover to confirm the data quality and follow along with the analysis: the data source, some requisites that should be according to the final goal as well as the evaluation criteria, in a way to have guidance to the analysis to execute. In this sense, data quality will determine and affect the reliability of decision-making (Salem & Abdo, 2016), just like the knowledge of the involved staff, since it requires an assertive and informed analysis to find solutions and correlations in the data (Cai & Zhu, 2015; Janssen et al., 2017).

1.1.2.2 Marketing Automation

Marketing automation has become increasingly necessary and could replace human work due to its analytical capacity and success rate. Thus, this tool refers to support for marketing decision-making based on software (Mero et al., 2022).

Thus, it is worth mentioning that data collection is associated with marketing automation, which is becoming increasingly important and can help collect data and turn it into knowledge and information (Paschen & Kietzmann, 2019). However, the biggest challenge lies in the latter, in processing the data and transforming it into insights that will later become actions (Bartoski-Purgat, 2018). Table 3 represents different explanations for the term Marketing Automation.

Reference	Definition
Hubspot (2015)	A software platform that can be use as content deliver, with the ability to attract, build and maintain trust with current and prospective customer.
Buttle & Maklan (2015)	A technology used to automate marketing operations and describe the application of technologies to support marketing management to achieve the different stablished goals.
Del Rowe S. (2016, p. 24)	A tool of strategic marketing and defined as “a centerpiece in terms of companies ‘communication and their customer engagement strategy”.
Mero et al., p. (2020, p. 32)	“A technology to improve the effectiveness and efficacy of marketing operations via automated, personalized and analytics-driven activities”.
Heimbach et al. (2015)	A strategic initiative that holds the potential to disrupt organizational structures, processes, and culture of how marketing is driven.

Table 3 - Definitions of Marketing Automation

Accordingly, the content can be automatically personalized, relevant, and valuable to answer customers' needs. Hence, data analysis using analytical tools allows for the correct extraction of data and applying the insights subsequently gathered by the company (Nuortimo et al., 2019). Furthermore, it is essential to realize that when data-driven strategies and decision-making are mentioned in predictive analysis, there is a higher success rate than any other approach.

Therefore, marketing professionals must have the discernment and knowledge to make decisions that apply appropriately to the target audience in terms of needs, motivation, and behavior. This step is fundamental since it dictates the success rate of customer-centric marketing strategies, and it is essential to focus on practice rather than on a theoretical perspective of marketing. Hence, the need to study this aspect is understandable, given that marketing strategy has become increasingly data-driven and digitally oriented (Sridhar & Fang, 2019b).

1.1.2.3 Machine Learning

Machine Learning significantly impacts generating recommendations, producing solutions, and determining plans to mitigate the impact of errors (Cinus et al., 2016). To remain competitive, companies must understand the power and necessity of marketing and the added value and ally of Machine Learning. What must be considered is the effectiveness and challenges that this paradigm shift in companies can generate and how the data quality can be decisive for good results (Kwon & Lee, 2014). In addition, given its ability to analyze patterns and enhance decision-making. It has been increasingly applied, especially in marketing, to boost the results and success of actions (Y. Chen et al., 2017). The advancement of technologies such as these has become a powerful aid in data analysis and makes it possible to automate time-consuming processes. It provides opportunities to gain new insights into consumer behavior and improves the performance of marketing operations (Cui et al., 2006). In recent times, researchers have proven that, with this tool's help, it has been possible to see which consumers are more likely to buy a product. In this sense, it becomes a great asset for companies to know where to spend resources efficiently, knowing they will get a return (Martínez et al., 2020).

However, there is a catch in this world of data, that is the lack of information about how all of these are collected and integrated with the organization's strategy, which can put the customer in a disadvantageous position since it is their privacy that suffers (Strycharz et al., 2019). In this way, data-driven marketing has been working on customers' behalf and influencing companies' transparency; since then, the customer has the right to know if the content being seen is an advertisement and if it should be signed (Mandura, 2023).

In conclusion, data science applies several techniques, such as statistical methods, databases, and machine learning tools, that can manage, extract, and discover new results through and using big data. In this way, a competitive advantage is connected to the machine learning and artificial intelligence era in which we live. For these reasons, the gap between the availability of data and the knowledge application must be treated with decision-making support systems that integrate all the information and change the marketing paradigm by impacting the customer's selection (Moro et al., 2017).

1.2 Impact of Data-Driven Marketing on consumer behavior

In a way, Data-Driven Marketing has shifted its focus from the product to the customer, introducing data into decision-making. This customer-centric approach has gained more relevance, making marketers understand the relationship between the customer, product, and brand (Camilleri, 2020). Nevertheless, data-driven marketing, as already mentioned, aims to convert the data collected into decisions that can result in revenue and the acquisition of loyal customers. It also allows companies to target consumers' weak points by tailoring and personalizing their offers. However, it is necessary to consider that consumers are constantly approached with countless promotions from advertisers. Feeding the audience unnecessary content can cause them to lose interest in the brand. It is, therefore, up to marketers to use the available content tactically, evaluate the data, and make decisions to obtain the best results (Camilleri, 2020).

Then, with the emergence of data, the internet, and modern information, consumers' behavior has profoundly changed when purchasing decisions. Consequently, traditional marketing strategies, which were often generic and less personalized, have lost their effectiveness, mainly in the digital world (Kakatkar et al., 2019b).

1.2.1 Data-Driven Marketing strategy

Marketing strategy and strategic planning are essential steps towards a more informed decision in a dynamic and constantly evolving context. These, combined with data orientation and supported by advanced marketing analysis, make it possible to contribute to understanding the current situation, whether based on past events or predicting future behavior. So, although the traditional method focuses only on strategic planning based on data from past moments, the future guarantees that analytical and forecasting tools contribute to better results (Miklosik et al., 2019).

Thus, strategic planning is among organizations' best-known and most widely applied management approaches (Wolf & Floyd, 2017). As well as it is a type of planning whose aim is to define and formulate strategies and follow the methods of executing the organization's missions (Terrados et al., 2007). Also, by combining the decision-making process with strategic marketing planning, the marketing role should have a holistic approach (Kotler & Keller, 2016). Based on this perspective, strategic marketing planning can be considered a systematic method, which, without the right skills, can lead to confusion, wrong decisions, and deficiencies in terms of effectiveness (Hanlon, 2022). Finally, it is possible to establish the essential components of a strategic marketing plan; in the first place, get to know the market, followed by knowing the competitive environment and the resources, capabilities, and limitations; next, it is the creation of a strategy mix aligned with the market, as well as the implementation of the strategic plan and budget; and lastly the creation of feedback and control mechanism (Hauser, 2007; Pour & Emami, 2023). Following this course of thinking, strategic marketing decisions are taken to achieve specific goals by understanding the customers' needs and interests, affecting the company's performance (M. Jorge et al., 2016).

Typically, strategic planning includes elements determined by the brand's identity, such as its mission and values, as well as issues, such as internal and external analysis, that will impact how the company operates. It also includes formulating strategies, objectives, and plans that address the company's main problems (Bryson & Bryson, 2004).

Hence, the digital marketing strategy is responsible for defining and integrating organizational programs using digital technology to create value between partners and customers (Sridhar & Fang, 2019a). Moreover, these strategies will guarantee a right to

foster customer data collection to achieve a valuable approach to improving an enterprise's marketing capability (Frank et al., 2019).

On the other hand, a marketing strategy can be perceived as an organization's integrated decision-making, with marketing activities and resources included, that generate value for consumers. This enables the organization to achieve specific goals and raise the image in customers' minds (Lai, 2019). It can be considered the foundation at the conceptual center of strategic marketing and is fundamental to marketing. It can also concern specific strategic decisions and integrate tactical marketing program decisions (Morgan et al., 2019). In addition, marketing strategy is an integrated pattern of decisions that an organization needs to specify to determine crucial choices regarding marketing activities and resources, as well as communication that offers value to customers in exchange with the organization, thus enabling the organization to achieve specific objectives (Varadarajan et al., 2008).

In essence, a marketing strategy is the comprehensive decision-making framework within an organization, surrounding various activities and resources aimed at delivering value to consumers. The core framework of decision-making within an organization encompasses a range of activities and resources designed to provide value to consumers. This strategic approach is vital for achieving organizational goals and shaping the brand's perception among consumers. It extends beyond specific tactical and program choices, forming an integrated pattern of decisions crucial for guiding marketing activities, resource allocation, and communication strategies. Also, it enables the organization to achieve specific objectives by delivering value to customers in exchange with the organization (Joe Weller, 2017). The process detailed above can be organized by a conduction course of organizational actions, which are present in Figure 3.

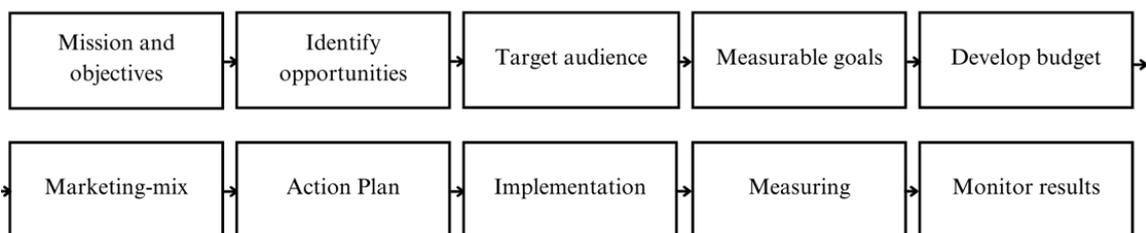


Figure 3 - Marketing Strategy Process

Source: Adapted from Joe Weller (2017)

Moreover, it is essential to emphasize that Data-Driven Marketing involves analyzing trends and customers' information to create an understanding of every individual. This allows for making better and more efficient marketing decisions, leading to solid competition and organizational improvements (Ghonim et al., 2022). Marketing analytics strives as it affects customer relationship management and how organizations make decisions. Therefore, it gains foresight by predicting behavior, trends, and customers' actions (Amoozad Mahdiraji et al., 2023; Ghonim et al., 2022).

1.2.2 Customer-centricity in marketing strategies

Therefore, Data-Driven Marketing is used to execute and sustain marketing decisions, as presented in Figure 3. It puts the customer in the spotlight and allows them to make adjusted and relevant decisions (Tripathi & Bagga, 2020). For example, it is a massive game changer in the marketing field. It also helps companies to segment the right content to the right audience, which allows them to personalize the experience best and improves the chances of initiating a relationship with a potential customer (Schneider et al., 2017). By adopting this perspective, it is expected to adopt supply-chain management techniques to respond effectively to customer needs. On the other hand, customer-centric marketing refers to the practice in which marketers evaluate customers individually and determine whether to serve the customer, as well as focusing on the needs, wants, and resources of customers before planning the approach strategy, placing them first (Cheng & Dogan, 2008).

1.2.2.1 Customer Relationship Management (CRM)

Additionally, it is essential to emphasize that, as said, the e-commerce movement is the basis for this direct communication gate – data-driven marketing – that allows for an exponential increase in customer relationship management – CRM. This unique practice, combined with Big Data and algorithms pitched in with assertive decision-making, comes with fewer risks and a higher profit rentability. As Katae et al. (2015) agree, Data-Driven Marketing is divided into two steps, the first one being the use of databases for unique and personalized marketing, known as one-to-one, and the second uses Big Data to explore this relationship through predictions, interactions, and management of content marketing and dynamic advertising (Katae et al., 2015).

In this sense, CRM has emerged as the most widespread strategy and management tool for guiding powerful marketing strategies through customer relationship management, consistently and effectively managing information and actions aimed at customers. It is also one of the leading business strategies and management tools and has proved crucial in developing sales, marketing, and management strategies (Al-Omouh et al., 2021). CRM also refers to a philosophy of customer relationship management and the technological methodologies required for its implementation. Each tool and level reflects the CRM philosophy or strategy (C. Chen et al., 2020). It is one of the most valuable tools for establishing effective strategies and methods of customer-centric

information management (Vicedo et al., 2020). It can be described as a tool for building and maintaining a profitable relationship and maximizing the customer's portfolio (Zablah et al., 2004).

