

# The Role of Cloud-Based CRM Systems in Enhancing SMEs' Financial Management Capacities by Efficiently Collecting, Analyzing, and Utilizing Customer Data

A Thesis submitted in partial fulfilment of the requirements

for the degree of

Master of Science in Entrepreneurship

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**Under Supervision of** 

**Prof. Victor Del Rosal** 

Submitted to the National College of Ireland, August 2024

**Submission of Thesis and Dissertation** 

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# Al Acknowledgement Supplement

#### Dissertation

#### Dissertation Submission

Your Name/Student Number	Course	Date
Ahmet Volkar Gurbuz/22197729	n Entrepreneurship	10 August 2024

This section is a supplement to the main assignment, to be used if AI was used in any capacity in the creation of your assignment; if you have queries about how to do this, please contact your lecturer. For an example of how to fill these sections out, please click <u>here</u>.

### AI Acknowledgment

This section acknowledges the AI tools that were utilized in the process of completing this assignment.

Tool Name	Brief Description	Link to tool
Chatgpt	Assisted in creating survey questions and analyzing the data and variables	Chatgpt.com
Deepl	Translator programme – Turkish to English	Deepl.com

### Description of AI Usage

This section provides a more detailed description of how the AI tools were used in the assignment. It includes information about the prompts given to the AI tool, the responses received, and how these responses were utilized or modified in the assignment. **One table should be used for each tool used**.

[chatgpt]	
[Assisted in generating survey questions specific to using SPSS tools.]	o the research topic and analyzing the resulting data
["Conduct a log-linear regression analysis to understand the relationship between the use of digital tools and workplace efficiency, including their impact on cost reduction and customer service.]	The log-linear regression analysis indicates a

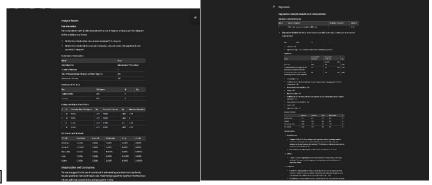
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customer service, creating a more efficient and effective workflow."

]
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# Evidence of Al Usage

This section includes evidence of significant prompts and responses used or generated through the AI tool. It should provide a clear understanding of the extent to which the AI tool was used in the assignment. Evidence may be attached via screenshots or text.

#### Additional Evidence:



[Place evidence here]

### Additional Evidence:

[Place evidence here]

#### **Abstract**

This research has found that small and medium-sized enterprises (SMEs) face and struggle to manage many handicap in optimizing business processes, managing customer relationships, managing competitive advantage and ensuring sustainability and continuity. Being small and medium businesses, their resources are limited and these businesses have to use the resources they have in the most efficient way, however, they have difficulty in accessing technologies that can use their cost-effectiveness in the most optimized way. This situation makes it difficult for SMEs to compete in market conditions. The main purpose of this research is to examine the impact of customer relationship management systems and artificial intelligence-supported programs on SMEs, especially on the continuity of a SME.

In particular, the impact of CRM technologies on business processes, how they can improve what is discussed, how costs can be reduced and their effects, the impact on sales and customer satisfaction and loyalty are discussed. The study conducted in this context, a survey was presented to 50 people in Dublin. These people are intended to be selected in sales positions or people with CRM experience.

The quantitative research method was used through the questionnaire study and was also supported by qualitative data when necessary. The quantitative data collected were analyzed using IBM SPSS software and various analyses were aimed to examine the meaning of the data in depth. These analyses are descriptive statistics, regression analysis, correlation analysis and log linear analysis. Based on the findings obtained in this way, it was observed to what extent cloud-based CRM systems affect the operational efficiency and overall strategic decision-making processes in SMEs.

# Keywords.

Customer Relationship Management, CRM Tools, Customer Satisfaction, Sales Impact, Operational Efficiency

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During this study, especially during the questionnaire process, the participants took the time out of their busy schedules to contribute by filling out the questionnaire and the analyses of the data were made possible thanks to them. I would like to express my endless gratitude to everyone who participated and supported me. Finally, I would like to thank my thesis supervisor, Professor Victor Del Rosal, for his exceptional understanding, encouragement and guidance, as well as his wisdom in conducting this study.

