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Abstract

Index terms—

1 I. INTRODUCTION

The world's most important resource is no longer oil, but data (The Economist, 2017). Almost six years after this statement, describing the opportunity and size of that staggering truth is difficult. Today, our everyday lives in the digital age are being facilitated by services and platforms that are powered by a new type of fuel called Data. In the framework of marketing, the benefit of actionable data insights is massive they optimize marketing performance, guide day to-day decision-making, drive strategy, induce customer engagement and retention, and fuel innovation. Many brands like Facebook, Google, Tesla, Apple, and Uber have changed our world just because they pioneered adapting and disrupting data-driven decisions and innovation. All these data-driven insights benefits have increased the interest of marketers in mining digital data (Sponder & Khan, 2018). Markets and consumers have evolved throughout the years, and this evolution has directly impacted researchers and marketers. For every business to succeed, a strong marketing strategy needs to be implemented in today's competitive business landscape. And to do so, marketers can no longer rely only on their assumptions when making marketing decisions. With the abundance of data available to businesses, data-driven decisions are becoming more and more important (Bibby, Gordon, Schuler & Stein 2021). Nowadays, marketers need to modify their techniques and methodologies to gain a deep understanding of consumers' trends and tendencies to mirror experiences and engagements. Data analysts are mainly responsible for communicating the data that matters by highlighting trends and insights based on the visualization, transformation, and manipulation of existing data. (Sponder & Khan, 2018). Marketers are expected to gain these skills because organizations all over the world are increasingly approaching their businesses from a customer centric perspective and collecting massive quantities of customer information in the process; utilizing this data flood is an enormous challenge (Bibby et al., 2021). Research has always been an integral part of the marketing process. The systematic design, collection, analysis, and reporting of data and findings relevant to a specific marketing situation facing the company represent the first steps in developing marketing strategies. Marketers must know their customers and gain an extensive understanding of their behavior and with the amount of data provided by the customer himself, database marketing is today more than ever playing an integral role in optimizing brands' performances. Evolving consumer behavior and the fast pace changing marketing landscape have put pressure on businesses to put marketing operations in a position to shape the interactions with customers rather than just connect with them. Today marketing operations necessitate the combination of skilled people, efficient processes, and supportive technology (Edelman & Heller, 2015). Born from the digital world we live in, the new marketing landscape has acquired a fundamental value: Big data. Has digital brought anything new to marketing? digital marketing is certainly faster and more cost-efficient but has not brought anything new to marketing operations. Research and data are not new to marketing, what is new is the size and opportunity of data that is challenging every marketer and pushing him to gain more skills in data analysis (Charlesworth, 2020).

In every business and every marketing department, there is a need today for a marketing analyst who has the skills to work with data to unearth new marketing insights for the company. Today companies have internal access to big data, but big data doesn't automatically lead to better marketing. Big Data often fails to deliver the big insights hoped for because companies don't tackle the topic optimally. To do this, it would be of huge benefit to identify and prove an the use of customer analytics and corporate performance-and to know what the best companies are doing to turn their analytics into growth (Bibby et al., 2021)The data is expected to be collected by the company's contact center, organized, and stored for marketers to be able to analyze and draw

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assumptions about customers' needs and reactions. The type of data collected is comprehensive information about the potential or current customers that help in achieving lead generation, lead qualification, sales, and even building communities and improving customer relationships. Data is worthless if it does not derive insights. Information collected and stored in the company database must be accessible to marketers who must have the skills to visualize, transform and manipulate the data. Marketers are expected to prepare data for communication by making reports that show trends and insights. Through data mining, marketing statisticians can extract useful information about individuals, trends, and segments from the mass of data. Database mining is a process of knowledge discovery and of distilling this knowledge into actionable information; leveraging the use of big data as an insight-generating engine has led to the demand for marketers with data analyst skills. Whether it is to better understand the customers' behaviors, to improve customer retention, or, to enhance loyalty and optimize business performance, organizations are relying on the data analysts' skills of their marketers to have more satisfied customers and more innovative approaches that would surpass the activities of the competition (Cheffey & Smith (2017)). To better show up the importance of data for marketing decisions we will take for example the case of restaurants. In the past years, and especially after covid-19, we have witnessed the growth of restaurant delivery through digital ordering services which represented a major opportunity for hospitality businesses of all sizes. Coronavirus has drastically changed society and forced the dine-in facilities to close for long periods leaving customers with the sole option of delivering to home. For restaurants that were struggling to survive at that time, pivoting to online ordering has been a real lifeline for many businesses. Many restaurants used third-party aggregators for a quick reaction to market changes, aggregators offered them a quick digital ordering solution to satisfy their customer needs in the most cost-efficient way. Many third-party aggregator platforms currently control the online ordering service. But why restaurants are now London Journal of Research in Management and Business rethinking that decision? The main reason is data. When restaurants partner with third-party delivery services they lose all customer data to these platforms. The data of customers are used by the aggregators to grow their business rather than the restaurant's business whereas restaurants using their online ordering system allows them to gather crucial customer data to drive their marketing, to help in coming up with the right promotional tactics at the right time to the right person, to personalize their communication with their customer knowing their preferences and tastes and surely to develop loyalty programs that will enable advocacy and build communities. Restaurants who are shifting to their online ordering app are certainly conscious of the importance of having marketers with data analysis skills or else the data will lose its value. Insights-driven decisions are safer and produce more ROI (Return on Investment) than any other decisions. The data the marketer has access to is challenging yet efficient in optimizing the brand's performance. The turning point is whether the marketer is ready and well equipped to work with this amount of data or not. To make sense of available data and derive insights and value from it that leads to decisions and actions, the community needs to be equipped with technologies, data capacity training, and technical support. Companies need to understand that what matters is not the technology itself but how you utilize it. Many managers associate customer analytics with complex IT (Information Technology) systems and expensive analysis tools. Indeed, a company can't leverage customer data successfully without IT investment, but relying on technology alone isn't the answer. How companies make use of customer information-and the organizational changes they implement to realize these changes-make the difference. A concentrated effort on technology and tools rather than staff and processes leads to failure. The ability to effectively translate data into concrete action is what counts. Not investing appropriately in staff skills and in-house expertise is where most industries are falling short. (Charlesworth, 2022) .