Therefore, the customer relationship is defined as an effort to identify and keep a customer basis, to continuously nurse through contact establishment and interactions that generate value (de Guzmán Miranda, 2014), which will create loyal customers, over time, being these those who keep the same pattern of consume. In this way, as Ngai (2009) refers, identifying the most valuable clients, attracting them, and retaining them with loyalty policies will develop a lasting partnership. It is important to refer that the target or customer identification analyzes the target specifications (Hult & Ketchen, 2001). Customer segmentation is when it is possible to establish a global potential market, and the audience is divided according to the characteristics of segments (D. Y. Huang & Lin, 2005). It also suggests a process composed of four components: customer identification, customer attraction, customer retention, and customer development.

Moreover, companies are increasingly trying to analyze consumer sentiment using collective data analysis, making it possible to create personalized campaigns in combination with other technologies in which product recommendations are based on tastes (Sahay & Patil, 2020). On the other hand, the possibility of visualizing the data in real-time has been a considerable shift, allowing us to work with predictive analysis and data visualization to understand consumer preferences and behavior (Mukhopadhyay et al., 2024).

1.2.2.2 Enhanced customer insights

When using customer data, a company should be highlighted, starting with personalization strategies that will improve customer services, create optimal customer support, and increase loyalty, revenue, brand awareness, and business opportunities (Ansari et al., 2019). This is important as it raises the purchase chance for organizations to focus on the user experience to boost digital marketing actions. It also allows the company to select specific campaigns more precisely for target audiences.

It is important to note that data-driven marketing is entirely customer-centric, considering that it is based on customer data. It has also been noticed that customer behavior and marketing strategy building take separate paths, and they should consider each other's insights to achieve better performance. Therefore, companies would gain value by analyzing consumer behavior through Data-Driven Marketing (Bhandari et al., 2014).

Initially, as shown in Figure 4, it is necessary to understand the premise of the customer-centered model.

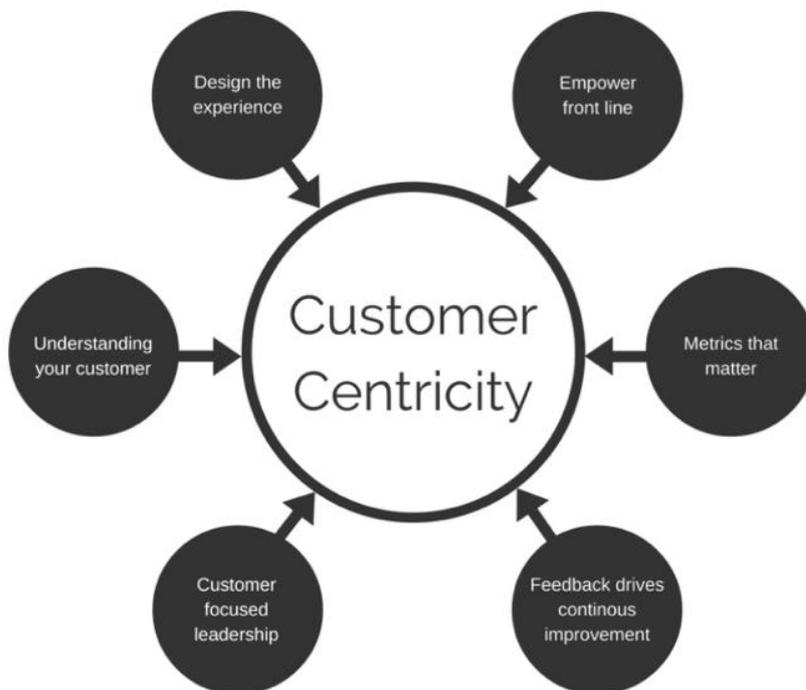


Figure 4 - The Customer Edge Customer Centricity Model

Source: [L2M Rail, 2021](#)

To complement this insight, companies increasingly use Big Data to improve decision-making, agility, and customer-centric methods (Erevelles et al., 2016). This issue of consumer-oriented strategies is defined as the development of efficient marketing focused on better serving a brand's potential customers with a view to their experience (Kumar et al., 2016). As it is represented, only by considering these variables will it be possible to develop a strategy geared towards success by integrating data correctly and with a consumer-oriented decision. In addition, many companies are implementing measures to improve the personalization of the consumer experience (Borges et al., 2021; K. Kawada & T. Miyake, 2019).

Therefore, business strategies must transform customer actions, systems, and the ability to personalize. These efforts and activities will help make the customer journey easier to trace since it's all about digital marketing. The organization can then use this data to create more personalized customer nurturing, making trustworthy customers feel important and their relationship with the company meaningful.

1.2.2.3 Improving the customer experience

Furthermore, it introduces the customer experience that is directly connected to the customer journey. The customer journey generally refers to a process or sequence a customer goes through to access or use a company's offer or service (Følstad & Kvale, 2018). Hence, to evaluate the customer journey and truly understand the customer experience, it is essential to recognize which “touchpoints” are included, as these are recognized as a building block of customer journeys (Clatworthy, 2011).

The customer journey, therefore, refers to the process the customer goes through with an organization at all stages and through multiple channels (Lemon & Verhoef, 2016). It is also possible to mention customer journey mapping as the main activity in analyzing the current state of the existing service process. Thus, customer journey mapping addresses implemented service processes and usually involves collecting customer data, qualitative and quantitative data analysis, and presentation of the results, usually visualizations (Asbjørn Følstad & Knut Kvale, 2018). Hence, Data-Driven Marketing emphasizes customer-centric approaches, enabling personalized content and effective supply-chain management. This inherently customer-centric approach revolves around customer data, offering insights into consumer behavior (Borges et al., 2021).

1.2.3. Decision-making process with customer-centricity

Decision-making is solving problems that maximize the expected utility between the probability distributions of the consequences of different actions (Johnson & Busemeyer, 2010). It is also an emergent process that occurs as a set of interventions rooted in complex work practices (Alby & Zucchermaglio, 2006).

Firstly, referring to the two phases a decision-making process goes through is fundamental, as presented by Elwyn and Miron-Shatz (2014). The first is deliberation, which determines information search and preference strategy building. Its main goal is to consider the reflection on the problem that someone has to decide about. The second step refers to determination, which encompasses the integration of input for deliberation and decision-making before finalizing a resolution (Elwyn & Miron-Shatz, 2010; José & Marinho, 2014).

However, Barlow expressed an interesting thought about the decision-making process that specifies how it is the process with all the steps involved, as presented in Figure 5.

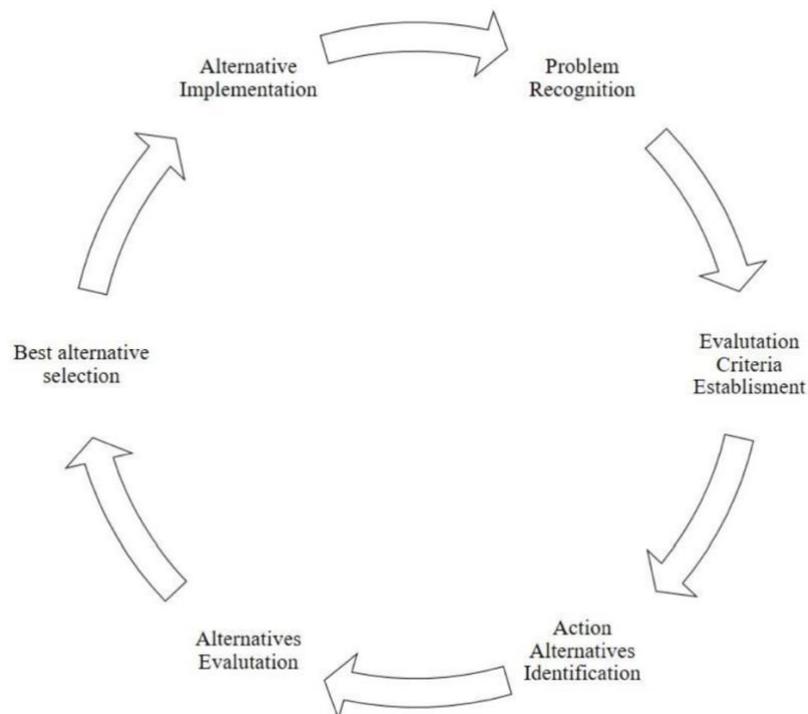


Figure 5 - Decision-making process

Source: Barlow (2005)

As Barlow (2005) presents, at the beginning of this cycle, the first step begins with problem recognition, which is necessary to initiate the change process. Through the following steps, it is possible to establish criteria that enable the evaluation of the information, identify several action alternatives and their evaluation, and make the final choice of the best options. The final step is the implementation of the alternative chosen. Although related to this process, it can be data-driven decision-making since the main goal is to make decisions based on gathered and analyzed data rather than the intuition of the decision-maker concerned (Provost & Fawcett, 2013).

Marketing decisions are also described as a deliberate process of implementing changes to achieve desired outcomes by reasonably analyzing circumstances (Hashem, 2020). Marketing decision-makers must examine many elements for each decision, many highly unpredictable, such as customer reactions or competition actions (Trisnarningsih et al., 2022). For this reason, it is advised to act and make decisions based on data.

Once the digital world has evolved, it brings up the opportunity to engage with customers and follow and analyze their behaviors and actions (Holmlund et al., 2020), which has obligated marketers to change their decision-making process (Hoffman et al., 2022). In this way, as Wierenga (1997) referred to, when volatility increases, marketing managers will be hard-pressed to realize and interpret the data and constantly revise it. So, decision-making must be approached as a maneuver to achieve a goal, depending on a highly volatile environment, and requires continuously keeping up with the changes. According to his study, Nordin (2023) even states that the implications of attributes of modern marketing for decision-making are complexity, volatility, and data intensity.

Furthermore, the decision-making process merges into a group of characteristics: agility, inventiveness, and reflexiveness. The Agile, Inventive, Reflexive (AIR) model has been developed to help create innovative strategies and effective resource use; marketers can reframe the decision to make it easier to manage or the environment more favorable to a desired outcome, as shown in Figure 6.

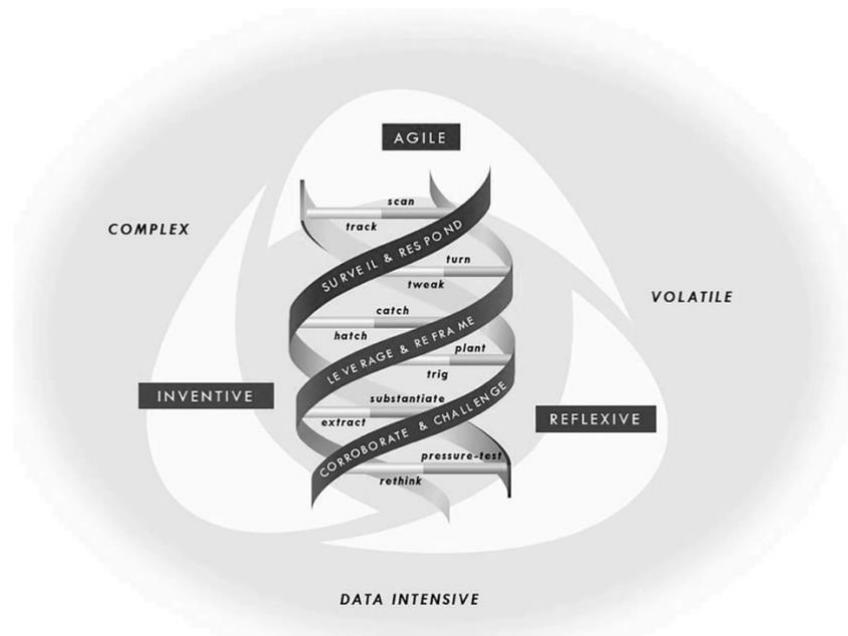


Figure 6 - AIR-model for the decision-making process

Source: (Nordin & Ravald, 2023)

In this way, as Nordin and Ravald (2023) refer to, the first characteristic refers to an agile process as assessing and acting upon internal and external cues proactively. On the other hand, the process is inventive, referring to how managers actively exploit specific resources and competencies to achieve decision-making and deliberately evoke alignment with the company's immediate goals and long-term objectives. The reflexive characteristic is supported by data interpretation, and gut feeling is linked to a decision (Nordin & Ravald, 2023).