#### 1.Introduction

In the recently evolving global economic model, the role of small and medium-sized enterprises (SMEs) is taking a more vital role. This role affects both employment and the income of countries (GDP). For this reason, SMEs have to act with limited resources. In addition, they have to deal with major challenges such as increasing competition and rapidly changing market conditions. Customer relationship management (CRM) systems create a challenge for SMEs in this context.

In order to compete with the harsh conditions of the market, cloud-based CRM systems offer SMEs the opportunity to centralize customer data, analyze data by providing real-time instant access, and manage customer relationships using automation tools. Through these systems, businesses can increase customer satisfaction, facilitate sales processes, and contribute to being more informed in strategic decision-making processes (Gupta & Khan, 2024). At another point, business efficiency can be increased by artificial intelligence technologies that automate routine tasks, provide predictive insights, and contribute to decision-making (Holmlund et al., 2020)."

The aim of this study is to monitor the impact of CRM technologies on SMEs' sales impact, operational efficiency, cost reduction and customer service improvement. The research is based on the hypothesis that cloud-based CRM systems can help SMEs to optimize daily operations, reduce costs, improve customer service and increase sales.

#### **Background and Rationale**

Recently, especially with the effect of digitalisation, a lot of data is entering into a rapid interaction with each other, the development of cloud-based crm systems and artificial intelligence has accelerated this interaction and has become a means of contributing and finding solutions for SMEs to combat difficulties at important points, cloud-based CRM systems are a very attractive platform for small and medium-sized businesses, one of the main reasons for this is that it requires lower upfront investment, especially through more effective results compared to in-house solutions. In addition, other important contributions can be added that it is generally scalable, flexible, and offers remote access, making it suitable even for businesses with limited technological possibilities (El Khatib, Al-Nakeeb, & Ahmed, 2019). Als offer advanced capabilities, such as machine learning and predictive analytics,

which can provide access to multiple possibilities and alternative ideas. These technologies can analyze big data while generating various hypotheses, which can contribute to SMEs making more effective business decisions and being competitive in the market (Chen, Chiang, & Storey, 2012).

Cloud-based CRM combined with artificial intelligence can significantly improve data accuracy and integrity. this minimises the need for manual input and reduces human-based errors. with this, decision-making processes evolve to a more reliable state. In this way, an increase in customer loyalty and retention can be observed and personalised customer experiences can be used more effectively in addition to marketing strategies suitable for the target audience.

Through its scalability, cloud-based CRM systems contribute to SMEs to increase and expand their operations and effectiveness without significant additional costs. Because as businesses grow, CRM systems adapt more easily to increasing data load and more complex customer data. Through this scalability, CRM systems can also meet the needs of SMEs with basic simple programmes at first, and as the process progresses, they can switch to more comprehensive and more effective CRM systems.

Although the need for qualified personnel may arise in order to use CRM systems, this may cause a cost burden for SMEs, but the effective use of CRM tools in the process will create a more profitable position for companies.

These situations are usually related to data security, and also the lack of qualified personnel and implementation costs can create difficulties for SMEs. SMEs should evaluate various strategies to overcome them. When all these are considered, the successful integration of artificial intelligence-supported Cloud-Based CRM technologies will evolve to an increasingly critical point for SMEs.

#### **Case Studies and Practical Applications**

Crm tools contribute to the practitioner in general, through which the relevant tools show that they positively increase customer loyalty and sales conversions at a certain level and provide continuity in their development.

Such applications and newly developed tools were implemented on a large online retailer during a study, and the retailer was able to provide specific, specific, matching recommendations specific to people's demands and expectations by analysing various

customer data simultaneously and instantly, and increase customer interest, meet their expectations and strengthen their satisfaction (Gantz et al., 2017).

One of the case studies focused on a medium-sized manufacturing company that used cloud-based CRM systems to accelerate sales and customer service processes, and the company reported a 20% increase in sales in the first year of implementation, while at the same time reducing customer service costs by 15% (Ledro, Nosella, & Vinelli, 2022)

The widespread evaluation of CRM applications shows that they are also widely used in financial services firms. firms that have deployed AI-powered CRM applications have typically used predictive analytics to anticipate customer needs and provide proactive applications to their customers. high levels of personalisation and fast response times have led to increases in customer satisfaction scores and decreases in support response times.

