



FACULTY OF EDUCATION AND BUSINESS STUDIES
Department of Business and Economics Studies

The Impact of Artificial Intelligence (AI) on CRM and Role of Marketing Managers

Tahir Iqbal
Md Nazmul Khan

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Tahir Iqbal

Md Nazmul Khan

Abstract

Background- Emergence of artificial intelligence (AI) has transformed the dynamics of the business world. AI tools are changing the way marketers used to do business and these changes are so profound that it has become difficult for marketing managers to overlook the importance of investing in and adopting AI as an integral part of the marketing function. Companies which have implemented AI in their Customer Relationship Management (CRM) and marketing as a whole, have reported significant impacts on company's growth in terms of customer loyalty and profitability. In recent years, we also witness emergence of specialized software and IT companies which are dedicated to produce customized marketing solutions and programs targeted at customer relationship management and marketing. They produce enterprise applications for marketing automation, analytics, and application development. Consequently, the role of marketing managers has also transformed and is expected to change even more in the future. This calls for further research, as the area appears to have received little attention in relation to its weight of importance.

Aim- The main purpose of our thesis is to contribute to the literature of what changes have been introduced in the function of CRM as a result of AI integration and how these ongoing changes have affected the role of marketing managers.

Results- The findings of the research show a connection that exists between the 3 factors, Artificial intelligence, CRM and role of marketing managers/decision makers. The ongoing changes that are occurring in marketing as a result of AI are not only limited to transforming the marketing function of business, it is rather consequently changing the way marketing manager make decisions and the way they interpret data. It is becoming increasingly essential for marketing managers to upgrade their skillsets and acquire sound technical knowledge in addition to deep understanding of marketing concepts.

Contribution- The evolution of AI is impacting all areas of business and to harvest maximum benefits, adoption and change in all aspects is equally important. This study offers guideline to marketing managers for successful application of AI and its impact on the overall performance.

Key Words- CRM (Customer Relationship Management), AI (Artificial Intelligence), Marketing

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1. Introduction

This chapter will take account of background of the study as well as the chosen subject for the thesis, its scope and implications. The chapter will highlight the subject with regards to business administration and specifically marketing. This will be followed by a brief overview of the existing research in the relevant areas in connection to artificial intelligence. The research gap is then identified along with the ongoing issues within the selected topic. The chapter concludes with justification of the aim of the study, the research questions and delimitations of the study.

1.1 Background of the study

Artificial Intelligence (AI) is all around us. Perhaps, to some, it may still be a new concept, but it already has a huge impact on our everyday routines. The notion of Artificial Intelligence (AI) was first presented by renowned scholars at Dartmouth College (US) conference held in 1956. Their definition of AI is the ability of machines to understand, reason, and learn the same way as human beings do, indicating that there are possibilities that computers can be used to simulate human intelligence (Pan, 2016). It wouldn't be an exaggeration to say that most of us interact with artificial intelligence on a daily basis in some or the other way. In business, AI has an extensive range of uses as well. From conventional to contemporary, artificial intelligence is already reshaping virtually every business process in all industries. As artificial intelligence technologies boom, they are becoming a necessity for businesses that want to attain a competitive edge in the market. According to Syam and Sharma (2018), experts suggest that the upcoming years will be an insight of the fourth industrial revolution which will be driven by digitization, information technology, machine learning and artificial intelligence and this will gradually shift decision-making from humans to machines. Moreover, its subsequent societal changes will significantly impact both, personal selling and sales management research and practices.

They further stated that the influence of AI on organizations is huge already as of today and will be even more in years to come (Syam & Sharma, 2018). Therefore, business managers around the world are investing in AI to a large extent as it helps them in creating new sources of business value. The corporations which have adopted AI and pioneered in it have already seen remarkable results (Ransbotham, Gerbert, Reeves, Kiron, & Spira, 2018). Adding to the future insights of the impacts of AI, Bughin et al. (2019) in their research have estimated AI to create an additional \$13

trillion output by 2030, increasing the global GDP by approximately 1.2% every year (Bughin, Seong, Manyika, Chui, & Joshi, 2019).

1.2 AI in CRM and Role of Marketing Managers

Customer relationship marketing (CRM) is a tool used to automate sales processes and customer services (Payne & Frow, 2005). CRM is connected to relationship marketing and the concerned principles of this field (Parvatiyar & Jagdish, 2001).

The role of IT and AI in today's world is becoming indispensable for business firms especially marketing functions. According to Hall (2019), AI marketing is basically using technology to improve the customer's experience. Similarly, the role of marketing managers has also been affected by the intervention of information technology and AI in particular as it is now more important to understand the customers better or there is a risk of losing them to competitors who responds to their needs and wants. AI makes it convenient for business firms to understand their customers better and assess their behavior towards products and services. It also helps in making calculated decisions once you have access to all the necessary data regarding intended customers.

1.3 Research Motivation

Several experts are of the opinion that the marketing function of a firm has great potential of reaping benefits if AI-technology is implemented in it, especially focusing on machine learning (Faggella, 2019). According to Faggella (2019), who is also the Chief Executive Officer at Emerj Artificial Intelligence Research, marketing is one of the most thriving business functions to implement AI in because of the presence of very large amounts of data and also because marketing has a direct impact on organization's revenue growth. An expert consensus consisting of 51 marketing managers who worked actively with AI, was recently conducted by Emerj Artificial Intelligence Research. A section in this machine learning marketing survey expected the executives to predict when AI/Machine Learning (ML) would become universal for marketing technologies, even for small businesses. The results showed that majority of the investors and business owners believed that AI will soon be fundamental to nearly all marketing products of the future, just as having a website and some kind of CRM is essential for the business (Faggella, 2019). Customer relationship management in particular helps to better understand the needs and behaviors of customers so that stronger relationships can be developed with them (Anshu & Tarun, 2019). According to Dilmegani (2021) a Customer Relationship Management (CRM) system lets businesses closely observe and analyze relationships with its existing and potential customers,

contractors, and workers. The core purpose of implementing this system is to escalate sales efficiency and firm's profitability by improving and sustaining strong business relationships. When the sales and marketing functions collect customer data, the CRM tools help examine customers' interaction histories and sales data, which in turn helps businesses identify customer preferences and improve sales processes by offering what customers are looking for (Dilmengani, 2021). Using this valuable analysis of its customer's preferences, companies can:

- Create even more effective marketing strategies
- Identify greater sales opportunities
- Offer more efficient and effective customer support services (Dilmengani, 2021)

Therefore, to become more customer focused, business managers, marketing specialists and IT professionals must realize the importance of building profitable relationships with customers and make managerial decisions which will grow the value of the customer base and consequently the value of the company (Anshu & Tarun, 2019).

Now the question arises that why should businesses integrate AI into their CRM tools? To answer this, we will be giving 3 main reasons. Firstly, as the size of customer data increases day by day, AI helps in converting raw (unstructured) customer data into organized (structured data) using tools such as machine learning. This helps in detecting trends/patterns and provide valuable insights for businesses. AI technology enables companies to store and manage large volumes of data without errors (Dilmengani, 2021).

Secondly, in addition to the ever-growing volume of data, managing business processes and relationships becomes more complex due to increasing transactions. This causes complications in understanding company relationships and identifying accurate customer patterns. This is where AI helps by augmenting the CRM function and providing actual information (Dilmengani, 2021).

Lastly, the increasing popularity and interest of business investors shown towards AI-integrated CRM tools is growing since 2016. The influence of AI in CRM tools can be seen better as business processes become more intricate with the increasing amount of customer data (Dilmengani, 2021).

Having understood the concept of CRM and AI integration in CRM, we are going to look upon CRM which is defined as "a term referring to the strategies and tactics, as well as to the technologies supporting the execution of said strategies and tactics, marketers use in order to manage the relationship with their customers throughout the customer lifecycle. The goal of CRM

is to improve and optimize customer relationships, in order to drive customer loyalty, retention, revenue and customer lifetime value.” (Optimove, 2020). Our research focuses on understanding the impacts of AI on CRM as a whole.

Along with all that we just discussed, it is becoming increasingly important that professionals possess the capabilities of converting technological opportunities and investments on IT into customer demand growth. Therefore, marketing department analysts and managers must also possess technical skills so that they are able to manage machine learning and other methods within AI, along with having excellent command on marketing itself (Wedel & Kannan, 2016). According to a global executive study of strategic measurement conducted by Schrage and Kiron (2018), 79% of the responding CEOs stated that they believe in investing in skills and training of their marketing professionals to boost the effectiveness of ML in marketing. With the rise of AI in marketing and specifically in CRM, it is commonly assumed that this will lead to major labour layoffs in the economy due to automation of tasks once performed by humans now being overtaken by machines (Schrage & Kiron, 2018) . However, according to the US Bureau of Labor Statistics (2020), the overall employment of advertising, promotions, and marketing managers is expected to rise 6% from 2019 to 2029 in which managers with digital marketing skills will have the best prospects (US Bureau of Labor Statistics, 2020). Another important thing to note is that AI is a machine-based process and is believed to be incapable of replicating human intuition and imaginary skills (Jarrahi, 2018). It is more important to however understand that how the role of marketing managers is changing due to the increase in tools that automate and support marketing decisions (Dawar, 2020).

1.4 Research gap

In April 2018, Marketing Science Institute (MSI) in US announced the new Research Priorities for the term 2018 to 2020, where a good number of research priorities were directed towards the need for more research with regards to AI in marketing (MSI, 2018). When we were exploring the literature on the impacts of AI on CRM and decision making, we could deduce that AI is not only changing the dynamics of the various areas in business but is also giving rise to the need of advanced skillset that would be required by marketers, and in particular marketing managers, so that they can understand and utilize the actual benefits that can be drawn from integrating AI into marketing as a whole. However as of now, there are only few research and articles which explore how development of AI is transforming the role of marketing managers.

Jarrahi (2018) is of the opinion that managers must be well aware of the ongoing AI developments and at the same time be prepared to adapt to these changes. He further suggests that decision makers should always update their knowledge and skills regarding AI so that they are aware of how it can help them augment the desired outcomes and simultaneously attain a competitive edge in the human-machine synergy. (Jarrahi, 2018). Emphasizing on the role of marketing analysts, Wedel and Kannan (2016) state that in many firms marketing analysts work along with both marketing managers and IT personnel therefore they must be well-versed with knowledge of both (Wedel & Kannan, 2016) Also as CRM and decision making becomes more and more automated as result of AI, it is important to determine how to ground these as part of the practical and intuitive knowledge of the managers (Wedel & Kannan, 2016). In their research, Wedel and Kannan (2016) have highlighted how the role of marketing managers must grow with the integration of AI, however there is still further research required due to the fact that these developments are ongoing and AI revolution involves even more areas like AI assistants, which will require an in-depth analysis to reach a conclusion.

Similarly, a research was conducted by Dawar (2018) in which industry experts and managers participated. Based on the finding he concluded that AI platforms can bring very profound changes in relationships of managers and firms with customers, especially in B2C firms (Dawar, 2020). He also gave suggestions on how successful marketing can be achieved through targeting AI-assistants, yet the research focused primarily on the relation between marketing manager's role and the AI assistants which shows there is still need of a research to understand the impacts on mixed audience of machines and humans.

Based on our understanding of the researches conducted earlier, we consider it important to look at the transformation that AI is bring in marketing and consequently on the role of marketing managers from a holistic point of view. This study emphasizes on the overall impacts AI is bring to the marketing of B2C firms along with specifically looking at what contributions marketing managers are making to it along with what AI can and cannot offer to marketing. We will take a closer look at what new skills and knowledge are expected of marketing manages to be upgraded in line with the ongoing developments. Additionally, we will see how AI automates decision making in marketing departments, therefore, we have developed the following research question.