Regarding data usage, customer data refers to any record of consumer information collected by a company, whether personal, behavioral, psychographic, or demographic (Blasco-Arcas Lorena et al., 2022). It can also be referred to that the customer usage data appears as the activity recording concerning a specific tool or product (Awazu Yukika et al., 2009). For the data process, companies use data analytics, commonly known and used as multilevel, mathematical, and computational terms, to achieve a conclusion (Park YoungKi et al., 2017). The impact of this analytical approach on decision-making confers a hierarchy of descriptive, predictive, and prescriptive analytics (Micus, 2023). In the descriptive method, which is more suitable, data is analyzed by characterizing or describing data, which can lead to different results and contribute to thoughtful decision-making, as can be seen in Figure 7 (Christopher Andrew N., 2016).

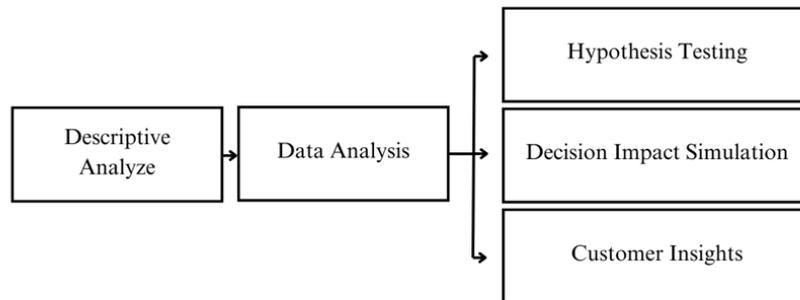


Figure 7 - Descriptive Analysis

Source: Micus (2023)

According to Micus (2023) and Webster Jane & Watson Richard T. (2002), the analyses' results were classified into six categories: forecasting, product development, optimization, hypothesis testing, decision impact simulation, and customer insights. As seen in Figure 7, descriptive analysis is recommended for this investigation's object, and the data analysis impacts hypothesis testing, decision impact simulation, and customer insights.

Although customer behavior data provides an evidence-based platform for decision-making, in this way, tasks such as integrating and analyzing data collected from numerous sources like website analytics demand specific technical achievement (Basu et al., 2023). Once patterns are identified, marketers can implement strategies to retain customers, such as personalized engagement and promotional offers (Chandra et al., 2022). Furthermore, the information obtained must be interpreted in a business context to support strategic decisions, which requires in-depth knowledge of the business model and the company. Another common obstacle is the lack of an end-to-end approach to analysis (Rana et al., 2022). Therefore, by making it easier to obtain data-driven insights, marketing analytics allows companies to make data-based decisions, thus improving marketing effectiveness and overall results (Sheth, 2021).

1.3 Unfolding the online reality

Since evolving consumer expectations and their impact on the online environment are possible, companies should integrate customer-centric strategies and focus on customer needs. In this sense, e-commerce allows businesses to reach customers everywhere, even though they must adapt their thoughtful preparation to match their online sales strategy (Paul & Rosenbaum, 2020).

Therefore, a company's online activity appears as e-commerce, which, by its original definition, means buying and selling products electronically. However, when e-commerce is mentioned, it usually involves transactions over the Internet. This form of transaction has gained popularity due to its convenience, in general, and it is believed that it is a proof and vital indicator of globalization (Patel, 2017). It has been gaining and becoming increasingly representative and more widespread because of its capabilities to access information and allow it to reach more audiences. Also, e-commerce is essential for SMEs since it boosts their productivity, growth, and performance (Gao, 2023; Salah & Ayyash, 2024). Organizational decision-makers must consider the uniqueness given to their customers regarding product, speed, cost-efficiency, and provision of real-time experiences (Khan, 2023).

Thus, the use of e-commerce has increased in recent years. So, it is essential to realize that an e-commerce transaction is the purchase or sale of goods or services carried out over the Internet by methods specifically designed to receive orders (OECD, 2011). It also refers to the sale of physical products through a digital channel to a private end consumer, recognized as B2C, or takes place between a business and a private consumer (Statista, 2024). It can also be said that the projections estimate an annual growth of 11.17%, achieving 4.5 billion users by 2028, and this market is projected to reach 3,334.00 billion euros in 2024 (Statista, 2024). So, it is correct to affirm that e-commerce has been gaining more consumers as it matches the reality of usefulness in terms of resources.

1.3.1 Competitive advantage and consumer expectations

A company's success can be measured by numerous aspects, including production volume, sales numbers, profitability, ongoing expansion, and others, which must be tracked (Trisnaningsih et al., 2022). On the other hand, competitive advantage is closely related to the previous concept and is associated with better performance of an organization's strategic activities concerning its competitors (Porter & Porter, 1985). It must be understood that performance depends on different factors such as the degree, scale, speed, and sources of the digital business strategy, and it is directly related to the operational efficiency indicator and competitive position in the market (Zainurossalamia et al., 2016).

Therefore, it becomes important to understand that marketing metrics take an essential role in achieving better results; these refer to the collecting data on marketing campaigns, channels, treatments, and responses from customers, intending to monitor the effectiveness of CRM (Hirschowitz, 2001). Connected to competitiveness and success measuring is business performance, which is setting objectives, evaluating methods, and planning how to effectively achieve these objectives (M. Jorge et al., 2016). On the other hand, organizational performance refers to how and if an organization is achieving its vision, mission, and objectives, and its evaluation is vital for management to know how it is performing and realize what strategic changes need to be made. Most managers, therefore, determine measurable metrics to assess performance, such as profits and sales, to understand how competitive they are in the market (Ketchen & Short, 2001).

Then, to achieve competitiveness and greater market dominance in a volatile environment, even in a digital world, more and more companies are betting on a Data-Driven approach with innovative capabilities (Sultana et al., 2022). These have allowed companies to overtake competitors and lead sectors (Deevi & Deevi, 2015). Remember that competitive advantage occurs when current and potential competitors must keep the value-creating strategy adopted by the firm and the benefits of such a strategy (Barney, 1991).

1.3.2 The impact of data-driven marketing on the consumer

For a company to achieve a better position in the consumer's mind, there must be distinctive factors from the competition. Therefore, marketing agility is also an exciting compound for this study, as it is a dynamic capability that mediates the association between innovative Data-Driven capabilities and competitive advantage (Schiaivone, 2022). These two aspects complement each other because stands out from its competitors by, for example, reducing costs, creating innovative products, and delivering superior customer service (C. Chen & Chen, 2019). Moreover, it is understood that marketing agility has contributed to achieving this objective, given that competitiveness is also measured in intangible capabilities, efficiency, and response (Qosasi et al., 2019). Finally, it can be concluded that an organization's competencies can surpass competitors, thus improving competitive advantage and competitiveness (Efrat et al., 2019).

In this sense, it is necessary to understand which methods are most effective and provide these companies with the tools needed to act. This new development has increased competition and led companies to pay attention to the needs and demands of consumers, making them powerful components of business strategies and processes (A. Rosário & Raimundo, 2021). Yen (2014) also explains that consumer behavior and purchase intentions have been changing due to the growth of online platforms. For example, customers are now concerned about the organization's reputation, information, satisfaction, and extended benefits. Consequently, companies must evaluate and improve their relationships and success from the customer's perspective and implement consumer-centric strategies (Singh & Srivastava, 2020).

Kitapci et al. (2014) investigated the effect of service quality dimensions on customer satisfaction, thus identifying the impact of satisfaction on the form of communication known as word-of-mouth – WOM – and on repurchase intention. In addition, Blut (2015) showed that e-commerce service quality positively affected customer satisfaction, repurchase intention, and WOM for online shoppers. Therefore, an online customer experience results from consumers being exposed to website elements (Rose et al., 2012), which include verbal and visual cues, such as text-based information, visual images, video, or audio (Gentile et al., 2007). On the other hand, it should be noted that the online customer experience is dynamic and should be examined in terms of the stages of the customer journey (Siebert et al., 2020).

The customer marketing strategy should focus on consumers' senses, emotions, ideas, and behaviors. Unlike traditional marketing, the use of websites in e-commerce has created a power of influence over customers. The adaptation of the techniques to a specific target will have a much better result, and there are suggested practices like upselling and cross-selling for customer development, which are promotion activities that aim at augmenting the number of associated or closely related services or products (Prinzie & Poel, 2006). In this way, it will be possible to elevate the market basket, maximize the customer transition and value, and discover patterns in purchase behavior.

Finally, to properly consider the impact of data-driven marketing capabilities, it is necessary to synthesize the four essential foundations of this approach, with their respective benefits allied, as shown in Table 4.

Practices	Competences
Data Management	<ul style="list-style-type: none"> • Assigns data collecting and processing. • Ensures data quality. • Provided by a safe data source. • Guaranty access and sharing. • Usage of certified tools for correct treatment.
Customer Centricity	<ul style="list-style-type: none"> • Predict and consider consumer behavior. • Optimizing personalized content. • Develop the customer journey and identify touchpoints. • Focusing on the customer experience. • Respond effectively to customer needs. • Customer-oriented culture.
Strategic Planning	<ul style="list-style-type: none"> • Produce solutions and determine plans. • Formulate valuable strategies. • Making tactical decisions. • Strategy formulation through data gather. • Develop targeted promotional activities. • Implementation and monitoring.
Data Analysis	<ul style="list-style-type: none"> • Identify trends in consumer behavior. • Enhance the decision-making process. • Improve the performance of marketing operations • Turns data into decisions. • Create new consumer insights. • Forecasting and continuous improvement.

Table 4 - Concepts of Data-Driven Marketing Application

CHAPTER III – METHODOLOGY

2 Research Methodology

Regarding the methodology adopted for this study and the objectives chosen, it is possible to develop an interesting fundament. Thus, an outline of the research questions and propositions created according to the interview script will be provided. Subsequently, we will discuss the data collection method and sample and then elucidate the data analysis process. Moreover, this study aims to achieve three key objectives: To explore how personalized marketing, guided by Data-Driven Marketing techniques, impacts online shopping behavior; To investigate the relationship between accurate data used in customized marketing and customer retention; and finally, to understand the influence of data-driven marketing strategies on consumer decision-making processes and matching expectations.

2.1 Propositions and Research Questions

To investigate the impact of Data-Driven Marketing on the consumer spectrum, it is essential to understand to what extent these techniques contribute to a better understanding of the public. To this matter, by the development of a deep and structured investigation, it is possible to come across the following propositions based on the research done:

Proposition 1: Organizational structure and culture influence the Marketing Team's ability to develop and implement Data-Driven Marketing practices.

Proposition 2: The use of Data-Driven Marketing practices contributes to improving the customer experience.

Proposition 3: The adoption of Data-Driven Marketing practices impacts the company's customer retention.

Proposition 4: The implementation of Data-Driven Marketing practices is related to increased customer satisfaction.

The development of these propositions led to the consideration of some research questions, which it was possible to come across the research question, which can be torn into two sub-research questions:

RQ: How do Data-Driven Marketing practices directly influence consumer behavior, in an online environment?

RQ1: How do Data-Driven Marketing strategies help build deeper relationships and foster loyalty?

RQ2: How do data-driven techniques influence consumer purchase decisions, providing a higher satisfaction and tailored experience?

In this way, a framework was developed to ensure the clarity of the different relevant subjects carried out, in Figure 8.

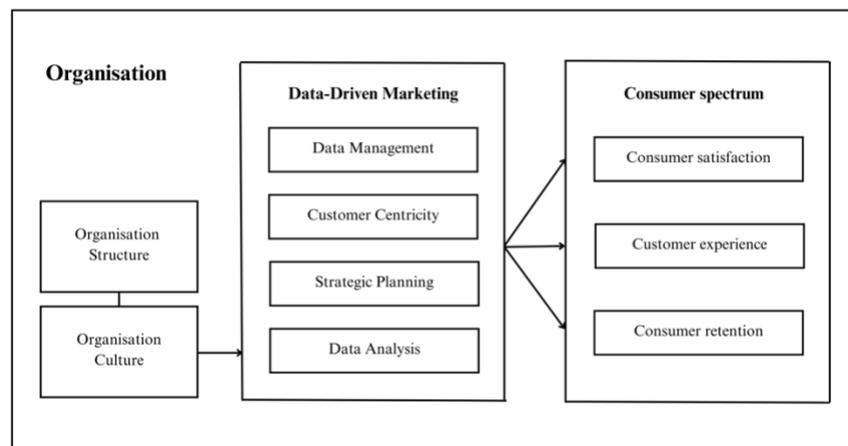


Figure 8 - Data-Driven Marketing Implementation Framework

2.2 Research Strategy and Design

A research strategy can be approached through two distinctive methods: qualitative and quantitative studies. Qualitative research is an exploratory study usually expended to discover patterns in ideas or points of view. The most common research questions that can be answered with this method are the “what”, “how”, and “why” questions (Abuhamda & Bsharat, 2021). Therefore, as this work aims to understand how Data-Driven Marketing practices directly affect consumer behavior and consider the research questions previously developed, we will carry out a qualitative study to support the analysis.