Organizations must be aware of the importance of data analysis and provide their employees with relevant training and academic institutions must rethink their course offerings to equip future marketers with data analysis skills. Developing these skills will improve marketers' potential in putting different data together like paid advertising analytics and conversation, data website traffic, data customer care, and data sales and explore the direct and indirect connection to get a specific source of fact. Integrating different data sources into clear reports intended for insight-driven marketing decisions will unlock the organization's value and optimize its potential. Marketers skilled in combining big data with integrated marketing strategies will make a substantial impact on significant areas related to customer engagement, customer retention, loyalty, and optimizing marketing performance. Big data does not simply help you connect with the customer, but it helps you gain an in-depth understanding of who your customers are, what they want, how they want to be contacted, and when. What makes this kind of data reliable is that the customer himself is the source and he willingly made it accessible to marketers. Combining data learnings with strategic thinking also allows marketers to develop loyalty programs that are relevant to the desires of their customers by identifying what could influence them to make them want to be labeled as their loyal customers and what would affect their buying behavior and increase their consumption. With access to big data, achieving ROI is becoming more achievable through data and metrics helping to assess performance and optimize it in a way that every dollar spent is directly linked to conversions achieved. The data that matters to marketers can be classified into 3 main types: customer, operational, and financial. Customer data includes behavioral attitudinal and transactional metrics and can be retrieved from different sources such as marketing campaigns, communities, loyalty programs, points of sales, websites, customer services, and surely social media. Operational data is crucial in setting objective metrics that measure resource allocation, budgetary controls, asset management, and quality of marketing processes.

Finally, the financial data which is usually found internally within the company systems play a major role in

111 assessing sales, revenues, profits, and other important numbers that reflect the financial health of the organization
112 (Chernev, 2019). When those 3 types of data are combined, reports and conclusions are derived to enable the
113 development of a marketing strategy that is efficient and profitable. Data is not only the new oil but it also
114 can be described as the soil that supplies the world. Organizations are more and more seeking to grow from it.
115 The internet of Things (IoT) is a great example of how data can generate more data. It is when the product
116 becomes the source of data itself through a dynamic system of devices that use the internet to exchange data and
117 the "thing" represent all the internet-enabled devices such as smartphones, computers smartwatches, smart TV,
118 smart homes, etc. IoT, which integrates everyday "things" with the internet can give an edge and truly generate
119 innovative marketing campaigns.