Such analyses, evaluations, case studies, integration of artificial intelligence-based cloud CRM tools and emerging technologies, increasingly intertwining and adopting new concepts, evaluations, analyses and analyses show the practical benefits and provide valuable, important and different options and strategies for SMEs evaluating, closely following, activating and considering similar applications.

#### **Handicap Situations and Suggestions for Solutions**

However, unfortunately, despite these advantages, SMEs trying to exist in the market face barriers such as various difficulties, adaptation problems, lack of implementation, and lack of implementation in adopting, comprehending, and operationalising artificial intelligence-based cloud CRM systems and cloud CRM systems. High implementation costs are a burden for SMEs, and the lack of calibrated, trained, specialised and unique people, technicians and staff for emerging technologies are the most important common barriers. SMEs may also have concerns about data security, storing customers' information, protecting it, not sharing it, and the purposes for which this data will be used, and this may hinder, hamper or even discourage their willingness to adopt these technologies.

Obviously, each system has its own set of challenges. CRM technologies also have a number of challenges in themselves. costs and lack of expertise are common. Another handicap of SMEs is that customers may have concerns about data security and confidentiality. This situation can put companies in a difficult situation.

To overcome such difficulties, SMEs can work with providers that prefer more flexible models, simpler systems and prioritise security features. Participating in major fairs, following such technologies enables SMEs to become familiar with CRM and artificial intelligence technology solutions and to have knowledge and foresight about the complexities that may arise.

SMEs should always develop comprehensive implementation plans with a clear timetable and defined objectives and regular progress, and such structured approaches contribute to the rapid progress of the process and adaptation By leveraging cloud-based CRM systems, companies can make optimum use of this opportunity. thus, they can ensure growth and maintain their competitive advantage in the market.

#### 2- Literature Review

#### **Definition of CRM**

Employees in sales positions had to manually analyse and evaluate customer data. With the introduction of computers in 1907, customer information began to be transferred to computers. In the 80s, personal computers became widespread and digital management systems were developed for the first time. In the 90s, CRM systems became more widespread therefore to the spread of the internet network and the emergence of cloud-based CRM systems. In the 2000s, CRM tools started to be used by the wider public. In 2010 and today, various tools and applications have been developed to manage business processes more effectively. (Brontén, 2022).

The history of CRM has changed the system of managing customer relationships along with technological developments. this evolution reveals that businesses are using CRM tools more effectively to increase customer satisfaction and revenue.

#### **CRM Framework**

CRM systems can be described as a set of various tools, processes and applications rather than a methodology. CRM structures are not only a structure limited to customers, but also means that any business strategy, organisational structure and patterns such as customer information are integrated with technology. This integration contributes to both customer satisfaction and the performance, impact and strategy of the organisation while observing all customer interactions (Ullah, Iqbal, & Shams, 2019)). One of the other objectives of CRM is to contribute to the profitability of companies by increasing customer satisfaction and loyalty.

Such tools contribute to strategic processes such as collecting, processing and evaluating customer data (Buttle & Maklan, 2015).

#### **CRM** and Relationship Marketing

When we examine the marketing literature, the concepts of CRM and relationship marketing are intertwined. relationship marketing is characterised as a process of exchanging and swapping resources between the customer and the company. The aim here is to create value for both parties. Generally, the parties consider the exchange to be an exchange and that the benefit they receive is greater than what they give. (Ballantyne, 2005) This type of Relationship marketing builds deeper and more meaningful relationships with customers and this approach increases customer satisfaction, strengthens customer loyalty and increases long-term profitability (Ballantyne, Christopher, & Payne, 2003).

#### **CRM Strategies and Approaches**

CRM systems can be considered as a holistic tool that looks after the whole company. Through this process, companies build and maintain profitable customer relationships. It delivers exceptional customer value and satisfaction. CRM strategies are a structure that should be followed by considering the entire company and reviewing it regularly. CRM should be considered as a customer-centred business strategy tool that combines sales and marketing with customer service and contributes to increasing customer value. (Chalmeta, 2006). In this way, customer interactions are personalised and communication is organised. each customer interaction reaches the maximum level in this way, this maximises the performance of organisations. (Buttle & Maklan, 2015).