2.2.1 Data Collection Method

Different methods in qualitative research encompass a range of data collection techniques, such as conducting interviews, whether structured, semi-structured, or unstructured (Gill et al., 2008). The semi-structured interview method will collect detailed and high-quality information from companies that apply data-driven marketing practices, which is suitable for a deeper understanding of a specific subject (Gill et al., 2008). In addition, the semi-structured interview method also allows the interviewer to diverge and focus on a particular question or topic, which is crucial to deepen an idea (Kakilla, 2021). However, this approach has some limitations that can compromise the quality of data collection. The same researcher (2021) also states that if the interviewee needs a better understanding of the topic, semi-structured can lead to data loss, and the answers can jeopardize the data quality.

2.2.2 Sampling Method

Following O'Reilly & Parker's (2013) perspective, in qualitative research, the sample size must be measured by the "depth" of data rather than its frequency, suggesting that it's preferred to have fewer participants who best represent the research topic than quantity.

In this way, the selection of participants was decided based on a set of criteria, such as a couple of primary couple of questions to ensure that the company was a data-driven mindset, as well as all interviewees were informed of the purpose of the data gathered. So, this would work to gather conclusions about companies in the same conditions but extended to different sectors of activity. In this sense, ten participants were selected, with functions that contemplate a set of data-driven marketing guidelines in the exercise of their role in the company, and these companies include distinctive sectors. It is also important to mention that to achieve a better understanding, our sample will be focused on medium or large companies, based on the requirements of Commission Recommendation 2003/361/EC, with a marketing department and a data-driven mindset. Therefore, the sample is presented in Table 5, and the interview script can be found in Annex 1.

Company	Size	Designation	Sector	Interviewee's position
Boca do Lobo	Medium	A	Furniture manufacturing	Marketing Manager
Salsa	Large	B	Clothing retail	Marketing Manager
Wella	Medium	C	Wholesale of cosmetics	Performance Manager
EDP	Large	D	Energy and electricity production	Data Protection Officer
Pluricosmética	Large	E	Retail of wellness products	Paid Media Specialist
Leroy Merlin	Large	F	Retail of bricolage material	SEO & Content Specialist
Loba	Medium	G	Performance Agency	Marketing Cloud Specialist
Intellias	Large	H	IT and programming	Brand Communications Lead
Delta	Large	I	Wholesale and production of food goods	Innovation and Data Manager
WOW	Large	J	Tourist and entertainment activities	Marketing Director

Table 5 - Investigation's Sample

2.3 Data Collection Process

Given the methodology chosen, the semi-structured interviews were conducted to ensure and realize the importance of applying Data-Driven Marketing in any company to increase the marketing performance rates. Thus, it becomes essential to understand the practices' most widely used and successful techniques and to comprehend the impact of those practices on the consumer spectrum.

In this sense, all the interviews were conducted online in April 2024, so the record and analytical process could be simplified. These had an average duration of 35 minutes, and the tool used to proceed to a better result analysis was webQDA. The interviewees chosen had some years of experience and good knowledge of the business and activity sector.

A set of open-ended questions was drawn up to guide the development of the semi-structured interviews. The first main topic was the company's structure and culture, the second was the Data-Driven Marketing environment and its appliance, and the last was the consumer spectrum, as can be consulted in Appendix 1. In this sense, in response to the research questions and propositions, the main topics to be addressed will be the following:

1. It is essential to understand the impact that customer-oriented strategies have on the satisfaction and experience of the online shopper.
2. Comprehend the influence of data-driven decisions on the performance of marketing processes and strategies.

This allowed different themes to be addressed and allowed the interviewee to explain his most outstanding facilities and challenges in the other main areas.

3 Results and analysis

The result chapter will enhance the insights obtained in the developed interviews. Considering ten distinctive companies, it will be possible to comprehend the factors and competencies highlighted by each within their activity area. In this way, the aim is to grasp where companies stand in data-driven applications and what the opportunities are to achieve better results and performance, considering the structure and culture of each organization.

3.1 The organization and its influence

As we tackle the potential causes and influence of the strategies developed, the companies point out that factors intrinsically determine the development of these actions. With the explanatory framework of data-driven marketing constraints, it is possible to understand the influence on brand performance, **validating Proposition 1**.

3.1.1 Structure and Culture

All the companies pointed out that their structure, particularly their organizational culture, affects how operations are managed, strategies are implemented, and decisions are made. The evolution of the management approach has allowed performance to be optimized by focusing on "data to support decision-making and investing in tools and employee training", as Wella referred to.

Greater emphasis is placed on "creating value and nurturing a growth mindset environment". As mentioned by companies EDP and Delta, the guarantee that operations are strategically aligned with overall objectives is associated with the growth of the individual as a whole. This combination working in unison will generate a "synergy of energies", as Boca do Lobo mentioned.

However, problems associated with the implemented culture arise when the vision fails to sustain the expected results. This is related to a need for more investment and risk so that the expected objectives can be achieved, as mentioned by Leroy Merlin. Complications associated with the organizational structure, such as an organizational chart, highlight the need to have a system of functions in place so that the workflow streams between departments. Clearly and concisely, communication maximizes operations, as stated by EDP and Pluricosmética, thus **validating Proposition 2**.

3.1.2 Embracing the Data Reality

The continuous prioritization and stimulation of valuable insights in the data collected by Loba and Intellias ensures that marketing actions are strategically aligned with the company's overall objectives. From another point of view, “strategic development of actions and decision-making with data support” is highlighted by Salsa. Likewise, “companies with a data-driven culture are focused on supporting data”, as per said by Delta.

Companies Boca do Lobo, Wella, EDP, and Loba highlight marketing strategy management, guided by the general business goals, and focused on the insights generated by the data collected, as the main engine that drives and indicates good performance. Also, digitalization and the need to focus on the right segment have made companies choose wisely how to communicate these to whom and where.

As Loba states, “a Data-Driven strategy corresponds to 99% of the success of an action”. Companies Pluricosmética, Leroy Merlin, and WOW share this perspective since data is the basis for building a sustained, personalized, and relevant communication strategy for the client.

3.1.3 Competitive Advantage

Moreover, companies must always consider their primary focus—the consumer – to outperform the competition—and develop strategies with the proper mindset.

In this sense, as Intellias states, “all actions are geared towards capturing the desired segment”. In a complementary way, and as companies Boca do Lobo, Wella, Pluricosmética, Loba, and Intellias state, “it's important to put ourselves in the role of the customer and trace the journey”, allowing us to capture attention more effectively and fully optimize the experience.

This special attention to detail will stir the customer and make them feel that the company's actions are developed with the customer in mind. Whether it's personalizing campaigns or actions that promote loyalty, the added value over the competition is guaranteed. As highlighted by Wella, the competition is excellent. “It makes us want to surpass and achieve more significant results, which leads to a brighter outcome”—customer satisfaction.

3.2 Data-Driven Marketing Implementation

Therefore, to respond to market demands, achieve a competitive advantage, and embrace the new era of data, it is urgent to understand how companies can adapt to a data-driven world. Almost all companies have worked on the capabilities in their entirety, which varies depending on the sector, segment, and level of development.

3.2.1 Data Management

In this central topic, competencies such as “Assigns data collecting and processing”, “Ensures data quality”, “Provided by a safe data source” and “Usage of certified tools for correct treatment” were valued and mentioned throughout the research process and contributed to the development of data management.

Concerning **data cycle** and **data management**, it should be noted that all the companies emphasize that it is essential to adapt to data-driven approaches. Thus, considering similar methods, companies Boca do Lobo, EDP, Intellias, and Delta guarantee collecting data from the target audience via forms, which can be found in the different sources and allow for their consent and direct collection. As for companies Salsa, Wella, and Leroy Merlin, given that part of their activity and interaction with the public involves using an e-commerce channel, all the data collected comes from purchases made or signing in for more information or a newsletter. As for the others, data collection appears as subscriptions to services. This cycle is the “result of rigorous collection, cross-checking, and processing with total confidentiality, which is then developed into communication strategies for the company's various digital and offline channels”, as mentioned by WOW. It has also been worked on to remedy potential shortcomings in customer satisfaction and performance on the website and throughout the online and in-store purchasing process. Next, as Wella and Loba mentioned, the data used encompasses responsibility that allows the public to be segmented and well-defined strategies to be applied.

The data quality ensures that the decision is effectively conveyed with assertive guidance. However, it is still a sensitive issue, considering that although companies realize that data quality is necessary to ensure subsequent steps, the notion of how and where data quality is represented is still tenuous, as mentioned by most companies. About this component, it is important to highlight several actions mentioned by the interviewees, such as:

- An "assertive and reliable data collection and use directly influences decision-making", stated Salsa.
- EDP states that all "actions must be measured, optimized, and automated to ensure that performance and results are the best".
- The "performance of all strategies is measured by objectives" in Wella, and "the whole team has access to the results, in a revised and reliable data format" in Pluricosmética.

Likewise, for a **safe source**, it's important to emphasize that marketers develop actions and collect data from reliable sources, whether incorporated as social media databases, purchases, or subscriptions. As companies Boca do Lobo, Salsa, Pluricosmética and Leroy Merlin mentioned, many dynamics are based on SMS and e-mail marketing actions. Therefore, there are many risks associated with sending messages to databases that must be structured and reliable. In this sense, the cluster of companies has different sources and channels of communication, such as those highlighted in Table 6.

Company	Sources
Boca do Lobo	Website, e-mail, newsletters, social media, forms, and calls.
Salsa	Website, e-mail, social media, SMS, tradicional media, newsletters.
Wella	Website, e-mail, newsletters, social media, chatbot, and forms.
EDP	Website, e-mail, SMS, newsletters, calls, and forms.
Pluricosmética	Website, e-mail, SMS, newsletters, social media, and forms.
Leroy Merlin	Website, e-mail, SMS, newsletters, social media, card, and forms.
Loba	Website, e-mail, SMS, newsletters, social media, and forms.
Intellias	Website, e-mail, newsletters, calls, and social media.
Delta	Website, e-mail, SMS, newsletters, social media, and forms.
WOW	Website, e-mail, newsletters, social media, and forms.

Table 6 - Sources and channels used by the companies

The usage of **certified tools**, with Salesforce and SAP standing out as the primary tools being used by the range of companies explored, is the need to incorporate all the data into a single platform. Thus, Boca do Lobo, EDP, Leroy Merlin, and Intellias attach great importance to processing data on the platform itself, particularly the need for access to information to be allocated to the entire company.

On the other hand, “data processing makes it possible to get to know each customer or segment in depth and follow their entire journey” if there is a need to develop a relationship with them, as referred by Pluricosmética. This can be understood as profiling, so recording every interaction on the platform is possible, connected to the initial intention and always considering that goal. As mentioned by companies Loba, Intellias, Delta, and WOW, the success of Data-Driven Marketing practices is directly related to the ability to coordinate the data obtained and stipulate personalized and targeted marketing strategies. Based on the results, this involves “collecting and analyzing data, stipulating strategies, implementing them, evaluating performance, and continually adjusting strategies”, as Wella mentioned. The “data is then processed so that we have an even better knowledge of the customer so that we can offer the best experience”, whatever the medium, and the most suitable products, considering the profile, the search, and, above all, the interest, as stated by Leroy Merlin.

Table 7 shows the different Data Management components mentioned in other companies, referencing all themes. This highlights the importance given to the data cycle, from collection to analysis, and the use of certified tools.

Data Management				
	Data cycle	Data quality	Safe source	Certified tools
Boca do Lobo	2	1	3	2
Salsa	1	1	2	1
Wella	5	1	2	1
EDP	2	3	1	3
Pluricosmética	1	1	2	1
Leroy Merlin	3	0	3	2
Loba	3	1	1	4
Intellias	0	0	1	1
Delta	2	0	2	1
WOW	1	1	1	2
Total	20	9	18	18

Table 7 - Data Management application in the interviewed companies

In this way, it is possible to see the level of applicability and insertion in the companies that each component of Data Management has. The application level was based on Table 7 and the size of the bubbles (%), representing the weight of the “data

management” component in the total of all the determinants for considering a company data-driven. That can be seen in Figure 9, and EDP stands out for its outstanding data management techniques regarding data quality, sources chosen, and platforms used for data processing.