1.5 Research Aim

The core aim of this research is to investigate how Artificial Intelligence affects CRM. We will then examine the impact of these changes on the role of marketing managers by forming a connection between AI, marketing and decision making. This research will serve 2 important purposes; first, it will contribute to the literature of what type of changes are being introduced in CRM through AI and secondly it will bring insights into what skill sets are becoming important for marketing managers to possess so that they remain competitive in their performance and are able to draw effective results from their decisions.

1.6 Research Question

How the integration of AI affects CRM and the role of marketing managers?

1.7 Delimitation

The respondents selected for the research are marketing managers at firms which already implement AI tools and practices in their marketing function. We believe that they possess deep understanding of AI technologies and have a thorough exposure to how these are affecting their role as marketing managers and decision makers. Moreover, we have delimited the firms to business-to-consumer (B2C) firms i.e. these businesses sell their products and services directly to consumers. We decided to do so because the marketing practices of business-to-consumer (B2C) and business-to-business (B2B) firms are quite different and so the effects of AI on the roles of marketing managers of each type of firm will also be different, therefore this differentiation was important.

1.8 Disposition

Chapter 1 - Introduction: This chapter consist of the background knowledge about the topic and different concepts included that are going to be studied further in later chapters. This section also consists research gap, research motivation, aim of the study, research question, and delimitations.

Chapter 2 – Literature Review: This chapter discusses all the relevant theories regarding this research topic and relationship between the variables under study.

Chapter 3 – Methodology: This chapter shows the research method used for conducting this research. It also shows the method of data collection, validity and reliability of the data, and ethical considerations.

Chapter 4 – Empirical Findings: This chapter includes the data that has been collected from the interview participants of the target companies.

Chapter 5 – Analysis: This chapter analyze the empirical findings of interview sessions with target participants.

Chapter 6 – Conclusion: Lastly, this chapter discusses the overall findings of this research study along with its contributions and suggestions for further study.

Figure 1. 1 Disposition of the Study

Chp 1 Introduction	<ul style="list-style-type: none">• Background, Research Gap, Motivation, Aim, Research Question, Delimitaions
Chp 2 Literature Review	<ul style="list-style-type: none">• Relevant Concepts regarding variables of study
Chp 3 Methodology	<ul style="list-style-type: none">• Research Method, Research Approach, Data Collection, Validity & Reliability
Chp 4 Empirical Findings	<ul style="list-style-type: none">• Responses from interview participants
Chp 5 Analysis	<ul style="list-style-type: none">• Analysis of Emprical Data
Chp 6 Conclusion	<ul style="list-style-type: none">• Conclusion Discussion, Contribution, Limitations and Future Suggestions

2 Literature Review

The chapter gives a brief overview of AI in marketing and then elaborates each of the AI techniques applied in it. These techniques include machine learning, artificial neural networks, deep learning and predictive data analytics. It then describes how marketing is done these days using each of these AI techniques. To explain the link between AI developments and the competition it creates in the market, we have summarized our understandings under the section implication for competition. This is followed by describing the role and responsibilities of marketing managers with and without the impact of AI developments to see the comparison. Towards the end of this chapter, the process of decision making is explained, and an illustration of the theoretical framework shows the AI factors which affect the role of marketing managers and their decision making.

2.1 Marketing and AI

Adopting modern marketing techniques is becoming essential for all businesses to remain competitive in market. Without a deep understanding of customer preferences and their needs, marketers are not able to make the right decisions and rely on them for success (Marketing Evolution, 2020). Therefore, they must be swift in attaining the right knowledge about the customers and act upon it effectively at the same time (Marketing Evolution, 2020). This is where AI comes to the forefront. AI enabled marketing techniques help marketing stakeholders make real time, data driven decisions however it is equally important to know how to integrate AI in the marketing campaigns in the best possible manner (Marketing Evolution, 2020).

According to Hall (2019), AI marketing is basically using technology to improve the customer's experience (Hall, 2019). He explains that an efficient implementation of AI marketing can greatly improve the return on investment (ROI) of promotion campaigns as well and this is possible because AI marketing uses processes like big data analytics and machine learning to gain target audience's insights and then use them to develop a more effective marketing campaign (Hall, 2019). AI also removes almost all presumptions involved in customer interactions, whether the firm uses email marketing or customer support (Hall, 2019).

Another major impact of AI on marketing is that the tasks which one used to be completely reliant on human effort in traditional marketing methods have now become automated therefore

content generation, web designing and running the most accurate Pay-per-Click (PPC) ads can all be performed through AI marketing (Hall, 2019).

In the same article, Hall (2019) emphasizes on the advantages of AI on digital marketing by saying that AI can modernize and improve the outcomes of a firm's digital marketing campaign and at the same time reduce the risk of human error to a large extent. On the other hand, in order to really connect with the customers and understand their needs, human interaction is a must because nothing can supersede attributes such as empathy and compassion that humans can offer and machines cannot (Hall, 2019).

For corporations it can be very useful if they fully understand what artificial intelligence is and how its implementation can be beneficial for the overall business strategy because AI is already transforming areas like finance, e-commerce, logistics and many others (Ng, 2017). Specifically looking at the future insights of AI on marketing, it is predicted that AI will influence marketing strategies, together with business models, customer service, sales options as well as customer behaviors (Davenport, Guha, Grewal, & Bressgott, 2019). According to research, AI is also considered a practical tool which has the capability of improving the efficiency and productivity of marketing managers and marketers through predictive analytics, automated email conversations, lead scoring, customer insights etc. (Kardon, 2019).

AI tools like machine learning are excellent at summing up large amounts of data into statistical information which helps marketers in estimating demand, forecasting sales, segmenting the market and targeting the right audience in a much more efficient way compared to manual methods (Syam & Sharma, 2018). Therefore, at present, the number of firms investing in AI machine learning (ML) is small, yet it is increasing as benefits of AI marketing gain popularity among corporations for augmenting strategic decision-making (Schrage & Kiron, 2018). There is still a big gap between the number of firms looking forward to adopting AI strategies and the ones who actually execute its implementation. According to research by Ransbotham et al. (2017), around 85% of the respondents were of the opinion that AI helps companies achieve/sustain a competitive advantage over others, however only 20% of them actually implemented it in their processes. The research also revealed that only 39% of these firms had a proper strategy to execute AI technology (Ransbotham, Gerbert, Reeves, Kiron, & Spira, 2018).

To elaborate further, let's have a look at the various AI techniques which have transformed marketing as a whole.

2.1.1 Machine Learning

Machine learning (ML) is one of the most well-known types of artificial intelligence (AI) which enables software applications to use historical data and predict the most accurate outcome without the need of programming the software to do so (TechTarget Contributors, 2020). Over the years, the use of machine learning in enterprises has grown tremendously and there is almost no area of modern business that remains untouched by ML (Burns, 2020). Machine learning is specially designed to process large amounts of data quickly by exploring it for patterns and predicting the future outcomes based on these patterns (Burns, 2020). These types of artificial intelligence are processes that learn over time and get better at what they do by repeatedly performing the tasks (Burns, 2020). As more and more data enter the machine learning algorithm, its modeling starts improving. Machine learning is suitable for putting large amounts of data (increasingly gathered through connected devices and the internet of things), into information context for humans to understand (Mahdavinejad, et al., 2018). If a human is expected to sift through all this amount of data, it would be too much data for a human (Schmelzer, 2020). Even, if they could, there would be great chances that they miss most of the patterns, whereas machine learning cannot only swiftly analyze large amount of data as it comes in, but also identify its patterns and anomalies (Schmelzer, 2020).

Machine learning is actually a pretty broad category. The development of an interrelated web of artificial intelligence "nodes" has led to what is known as artificial neural networks (Frankenfield, 2020)

2.1.2 Artificial neural networks

A technique used in machine learning and in its implementation within marketing is artificial neural networks. According to Frankenfield (2020), in his article published on Investopedia, an Artificial Neural Network (ANN) is the part of a computing system which is intended to simulate the way the human brain analyzes and processes information. It is the basis of artificial intelligence and resolves problems that would otherwise be impossible or difficult by human/statistical standards. ANNs have self-learning abilities that assist them in producing better results as more data becomes available (Frankenfield, 2020). Hence, to name a few, artificial neural networks are used for speech recognition, learning and vision (Frankenfield, 2020). Furthermore, deep learning and predictive data analytics are techniques used by artificial neural networks.

2.1.3 Deep Learning

Deep learning is a more specific version of machine learning that depends on neural networks to engage in nonlinear reasoning (Hargrave, 2020). The author of the article Deep Learning posted on Investopedia defines deep learning as a function of AI which works similar to how a human brain processes data and makes decisions based on patterns drawn from the data (Hargrave, 2020). Deep learning AI is able to learn without human supervision, drawing from data that is both unstructured and unlabeled (Hargrave, 2020).

Deep learning has advanced alongside the digital era, which has brought large amount of data in all forms and from all over the world (Hargrave, 2020). This data is called big data and it is collected from sources like social media, e-commerce platforms, internet search engines and online cinemas, among others (Hargrave, 2020). This data (normally unstructured) is so enormous that it is not easy for humans to comprehend it and extract relevant information from it. Thus, companies have realized the farfetched benefits that can be drawn from using this wealth of information by increasingly adapting to AI systems for automated support (Hargrave, 2020).

Instead of acting as a replacement for human intelligence and originality, artificial intelligence is rather considered its supporting tool (Uzialko, 2019). Despite the fact that artificial intelligence has a difficult time executing commonsense tasks in the real world at present, it is more proficient at processing and evaluating huge amounts of data much more quickly compared to a human's brain (Uzialko, 2019). The AI software can design and produce courses of action for the human user and then humans can use artificial intelligence to figure out possible consequences of each of these actions and restructure the decision-making process (Uzialko, 2019).

To look at how deep learning improves marketing, Fain (2020) in his article "How deep learning is transforming marketing" summed up his findings. According to him, deep learning works best when accurate prediction and analysis is required (Fain, 2020). Along with the many ways deep learning can be implemented in an organization, it is very useful for marketing, especially at defining the target audience (Fain, 2020). Deep learning algorithms predict customer's brand engagement on the basis of their past data such as purchase patterns and engagement metrics etc. (Fain, 2020). Moreover, deep learning analyzes the shopping habits of customers in detail by scrutinizing the various conditions which attract customers to buy more and also what are their preferences and reactions to various marketing campaigns (Fain, 2020). Another very important way in which deep learning helps marketers perform their job best is by identifying

undiscovered markets and reaching out to them in order to grow sales and optimize the business through forecasting future demand of products, the budget allocation for marketing and identifying newer opportunities (Fain, 2020).

2.1.4 Predictive data analytics

By using predictive data analytics, firms are able to forecast the future outcomes of any activities and decisions based on the historical data and AI techniques such as ML and statistical modeling (Edwards, 2019). Any organization can now predict the trends and determine reliable statistics about their decisions in upcoming days, months or even years (Edwards, 2019).

Predictive analytics is commonly being used for content personalization and gaining customer insights (The CMO Survey, 2019). These future predictions are based on historical data that are pre-analyzed by machine learning algorithms and therefore, these predictions are a valuable source for organizations to make informed decisions (Edwards, 2019).