120 IoT devices are senders and receivers of data, and this data is very valuable and helpful for marketers to be
121 able to predict trends, sales, and market changes in general which leads to the formulation of effective strategies
122 that enhance revenues. Data of IOT helps marketers decide on how to improve their product or what offerings
123 might be useful and desired by the customers through an in-depth analysis of the consumer interaction with the
124 product and thus it will help them have more personalized and customized offers which will convey more happy
125 customers and satisfying business leads (Greengard, 2015). Fitbit, for example, gathers data from the device
126 itself and provides the user wearing the device with personalized messages, activities, and relevant promotions in
127 addition to that Fitbit gathers statistics by itself related to the user's performance and achievements and gives
128 him the option of sharing it with his friends on social media. By that, the users' friends are informed about
129 their friends' activities, influenced, and are surely aware of the Fitbit benefits from a trusted source even though
130 the source of the data is the app itself. The app uses data to promote itself through a trusted source: the
131 user (Waher, 2015) Data can also drive creativity. The data are retrieved in visuals that represent more than
132 numbers and facts; they tell stories. Data analysis is the collection of data that is being analyzed to tell stories
133 using charts and visualization. Contrary to what has often been assumed, the familiarity, usage, and benefits
134 derived from data are not for scientists only. Marketers have always dealt with research to get data and today
135 they are challenged more than ever through dealing with big data-driven decision-making. Data is derived from
136 more sources than a website page makes connecting insights to actions more challenging and has raised the need
137 for incorporating many data sources via database integration and application programming interfaces. It is also
138 important for companies to be aware that the analytics strategy cannot be handled by one person or a very
139 small team. It is important to spread access and leverage the strengths of multiple teams to create maintainable
140 cooperative data culture to achieve scalable and valuable results. Real-time data with advanced analytics and
141 machine learning models combined with Key performance Indexes (KPIs) that are set based on business goals
142 can achieve greater results (Sponder & Khan, 2018). This combination mastered by the marketer will provide
143 clearness on the direct impact of data-driven decisions on ROI.

144 Finally, for data to be valuable, marketers must be equipped with the knowledge and provided with training
145 that will help them merge their strategic thinking with existing information derived from data which will lead
146 to optimized performance. Data analysts' skills are required to be part of marketers' skills to help organizations
147 grow and stay one step ahead of the competition. There are plenty of analytics tools available and accessible but
148 tools without people are useless. The combination of great tools with expertise to use the tools unlock the value
149 of data (Simon, 2015). In 2023 and beyond, businesses looking for success must adopt a data-driven marketing
150 approach. Decision-making based on data and analytics will improve the effectiveness of the marketing strategies,
151 help them reach their target more efficiently and the data-driven approach, and lead to more profit. Marketers
152 are expected Issue 3 ??? Compilation 1.0 to quickly adapt to the new technologies and innovations that are
153 shaping their roles and responsibilities in the industry.

154 It is also important that academic institutions and organizations be aware of the importance of data,
155 technologies, and innovations since they play a major role in supporting the evolution and advancement of
156 marketers' performances by providing them with knowledge and training that will keep them up to date with
157 the pace of the market changes. We can conclude that yes data is the new oil, but it needs a powerful engine
158 to extract it. This engine is the organization that builds internally a strong analytics culture and competency.
159 Only with this engine, the new oil will harness and produce wiser decisions.

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- 160 [Chaffey and Smith ()] D Chaffey , P Smith . 10.4324/9781315640341. [https://doi.org/10.4324/](https://doi.org/10.4324/9781315640341)
161 **9781315640341** *Digital Marketing Excellence: Planning, Optimizing and Integrating Online Marketing*,
162 2017. Routledge. (th ed.)
- 163 [Charlesworth ()] A Charlesworth . *Absolute essentials of digital marketing*, 2020. Routledge.
- 164 [Charlesworth ()] *Digital Marketing a practical approach*, A Charlesworth . 2022. (th ed)
- 165 [Edelman and Heller ()] D Edelman , J Heller . *How digital marketing operations can transform business. Insights*
166 *& Publications*, (New York) 2015. 2015. MIT Press. (The internet of things)
- 167 [Routledge Chernev ()] A Routledge Chernev . *Strategic marketing management theory and practice*, 2019.
168 Cerebellum Press.
- 169 [Sponder et al. (eds.) ()] M Sponder , G Khan . *Digital analytics for marketing*, Routledge Taylor , & Francis
170 Waher , P (eds.) 2018. 2015. Packt Publishing. (Learning the Internet of things)
- 171 [Bibby et al. (2021)] ‘The big reset: Data-driven marketing in the next normal’. C Bibby , J Gordon , G
172 Schuler , E Stein . [https://www.mckinsey.com/capabilities/growth-marketing-and-sales/](https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-bigreset-data-driven-marketing-in-the-next-normal)
173 **our-insights/the-bigreset-data-driven-marketing-in-the-next-normal** *McKinsey &*
174 *Company* 2021. March 25. March 30, 2023.
- 175 [The world’s most valuable resource is no longer oil, but Data. The Economist The Economist Newspaper (2023)]
176 ‘The world’s most valuable resource is no longer oil, but Data.
177 The Economist’. [https://www.economist.com/leaders/2017/05/06/](https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-isno-longer-oil-but-data)
178 **the-worlds-most-valuable-resource-isno-longer-oil-but-data** *The Economist Newspaper*
179 March 29, 2023.
- 180 [Simon ()] *Too big to ignore: the business case for big data*, P Simon . 2015. Wiley.