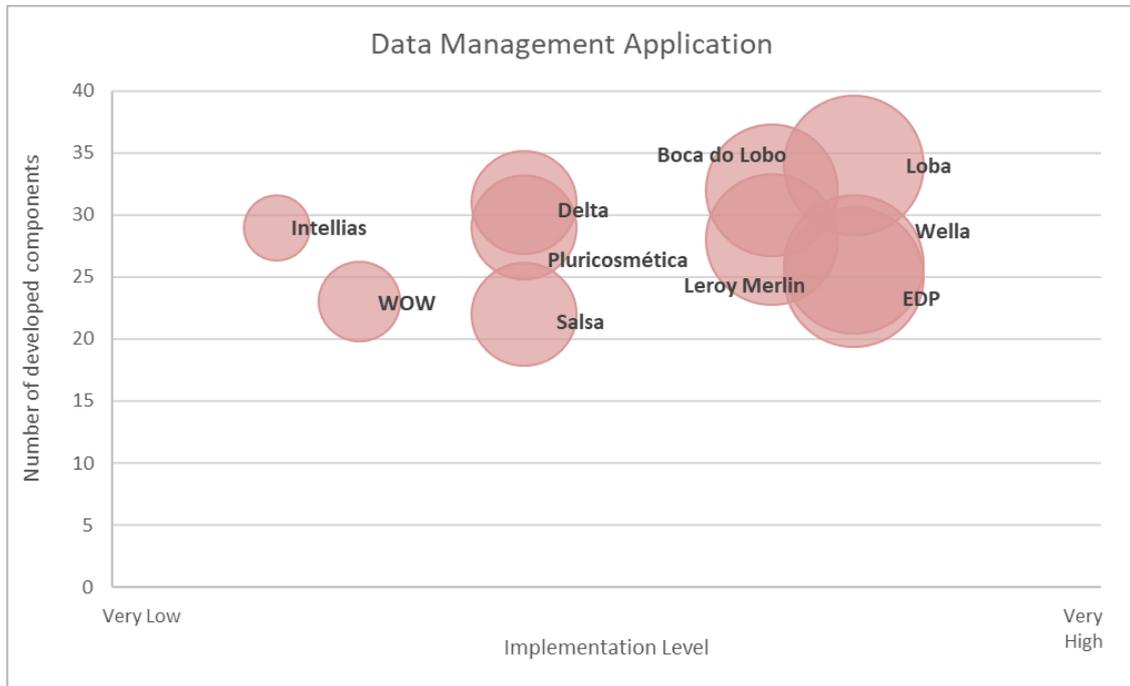


Figure 9 - Data Management Application

3.2.2 Customer Centricity

Nine companies mention the competencies “Predict and consider consumer behavior”, “Develop the customer journey and identify touchpoints” and “Respond effectively to customer needs” as part of their efforts to achieve customer satisfaction, except for EDP, which focuses more on developing the customer journey and creating a direct relationship with the customer throughout it.

These topics must be the most important, considering that they dictate the public's adherence, so the fact that data has been captured and processed beforehand allows to understand “behavior, demographics, and preferences, which helps us to define more personalized strategies that can bring better results”, as per said by Delta. As in this case, “putting we – the professionals – in the role of the customer, trying to think like them and trace their user journey, to understand as much as possible who they are is the best way to delimit a strategy”. As well as realize what their blockages are on their way to conversion and at the time of purchase, is part of the strategy and highlighted by Leroy Merlin as the secret to better performance. This is why it is essential to “work with reports, not only so that there is consistency in the work of all the company's employees”, as said by EDP, but also so that all actions can be measured.

Understanding and enhancing the **consumer behavior** for the experience is the primal key, mainly "by personalizing content and recommendations based on user data and behavior”, making browsing more intuitive and relevant, as mentioned by Intellias, whose practice is to suggest content based on an automated analysis of the customer's profile. This approach allows us not only to capture attention more effectively but also to optimize the experience continually. Thus, there was a need to invest more and personalize the consumer experience, regardless of the channel through which they reached the company.

Quoting EDP, to achieve a correct and accurate assessment, “the data has to be structured in an optimized way, given the volume that exists, to be prepared for an analysis and give a quick response to customers”, which will influence how it is perceived. In this sense, to be able to develop specific suggestions, according to the dynamics of WOW, “based on data collection, we can carry out more segmented strategies and upsell”. On the other hand, Leroy Merlin emphasizes that, based on data

processing, the strategy must be omnichannel to provide good communication, high satisfaction, and efficient attraction of new audiences.

Regarding the **customer journey** and the touchpoints, the group of companies interviewed identified the process by identifying different intentions, allowing them to establish some points of contact and communication to access more targeted and segmented information.

Given the sector of activity, Loba and Delta describe that to develop a correct customer journey that can provide us with information on how, where, and to whom to communicate, a user behavior analysis must be carried out, which involves monitoring website visitors' actions. This data creates user profiles and segments visitors based on their interests and customer journey stage.

This way, a suggested flow to achieve a customer journey and a correct analysis were possible, as shown in Table 8.

Stage	Practices
1	Firstly, there's audience segmentation , mentioned by Leroy Merlin: it's possible to create user profiles based on behavior analysis, and the website's content can be segmented for different audience groups.
2	Next, the different points of contact are identified – touchpoints –, as explained by Salsa, in the different actions, such as purchases, customer support contacts, reactions to communications, surveys, mentions, among others, through innovative tools, from the first contact to loyalty.
3	The choice of channel is then acknowledged, followed by conversion, which must be boosted by the company, as mentioned by EDP and Leroy Merlin by using specific techniques that identify the points susceptible to interaction; heat maps and A/B tests; comparing which generates the best results in terms of conversion rates and identify the best placements for implementing personalization techniques.
4	That said, it is possible to move on to personalized product recommendations , based on browsing history and previous purchases. This can be implemented through recommendation algorithms that analyze user behavior patterns to predict which products they are most likely to like, maximizing the customer experience, as per said by WOW.
5	Therefore, it is important to apply techniques that focus on consumer behavior, even forecasting, not only to get conversion , but also to achieve satisfaction and enhance the experience, as recognized by Intellias and Boca do Lobo. This satisfaction is guaranteed, as mentioned by WOW and Salsa, through the personalization and improved usability.
6	Lastly, focusing on customer retention , it is important to also ensure their satisfaction in the after-sales period, treating them as a priority, so that customers can return satisfied and loyal, as mentioned by Pluricosmética and Boca do Lobo.

Table 8 - Best practices for customer journey development

To understand **customer needs**, professionals must and do use databases, such as “reports based on trends, cluster analyses, will allow us to formalize more targeted marketing strategies” and align them with consumer and client preferences, as mentioned by Delta. Thus, considerate specific demands have contributed to optimizing response

times and personalizing “the consumer experience as much as possible and increasing satisfaction to retain customers”, as mentioned by Intellias. Loba also emphasizes that companies “should deeply invest in detailed data analysis to understand consumer preferences and behaviors”. Therefore, a culture of continuous feedback must be cultivated, allowing dynamic adjustments based on customer responses to be implemented. Primarily, there must be a customer-oriented culture; in particular, by segmenting and better understanding the target audience, companies highlighted a couple of critical actions to achieve better results through the development of the following actions:

- Personalizing messages, offers, and experiences.
- Implementing customer feedback for continuous improvement.
- Anticipating customer needs and offering proactive solutions.
- Offering exceptional and consistent customer service.
- Accompanying the customer throughout their journey, designing them for conversion.

Moreover, agreeing with Pluricosmética, getting customers as much information as possible is urgent to personalize the whole experience. It also creates a relationship of retention with the consumer, providing purchase suggestions, customer support, and attention to detail that directly influences the consumer's opinion. However, the product being worked on must be considered: “Communication is different, as are the demands, objectives, interests of the public and the conversion funnel,” said Wella, which is why it is imperative to value data over intuition.

Table 9 mentions the different customer-centric components in the various companies by comparing the total references to the multiple themes. Therefore, it is crucial to develop the customer journey, as it is the most relevant component. Understand the customer needs and optimize the journey to enhance the marketing operations.

Customer Centricity			
	Consumer behavior	Customer journey	Customer needs
Boca do Lobo	2	4	2
Salsa	1	1	1
Wella	2	2	3
EDP	0	2	0
Pluricosmética	4	5	1
Leroy Merlin	2	5	1
Loba	3	4	2
Intellias	3	3	4
Delta	1	2	3
WOW	1	3	1
Total	19	31	18

Table 9 - Customer Centricity application in the interviewed companies

In brief, the level of implementation was based on Table 9, and the size of the bubbles (%) represents the weight of the “Customer Centricity” component in the total of all the determinants for considering a company data-driven. Figure 10 shows companies Pluricosmética and Intellias stand out for developing customer-focused strategies.

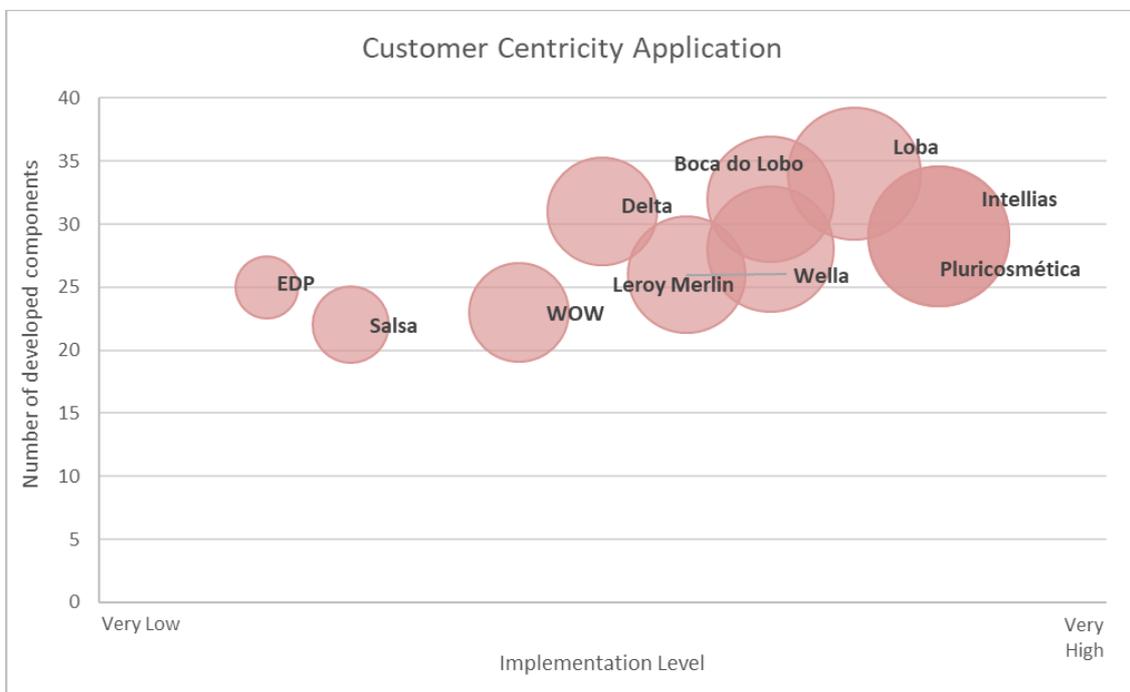


Figure 10 - Customer-Centricity Implementation

3.2.3 Strategic Planning

With “Produce solutions and determine plans” connected to “Making tactical decisions”, “Formulate valuable strategies”, and “Develop targeted promotional actions” as components to strong and strategic planning, all companies mentioned that it is crucial and decisive to achieve higher performance.

Effectively, concerning the **determination of plans and making tactical decisions**, it is essential that “data is used to optimize the company's performance in various ways, and the process of transforming data into marketing strategy plays a key role”, as highlighted by Loba. As mentioned by Delta, a “more careful and rigorous analysis is needed beyond the numbers, with segmentations, trends, the definition of clear and measurable goals, with a well-structured action plan and aligned marketing strategies”. Adapting to consumer behavior and as mentioned by Leroy Merlin, “the techniques on the product pages are based on what works best for the customer”, in other words, giving priority to what the customer searches for and wants to buy. The data is then analyzed to identify patterns, trends, and insights that can be used to inform the marketing strategy. So, it's possible to “predict behaviors, models, and perspectives and from here we can move on to developing marketing strategies, actions, and operations”, as mentioned by EDP. Therefore, companies should focus, above all, on specific techniques for developing strategic planning, such as:

- Collecting and analyzing data from various sources using some available tools.
- Creating individual customer profiles with all possible segmentation, like persona technique.
- Using AI to automate flows of personalization tasks and experiences.
- Being transparent and consistent throughout the process.
- Always focus on the customer.