#### **Sales Management and CRM**

CRM systems play an important role in managing and communicating interactions with existing and potential customers. These tools help to streamline processes, improve customer service and increase profitability. Recent studies on this topic show the integration of CRM tools with sales objectives and organisations to increase customer satisfaction and improve sales performance. The effectiveness of CRM tools is greatly influenced by the development of technology tools, the processing of data and the involvement of users. The success of CRM applications generally affects customer data, analyses, personalised marketing methods and sales growth. (Nguyen & Waring, 2013).

It has been observed that companies implementing CRM tools are more effective in managing their sales processes, which leads to increased customer satisfaction and the creation of loyal

customers. The sales role used to be more based on transactions and short-period results. This situation has changed with the transition to customer relationship-oriented selling, which aims to meet the demand of the market by applying more dominant techniques of sales and staying in effective communication with customers. (Weitz & Bradford, 1999)

With the help of CRMs, companies are establishing a kind of relationship marketing. This is simply the establishment of a long-duration customer and sales relationship. This focus leads to changes in practice in terms of personalised selling and sales methods. The position of the sales staff changed in the process and started to make sense for the customer and created value. (Biong & Selnes, 1995)

The change in relationship roles and the fact that the bond between the customer and the seller has become more important in the process has caused the roles to change. in this respect, the transition to relationship management roles has increased the ability of sales representatives to manage a successful relationship. Relationship management requirements differ from traditional sales roles. It is emphasised that sales and relationship management roles should be examined in the service sector.

#### **Marketing Management and CRM**

With the advent of technology, relationship processes have also changed in nature. While CRM tools are renewed and integrated into these processes, customer and marketing interaction has changed due to the customer life cycle. CRM tools act by managing and researching this process. These tools accelerate the workflow by using various modelling and automation, algorithms and create alternative contact points with customers. They offer any relevant product and service to the satisfaction of the customer and ensure his participation in this process. (Buttle & Maklan, 2019). CRM tools increase customer interest and attraction by personalising relationships and maximising the relationship with customers (Chatterjee, Chaudhuri, & Vrontis, 2022).

#### **Customer Service and CRM**

Data management for customer service is one of the most critical points. in this respect, CRM tools help to improve customer service and automate workflow. CRM tools enable companies to establish new contact channels with buyers. CRM also disciplines customer service, makes it effective and helps them to be more professional. therefore, it helps to produce solutions in case of any problems and concerns. This situation mutually increases the satisfaction of

consumers and is more financially advantageous for the company and establishes an effective communication with consumers. (HubSpot, 2021).

As can be seen, the impact of CRM tools on customer service is important for a company. CRM tools improve the working style, structure and functionality of customer service. this is directly reflected on consumers and reinforces their feelings of satisfaction and loyalt (Nguyen, Sherif, & Newby, 2007).

#### **Impact of CRM on Business Performance**

The purpose of CRM tools in a company is to ensure more effective use of customer relations and to contribute to customer relationship management. Such systems firstly analyse the collected consumer, buyer data and then make decisions according to the strategy of various companies through this data. Thus, companies gain various advantages. Customer Relationship Management applications contribute directly to the effectiveness of a company. CRM tools provide various advantages at this point, and these can manifest themselves in many different areas. The areas mentioned are; while increasing customer satisfaction and loyalty, another point is to increase profitability and efficiency for the company. While providing an advantage in competition with others is another important issue, it also contributes to increasing operational efficiency. (Nguyen, Sherif, & Newby, 2007). These benefits of CRM increase the long-term success and sustainability of businesses. CRM systems optimise the customer experience by personalising customer interactions and improving customer service.

#### **Customer Satisfaction and Loyalty**

Customer Relationship Management tools should focus most on customer satisfaction. CRM applications, increasing customer satisfaction and tightening the bond with consumers enables a company to improve its business performance. (Elkordy, 2014). The data collected enables the behaviour of the customers and the services to be offered individually to the customers and the products to be offered individually according to the style of the customers. While this situation attracts the customers, a sense of belonging to the companies is formed. Customers who feel satisfied with themselves give positive feedback about the companies and this situation contributes to the companies to create and advertise their own customers and to gain new customers.