Specifically, for marketing, predictive data analytics can be very useful in boosting marketing campaigns, predicting customer behaviors, and creating personalized marketing for each segment (Martin, 2019). Another advantage that predictive analytics can provide the firms is the improved identification of potential leads along with an estimation of the ones which will actually convert into sales (Martin, 2019). This consequently enables marketers to find out the high-end customers and pitch them the right offer resulting in more profits (Martin, 2019).

2.1.5 Implications for competition

According to Springboard India (2019) tech giants like Apple, Facebook, Amazon, Google and Microsoft are the forerunners uplifting artificial intelligence (AI) and expecting to do more, not less of AI in 2019 and ahead (Springboard India, 2019). This has given them a huge market advantage as these biggies are pioneers in providing services which are highly personalized and focus on targeted advertising and marketing campaigns in order to attract customers (Springboard India, 2019).

Today, firms like IBM and Salesforce etc. have developed fantastic AI marketing tools which have become an important aspect of marketing for even the giant firms, meaning they do not need to employ expensive data scientists to understand how to run the tool and analyze its outputs (Power, 2017). Furthermore, with tools like software-as-a-service (SaaS) and pay-as-you-go pricing, firms with limited resources can also take advantage of the various pricing models (Power, 2017). According to Power (2017), it is very important that as the business evolves and

firm's product offering expands, so does the structure of pricing. Choosing and implementing the right pricing model balances what customers are willing to pay with what your business needs to be profitable (Power, 2017). If you come in low to attract more customers, over time your business will suffer and hold you back from quicker growth. If you come in too high, you'll drive away customers before they even have a chance to understand and use your product (Square, 2018). These new tools can manage the integrated process over all channels, instead of working within individual marketing channels or optimizing specific marketing tasks (Power, 2017).

Ng (2017), also raised a very important area to consider with relevance to integration of AI in marketing strategies so that maximum value can be created. He believes that only depending on the adoption of AI technologies is not sufficient to guarantee success, it is the right strategy formulation by marketing managers that will assure the desired results (Ng, 2017). Mastering on truthful data acquisition and skilled human resource is actually scarce in the market compared to technology because leading AI teams can easily reproduce/replicate the required software, but it is difficult to attain others' insights and data (Ng, 2017).

Likewise, Freeland (2019) has also laid emphasis on investing in AI talent because he believes that organizational data and practices also change as AI technology changes. Therefore, it is equally necessary to understand that any success derived from the implementation of AI technologies is rooted in the skills of a good team (Freeland, 2019). He suggests that to build the best team, (in addition to investing on development of newer skills in internal human resource), even if it is desirable to hire from abroad, it must be done (Freeland, 2019).

2.2 CRM

2.2.1 Understanding CRM

Customer relationship management (CRM) is a set of all the strategies and processes employed by marketers to develop and manage customer relationships (Optimove, 2020). The main objective of CRM is to improve and augment customer relationships in a way that it businesses are able to achieve customer loyalty, revenue growth and customer lifetime value through customer retention (Optimove, 2020).

Adoption of CRM in businesses is growing as it is important to be up to date with the latest trends as in a highly competitive market (Cole, 2019). Top CRM vendors like Salesforce, Oracle, and SAP, have been making improvements in key CRM functionalities (Cole, 2019). Each of these

CRMs are equipped with the ability to improve conversion rates, boost sales, gather valid data, and improve customer satisfaction (Cole, 2019).

2.2.2 Five Ways in which AI is transforming CRM

i. Ingestion and retrieval of data

Many are of the opinion that with the emergence of AI, marketers and sales professionals may be at the verge of losing jobs however this is a myth and considered as a short-lived point of view (Fatemi, 2019). According to Fatemi (2019), AI promises to enrich, not replace, the human element of sales. This means that the sales professionals of the future will employ artificial intelligence to complement their professional practices and skillsets (Fatemi, 2019).

Through integration of AI, manual data entry no more required by sales professionals which saves several hours of extra effort and unproductive time spending on various activities (Fatemi, 2019). Not only this but AI assists in centralizing different customer databases and at the same time save the complete customer lifecycle information whether it is retrieved through email, call or Chatbots etc. (Fatemi, 2019).

ii. Sentiment Analysis

As majority of customer interactions occur virtually through mediums that do not reveal the body language and facial expressions of customers, it becomes difficult for salespersons to develop trust and a strong relationship with their customers (Fatemi, 2019). Luckily, artificial intelligence offers a powerful solution to this problem. Through the use of sentiment analysis, AI-powered tools can analyze conversations and evaluate customers' emotional situations (Fatemi, 2019). According to Fatemi (2019), a good example of this is Cogito that provides in-call voice analysis which helps sales staff comprehend customers' emotional states and how to respond to them in the best possible manner.

iii. Data reliability

To augment the role of decision making, an AI-integrated CRM system can help by identifying potential issues in the system, remove any duplicated data, report any errors so that the users can correct them, identify if there is any incomplete data in other systems and give advice on updating any obsolete data (Dilmengani, 2021)

iv. Converting leads into customers

Artificial intelligence has immensely motivated sales organizations to move from rules-based lead scoring to predictive lead scoring (Fatemi, 2019). As AI can examine millions of different historical and instantaneous attributes such as demographic data, geographic data, activity and web behavior, it helps salespersons determine buying readiness of customers (Fatemi, 2019). Once combined with CRM systems, AI can scrutinize the ratio of won versus lost deals to identify trends that can advise predictive lead scoring methods. Every time a more accurate model is recognized, it automatically becomes the default (Fatemi, 2019).

v. Targeted recommendations for salespeople

CRM are sources of data collection (Fatemi, 2019). When AI is integrated with CRM systems, they undertake a new and more useful role such as a trusted advisor (Fatemi, 2019). An AI integrated CRM is equipped with the capability of providing targeted recommendations for salespersons. An artificially intelligent CRM is considered effective when it provides the "why" element to the salespersons, therefore informing them the rationale behind certain prescribed courses of action (Fatemi, 2019).

2.3 AI impact on decision making and role of marketing managers

According to Jarrahi (2018), it is possible for machines to execute the tasks which are operated by System 2 exactly how humans can perform them. To understand this, System 2 is when humans are solving mathematical problems or performing a similar task (Kahneman, A Perspective on Judgment and Choice: Mapping Bounded Rationality, 2003). Therefore, it is when application of conscious reasoning and logic is required by humans to resolve analytical problems (Jarrahi, 2018). This is because in System 2, process of rational decision making can be simulated through algorithms as it requires a set of predetermined rules and control (Kahneman, A Perspective on Judgment and Choice: Mapping Bounded Rationality, 2003). On the other hand, however, System 1 operations are ruled by intuitive judgments, therefore all System 1 decisions can only be made after attaining knowledge/understanding through intuitive capacity (Sadler-Smith & Shefy, 2004). When decision making is required for System 1, it is always preferred that humans are assigned the job as the decision requires experience and intuitive decision-making skills (Kahneman, A Perspective on Judgment and Choice: Mapping Bounded Rationality, 2003).

As we see that humans and machines have harmonization when it comes to decision making abilities, it would be better suited if machines augment human decision making instead on just

automating it (Jarrahi, 2018). This way more appropriate and beneficial decision making can be expected from marketing managers.

2.4 Theoretical Framework

2.4.1 AI and implications for Marketing

For corporations it can be very useful if they fully understand what artificial intelligence is and how its implementation can be beneficial for the overall business strategy because AI is already transforming areas like finance, e-commerce, logistics and many others (Ng, 2017). Specifically looking at the future insights of AI on CRM, it is predicted that AI will influence marketing strategies, together with business models, customer service, sales options as well as customer behaviors (Davenport, Guha, Grewal, & Bressgott, 2019). According to research, AI is also considered a practical tool which has the capability of improving the efficiency and productivity of marketers through predictive analytics, automated email conversations, lead scoring, customer insights, and personalized customer experience. (Kardon, 2019).

Syam and Sharma (2018) also lay emphasis on the fact that machine learning, and AI tools equip marketers with greater statistical power which significantly improves the efficiency in tasks such as market segmentation, more accurate estimations of demand and sales forecasting, target market identification etc. Accordingly, AI integrated CRM enables real-time customer engagement which helps in building contextually relevant interaction with customers. This helps in reaching an effective conclusion towards the end of the conversation and determining exactly what solution, product or service the customer is looking for.

Machine learning is that area of AI which is most adopted around the world and is widely used in business and marketing (Schrage & Kiron, 2018). To handle the influx of data today, businesses are using AI tools like machine learning which construct mathematical models and gives analytics that are either descriptive (knowledge based on past data) or predictive (giving future insights) to help businesses make decisions (Adair, 2020). It is for this reason that machine learning will be the central theme throughout our research. Machine learning is well known as a practical tool having the capability to improve the efficiency and productivity of marketing department through tasks such as automated communications, predictive analytics, customer insight, lead scoring etc. (Kardon, 2019).

There are a number of good examples that show how AI tools have proven to be a complete game changer for marketing of firms. Taking the example of Harley Davidson, their

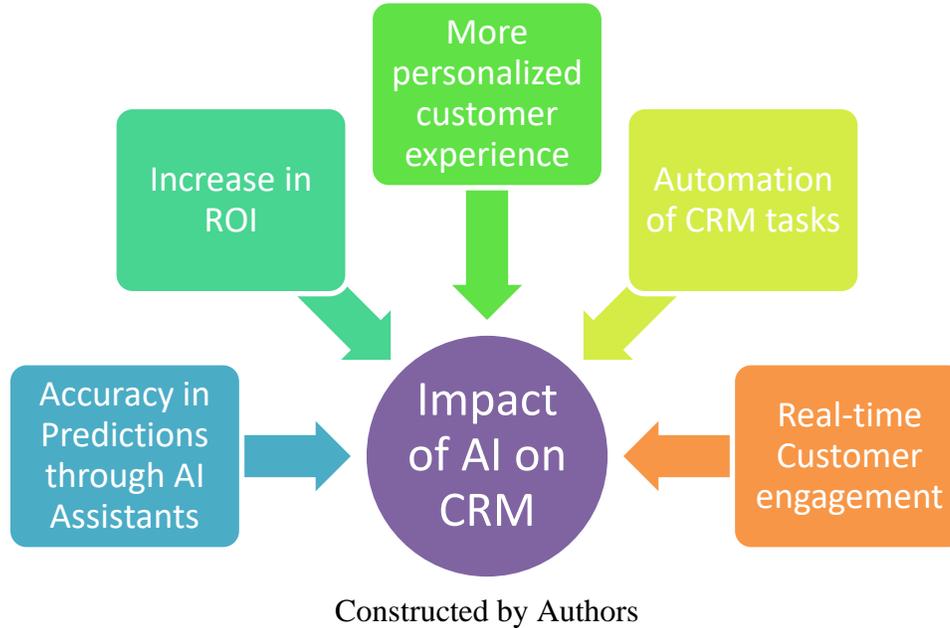
dealership in New York was able to increase its sales by three folds after utilizing predictive analytics AI tool into their marketing (Power, 2017). The tool enabled marketers to identify what would be the best way to utilize company's resources based on customer data analytics and when decisions were based on the predicted results, company could see an increase in the return on investment (ROI) of marketing (Power, 2017). This showed that when company relied on concrete data statistics and based decisions on it instead of using gut feeling or guesses, they could actually reap excellent results (Power, 2017).

Moreover, in the near future the use of AI assistants will actually take over the market and not only change the role of marketing managers but also transform the relationship between customers and the firm (Dawar, 2020). Soon the dynamics of marketing will completely change because when AI assistants will be at play, they will be the predicting and recommending products/services to customers based on customer's personal preferences of quality, price, features etc. therefore marketers would be in a battle to provide what the customers are exactly looking for (Dawar, 2020). It is therefore becoming increasingly important that marketers understand how to position their products towards AI assistants along with targeting the right audience.