Regarding the development of **targeted promotional actions** and a personalized offer, as described by Salsa and WOW, brands need to go a little further than mere personalization and enhance unique, relevant, and purposeful experiences for each customer. For this reason and because of the wide range of techniques mentioned, the quotes presented in Table 10 can be observed and considered.

Subject	Techniques and practices mentioned
Adapted content displayed	<ul style="list-style-type: none"> • “Adapting the content to each audience segment and making a conscious choice, always considering the data”, by Boca do Lobo. • “Investing in segmentation and optimizing the presentation of content display to each customer”, by WOW. • “Personalized content directly influences or determines the action a customer may take”, by Salsa.
Segmentation	<ul style="list-style-type: none"> • “The use of data allows companies to personalize their messages, offers and experiences to meet the specific needs of each customer or target audience segment.”, by Loba. • “Based on the data collected, the company must segment its messages and offers for each target audience segment. This increases the relevance of marketing communications and improves the customer experience”, by Leroy Merlin.
Personalization	<ul style="list-style-type: none"> • “It can directly influence the actions a customer may take, including conversion, engagement, loyalty and advocacy. By the experience to a customer's specific needs and interests, increases the likelihood that they will respond positively”, by Loba. • “At the moment, I would say that a greater focus on automation and personalization could bring positive results”, by Intellias. • “Companies can achieve a more personalized customer experience and increase satisfaction, which leads to customer retention, through the effective use of data.”, by EDP.
UX/ UI improvements	<ul style="list-style-type: none"> • “In an age when there is such a need to captivate the visitor, it is essential to make the website more user-friendly and apply greater automation of procedures”, by Pluricosmética. • “By optimizing the website, using some of the tools intelligently, it is possible to personalize the customer experience”, by Delta. • “Essentially, to improve results, product recommendations should be implemented according to user activity, by creating segments and using forecasting technologies”, by WOW.
Cross and upselling adapted strategies	<ul style="list-style-type: none"> • “There is an increasing effort to introduce these dynamics, especially when it comes to bundles, in order to increase interest on the part of buyers”, by Wella. • “These are times when it's easier to identify the characteristics and data of each client and develop tailored suggestions”, by Pluricosmética.

Table 10 - Techniques and practices implemented by the interviewed companies

Per creating **valuable strategies**, “data is essential for building the strategy around the company's concept and the communication objective”, said Delta. Marketing evolves according to this constant updating of strategy, adjusting to the reality of the public and always taking it into account. Therefore, the decisions must balance data analysis and intuition to achieve a better strategy. In this way, a winning strategy is the database and can be found by combining the following components:

- 1) Intellias continuously states that it “comes from the harmony between robust data collection, accurate analysis, and the strategic application of this information to optimize marketing initiatives”.
- 2) Referring that “the data is very extremely for building the strategy around the company's concept, strategy, and communication objective”, mentioned by Boca do Lobo.
- 3) Adopting “a structured approach to evaluating the performance of our campaigns, which includes generating detailed reports per campaign and allows us to make informed decisions”, noted EDP.
- 4) Have “a strong focus on continuous improvement and focus not only on past events but on trends, to work on our content, to increase our brand awareness, attract new customers and outperform our organic competition”, reported Leroy Merlin.
- 5) The “marketing strategies are created on an analytical basis, selecting the target that makes the most purpose, the relevance of the channel to the objective and the expected return”, named by Salsa.

In this way, Table 11 mentions the different strategic planning components in the other companies, using the total references to the various themes. Therefore, it is crucial, and as can be seen, that tactical decisions are the most relevant component for developing and making the right decisions to get valuable results.

Strategic Planning			
	Tactical decisions	Valuable strategies	Targeted actions
Boca do Lobo	3	2	2
Salsa	2	2	1
Wella	2	0	0
EDP	2	2	2
Pluricosmética	2	1	2
Leroy Merlin	1	1	0
Loba	1	3	2
Intellias	5	2	2
Delta	2	3	5
WOW	3	1	1
Total	23	17	17

Table 11 - Strategic Planning application in the interviewed companies

At a glance, the level of implementation was based on Table 11, and the size of the bubbles (%) represents the weight of the “Strategic Planning” component in the total of all the determinants for considering a company data-driven. In this sense, as can be noticed in Figure 11, Delta stands out for considering strategy in the decisions and marketing deeds implemented.

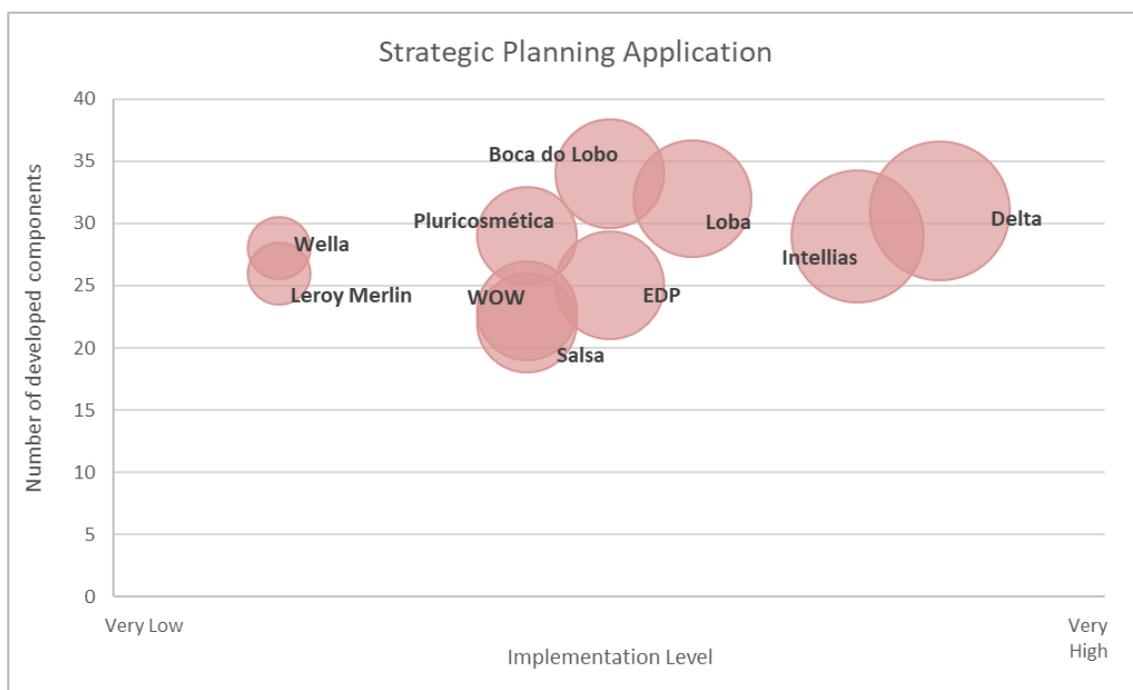


Figure 11 - Strategy Planning Application

3.2.4 Data Analysis

Concerning **Data Analysis**, there are main thresholds taken into consideration: “Identifying trends in consumer behavior”, “Improving the decision-making process”, “Improving the performance of marketing operations”, “Creating new insights about the consumer” and “Turning data into decisions”. All the variables were mentioned throughout the interview process, with the most critical components being the decision-making process and continuous improvement.

Data parsing has proven to be the least. Still, a not less important aspect for companies, as expressed by Delta, is “a more careful and rigorous analysis beyond the numbers, with segmentations, trends, the definition of clear and measurable goals, leads to a well-structured action plan and aligning marketing strategies”. Thus, the identification of trends in consumer behavior, through data analysis, is felt by companies. It is suggested that first of all, “we collect, analyze and process data that allows us to get to know the customer so well that we know what their buying tendency is, their history, what they most want to see, and which products are most likely to convert them”. This is what most retains, builds loyalty, and is mentioned by Leroy Merlin. As for the suggestion of products or activities, WOW highlighted the necessity of “tracking and monitoring changes in market preferences is the only way to devise winning strategies, with the public as the main focus”.

Regarding the **decision-making process**, as Leroy Merlin and EDP said, there are necessary meetings to assess the situation, define the following steps, monitor, and verify results. Still, as there are so many stakeholders, we work with data and performance reports in real time, allowing us constant autonomy. As well as, Salsa puts it, “teamwork in which each person has their role and responsibility and contributes to decision-making”. This highlights several good practices mentioned by the companies as a whole:

- As EDP mentioned, a “structured approach to evaluating campaign performance should be adopted, which includes the generation of detailed reports per campaign”.
- Based on the data analysis, the company “should define clear objectives and performance metrics that it wants to achieve with its marketing initiatives”. Boca do Lobo says the objectives and metrics will benchmark the success of the strategies.

- Decision-making for specific tasks “is undoubtedly a crucial moment in terms of responsibility but taking into account the existing hierarchy and the assigned need”, as Boca do Lobo preferred.
- There are “necessary meetings to review the situation, define next steps, monitor and verify results, but we work with data and performance reports in real-time, which allows us constant autonomy”, as cited by Leroy Merlin.
- All “functions must be very well established and allow for well-organized processes in this sense, so there is a lot of openness to suggestion”, which is the only way to ensure smooth decision-making, as stated by Pluricosmética.
- “Data provides insights that help with informed decision-making”. This allows companies to identify areas of opportunity, prioritize initiatives, and allocate resources more efficiently, as Loba mentioned.

Therefore, part of the data analysis process is turning **data into decisions**, revealing the correct choices based on the information recovered from all the sources. The companies highlighted many insights regarding the use of data for decision-making, which can be examined below.

- All marketing strategies are created on “an analytical basis, selecting the target that makes the most sense, the relevance of the channel to the objective, the expected return”, as Salsa said.
- As Leroy Merlin mentioned, it's the “capturing and cross-referencing of data, the reporting, the processing, and the strategies that we then plan and implement to use the data in our various channels”, both digital and offline.
- The essential part is “ensuring that marketing decisions are always guided by up-to-date and accurate data”, as stated by Intellias.
- Data is “important for building the strategy around the company's concept and communication objective. Marketing evolves according to this constant updating of strategy, adjusting to the reality of the public and always taking it into account”, as mentioned by Boca do Lobo.
- The success of Data-Driven Marketing practices is “directly related to the ability to coordinate the data obtained and stipulate personalized and targeted marketing strategies”, as Pluricosmética referred.

In terms of creating new **customer insights** based on data collection, companies “can carry out more segmented strategies and upselling,” as WOW mentioned. In reality,

“several variables are monitored daily, so the decisions taken can be valuable,” stated Salsa. The improvement process is recurring and dynamic, more reactive when the indicators show negative trends or proactive when insights or opportunities arise that lead us to try different things. Undoubtedly, “customers who feel valued, that their opinion is taken into consideration and who receive personalized experiences are more likely to repurchase the product or service, recommend them, spend more, be loyal to the brand, helping to increase its reputation”. Above all, they have a decisive influence on reputation, which will lead to greater brand recommendation, said Delta.

In this sense, as a measure of satisfaction, considerable effort is made to achieve excellent customer service, as stated by Boca do Lobo. Thus, as most companies mentioned, CRM emerges as the leading player in change. So, the complete customer journey must be analyzed, from the first interaction to conversion and beyond, to identify friction points, improvement opportunities, and the critical moments that influence their decision.

Companies’ suggestions for improving marketing operations have generated controversy. However, as already highlighted, culture, structure, and decision-making power are constraints that do not allow all improvements to be implemented. However, the suggestions for improvement are highlighted in Table 12, depending on the development area.