There is a relationship between these two. While the customer is satisfied, it also develops loyalty. CRM tools used effectively can further strengthen this bond. CRM tools analyse this

situation quickly and effectively, evaluate and offer suggestions. Through this cycle, customers become regulars and create a continuous cycle. Through the trust of the customer, the company tends to consume the company's products again and this contributes financially to the company. (Nguyen, Sherif, & Newby, 2007).

As long as the company and customer relationship established through CRM continues, the bond formed between buyers and the company also ensures satisfaction and loyalty. The contribution of CRM tools to this situation is that they can analyse and evaluate the problems that arise and find various solutions. this situation creates a feeling of security and satisfaction for buyers. Through the feedbacks, the data obtained are monitored and a result-oriented approach is provided. This situation is automated in the process and the mishaps experienced begin to be resolved. (HubSpot, 2021).

#### **Profitability and Efficiency**

Through the contributions of CRM tools, the ordinaryisation and automation of the determined jobs, as well as the more efficient management of the obtained consumer information, increases the operational efficiency of the company and reduces the costs such as documents, documents and administrative costs. (Krasnikov, Jayachandran, & Kumar, 2009) In this way, companies that determine their strategy turn their focus to marketing and use marketing tools more actively. marketing determines costs more efficiently than strategy and establishes closer relationships with customers. While this situation regulates costs, it also contributes positively to spending capacity and ensures higher conversion of customers.

By optimising sales processes, businesses can improve their capital and increase operational efficiency. This leads to faster and more effective sales and accelerates the interaction of sales staff with buyers. In other words, they spend less time with customers. In this way, performance and revenue increase. CRM tools contribute to the staff assigned in sales to grasp and master the needs of consumers faster.

Through all these considerations, the contribution of CRM tools to the revenues of companies and the development of service processes with consumers are intrinsically linked to the effectiveness of CRM tools in operations. While CRM tools are effective and competent in analysing the questions of customer service teams, this situation satisfies the consumer and reduces the weakness in the operation. Through CRM applications, companies effectively evaluate customer data and use such data efficiently for the future of the company. (Nguyen, Sherif, & Newby, 2007).

#### **Competitive Advantage**

In order to take a superior position than their competitors, companies examine the customer information obtained through the CRM tools they use, understand the needs of consumers and develop their target audiences and strategies accordingly. In this way, companies that can take a superior position than their competitors increase their market share and become more permanent, competitive and advantageous in the market (Buttle & Maklan, 2019).

At this point, CRM tools are a very vital application for companies to be competitive in the market, to ensure continuity and to be a pioneer. While customer relations become more analytical, it develops large-scale analyses. It is aimed to increase customer loyalty through these applications. While established relationships reduce customer losses, at the same time, managing interactions and using data more efficiently allows companies to move companies to a more competitive point in the market. (Nguyen, Sherif, & Newby, 2007).

This contribution that CRM has made on companies enables companies to be more competitive in the market, on the one hand, it enables them to improve their services and increase their product calibration with innovative ideas. In this way, new market share can be formed and they can increase their revenues with new products. New targets are developed through rapidly identified needs, services and demands of the market. These developments support businesses to catch the change in the market and act expeditiously. (Chatterjee, Chaudhuri, & Vrontis, 2022)

#### 3- Research Question

#### **Overall Familiarity and Use of CRM Tools**

The purpose of research questions is to form the basis of a study and to guide the direction of this basis are the most important points. this study aims to analyse the impact of AI-cloud-based CRM systems and automation tools on SMEs. and three main research questions were formulated.

- 1. How do AI-based CRM systems impact customer satisfaction, and what factors mediate these effects?
- 2. What are the cost implications and financial benefits of these technologies for SMEs?
- 3. How do these technologies affect the performance metrics (sales, customer engagement, etc.) of SMEs?

These questions aim to define the scope of the research and address existing knowledge gaps in the literature.