In this study we are going to look at how AI is becoming more of a longer-term connection for building relationships between customers and marketers based on the ability of AI to help predict and make decisions on what must actually be done. We will identify how AI plays a

valuable role in reshaping marketing and how marketers must be prepared to adopt AI tools if they are looking for a more unified way of marketing.

Figure 2. 1 Impacts of AI on CRM

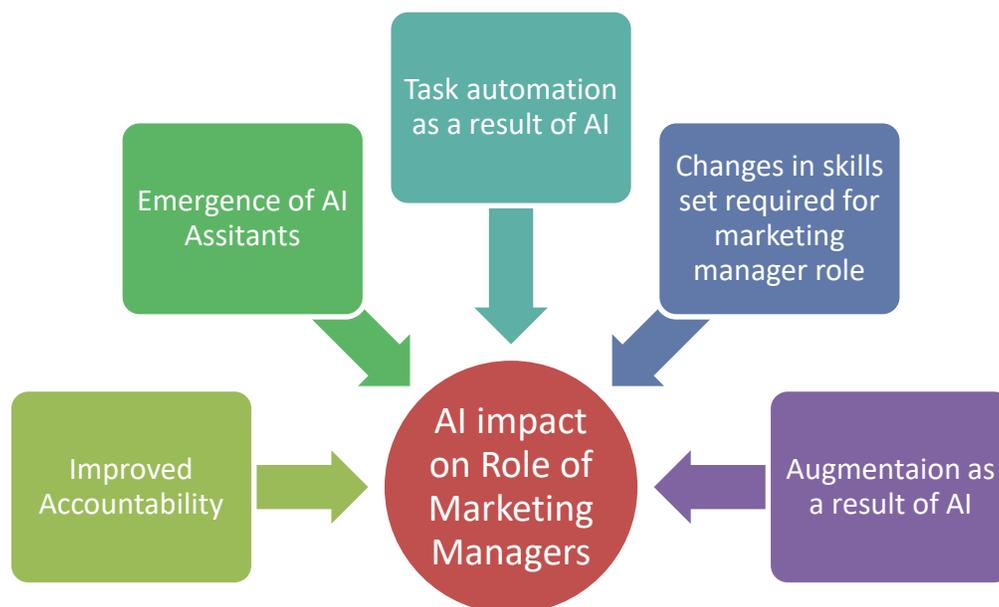


2.4.2 Role of Marketing Managers

An organization's marketing department often undergoes various complications due to big changes that occur in consumer demographics, ever-increasing quantities of data, changes in technologies (Bolton, et al., 2013), business model (Ehret, Kashyap, & Wirtz, 2013) and the need to remain competitive through differentiation strategy (Bolton, McColl-Kennedy, J. Sirianni, & K Tse, 2014). If marketing department lacks strong skills to assess and analyze the ongoing changes in market's needs and preferences, there is little chance that the company's profitability will grow (Wirtz, Tuzovic, & Kuppelwieser, 2014). This may eventually give rise to trust issues about the marketing department's performance in the eyes of the CEOs and they may decide to take away responsibilities from the department (Wirtz, Tuzovic, & Kuppelwieser, 2014). Research have previously been conducted on this issue and have shown that often employments for the role of Chief Marketing Officers (CMO) have very short tenures and greater turnover when compared to other roles in senior management (Nath & Mahajan, 2011). This however is not only a result of unsatisfactory performance but also because it is difficult to measure performances of CMOs and hold them accountable for them financially (Hanssens & Pauwels, 2016). Usually, the top

management uses performance metrics like attitudinal, financial and behavioral factors to measure the value of marketing generated, whereas this makes it rather difficult to see the real picture and therefore leads to mistrust and lack of focus on decision making (Hanssens & Pauwels, 2016). Therefore, it is very important to assess the value of marketing through a proper channel and in a way that it defines the role of marketers as being responsible for short term decisions and long-term growth of the organization (Whitler & Morgan, 2017). According to CMO Survey (2019), it is suggested that the following roles must be a part of the marketing department: digital marketing, promotion, lead generation, brand management, public relation management, advertising, market research, product positioning, generating marketing analytics, competitive intelligence and social media marketing management (The CMO Survey, 2019). With the evolution of technology and its impact on businesses, the overall role of marketing managers is going under considerable change and addition of newer responsibilities. (Hanssens & Pauwels, 2016). As a result of these technological advancements, not only has the quality and quantity of data collection improved but the adoption of advanced analytical tools has also made it easier to assess the performances of marketing department making them accountable for the decisions they make (Hanssens & Pauwels, 2016). Figure 3 summarizes the various aspects we will be discussing in our study with regards to changes that AI has brought to role of marketing managers.

Figure 2. 2 AI impact on Role of Marketing Managers



2.4.3 AI and the decision-making process

Decision making is one of the major roles of all marketing managers. Over the years technology was helping with augmenting business communication and data, yet the decision making was solely in the hands of humans (Syam & Sharma, 2018). But with the new shift, the process of making appropriate and reliable decisions is also moving towards machines (Syam & Sharma, 2018).

To see which decisions in marketing can be automated or augmented, let's first identify the structure of how decisions are made. The decision-making process comprises of intuitive judgments and thinking activities that are determined by System 1 and System 2 operations (Kahneman & Klein, 2009). To understand this further, System 1 operations are performed automatically and require no effort in the form of logical reason data calculations, whereas System 2 requires analytic approach, reasoning and logical deliberation for execution (Jarrahi, 2018). Therefore, when it comes to AI technologies solving the problems, it uses a set of analytics and data driven calculations instead of intuition i.e., it solves System 2 issues (Jarrahi, 2018). Even though business operations and decisions can be complex and difficult to predict, and can be resolved using algorithms (AI), yet there is still need of human intuition and it cannot be replaced completely by machines (Jarrahi, 2018). This is often considered as a barrier to implementation of AI from top to bottom in organizational decision-making (Ransbotham, Gerbert, Reeves, Kiron, & Spira, 2018).

Scholars think that it is always best to look for a synergy between use of machines and human in decision making instead of trying to automate every single aspect of it (Jarrahi, 2018). There is a need for collaborative intelligence, and instead of letting every single decision and activity become automated it would be more beneficial to share tasks so that it encourages societal support as well (Epstein, 2015). Jarrahi (2018) also furthers this by saying that AI should be considered as a tool of augmenting decision making rather than automation. He says that there is a need of sensing capability also required in decision making which only humans can provide, and machines cannot fully capture this ability (Jarrahi, 2018).

These factors have also given rise to two ways of thinking about the future of marketers. First is that as a result of ongoing changes in marketing due to AI, there will a greater need to well-trained marketers in the upcoming years, while the others have the opinion that automation of a large number of tasks will eventually lead to reduction in tasks of marketing

managers and reduce their demand over the longer run (Epstein, 2015). Research however shows that many are in the favour of the need to have augmentation rather than automation so the importance of market managers role can never be overtaken fully (Jarrahi, 2018).

3 Research Methodology

This chapter discusses the methods we used in seeking answers to our research question and fulfilling the purpose of the thesis. This chapter summarizes the methods chosen to conduct the research along with our research approach, research strategy and research design. The chapter will also present a link with the previous chapters and how they will be used in the collection of appropriate data. This is followed by the data collection process and details of research participants.

3.1 Philosophy of research study

To conduct a comprehensive study, researchers must have a philosophical viewpoint to formulate the specific research questions, methodology for the research and the right approach towards seeking answers to the research question (Berryman, *Ontology, Epistemology, Methodology, and Methods: Information for Librarian Researchers*, 2019).

According to Berryman (2019), the main determinant of selecting the most accurate research methodologies and techniques which eventually enable the author to make conclusive statements, is the research question. Moreover, the process of entire study itself is such that throughout the course there are certain realities which already exists about the topic under consideration, known as ontological assumptions (Saunders, Lewis, & Thornhill, *Understanding research philosophy and approaches*, 2016). On the other hand, researchers keep making various assumptions regarding human knowledge and try to explore more into the topic to enhance understanding about these assumptions, referred to as epistemological assumptions (Saunders, Lewis, & Thornhill, *Understanding research philosophy and approaches*, 2016).

Therefore, it is very important that the researchers must first present their own research philosophy in light of the realities that exist around them. Based on this, it becomes more appropriate to define and organize the relevant assumptions which enhance the credibility of the complete research methodology resulting in a conclusive research report (Saunders, Lewis, & Thornhill, *Understanding research philosophy and approaches*, 2016)

3.1.1 Ontology

In simple words, ontology is analysis of a phenomenon that exists in reality and humans can obtain knowledge about it (Moon & Blackman, 2017). It is said to be existent independent of human experience and helps researchers be sure about the reality and nature of the objects they are

researching on (Moon & Blackman, 2017). Moreover, ontology may or may not seem in line with the researcher's objectives, however due to its very nature of being a reality, it is a part of the entire study from the beginning towards the end (Saunders, Lewis, & Thornhill, Understanding research philosophy and approaches, 2016).

The main objective of our study is to understand how marketing has transformed due to AI and what are its implications towards the role of marketing managers? Our study is of an exploratory nature as there is still need of more thorough research on the connection between marketing, AI and the role of decision makers. Moreover, the concept of AI with regards to marketing is different for each area of application and for each of the marketing managers due to diversity of its nature. As our research is based on the knowledge collected through interviews and secondary research on the companies that we choose our respondents from, the report reflects the views of these social entities. Therefore, bearing in mind the subjectivity of findings, we cannot generalize the findings of this research, however we are putting forward valid insights which we were able to identify with respect to the changes that have come about in marketing and the role of marketing managers. This study is based on constructionist ontology.

3.1.2 Epistemology

Epistemology focuses on aspects that constitute the legitimacy, scope and various approaches used in acquiring knowledge (Moon & Blackman, 2017). It questions the basis of the knowledge claim, the methods in which the knowledge can be attained and what to what extent can the acquired knowledge be transferred (Moon & Blackman, 2017).

In our opinion, positivistic assumptions would not justify our research on exploring various changes that AI has brought on marketing and role of marketing managers. This is because lack of previous research on the topic does not allow us to test any specific theories, instead we aim at contributing some valuable insights with regards to our research question. This study is based on an interpretivist approach, meaning the researcher is part of the research.

In our opinion, interpretivist view is most suitable here as it enables us to understand the human behavior as well because it is not only technological growth that affects marketing and role of marketing managers, but also how individual perceives AI.

3.2 Research Approach

Research Approach is how the researcher chooses to relate between the theory and insights gained from practical exposure or empiricism (Patel & Davidson, 2011). We have selected an inductive research approach for this study. Inductive approach aims at developing a new theory based on data collected through experimentation (Patel & Davidson, 2011). For the purpose of our study, inductive reasoning is most appropriate as the study is of exploratory nature and because previous researches have not developed a generalizable theory to be tested so there is still unexplored research area that exists.

3.3 Research Strategy

In order to conduct a detailed research on the topic, the researchers have adopted a qualitative research method. Qualitative research is collection of non-numerical data which is then analyzed to understand the theories, ideas, or experiences (Bhandri, 2020). Qualitative research can be conducted whenever there is a need to produce newer ideas and concepts or when there is a need to collect in-depth insights into an identified problem (Bhandri, 2020). Qualitative research is a form of scientific research (Lumen Learning, n.d.). A scientific research entails an investigation which tries to find answers to a question using a predetermined set of techniques to answer the question, collects evidence, summarizes findings which have not been determined previously and that are applicable beyond the core purpose of the study being conducted (Lumen Learning, n.d.). Additionally, through qualitative research, the researcher also tries to understand a given research problem from the local population's perspective that it involves. Another reason why qualitative research is especially effective is that it helps obtain information that is culturally specific which means that it helps produce information which includes behaviors, values, views and social contexts of particular populations (Lumen Learning, n.d.).