Improvement of the performance of marketing actions
Boca do Lobo
Improving performance would mean investing in paid ads on Google Ads.
Retargeting analysis to better target customers.
Salsa
Capturing, cross-referencing, analyzing, and working with data more and more effectively.
Getting to know the customer better so that we can meet their needs more quickly, simply, and efficiently.
Wella
Efforts are being made to achieve even better results, because usability has been a major battle, because if a customer tries to buy and can't, they feel frustrated and don't complete the purchase.
To improve operations, it was suggested that service provision be centralized in the office.
EDP
The aim is always to improve satisfaction and foster loyalty
Pluricosmética
An investment in everything related to our biggest digital traffic channel, the website, given that it has only been considered since the pandemic, there are still a lot of changes and improvements to implement.
Leroy Merlin
The process of improvement is to always get to know our customers' needs better in order to increase their satisfaction and achieve our metrics and KPIs by a greater margin.
Loba
Use of analytical tools to understand customer behavior, identify patterns and areas for improvement, via machine learning.
Intellias
To achieve better results, we discuss strategies for future initiatives, ensuring a continuous cycle of improvement and innovation.
We should highlight the increased use of artificial intelligence and marketing automation tools.
Delta
The whole process of improvement is continuous, although there is no secret recipe, all operations are constantly being optimized and the emphasis is on the integrity of the system.
WOW
The consumer experience must be improved by implementing personalization, improving usability and the experience, and enhancing the relationship between the suggestion and the consideration of the consumer's latest actions.

Table 12 - Mentions of improvement of the performance of marketing operations

In this vein, Table 13 shows the mentions of the different components of Data Analysis in the other companies by the total number of references to the various themes. The most crucial element to develop is improving marketing operations, followed by the decision-making process and consumer insights.

Data Analysis				
	Behavior trends	Decision-making	Marketing operations	Consumer insights
Boca do Lobo	2	3	2	2
Salsa	2	3	3	1
Wella	2	1	4	1
EDP	2	1	2	3
Pluricosmética	1	2	3	3
Leroy Merlin	2	3	2	3
Loba	2	2	3	3
Intellias	1	2	3	2
Delta	1	4	3	2
WOW	1	3	4	2
Total	16	22	29	22

Table 13 - Data Analysis application in the interviewed companies

At a glance, the level of implementation was based on Table 13, and the size of the bubbles (%) represents the weight of the “Data Analysis” component in the total of all the determinants for considering a company data-driven. In this sense, as can be noticed in Figure 12, Leroy Merlin, Loba, Delta, and WOW stand out for considering data analysis in the decisions and marketing deeds implemented.

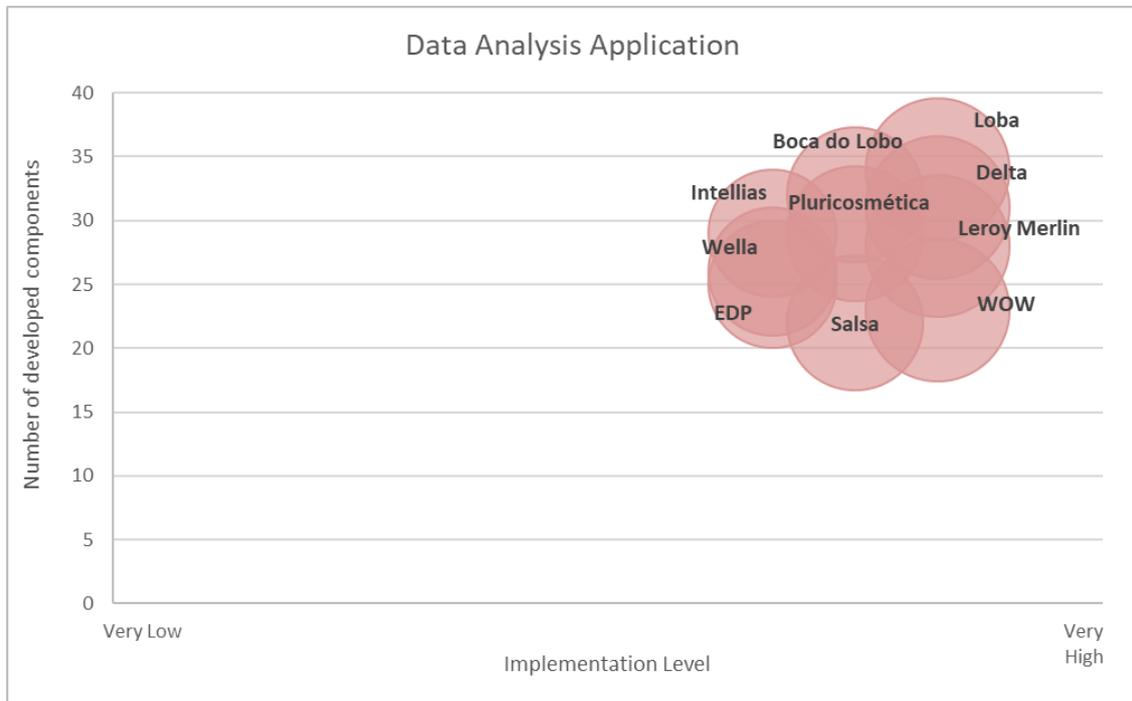


Figure 12 - Data Analysis Application

3.3 Impact on the Consumer Spectrum

As mentioned before, consumer behavior depends on developed strategies, which result in three distinct variables: customer satisfaction, customer retention, and customer satisfaction. To better understand this, the following tables will present the impacts of developing data-driven strategies on each variable.

3.3.1 Consumer retention

Regarding consumer retention, the companies mentioned several situations, techniques, or scenarios that can be consulted in Table 14, **validating Proposition 3**.

Impact on consumer retention	
Company	Statement and inferences
Boca do Lobo	<ul style="list-style-type: none"> “More controlled metrics that dictate our next actions include returning visitor or returning lead, conversion analysis, repurchase rate and the retention rate.”
Salsa	<ul style="list-style-type: none"> “Essentially, they work on strategies and actions to retain consumers and increase their lifetime value, such as cross-selling and up-selling.”
Wella	<ul style="list-style-type: none"> “When it comes to retention, there are objectives and KPIs to meet, which is why there is a large investment in post-purchase.”
EDP	<ul style="list-style-type: none"> “A good practice that allows consumers to be retained has been the total personalization of the offer and to this end campaigns and communication are totally targeted”
Pluricosmética	<ul style="list-style-type: none"> “There is a very close relationship with the consumer, in terms of purchase suggestions, customer support and attention to detail, which directly influences consumer opinion and retention.”
Leroy Merlin	<ul style="list-style-type: none"> “Firstly, the management of data that allows us to get to know the customer so well that we know their buying tendency, history and what they are most likely to convert them. This is what retains and builds loyalty.”
Loba	<ul style="list-style-type: none"> “Specific programs or strategies should be implemented to retain customers, such as buy-back offers, referral programs or satisfaction guarantees.”
Intellias	<ul style="list-style-type: none"> “Companies must invest in detailed data analysis to deeply understand consumer preferences and behaviors.”
Delta	<ul style="list-style-type: none"> “By optimizing the website, it is possible to foster a closer relationship with the customer and help increase satisfaction.”
WOW	<ul style="list-style-type: none"> “In terms of performance, it is essential to justify decision-making and customer retention and bounce rate, in particular, must be taken into account.” “To achieve better retention, the recommendation system and after-sales treatment must be improved, there is still a long way to go.”

Table 14 - Statements about Consumer Retention and its impacts

3.3.2 Consumer satisfaction

Different perspectives and suggestions regarding customer satisfaction in online environments are considered and scanned for analysis, which can be verified in Table 15, **validating Proposition 4.**

Impact on consumer satisfaction	
Company	Statement and inferences
Boca do Lobo	<ul style="list-style-type: none"> • “As a measure of satisfaction, a huge effort is made to achieve excellent customer service throughout the entire purchasing process, especially after-purchase.”
Salsa	<ul style="list-style-type: none"> • “Satisfaction needs to be a priority and the company needs to have this as its purpose. There are now numerous tools that make it easier to identify opportunities and pain points that influence customer satisfaction.”
Wella	<ul style="list-style-type: none"> • “As for cross-selling and up-selling, there is an increasing effort to introduce these dynamics in order to increase interest on the part of buyers - which increases satisfaction and makes possible to guarantee a better and wider offer.”
EDP	<ul style="list-style-type: none"> • “It is essential that customer processing is more direct and instantaneous, as this will allow the company to work better with the data and distinguish itself from the competition in terms of the products and services to offer consumers and guarantee greater satisfaction.”
Pluricosmética	<ul style="list-style-type: none"> • “The characteristics and data of each customer should be more easily identified whether in terms of characterization, purchases, preferences, pages visited, among others, so that satisfaction in personalization is better.”
Leroy Merlin	<ul style="list-style-type: none"> • “Taking care of customer satisfaction, not only in the buying and persuasion process, but also after-sales, treating them well so that they can come back. Above all, listening to them and giving them importance.”
Loba	<ul style="list-style-type: none"> • “Companies can achieve a more personalized customer experience and increase satisfaction, which leads to customer retention, through the effective use of data.”
Intellias	<ul style="list-style-type: none"> • “It is essential to implement exceptional customer service, create attractive loyalty programs and maintain two-way communication that values customer feedback in order to satisfy the customer as much as possible.”
Delta	<ul style="list-style-type: none"> • “Customers who feel valued and receive personalized experiences are more likely to buy the product or service again, recommend it, spend more, be loyal to the brand, and contribute to increasing its reputation.”
WOW	<ul style="list-style-type: none"> • “First, we have to satisfy a customer in order to retain them, and to do this they have to have an excellent experience, which requires a close relationship with the company.” • “To achieve satisfaction, we have to work to optimize operations and achieve applied usability in our customer contact channels”.

Table 15 - Statements about Consumer Satisfaction and its impacts

3.3.3 Consumer experience

Finally, considering the experience provided to customers, the companies mention a set of techniques and good practices that have stood out during the interviewees' professional careers, which can be duly found in Table 16, **validating Proposition 5**.

Impact on consumer experience	
Company	Statement and inferences
Boca do Lobo	<ul style="list-style-type: none"> • “The adaptation of content to each audience segment stands out, providing the best possible experience.”
Salsa	<ul style="list-style-type: none"> • “There are several variables and conditioning factors that are constantly monitored, so that the improvement process is recurrent and dynamic. Thus, negative or proactive conditioning when insights or opportunities arise can lead us to try out different strategies in order to enhance the experience.”
Wella	<ul style="list-style-type: none"> • “The aim is always to improve in order to make up for these bad experiences and to continuously improve the experience offered to customers.”
EDP	<ul style="list-style-type: none"> • “The customer experience is multichannel, and all these communications are analyzed so that they perform as well as possible, in terms of metrics, as well as the most important thing is the work throughout the journey.”
Pluricosmética	<ul style="list-style-type: none"> • “It's imperative to get as much information as possible from customers in order to personalize the whole experience.”
Leroy Merlin	<ul style="list-style-type: none"> • “The data is processed so that we have an ever-better knowledge of the customer, so that we can offer the best shopping experiences, taking into account the characteristics of the segment in detail.”
Loba	<ul style="list-style-type: none"> • “The use of data allows companies to personalize their messages, offers and experiences to meet the specific needs of each customer or target audience segment. This increases the relevance of marketing communications and improves the customer experience.”
Intellias	<ul style="list-style-type: none"> • “The personalized approach allows us not only to capture attention more effectively, but also to continually optimize the experience.”
Delta	<ul style="list-style-type: none"> • “Companies must focus on personalized experiences, communicate in an authentic and transparent way, but also with relevant and purposeful content.” • “The use of information and data collected on the customer to direct and guide marketing campaigns, especially on behavior, demographics and preferences, helps to define more personalized strategies that can bring better results.”
WOW	<ul style="list-style-type: none"> • “In order to achieve a better relationship with the customer, more effort must be made to reach the optimum point of recommendation so that the customer will come back again given the experience they have had.”

Table 16 - Statements about Consumer Experience and its impacts

Considering the information in previous tables, Table 17 suggests that all companies in the sample positively impacted the consumer spectrum, working through the experience, creating satisfaction, and guaranteeing retention.

	Consumer retention	Consumer satisfaction	Consumer experience	Impact on consumer spectrum
Boca do Lobo	Yes	Yes	Yes	High
Salsa	Yes	Yes	Yes	High
Wella	Yes	Yes	Yes	High
EDP	Yes	Yes	Yes	Low
Pluricosmética	Yes	Yes	Yes	Very High
Leroy Merlin	Yes	Yes	Yes	Very High
Loba	Yes	Yes	Yes	Low
Intellias	Yes	Yes	Yes	High
Delta	Yes	Yes	Yes	High
WOW	Yes	Yes	Yes	Low

Table 17 - Impact on the Consumer Spectrum

To sum up, Table 18 shows the level of development of each component of data-driven marketing, the number of tactics and actions mentioned by each company, and the assessment given regarding the implementation of data-driven marketing.