# Research Question 1: How do AI-based CRM systems impact customer satisfaction, and what factors mediate these effects?

The impact of AI-based cloud CRM systems on customer satisfaction has been increasing in recent years. With this feature, it has become an important research topic. AI-based cloud CRM software quickly analyses customer data, thereby personalising and increasing service delivery capacity (Gupta and Khan, 2024). These systems make customer needs more understandable and use big data analytics to optimise the customer experience.

Personalised data allows AI-based cloud CRM systems to make customer problems more personalised. At the same time, it provides higher customer satisfaction by enabling it to respond simultaneously. By analysing customer data with this system, it individualises services to meet personal needs. In this way, while increasing customer loyalty, it also ensures that the work is repeated and progresses quickly.

Another factor is customer complaints. Complaints can be quickly analysed in the same way and concluded efficiently with feedback. Businesses can quickly identify the problem with these applications, which can affect customer satisfaction. And as one of the most important points, it can reduce customer loss.

# Research Question 2: What are the cost implications and financial benefits of these technologies for SMEs?

Through such automation applications, SMEs can provide cost advantages and have a positive financial impact. Such technologies reduce operational costs and enable more strategic investments. (Gupta & Khan, 2024).

CRM marketing tools automate routine tasks and at the same time reduce the need for a manual workforce, thereby reducing operational costs and minimising human error. Among the benefits of CRM tools, we can also see financial benefits. Through customer segmentation, it allows the target audience to be reached more easily. In this way, it contributes to high conversion and sales rate. Return on investment is achieved through marketing campaigns.

# Research Question 3: How do these technologies affect the performance metrics of SMEs, such as sales and customer engagement?

Through AI-based cloud CRM systems, the metrics of small and medium-sized enterprises are affected. this effect; It contributes to the increase in business performance while increasing sales and customer loyalty positively. (Ledro et al., 2020).

With these systems, performance improvements can be made, tasks can be automated and employees can take on more strategic roles. Customer interactions increase through personalised interactions. This makes the customer feel special, which has a positive effect on sales. Through the analyses made, inventory and marketing strategy are arranged more effectively

#### Conclusion

This study aims to comprehensively examine the impact of cloud-based artificial intelligence and marketing automation on SMEs. The effects of AI-based CRM systems on customer satisfaction, costs, financial benefits, and performance metrics have been investigated. Each research question highlights the tangible benefits these technologies provide for SMEs and their potential to fill knowledge gaps in the literature.

In this study, it is aimed to examine the effect of artificial intelligence-based cloud CRM systems on small and medium-sized businesses. The effects of CRM systems on customer satisfaction, cost reduce, financial benefits and performance metrics investigated and the significant benefits to SMEs and filling the knowledge gaps in the literature. By understanding the impact of AI-based CRM systems on SMEs and investigating how these technologies can be used more effectively will help SMEs to increase their competitive advantage.

#### 4-Methodology Section

This section clearly explains the philosophy, framework, and design followed to gather data for the study. It includes a thorough discussion and justification of the specific methodology and tools. The chosen research instruments, such as online surveys, were excellent.

Appropriate referencing has been followed.

#### 4.1. Research Design

In this study, a quantitative research method was used to examine the issue of "The Role of Cloud-Based CRM Systems in Improving the Financial Management Capacities of SMEs by

Collecting, Analysing and Using Customer Data Effectively". Questionnaire technique was selected as the data collection tool. The questions created in Google form were shared with the respondents and the collected data were translated quantitatively. This research was chosen to examine how cloud-based CRM systems improve the financial management capacities of SMEs. Through CRM tools, data are nowadays collected and used in various ways in many fields. this research aims to investigate the benefits and advantages of SMEs in collecting, analysing and using customer data. Questions were asked to the participants in the form of determined sub-headings, the questions were shared with them via message and they were asked to evaluate them. Attention was paid to the fact that the participants had sales and marketing experience or were actively working in this field. Another important consideration was that the employees should reside in Dublin. The analysis of the incoming data sheds light on how based CRM systems can optimise these processes and increase the efficiency and profitability of businesses

#### **4. 2. Sample**

People living in Dublin were selected as the sample. The questions sent to 50 people were focussed on people with the experience of the research and aimed to make the study more qualitative. The purpose of this type of sampling in quantitative research

It is aimed to process the obtained resources in the most efficient way for the purpose (Field, 2013). In this way, more in-depth analyses can be made and it can be understood how often the data is used.