Since the objectives of the research is to present a study on the changes that AI has brought in CRM along with changes in the role of marketing managers, the researcher has opted for conducting both, primary and secondary research for collecting relevant information that helps in reaching a sound conclusion. According to Bhatt (2020), primary research is a type of research design in which the researcher is directly involved in the data collection process instead of relying on previously produced data with regards to the context of research (Bhat, 2020). The information collected through primary research is considered valid and more reliable in coming to a conclusion regarding the research problem (Bhat, 2020).

3.4 Research Design

Research design is the plan of the research work which determines the various structures and strategies to conduct the study in a way that the research question is addressed appropriately (Akhtar, 2016).

For the purpose of our research, we first did a thorough secondary research to investigate how AI is impacting the marketing function of the business. We could analyze that there are few previous research done on what transformations AI has brought into marketing and CRM, however with the course of our research we also realized that an uncommon phenomenon existed in the theory but was not given much attention. This was the aspect of changes in the role of marketing managers that are continually occurring as a result of the ongoing transformations in marketing. As we read further and studied various case studies to find out a connection between changes that AI has brought in marketing and the resultant changes occurring in the role of marketing managers, we were successful in devising a 3-way correlation between AI, marketing and role of marketing managers/decision makers.

To address this, we decided to further our research and progress towards primary research so that we could take the valued opinion from marketing managers regarding this finding.

3.5 Research Method

In this section we will give a detailed overview of the various tools, approaches and techniques we used as means of data collection.

The primary research method used for this research is interviews. As the topic is specifically about the impact of AI integration on CRM and the role of marketing managers, interviews were conducted with semi structured form of questions. This was chosen as the preferred form of format for questions because semi structured questions allow for a more descriptive answer to the question instead of straight forward ones. With regards to our topic, we were looking for connections between AI, marketing and decision making therefore it proved to be beneficial for our understanding.

Next, respecting the fact that companies were not very open to having a face-to-face interview session during the prevailing Covid-19 situation, we managed to connect via email/telephone and get the correspondence details of the authorities.

3.6 Validity

Yin (2009) describes that by replicating the findings of a particular theory on various cases helps improve its generalization if different experiments conclude similar findings (Yin, 2009). Therefore, we studied and investigated multiple case studies to increase the generalizability of the impacts AI has on CRM and the subsequent changes in the role of marketing managers. However, this is a qualitative study, and our aim was not to generalize our findings. Instead, we aimed at gaining a deeper understanding of how overall CRM and marketing managers are affected by greater levels of AI integration. We have tried to bring valid insights with regards to the research question.

3.7 Reliability

Reliability of a research is meant to ensure that if a different researcher has to conduct the same research again, along with following the similar procedures as this study, he/she must then be able to conclude the same findings as this research (Yin, 2009). The purpose of reliability is also to ensure that there are minimal errors and bias in a study (Yin, 2009).

In accordance with this, we have used cloud storage to save all information on G-Drive and also stored details of articles that we used for purpose of our study. In addition to this, we have provided proper references for the text throughout the report plus a reference list at the end of the thesis for easier access to complete information about the references we used. We have also saved all email correspondence with the respondents.

LeCompte and Goetz (1982) state that in case of qualitative research, reliability may often be difficult to fulfill and it may also be nearly impossible to achieve perfect replication because qualitative research is based in a specific setting (Lecompte & Goetz, 1982).

The reliability of this study will be limited for a reason. As the development of AI technologies is very rapid and thus brings changes overtime, it may be difficult to replicate a similar study in future, since there will be changes in both the AI-technology and marketing managers role at the time of an eventual replication. Therefore, as more and more time passes from when this research was conducted in November 2020, the reliability of the results will become more limited.

4 Empirical Findings

The empirical findings of this study are described here. The findings have been gathered through interviews with three marketing managers. Brief description of the different cases (as explained by the respondents) are included. It is then followed by questions in relation to the areas described in the framework.

4.1 Target companies and respondents

Table 1 below summarizes the target companies and respondents who participated in our research. The names of respondents are not disclosed because they agreed to provide information upon names being kept confidential. The firm in which they are employed, their position in the firm as well as an indicator of the size of the firm.

Table 4. 1 Target Companies and Respondents

Designation	Company Name	Size of Firm
CRM Manager	Rusta (Sweden)	Large
CMO/Co-founder	Refunder	Small Medium Enterprise
Marketing Manager	IEWA	Small Medium Enterprise

Description of firms

Rusta

Rusta opened its first store in 1986 in Gävle. Entrepreneurs Anders Forsgren and Bengt-Olov Forssell, are its principal owners and have a hands-on role in the company. The business concept of Rusta is to make it easy for customers to buy high-quality home and leisure products at the finest prices. They offer a range of Seasonal Products, Home Decor, Leisure, DIY and Consumables for anyone who is looking forward to renewing and refresh interior and exterior of their homes. Rusta markets quite a few of its own brands, in addition to familiar international brands.

The business model focuses on offering simple purchasing processes and avoiding expensive intermediaries. Rusta partners with a wide range in large volumes and efficient logistics, where they are their own importer, wholesaler, distributor and retailer.

Throughout 1990s, the company witnessed rapid expansion and success and by the turn of the millennium Rusta owned 25 stores. By 2008, the company had 52 stores and 578 employees.

Rusta managed to continue its rapid pace of expansion over recent years and today Rusta has over 100 stores in Sweden.

Since 2014 Rusta started operations in Norway and owns 37 stores there today as well as an office at Strømmen, near Oslo. It expanded further in Germany, Finland and Hong Kong which means that Rusta is now active on four markets with a total of 169 stores.

Refunder

Refunder is a Swedish cashback website which began in 2014. Its business model is such that Refunder is a member site which is connected to several e-commerce businesses from which the cashback site receives provision when their members purchase via their website. Once a purchase is made by the member, the cashback website pays them a percentage of the provision they have earned through these purchases. Consequently, the consumers get money from their purchases and the cashback site (Refunder) keeps some of the provision. To date, this provision is the only source of revenue for Refunder. Basically, it is a volume-based business model with small margins, which gives more profit for greater order volumes. Currently there are around 500 000 Refunder members in Sweden, and this number is gradually increasing.

CMO and co-founder of Refunder stress on the 2 most important key performance indicators. They are:

- Member Acquisition Cost and
- Customer Acquisition Cost

It is not profitable for Refunder if the cost to acquire a member is too high, or if the member does not purchase via Refunder. Moreover, there are several channels for Refunder members through which they can receive cashback.

- Website
- smartphone application
- Plug-in function for the browser.

Refunder regularly runs different campaigns in collaboration with various e-commerce firms which creates higher amount of provision and it generates sales for about 1000 e-commerce firms in Sweden with a turnover of around 1.2 billion SEK annually. Refunder relies greatly on and utilizes AI for personalization of their marketing efforts.

IEWA

International Education & Work Abroad Consultants (IEWA) is student advisory and immigration consultancy firm based in Pakistan with sub office located in Ontario Canada. The company is well known for having a team of highly experienced career advisors that assist students and professionals from around the world to move to international destinations where their career enhancement prospects are best.

IEWA has successfully spread its representation in Western, Eastern and European countries since its origination in 2016. The company has around 50 employees currently and partnerships with related organization around the world. IEWA is a service sector firm and relies strongly on CRM to maintain internal and external communication with prospect client and partners.

4.2 Objective and techniques of interviews

The interviews were conducted with 3 managers each from different companies. All three were B2C firms out of which two were product-based firms and one was service providing firm. Online interviews were arranged through prior correspondences via email and calls.

The main objective of the interviews was to attain a clearer picture of how AI is changing the dynamics of the marketing function in particular and how managers are reacting to these changes. It was quite evident that these managers had good knowledge of the various technical skills which are required to understand the whole concept of automation in marketing through the use of CRM as without this knowledge it would be very difficult to assimilate these changes. The marketing managers were very cooperative in sharing their valuable experiences with us about how they adapt to the ongoing changes and up gradations that have become a part of their job to address on regular basis. They shared the details of various skills they apply in different situations their overall experience on how they have seen changes coming in their role as managers.

We used purposive sampling technique for this research. This technique focuses on identifying such persons who possess vast knowledge and experience about a particular topic. In our research this is important because we were looking forward to gaining as accurate information as we can making the most of the limited time and resources. Also, if the respondents were not knowledgeable enough, it would not serve the purpose of the questions we have formulated as part of the questionnaire. During the course of our research in finding knowledgeable persons who agree to provide interviews to us, we also made use of our existing contacts within Sweden and overseas. We tried to arrange interviews with 2 other B2C firms in Pakistan namely Daraz (owned by Alibaba.com) and Telemart, who are considered the largest online buying and selling platforms

in Pakistan. Unfortunately, the companies posed information privacy concerns and did not agree to provide interviews. However, we were able to get an interview with IEWA through a reference and it was great to find out the company uses CRM for data collection, lead generation, task assignment, communication with existing and prospect clients etc. Marketing Manager at IEWA informed us that the department relies heavily for information storage, sales forecasting, tracking the processes completion statuses of clients and setting response times for all clients through Zoho projects and Bitrix CRM.

4.3 Interview guide

To receive the right information that we are looking for through the research, it was very important to develop the questions whose responses would serve us the purpose. To do so we questioned ourselves “what we need to know” several times while formulating the semi structured interview questions. Not just that, we were sure that questions like “Do you perceive AI as an opportunity or a threat towards your role as a manager?” and “What are the influential factors and uses of AI integrated CRM in the marketing/sales functions of your company?” required answers from professionals who could give insights of their actual experiences.

Another important criterion for the interview is to ensure that the interviewer and the interviewee both are knowledgeable. As interviewers we were aware that to conduct a comprehensive interview, we would need prior knowledge on the subject matter so that we could take advantage of the opportunity and put forward connected questions during the interview which could enable us to produce a more logical discussion.

For this research, while we were doing the literature review, we found out that the phenomena of changes in role of marketing managers existed in direct relation to the changes that occur in CRM as a result of AI, therefore we decided to explore this aspect in line with the research and formulate its connection between all the other aspects as part of the research. We took prior approval from the supervisor to work on this area of the research as well, after its identification. Once we finalized the interview guide which included the questions selected for the interview, we finalized it and did not put any additional phenomena into it during the research.

4.4 Conducting the interview

We would first like to stress on the importance of face-to-face interview compared to online interviews. Face to face interviews are always best for the kind of research we are undertaking. It helps better understand the opinion and expressions of the interviewee. However, respecting the

social distancing aspect of the prevailing Covid-19 situation throughout the world, it was best to conduct the interviews online or via email. Online interviews also serve best when there are budget restrictions or if there are geographical distances between interviewer and interview. Therefore, we managed to conduct Skye interview with IEWA consultants and email interviews with Rusta and Refunder.

We were provided the option of telephonic interviews initially by the companies; however, it was not serving the purpose of our research as the respondents would feel uncomfortable in prolonging the time duration during interview even if needed and also there would be lack of important verbal communication if the interviewer wishes to ask connected questions or request for elaboration at some instance. Therefore, we chose to take online interview via Skype and the time duration we arranged was between 30minutes to 50minutes. We believe that we were able to draw relevant information from the interviews. At the end of the interviews, we ensured that all important aspects were discussed and there was no additional information that the interviewee wished to add.