	Competence Application	Data Management	Customer Centricity	Strategic Planning	Data Analysis	Global level Implementation
Boca do Lobo	32	High	High	High	Very High	High
Salsa	22	Low	Low	Low	Very High	High
Wella	26	Very High	High	Very Low	High	High
EDP	25	Very High	Very Low	High	High	High
Pluricosmética	29	Low	Very High	Low	Very High	High
Leroy Merlin	28	High	High	Very Low	Very High	High
Loba	34	Very High	Very High	High	Very High	Very High
Intellias	29	Very Low	Very High	Very High	High	High
Delta	31	Low	High	Very High	Very High	High
WOW	23	Low	Low	Low	Very High	High

Table 18 - Data-Driven Marketing Implementation

The classification of the global-level implementation is calculated considering the development of the components of each pier of data-driven marketing, each of which can be seen in Table 19.

Number of components implemented	Data-driven classification
0 – 2	Very Low
3 – 5	Low
6 – 8	High
9 – 10	Very High

Table 19 - Classification of Implemented Components

4 Discussion

4.1 Results discussion

Throughout the study, it was possible to perceive that the company's structure and culture directly influence the activity's development, as mentioned by most interviewees and Länsipuro (2021). Moreover, this study concludes and agrees with the relevance and importance that companies attach to distinguishing themselves from the competition and learning how it operates to improve their actions, as prementioned (Liu et al., 2020).

Thus, the **marketing team** is the engine that drives toward success. With the alliance that can be made by integrating Data-Driven marketing, these professionals can develop better and more personalized strategies that meet the customer's needs (Borges et al., 2021). In this sense, according to Tripathi and Bagga (2020), all the companies that reported the execution and implementation of data-driven strategies developed this process by identifying and forecasting consumer behavior and following a defined path to achieving success. This study pointed out that the structure presented above, in Table 4, portrays the reality of companies in the form of processes to follow and the importance attributed to different phases, not only in the development of a marketing strategy but also in the application and improvement of internal processes and integration into this new data era.

In addition, regarding **consumer retention**, with an average weight of 65% of all mentions throughout the study, it is possible to highlight competencies such as “Predict and consider consumer behavior” and “Develop targeted promotional activities” as the main priorities of companies. In addition, the “Customer-oriented culture” is highlighted, which is the key to creating a stable relationship with the customer. It should be noted that, as aforementioned, the right relationships will create loyal customers over time; as Ngai (2009) refers, and this study proves it, companies must identify the most valuable clients, attract them, and retain them, and this study validates the main priorities to achieve this goal.

In terms of **consumer satisfaction**, it stands out with greater weight and relevance the techniques of “Optimizing personalized content”, “Respond effectively to customer needs” and “Customer-oriented culture”. Therefore, to achieve satisfaction, companies need to work through and enhance their relationships with the customer and implement

consumer-centric strategies (Singh & Srivastava, 2020). This result, in particular, is highlighted and concluded in this study, with an average weight of 90% in the total of mentions as the primary focus when steering objectives.

Finally, concerning the outcome of the **consumer experience**, it is an emphasis on specific competencies that companies noted as the main apparatuses that lead to leveraging the time consumers spend on a brand's digital channels, providing the best possible personal encounter. "Focusing on the customer experience" and "Develop the customer journey and identify touchpoints" were referred to by 100% of the interviewees. In addition, the components of "Develop targeted promotional activities" and "Strategy formulation through data gathering" were mentioned by 45% of the companies. As realized by Siebert et al. (2020), the customer experience should be the most dynamic, personalized, and accompanied by the stages of the customer journey.

Ultimately, it can be understood that this study extends the conclusions based on the different references captured throughout, with the final goal of achieving a holistic view of the subject, although the size of the company does not influence the level of implementation of data-driven marketing. Hence, it is stated that the degree of application of data-driven techniques will vary according to the sector, public, conditions and human resources. As such, the company with the lowest score for all the competencies in this study was Salsa, which is explained since the interviewee may have needed to study the techniques practiced more rigorously. On the other hand, the company with the highest level of application of all the competencies assessed was Loba, which could be explained by performance, given the sector in which the is positioned. Thus, it is possible to conclude that, in general, the development of these components had a positive impact on every result of the consumer spectrum, allowing the study to be validated.

4.2 Recommendations for companies and marketing professionals

In today's data-driven world, marketing professionals harness data's power to create the most successful campaigns. In this ever-changing and challenging situation, it's super important to learn how to use data and make intelligent decisions that help companies grow and be good at what they do. The key to success lies in transforming data into practical knowledge that propels businesses forward and ensures successful operations. However, companies need to think ahead and plan for the future if they want to be successful. To truly excel, there's a need to be tech-savvy and deeply understand the business's workings by having a dense data infrastructure. To ensure data is handled properly, fancy systems like data warehouses and lakes should be used that help us collect, store, and process data smartly and safely.

In addition, a culture of experimentation and learning is vital, and companies should encourage their teams to test different marketing strategies based on data insights, being willing to learn from the positive or negative results. On the other hand, data quality is another crucial aspect to consider. Ensuring that the data used in analysis is accurate, relevant, and reliable is fundamental to the success of data-driven marketing. It's recommended that the integration of data and insights across the company be promoted and a more holistic and practical approach be adopted. Personalizing the customer experience is another crucial strategy. By using data to understand customer needs and preferences better, companies can offer personalized and relevant experiences that drive customer engagement and loyalty.

Another critical aspect is being open to innovation and new technologies. Companies should always be on the lookout for new trends and emerging technologies in data-driven marketing and willing to experiment and adopt new approaches that drive innovation and growth. Finally, companies must be mindful of data ethics and respect customers' privacy. Adopting ethical practices in the use of customer data and ensuring compliance with data protection regulations are essential aspects of responsible data-driven marketing.

CHAPTER VI – CONCLUSION

5 Final statements

5.1 Conclusions

Companies have become increasingly concerned with the issue of data and adapting their strategies to what they can obtain from relevant information. In particular, they invest more financial and human resources in data processing, business analytics, and intelligence. This phenomenon is seen in large companies with a culture of continuous improvement and capable of understanding why this investment is necessary. However, in addition to being a topic that has been gaining importance, data-driven marketing, and the impact it has on the customer's attitude, experience, and perseverance is truly the key, and it is important to move the masses so that this mentality can be applied to improve competitiveness and performance.

Therefore, considering the data environment in Portugal, this study aimed to understand how companies act and perceive the need to build an environment conducive to receiving data, which components are essential to develop to respond to the most significant challenges, and the results and impacts on the consumer. To this end, a literature review and an in-depth analysis of the interview results were carried out. After this, a set of indicators was developed that encompasses the influence that companies and data-driven marketing components can have on creating retention, satisfaction, and an excellent customer experience. Interviews were conducted with ten companies based in Portugal, medium or large size, and operating in various sectors.

Firstly, it was possible to testify that the data has a major influence on the role of professionals and that the main factors for change mentioned by the companies were a lack of decision-making power, disorganized hierarchies, managers with a risk mentality, and a capacity for change. These factors were later verified as culture, leadership, and structure components.

On the one hand, it was found that to respond to the challenges identified; marketers must develop specific components, with "Respond effectively to customer needs" being the most mentioned, followed by "Develop the customer journey and identify touchpoints" and "Develop targeted promotional activities".

Within the consumer spectrum field appears the concept "Consumer Retention" linked to "Respond effectively to customer needs," the "Consumer Experience" to

"Develop the customer journey and identify touchpoints," and the "Consumer Satisfaction" to "Develop targeted promotional activities". Accordingly, it was stated that each component's application level varies between different companies due to their characteristics and internal and external environments. Therefore, all companies revealed a positive impact of data on performance.

Finally, this study provides important insights into the impact of the new digital and data era on developing components that a company must cultivate. It highlights possible actions to improve its marketing operations, whether in customer retention, satisfaction, or experience.

5.2 Limitations and endorsements for future research

This study has limitations, which must be considered for an overall analysis. The sample comprised companies with very different activities and interviewees from different areas, although always linked to the data and with a great presence, relevance, and knowledge, making the analysis more difficult to unify. In addition, the analysis in question and subsequent conclusion were drawn up based on mentions and examples given during the interviews. The fact that considered people from different positions and based the research on the facts explained during the interview makes the conclusion more difficult, as a critical spirit is required under the overall and punctual result. Subsequently, data was collected from ten companies based in Portugal from various sectors to get a holistic view of the area and the market. Consequently, the scope of the study could be more expansive in terms of conclusions.

It should also be noted that gathering information has become complex, given that no model contains all the information relating to the different stages of the data-driven marketing process. Therefore, finding a direct link between these components and the result on the consumer spectrum was challenging.

Thus, for future research, the study related to this topic could include a quantitative component, the consumer's opinion, to understand the effect of applying different tactics, which could contribute to obtaining more accurate conclusions. It is also recommended that the sample be large to achieve a high level of representativeness and make it possible to extrapolate the data obtained.

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Appendix I – [Interview script]

INTERVIEW SCRIPT
Interviewee context
<ul style="list-style-type: none"> • <u>Required:</u> Role, Company, size, and sector. • <u>Question:</u> In your opinion, do you think that the culture and structure of your impacts the development of the activity (data collection management, marketing strategy and decision-making)? • <u>Question:</u> What does Data-Driven Marketing mean to you?
Data-Driven Marketing
<ul style="list-style-type: none"> • <u>Question:</u> In terms of Data Management, how is it done the collection, treatment, and management of data and what tools are used for these processes, it is used a CRM platform? • <u>Question:</u> How is it mapped the customer journey, the touchpoints are identified and how does the usage of data allow more targeted actions? • <u>Question:</u> Can you identify some data sources, known as channels, that are used to promote the company (E-mail, SMS, website, social media)? • <u>Question:</u> How is data used to optimize the company performance and how would you say is the process of transforming data into marketing strategy? • <u>Question:</u> How do you personalize content for consumers on a website, do you use specific techniques? And does it work the decision-making process?
Consumer spectrum
<ul style="list-style-type: none"> • <u>Question:</u> How can you measure success and how does the process of improving marketing operations work? • <u>Question:</u> How do you think your operations could be improved to achieve better results, greater conversion, satisfaction, or retention? • <u>Question:</u> Do you attach importance to Data-Driven Marketing, or do you think that intuition also plays a role in Decision-making? • <u>Question:</u> In your opinion, how can companies build closer relationships with customers and achieve loyalty? And how can companies get the consumer experience to be the most personalized possible and get satisfaction in a way that can retain the consumer?

Table 20 - Interview Script

Source: Self-elaboration

Annex I – [WebQDA platform reports]

TESE
Emitido por ivmainse01



Fontes

Culture and structure

Nome	Refs
Boca do Lobo	2
Delta	1
EDP	2
Intellias	1
Leroy Merlin	1
Loba	1
Pluricosmética	1
Salsa	1
Wella	1
WOW	1
Culture and structure	12

Figure 13 - Culture and Structure Interviews Mentions

Source: WebQDA

TESE
Emitido por ivmainse01



Fontes

Data Management

Nome	Refs
Boca do Lobo	1
Delta	1
EDP	1
Intellias	1
Leroy Merlin	1
Loba	3
Salsa	1
Wella	1
WOW	1
Data Management	11

Figure 14 - Data Management Interviews Mentions

Source: WebQDA

Fontes

Customer Centricity

Nome	Refs
Boca do Lobo	1
Delta	1
Intellias	1
Leroy Merlin	2
Loba	3
Pluricosmética	1
Salsa	1
Wella	1
WOW	2
Customer Centricity	13

Figure 15 - Customer-Centricity Interviews Mentions

Source: WebQDA

Fontes

Strategic Planning

Nome	Refs
Boca do Lobo	1
Delta	2
EDP	1
Intellias	1
Loba	1
Pluricosmética	1
Salsa	1
Wella	1
WOW	2
Strategic Planning	11

Figure 16 - Strategic Planning Interviews Mentions

Source: WebQDA

Fontes

Data Analysis

Nome	Refs
Boca do Lobo	2
Delta	1
Intellias	1
Leroy Merlin	1
Loba	3
Pluricosmética	1
Salsa	1
Wella	1
Data Analysis	11

Figure 17 - Data Analysis Interviews Mentions

Source: WebQDA