#### 4. 3. Data Collection Tool

Through the internet, which is one of the most widespread tools today, we can access everything easily. Thus, the preferred method for collecting data has been Google form. The questionnaire created on the platform was shared with the participants online and they were asked to answer 10 questions. The questionnaire, titled Customer Relationship Management (CRM) Usage, Its Impact on Financial Management and Future CRM Implementation Plans, was optional and allowed people to access and evaluate it easily. in this way, participants were able to respond without consuming much time, data could be collected online and cost savings were achieved. (Evans & Mathur, 2018).

#### 4.4. Data Collection Process

After deciding on the subject, structure and content of the thesis, questions were formulated in the most efficient and active way, so that data were collected on 5 June 2024 and until 10 June 2024. For the safety of the research, no pressure was applied to the individuals and data were collected on the basis of volunteerism. In this way, data were obtained in a safe and systematic way (Saunders, Lewis, & Thornhill, 2019)

Distributing the questionnaire online and leaving it for people to evaluate allowed for efficient data collection within a specific time frame. Respondents were given sufficient time to complete the questionnaire at a convenient time, resulting in more meaningful, higher response rates and more reliable data. Participants were informed in advance what they would be surveyed about and were assured that ethical considerations would be strictly adhered to throughout the process, including the protection of their anonymity. Participants were initially contacted via text message or phone call and given a detailed explanation of the objectives of the study, the voluntary nature of participation and a link to the online survey. In the following period, reminders were given to speed up responses

In addition, participants were contacted by telephone to obtain their consent and encourage them to participate in the survey. During these calls, it was explained that this study was part of a master's thesis research and that CRM research is becoming increasingly attractive. They were asked to respond with their natural knowledge, which helped to gain a clearer understanding of their level of expertise and awareness of CRM. Although some people were initially reluctant, they eventually supported the study.

One of the main difficulties encountered during the data collection process was that at first people did not fully understand the situation and the context. it was realised that some people did not have enough knowledge and experience, or even did not know the companies they worked for in CRM. this was reflected in the low response rate for return and data collection. After the necessary information was provided, the importance of working together with reminder messages to solve this problem was emphasised.

The collected data was analyzed using statistical software such as SPSS. Various analyses were conducted, including regression, log-linear, descriptive analyses, frequency analyses, and correlation analyses. To provide a clearer understanding, correlation matrices were included

#### 4.5. Ethical Considerations

One of the questions that may arise in any study is that individuals avoid sharing their information and revealing their identities. In such cases, individuals should be informed in detail and necessary permissions should be obtained. Particular attention was paid to this issue

and adherence to ethical rules was maintained throughout the research process. They were told that no changes would be made on any data in the survey results and they were asked to be evaluated within the scope of their own free will. This comfort provided to them contributes to the purpose of participation. Ethical issues are very important to protect the rights and privacy of participants in research. In this study, confidentiality was ensured by anonymizing the data and ensuring that individual responses could not be traced back to specific participants. The participants were given detailed information about the purpose of the study and their role in this study and informed consent was obtained. The identities of the participants were kept confidential and they were allowed to make a natural evaluation by entering the data, so that the data obtained were processed anonymously. In this way, the participants felt safe and were able to share their information. There were no ethical problems in the research, the participants were not forced, and they were informed about the necessary confidentiality and not sharing their identities. In this way, the participants were informed and helped before the survey. Participants were informed about the purpose of the research and their voluntary participation was ensured. Participants were informed about the purpose of the research and their voluntary participation was ensured.

After the research, positive feedback was received from the participants for protecting their identities and they were informed again. In this way, it was conveyed to them and mutually confirmed that they did not experience any ethical discomfort problems.

#### 4.6. Limitations of the Study

This section outlines the limitations of the research, such as sample size and geographical limitations. The sample consisted of 50 people living in Dublin with experience in CRM, sales or working in sales positions. The sample was selected using purposive sampling, which targets individuals with relevant experience of the research topic.

Whilst the sample size of 50 participants provides valuable insights, it is relatively small and limited to Dublin. This geographical limitation means that the findings may not be generalizable to other regions or contexts. Furthermore, the use of purposive sampling, while effective in targeting a particular specialism, may lead to some bias as it relies on the judgement of the researcher in the selection of participants.