There were however a few issues we had to face in trying to get in touch with the respondents. It was mainly due to 2 factors that we constantly faced delays in getting the required response from the companies; first was the Covid 19 issue due to which several persons were working from home and second was the fact that it was a very busy sales season for the companies i.e., the months of November and December. Despite our continuous efforts in trying to get in touch with the respondents in time, we faced major issues, yet we were successful in obtaining information from other sources and also arrange interview with an overseas consultancy firm known as International Education and Work Abroad Consultants (IEWA). It was interesting to gather valuable information from IEWA as it gave us a chance to get responses from a service-based firm as well. The company uses CRM for company's internal and external communications/marketing, and it was interesting to know how the marketing manager at IEWA was well versed with both marketing knowledge and technical analytical skills.

Once the interview day and time were decided, we made ourselves available at the specified time to conduct the interview. To begin with, we started the chat by asking respondent to briefly tell us about their firm and its business model, followed by asking about their current employment role at the firm. This was done for 2 main reasons; firstly, it eased the respondent to begin the conversation and secondly for letting us know more about the firm which is being represented by

the respondent. This chat was then following by putting forward more specific questions and asking related questions wherever there was need to do so. Towards the end of the interview, we allowed a more generalized and open discussion so that the interview ended with a good note and confidence that all important information was discussed. We then thanked the respondents for their valuable time and for giving us the opportunity to have this discussion.

Prior to conducting the interview, we had correspondence with the various personnel at the companies so that they could assist us in arranging the interview with the designated person.

4.5 Value of the Manager Role

We asked the responding managers about what they are intended to contribute with to their respective firm. This would not only help us understand their motivation towards building the firm but also allow us to draw conclusions, theoretical framework, and expert opinion regarding the prospects of AI to automate decisions assigned to marketing managers.

Rusta

The role of interviewee at Rusta was described as CRM Manager which evolved into a position as Head of Customer Experience and Insight. The respondent reports directly to the firm's CMO. His core responsibility is to enrich the organization with opportunities to streamline advertisement and product development specifically through customer insight.

Refunder

The respondent at Refunder was working as the CMO for the firm and he was along its co-founders. His main responsibilities were to build the brand and its loyalty to acquire customers. The respondent describes that he is experienced with marketing via TV advertisements, Google AdWords, social media and influencers.

IEWA

The respondent at IEWA was working in the capacity of Marketing Manager since the company began its operations. The main role and responsibilities performed by him were designing marketing campaigns, generating leads, allocate budget for marketing activities, strategize other marketing ways such as exhibitions and deciding the right time to market the services. As per experience, the manager shared that for the business IEWA is in, it is seen that marketing campaigns that are run at specific times of the days and week are expected to produce the desired results compared to the ones run 24/7 without predetermining the prospective customer's preferences. The manager is also responsible for developing contacts with other business partners

through business development techniques alongside expanding business overseas after identifying market potential.

4.6 AI's impact on CRM

This theme discusses the valuable responses and opinions provided by the managers regarding their view of Artificial Intelligence and how it has changed the way marketing once used to be. We have summarized the finding in this section about their views of AI and how adoption of AI integrated CRMs have impacted their marketing efforts.

After collecting the responses of marketing managers, it was great to find out that all three managers were of the similar opinion that they view AI as a great opportunity for augmenting marketing functions of the organization. They think that AI provides innovative marketing platforms which would otherwise not be possible through manual processes. Moreover, all the respondents agreed on the fact that AI and especially machine learning has completely transformed and opened doors for new opportunities for business growth due to its capability of offering newer dimensions of analyzing even very large amounts of data. They all were of the opinion that the analysis which they get as a result of machine learning algorithms is very defined and comprehensive. If AI was not processing such large data into information, it would otherwise have required several data scientists to perform the same job and the result may still not be as good as that provided by AI integrated CRM.

Rusta

Manager at Rusta specifically discussed that the machine learning algorithms map approximately 400 million transactions and data from 2 million individuals, which the respondent believes would require over five to six data scientists had the AI integrated CRM not been there to perform the task. Also, they believe that even if a number of data scientists continuously working on the data the manager there further describes that after implementing the AI integrated CRM, the resultant machine and deep learning means that they can actually work data driven in reality. Using the example of their loyalty club members' propensity to buy various products from Rusta, the manager explained that it facilitates the management to look at the likelihood of customers buying some product in a specific amount of time, along with the affinity for all the product categories at Rusta. Often it was surprising for the management to observe trends and purchasing preferences of customers which led them towards better identifying and finding connections that did not seem logical at all initially, yet they existed. When the product recommendations were

based on these connections, the managers were amazed with the results as this led to an incredible effect in increased sales as they become more relevant. Not only that, but the company could also now achieve a better timing, which together boosted parts of their assortment. Manager at Rusta also mentioned that at present they have only implemented ML in marketing, but after being impressed with the results, they plan to extend the integration of AI in purchase function of the firm to predict demand and improve logistics.

Refunder

At Refunder, the customer interaction is basically through membership. Therefore, machine learning has enabled personalization of marketing efforts at Refunder specifically towards their members. With time, the algorithms learn what each member is interested in currently and what each of the member might be interested in the future. Manager at Refunder told us that they have witnessed a double increase in their email communication with members after implementation of AI in marketing. Not only this, it has also enabled Refunder to design and run personalized campaigns specifically directed towards certain segments, instead of having mass campaigns, which were the same for all members. It was very interesting to find out the importance of AI integrated CRM when the manager at Refunder told us that the company now run more than 50 personalized campaigns every week instead of 10 mass campaigns, as they used to prior to implementing machine learning, which has led to a significant growth of sales throughout their website.

Finally, according to the respondents, implementation and best utilization of AI will further enable Refunder to have a personalized front-page on its website soon. The CMO of Refunder further described that AI enables their 42 marketing managers to simultaneously manage a lot more processes compared to what is possible with using human efforts, and that Refunder could never have achieved the amount of turnover as it is able to achieve today with its current number of employees, without using machine learning. Eventually, the management at Refunder looks forward to be able to let machine learning algorithms assist their decision making process about which campaigns must be launched with their partner ecommerce firms. Based on parameters which show for example the provision to Refunder, return degrees of products and the average order worth of the products, the machine learning algorithms could provide more precise information about which selection of campaigns could result in the maximum profitability. The respondent explains that for now these decisions are still based on gut-feeling to a great extent. As

consumers gets increasingly digital and can choose which messages they want to display, it will be more difficult for firms to get to the consumer with the right message, in the right time.

The managers believe that it will be more difficult to attach a consumer to a brand and attain brand loyalty, as well as to differentiate a brand. As a consequence, the marketing manager always has to focus specially on the long-term development of a brand such that they get consumers attached to it and therefore this makes consumer insight even more important in the eyes of marketing managers. The marketing manager at Refunder stated that he personally believes that marketing managers must now focus more on building brand campaigns by basing them on the information provided by the machine learning algorithms. These must include algorithms such as which products and categories needs to be boosted, and which products already have a good momentum, but the company wants to scale them up further. Not only this, but the respondents also emphasized on the fact that as machine learning helps the firm by providing information about how the marketing communication should be governed, the role of the marketing manager will augment and be more focused into drawing conclusions based on this information so that they are able to create good campaigns, as AI does not master the creative process yet. There exists a need that the future marketing manager must be able to act more on data and less on gut-feeling. This implies that there is a need of marketing managers that are more technical, in addition to being creative.

IEWA

Marketing manager at IEWA discussed that without AI and CRM, it would have been very difficult for them to market globally and extend their reach internationally. Even though it could be possible through hiring the services of a number of sub ordinates to inspect each segment of the market and identify the clients who have needs/willingness to pursue careers abroad, it would be a very time taking process and the resulting lead generation would still not be as reliable as it is right now. IEWA runs separate marketing campaigns to target students and professionals and this require in-depth analysis of the country and career preferences of each target market segment. The manager stated that AI tools have provided them targeted marketing options which actually provide quality leads. Moreover, the services of the company are based on various time frames i.e. all the services cannot be provided at once, rather they are dependent on responses from international bodies like universities, embassies and qualification assessment authorities to plan and execute the processes in a systematic way. Due to this, the firm requires a data base that

collects and stores large amount of customer information in one place. Also, it must identify when certain tasks become due for each of the cases in process. This gives a good impression of the company and promotes effective communication between clients and the company. Same is with the sales function of the firm. When leads are generated and contacted by the sales personnel, there is a follow up strategy to engage communication with them on regular basis so that leads can be converted into sales.

4.7 Use of intuitive skills in decision making

Rusta

Marketing manager at Rusta explained that he often uses intuitive thinking in deciding and planning new marketing campaigns. He said that newer ideas are generated when he examines past marketing results and experiences and based on his intuitive analysis, he makes a decision to implement newer ways of marketing. The manager also mentioned one important thing that according to his opinion AI may even replicate human intuitive skills in years to come but replacing human expertise cannot be fully replaced even in the long run.

Refunder

Manager at Refunder emphasized that intuitive thinking is and will always remain important for marketing managers because they need to be innovative and come up with marketing strategies that competitors are not using. He thinks that AI can best support data driven analysis and predictions however it cannot truly replicate the intuitive aspect which a human can add towards bringing major strategic shifts. A strategic shift is risky, but it can bring a double fold improvement in the company if the right decision is made at the right time. For such a strategic change, in-depth analysis and human experience is definitely required. He also shared his opinion that it can be very risky for a marketing manager to be too data driven and not using intuitive capabilities when making decisions.

IEWA

Marketing manager at IEWA was of the similar opinion as the other 2 managers. He explained that intuitive thinking is used in their marketing design when approving various campaign targeted for different market segments. The managers also have to look at past experiences when deciding on the right time to run campaigns according to international time frames and after identifying the specific times when the ad response rate is highest. He shared an example stating that when targeted ads are run is essential to identify the time when target audience will actually be able to

view the ads, especially during the weekdays. The best responses on active ads were seen on weekends.

4.8 Transformation of relationships between firm and customers

When respondents were questioned about the changes that AI has brought in the relationship between the firm and the, all three managers agreed on the fact that they have witnessed that the relationship strengthened. It was because consumers felt improved engagement through the way products were being marketed to them. As a result of improved customer engagement (enabled by AI), customers received ads based on their personal preferences and this in turn also encouraged them to buy as well.

According to Rusta's marketing manager, AI-assistants will become the communication channel between the firm and customer in future therefore marketing managers must give importance to this aspect as well whether their firm has an online sales platform or a retail store. Manager at Rusta also believes that AI assistants can also be used in recommending the right products to customers, guiding the customers about the various uses and benefits of the product and at the same time improve customer's overall buying experience at the same time.

On the other hand, Refunder's marketing manager seemed more interested in first identifying the various parameters on which AI assistants will base their product recommendation on. He stated that there could be various factors on which firms would be interested in capitalizing for example some firms will be interested in brand building while others on selling at the lowest price, taking this example only, when a customer uses AI assistant for product recommendation, the AI assistant may refer the lowest price product to the customer while the ones who capitalize on brand building may lose a potential sale.

The marketing manager at IEWA raised a different concern with relevance to AI assistants as well. He was of the opinion that AI assistants will increase a very different kind of competition among the firms. By different he means that with the rise in use of AI assistants, it will become increasingly difficult for firms to attract and retain customers because AI assistants will base its recommendations on the numbers and facts but not emotions.

5 Analysis

Through this chapter we will present a detailed analysis of our research findings based on the research questions of the study: How has integration of AI transformed CRM and the role of marketing managers? For the purpose of our research, we used conceptual content analysis approach and have followed a thematic analysis approach to analyze the collected empiricism and therefore derived 6 different themes: The role of marketing manager; Use of AI integrated CRM; AI and decision-making process; Change in required skill set of marketing managers; Problems with using AI in CRM; as well as the future of AI integrated CRM and how will it influence future business practices.

5.1 The role of marketing manager

The purpose of understanding the role of a marketing manager is to bring insight into the core values that the marketing manager role offers to the firm and what responsibilities this renders to. This baseline is needed to determine the effect of increased levels of AI-capacity.

In general terms, a marketing manager handles the promotion and positioning of a brand or the products/services that a company sells. Typically, marketing managers are engaged in planning and overlooking execution of activities that attract more customers to buy from the company and increase brand awareness through targeted marketing campaigns.

Though the managers we interviewed had different sets of responsibilities and roles pertaining to the industry their organization belonged to, their employments were centered on enriching the organization with consumer insights, which are either acted upon through marketing or used as means of developing new value propositions. The main objectives of marketing manager at Refunder were brand building and retaining customers through marketing. Whereas the marketing manager at Rusta had a narrower focus due to the less senior positions. Their responsibilities however aligned with those proposed by Verhoef & Leeflang, who state that “The marketing department is most influential in marketing decisions pertaining to advertising, customer satisfaction measurement and management, segmentation, targeting, positioning and relationship/loyalty programs (Verhoef & Leeflang, 2010, p. 36). The marketing managers we interviewed were not quite involved in the pricing and distribution of the product/services. The role of Manager at Refunder had an Enterprise-wide Profit & Loss CMO role i.e. he developed strategies and oversaw commercialization in a way that it delivered profitable growth for the organization.

5.2 Use of AI integrated CRM

The purpose of this theme is to provide insight on how AI integrated CRM is leveraged in promoting of products and services as of today and also how professionals view it. We will also discuss the consequences this brings.

In general, all respondents had a positive opinion regarding AI and its implications for marketing through the use of AI integrated CRM. Both the respondents discussed about the various techniques within machine learning mainly, as of today and had an opinion that most of the advantages through the use of AI integrated CRM were due to machine learning. This is in accordance with a lot of research which state that machine learning is probably that area in AI which has received the greatest attention especially with regards to its functions in business and marketing. According to the respondents, they used machine learning as a tool to increase the efficiency and productivity in marketing because it helps in automating tedious tasks like data compilation, information organization and reporting of trends. Moreover, they think that one of the biggest advantages of machine learning is that all of a large number of tasks can be accomplished in an instant, even when massive amounts of data is involved. The respondents described that even though machine learning has received great attention, yet still it's not being implemented to its full potential in businesses till today.

Overall, the point of view of both respondents was in the favor that AI integrated CRM provide new dimensions and opportunities for evaluating large amounts of data, and that this has subsequently resulted in greater number of sales because of increased relevance and better timing. Also, the results have amplified in terms of sales and customer loyalty because the managers were able to strategize their marketing plans and now, they were more data driven instead of marketers' gut feeling driven. This opinion is in line with the statement of Open Data Science (ODSC) that if the business is entirely based on your gut feelings, it will eventually end in disappointment because humans are simply incapable of processing the large amounts of data which is received by businesses daily. On the other hand, data is neutral, but the machines that are processing such large amounts of data don't have an understanding of what they're processing (Science, 2019).

Furthermore, the respondents agreed to the point that AI integrated CRM has led to significant automation which has replaced both analytical and operational processes. According to the marketing manager at Rusta, he is convinced to believe that due to machine learning and deep learning, the marketing department is able to work "data driven" in realistic terms. He is also

convinced to believe that as a result of implementing AI integrated CRM, even under uncertainty he is positive that the best expected outcome can be attained because AI assists in converting raw data into information which helps in targeting the right audience at the right time. This aspect was often neglected prior to implementation of AI integrated CRM.

Through secondary research method, we were able to study research from various AI experts and came to a conclusion that majority of them were mainly concerned with viewing AI as machine learning models, such as predictive analytics and deep learning which uses deep artificial neural networks to provide profound results.

Another researcher, Marinchak et al. (2018, p. 22) believes that Artificial Intelligence completely transforms the roles, rules and tools of marketing. Not only this but he believes that the process of deciding how, what and to whom should the firm sell, along with how, what and from whom should the firm buy, has increasingly become an all-digital and automated process due to AI. This belief was also confirmed by our respondents. According to them, they have witnessed and experienced the ongoing increase in the usage of machine learning applications (for marketing departments and consumers both). The marketing managers described that they currently employ machine learning largely for the following reasons within marketing:

- Predictive analytics models
- customer insights
- marketing personalization
- recommendations and content
- market segmentation and targeting decisions.

Rusta's marketing manager, explained that by using machine learning as a result of implementing AI integrated CRM, they could find connections that seem somewhat illogical to a human, but when used in product recommendations, they actually resulted in an incredible effect in increased sales. In case of Refunder, AI integrated CRM introduced machine learning which eventually enabled personalization of their marketing efforts towards its members. As a result of personalized advertisement campaigns and email communication, an impressive customer response could be drawn which led to augmented sales figures. Marketing manager of both Rusta and Refunder appreciated the use of AI integrated CRM into their organization and described that its implementation has led to increased sales, while also replacing human analysis. This factor did

impact the number of persons required to perform certain tasks in the department particularly, thus making it possible to run the firm with fewer employees than would have been the case otherwise.

5.3 AI and decision-making process

This theme will bring insight into how AI can automate and expand decision making process within the marketing domain and define the respective roles of the machine/AI integrated CRM and the marketing manager in the organization.

To begin with, it is important to note here that all respondents showed agreement on the fact that AI will not replace and automate human decision-making, instead it would rather augment the process. They believe that machine learning can only automate some relatively simple and basic decisions when they can be easily formulated and computed based on the available data. Otherwise, algorithms can only augment decision-making based on what has been successful previously. They do not believe that algorithms can find connections between data collected from different sources to which the system does not have access to, for example potentially upcoming consumer trends, as it cannot assume, predict and compute reality as a whole. Therefore, it is better that decisions that cannot be made due to lack of historical data are better assigned to humans, for instance decisions about strategic shifts into new territory.

The marketing manager of Rusta also described the problem of integrating data about events where there is no data collected as yet. This includes, for instance, events that have not yet occurred or a product that has not been offered in the market as yet. This is considered missing data. It is also in accordance with Sam Ransbotham's point of view that even with ever increasing data collection, it is still difficult to capture many known explanatory variables. Algorithmic performance is always preferred when a great amount of relevant information is known, structured, and available. In particular, it may be problematic to incorporate data about events which either didn't happen or which happened, but no data of these events were collected about them (Massachusetts Institute of Technology, 2016). Therefore, this is considered a major obstacle for all round implementation of AI in organizational decision-making. Also, machines are considered a support in data interpretation, but a human is needed to make and implement the final decision based on intuition. Furthermore, it is assumed that one cannot trust a conclusion made by a machine regarding decisions which are considered of more strategic nature, because these decisions cannot be tested before their implementation on a full scale. Similarly, in correspondence to this, Sam Ransbotham believes that it is not possible to perform randomized A/B tests as each organization

is distinct. This is described as another barrier towards full scale execution of AI in organizational decision-making process. Likewise, this view of intuition and strategic thinking is supported by the marketing managers of both, Rusta and Refunder, who discussed that intuition is of great importance when decision making needs to be done in their role as marketing managers. The respondent of Refunder also laid great emphasis on the importance of intuition when it comes to “thinking outside the box” about marketing activities and strategic shifts. Therefore, he stated that taking risks and doing things that no one else has done before are important aspects of his role as a marketing manager as well.

Based on the above theory and observations, it is suggested that AI has not yet mastered intuitive thinking to the same extent as humans and therefore a meaningful implementation of AI integrated CRM can only be executed with the involvement of human effort and intuition.

5.4 Change in required skill set of marketing managers

All the marketing managers that were interviewed claimed at the start that emotional intelligence is highly significant in their roles as marketing managers. The reason for this is that in order to acquire valuable insights from the consumer, empathy and social understanding are vital. These insights are valued for use in innovating and developing brands and products. It’s also crucial to know the tone to be used while communicating with customers and other stakeholders. Jarrahi (2018), stated that emotional intelligence is key to understanding of the political dynamics beneath decision making, which can shape the brand in many ways. Moreover, a couple of managers stated that empathy is crucial in order to motivate subordinates and pushing the business forward. This is of the view of Jarrahi (2018) who also agree that central to the development of vision is emotional and social understand which further leads to inspire others towards the same goal.

All marketing managers claimed the creativity is a key part of their role. It is also understood that creativity is an essential capability not only when making a decision on characteristics of a product and during innovation of a brand, but also making strategic moves. Refunder’s marketing manager added that over-reliance on data can hinder creativity – a trade-off which marketing managers must balance. Using machine learning capabilities to obtain information on how communication should be controlled, the future of marketing manager is to make decision based on the information during campaign building, as the machine has not yet harnessed the power of creativity. Moreover, IEWA’s marketing manager states that pieces of the creative process will be

automated, and until the machine is able to create a concept on its own, it is integral for marketing managers to possess creativity for all of the above-mentioned reasons.

In the end, all marketing managers were of the view that their job has become more and more technical and it is understood that they value of these technical skills will eventually increase. As Rusta's marketing manager said, these days there is always a technical viewpoint to the customer experience. He claims that the AI-tool applied in marketing should be understood marketing managers, along with understanding AI-assistants. On this, Refunder's marketing manager stated that the benefit of AI is they can do test campaigns on a smaller sample before the big launch. Thus, making the ability to understand and interpret data for marketing managers a key capability.

Marketing Manager at IEWA, to add to this, does envisage AI having the ability to simulate marketing strategies. This view on the importance of technical skills among marketing managers is supported by Wedel and Kannan (2016) who state that marketing managers in addition to being well versed in business strategy must also pay similar attention to technology and analytics.

5.5 Problems with using Artificial intelligence in CRM

The core objective of this theme is to analyze barriers to the implementation of AI, it focuses mainly on the ethical concerns with respect to the collection and usage of data along with the lack of explainability of algorithms.

Starting off with the lack of explainability and how the algorithms are applied in the present era, it is not a major concern to the responding marketing managers. In fact, at the end of the day managers are only concerned with the end result and in their own business environment, explainability is not of much importance because with the passage of time the industry matures eventually increasing this demand.

In addition to the view of respondents, more than AI technologies, the data collection and usage are a bigger ethical concern. As expressed by one of the responding marketing managers, it is essential to consider ethics when working with customer data.

5.6 Future of AI CRM

All three marketing managers agree that the progress we have seen is going to move in the same direction in terms of increased technical possibilities and automation. The Rusta respondent claims that marketing managers will be able to operate more and more data-driven and insight-driven, and that with less use of traditional marketing platforms, the advertising environment will change in favour of new digital channels.

IEWA's marketing manager has the same confidence in technology, but also claims that, as in the social media era, there will be many new positions in marketing, such as more professional marketers with technical skills. He points out that a larger part of the marketing role of businesses would be made up of specialist consultants than today. This might, as such, slow down the phase of automation in certain companies' marketing departments. Ng (2016) suggests, however, that every organization needs to fully understand what AI is and what it can do for the strategy of a company and implement it into their strategies accordingly. Therefore, one can draw the inference, based on theory and collected empiricism that it actually appears to be extremely necessary for marketing managers to enter the AI revolution at an early stage.

The increased use of AI in marketing has the potential to generate value for both customers and businesses, both the responding experts as well as managers agree. This is because the technology allows for a greater personalization of consumer-marketed information, which contributes to a greater relevance of marketing and, ultimately, firms can achieve a higher marketing return. As such, consumers will make smarter decisions on purchases and increase the value of what they buy, reducing the frequency of their purchases, which will ideally drive us away from overconsumption

Marketing manager at IEWA is of the opinion that the relationship between firm and customer will grow for the better as relevance is increased. There is always a chance of overuse and/or misuse of emerging technologies, in which a consumer-centered approach is required to keep the marketing information relevant to the customer. This will create a trustworthy relationship between consumers and businesses over time. He further states that firms will concentrate on their core strengths and less on the sales of these goods to establish competitive products.

Even more, the perspective of AI-assistants becoming a significant channel was more or less found in all interviewees. Following this, it is vital to be mentioned on these platforms that there will be an increasing impact on polarization of brands, as those listed will not provide same access to the data of customers. Rusta's Marketing Manager sees potential, even though Rusta does not have e-commerce even today, to enhance customer experience in multiple ways with help of AI-assistants.

The concept that brand building has major significance is also pointed by Refunder's marketing manager, even though the reasons are different, as he firmly believes that AI-assistants will encounter challenges in the presentation of most relevant alternatives to its customers.

Therefore, it is very important to be on consumers' "top of mind" while choosing the alternatives provided by AI-assistants. However, it will further implicate the marketing manager's role while reaching a certain performance that was predicted for different products and segments at different time. In regard to commodity goods, where price stands to be the only dominant factor behind consumer frequency of purchasing, it is assumed that AI-assistants provides more accuracy in terms of value proposition that are complex and the infrequency of purchasing. Therefore, the managers of marketing should be well prepared and quick in shifting the focus of marketing expenditure. In accordance with it, Dawar (2018), suggests that when consumers adopts AI-assistants, brand should evaluate the significance of brick and motor and design strategies subsequently. Jarrahi (2018) believes that managers should be well aware of adapting and re adapting. In addition to this, Refunder's marketing manager is focused on the parameters that AI-assistants will be using as a base for their decisions, where he skims over the significance of AI-platforms to maintain a balance between firms and consumers conflict of interests, as mentioned by Dawar (2018).

6 Conclusion

This chapter gives a summary of the research findings we collected through this study. We have then looked at the Implications of the topic under consideration and concluded with an account on the proposal for future research.

6.1 Summary of Conclusions

To fulfill the purpose of our study which was aimed at identifying the transformations that AI has brought into CRM and the role of marketing managers, we used primary and secondary research methods. With specifications to finding how emergence of AI has transformed CRM, we conducted secondary research and then linked it with the responses of practical experiences gained by our primary research respondents. Moreover, to identify the various changes that have come about in the role of marketing managers as a result of changes in marketing, we conducted interviews with 3 different marketing managers who explained to us about the skillset that were required of them as marketing experts few years back compared to what is being expected since the emergence of AI. In light of the questions, we put forward to the research participants, we aimed at identifying the link between the 3 very prominent factors in our research which are AI, marketing and decision making. Hence, from the findings of this research we were able to draw the following conclusion:

How the integration of AI affects CRM and the role of marketing managers?

The findings of our study show that AI has very profound implications on CRM and role of marketing managers. AI has completely transformed the way companies used to do marketing to reach out to potential customers. AI enabled marketing techniques to have made large amounts of data collection possible along with analyzing even the slightest patterns that exist through the existence of this data. AI tools such as machine Learning and Deep learning algorithm have enabled marketers to reach a larger number of prospect customers, target the right audience, select the right marketing campaign and segment the market according to various demographics all through machine. Marketing managers can now predict the outcomes of every possible action and investment that they make aimed towards growing the company's sales, profitability, creation of brand loyalty and enhancing customer retention. Not only does AI equip the marketing personnel with all the required information about the customers, it analyzes data in such a way that the needs and preferences of customers are identified. Based on these, when marketing campaigns are run,

the response is such that it improves the Return on investment (ROI) for the company and also encourages factors such as improved buying patterns, increased sales and accurate targeting is achieved.

When AI enabled CRM is done, marketing managers are able to focus even more on innovation and try to identify patterns which help in developing newer ideas to fulfill even the slightest need of customers and in turn create value and longer-term growth for the company. As all these are discussed in much more detail throughout the thesis, we would now summarize the findings on how the transformations in CRM have resulted in changes in the role of marketing managers.

To begin with, our findings suggest that increased level of AI capacity has led to changes in the role of marketing managers both internally and externally. First is the positive change that has occurred in the financial accountability of marketing managers. As a result of predictive analytics, it has become easier for marketing managers to test and predict the outcomes of different variables that affect ROI. Marketers can therefore better allocate marketing budget and reap far-fetched benefits. Secondly, managers are able to understand and identify the value propositions for segments where they can maintain competitiveness based on their competitive advantages. As a result, firms become experts at what they do and start capitalizing on this focus area. This way they cannot be threatened by tech giants.

In the course of our research, we found out that Small businesses usually prefer that they outsource marketing expertise instead of having an in-house marketing team. It is however better that firms have their own specialized marketing team lead by specialized marketing consultants.

Now coming to the point that with the emergence of AI technologies and their implementation in marketing function of the firms, it is becoming important that marketing managers are well versed with technical and analytical skills alongside the vast marketing knowledge they possess. This is important as part of the decision-making process as well. The relation is that with the ongoing advancements in AI, if the managers are not able to understand how to implement the right marketing strategies by making the most of AI tools, the expected benefits for the firm will never be drawn. Without having knowledge about AI, managers will not be able to be as innovative as their competitors and may lose market share instead of expecting it to increase. Hence, the skills and experience being expected from marketing managers to possess have changed as well. Having technical and analytical skills is now considered advantages for person's future career prospects as well.

6.2 Theoretical Contributions

As we conducted a qualitative study using multiple case studies, we were able to understand the findings under the light of these research. Through our research we were able to conclude that marketing managers heavily rely on using their Emotional Intelligence (EI), intuition and creative thinking capabilities and this aligns with the statement by Jarrahi (2018) who emphasized that EI helps marketing managers understand the dynamics of decisions which are indeterminate and confusing. Jarrahi (2018) further stated that creativity, intuition and EI are not easy to replicate for a foreseeable future. Moreover, findings of our research also support the findings from a previous research conducted by Jarrahi (2018) that a symbiotic relationship exists between machines and marketing managers.

Secondly our findings suggest that impact of AI on CRM is that it enables improved evaluation of marketing, provides better quality of information and analytical data on which marketing managers can rely on to achieve customer satisfaction and business growth. This finding is in line with findings of Hanssens and Pauwels (2016), who concluded that due to the increased development of data's quality and quantity and also the innovative analytical tools, it has become easier to evaluate the results of marketing.

6.3 Implications for the society

It is very important that the societal implications of this research are highlighted and not overlooked. One of the more prominent implication of increased AI capacity in marketing function of business is that marketing is becoming more and more relevant from the customer's point of view. This is because AI has enabled increased personalization and predictability on the basis of customer data that is stored in the databases. It won't be an exaggeration to say that as a result of this customers are aware of what exactly they are looking for in a product, so they be offered the most accurate recommendations through AI. As a result, customers buy what they want and sellers produce the right quality of their products, thus reducing overconsumption and overproduction of products respectively.

Secondly, increased use of AI assistants enable consumers to purchase at the ease of their homes and therefore this reduces the amount of extra time they spend on shopping. This also allows more spare time for customers.

It is very important that firms follow the ethical guidelines of securing customer's information and never trespass the personal integrity of customers for the sake of greater revenue. If these

ethical guidelines are not followed, the relationship between the firm and customer is expected to deteriorate over time.

Another important aspect of increased use of AI is that many employees feel insecure about losing their jobs as more and more tasks are becoming automated with the AI developments. This may result in possible layoffs however if marketers analyze that they can instead create greater value for themselves by updating technical and analytical skills in them, it may instead open doors to more opportunities for them.

Lastly, as we have already seen through the research as well that there is a need that marketers acquire technical skills in addition to marketing knowledge so that they can compete in the ever-changing environment, there is a need that the educational centers also redirect their focus towards technological-oriented education.

6.4 Proposed future research

To attain a deeper understanding of how AI impacts each side of marketing it is important that future research touch those areas in more depth. As for this research, because it was of exploratory nature, we have touched certain areas briefly.

For areas where we were not able to find sufficient previous research, such as investigating on firms that choose to outsource their marketing functions. We propose that a future research is conducted to test this through a quantitative research method.

As far as the findings of this research is concerned, we identified that as a result of increased use of AI assistants in the future, companies are becoming more focused toward creating their brand identity, This is so because when using AI assistants, customers will be provided by a number of recommendations based on their preferences, it would be the brand image and loyalty that will help customers return to the brand they trust out of all the other recommendations. As this was one of the findings in our research, we could only touch limited areas in regard to it. However, there can be an in-depth research conducted on this in the future.

Consequently, AI assistants are expected to bring huge changes in market in the near future, yet there is limited research on its implications and expected disruptions. We suggest that a future research should be conducted on the various strategies which would be beneficial in shifting the current distribution channels towards AI assistants.

Lastly an area which can be researched on it the skillset which the marketing managers will be expected to have in order to meet the future expectations and to be successful. Findings of this

study predict that there will be increased demand of persons who possess technological skills, creative mind sets and emotional intelligence along with marketing knowledge in the upcoming years.

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Appendices

Appendix 1: Company Request Letter



Gävle 23/11/2020

Co-operation for Master Thesis

My name is Md Nazmul Khan, and my group colleague name is Tahir Iqbal . We are students at University of Gävle Sweden doing Masters in Business Administration As per the requirement of the degree program, we are currently working on a thesis on the topic “Is AI integrated CRM the future of businesses”. we contacted your company for a small interview via email. we would be very grateful if you could provide your valuable opinion on a few questions (see attachment). As per my research, your company uses AI integrated CRM in Marketing and sales departments and therefore it would be a great opportunity for us to learn and use your opinion regarding the use of the CRM, in our thesis. Considering the COVID-19 situation, an email interview would help us in doing our thesis. However, if due to time constraints you prefer any other mode of interview (via call or Skype chat), it would be completely fine.

We are humbly requested if you provide us your valuable answer. We are very grateful to hear from you soon.

Looking forward to your assistance in this regard.

Thank you.

Best Regards,

Tahir Iqbal

Md Nazmul Khan

Appendix 2:

Questionnaire

Questions

1. Briefly tell us about your firm and its business model.
2. What is your employment role at the firm?
3. What does Artificial Intelligence (AI) mean to you in a general sense?
4. How do you think the relationship between firms and consumers has evolved because of AI integrated CRM (Customer Relationship Management), and how does it affect your role as a marketing/sales manager?
5. Do you perceive AI as an opportunity or a threat towards your role as a manager?
6. What are the influential factors and uses of AI integrated CRM in the marketing/sales functions of your company?
7. What are the major benefits of using AI integrated CRM in the marketing/sales function of your company?
8. Are there any major challenges you have to face in this regard?
9. What are the ethical aspects of integrating AI in marketing/sales?
10. Briefly discuss the impact you have noticed on marketing/sales volume and expenditure of the company pre- and post-AI integrated CRM?
11. How do you think marketing/sales will change in the future due to adoption of AI integrated CRM?
12. Do you think companies must adopt AI into their marketing/sales functions to remain competitive in the market?