#### 4.7. Methodological Approach

The methodology of this study aims to carefully analyse cloud-based CRM systems to investigate their role in improving the financial management capacities of SMEs. The

research provides data evaluation through a quantitative approach. The participants were prioritised to be aware of the subject and the research, and the selected individuals were prioritized to have knowledge, interest and experience in the subject and it was aimed to select participants suitable for the sample. It also targeted individuals with CRM experience and ensured the collection of meaningful data. The online survey, which was conducted through Google Forms, one of the most widely used data collection tools on the Internet, was effective. In this way, it facilitated cost-effective data collection, and the participants could easily access the data within the time frame they wanted. The data obtained were transferred to the statistical programme SPSS. Ethical considerations were strictly adhered to in order to maintain the integrity of the research. Despite some limitations, this study provides valuable insights into the benefits of cloud-based CRM systems for SMEs in Dublin. Future research could extend these findings by including larger and more diverse samples from different geographical regions.

Measuring epistemological knowledge is necessary to constructively analyses and interpret data, test hypotheses and discover what is not obvious (Dźwigoł & Barosz, 2020). Articles evaluating such measurements have a qualitative or quantitative approach, or in some cases use a mixed approach that includes both concepts. Evaluating data to form a conclusion based on numerical or statistical findings is part of quantitative research. Qualitative research, on the other hand, involves the measurement of views and opinions on a particular topic through questions and interviews. A mixed approach combines the application of both qualitative and quantitative methods. For the purpose of this study, the researcher chose a quantitative approach. A quantitative research aims to accurately represent a data set through a numerical expression (Dźwigoł & Barosz, 2020). Therefore, this type of research allowed the researcher to utilize the experiences and knowledge of people in Ireland who have sales and marketing experience or who work in this field and their experiences and knowledge, and to examine the data obtained in a limited time period and to draw statistical inferences about this data.

#### 4.8. Philosophical Framework

The perspective and positioning of a research study makes it meaningful if a philosophical perspective guides it. (Quinlan et al., 2019)

This contributes to the literature and a research methodology can be based on three epistemological frameworks: These are positivism, constructionism and interpretivism. Interpretivism is based on interactions and experiences and assumes a subjective reality. Constructivism is based on socially constructed realities, which are multiple in nature. Finally,

positivism has data about only one reality. In the light of these data, research evolves into a scientific basis, a philosophical structure and a point of continuity (Quinlan et al., 2019).

The researcher adopted the positivism framework to meet the objectives of this study. In this way, the data obtained is translated into material terms and the analysis process is made more tangible (Dźwigoł & Barosz, 2020). Thus, the positivist approach makes the study more reliable through quantitative data. Such an approach has made the impact of CRM interventions on SMEs more comprehensive and quantitatively calculable.

#### 4.9. Research Design

When researchers intervene in the natural flow of an experiment by controlling a particular variable to analyses the effects of the relationship between the dependent and independent variable according to the variables obtained, it is known to be an experimental research, examination, evaluation (Dźwigoł & Barosz, 2020). In this study, the researcher tends to carefully analyses the dependent variables through various methods of analyzing the responses and reach the most efficient analysis and the most beneficial result for SMEs. The researcher learnt the independent variable during the analysis whether the respondent was related to CRM tools before answering the questionnaire or whether they were related to a structure with tools that were not familiar with CRM.

#### 4.10. Research Objective

Important analyses such as literature reviews and scientific researches indicate that a study is conducted for explanatory, exploratory or descriptive purposes. (Dźwigoł & Barosz, 2020) In this research study, the researcher aims to create a comprehensive analysis of the topic at hand and as a result, the researcher aims to understand how CRM can have an impact on SMEs by making an evaluation on the answer to the questions given, improve their continuity in the current market conditions and provide benefits. Adopting a descriptive purpose, the author chose to use a questionnaire or questionnaire as the stated objectives could not be met by a case study approach. it also allowed for the effective dissemination and collection of data through the online environment on the internet.

#### 4. 11. Research Instrument

The research instrument is referred to as a tool used to collect measure and evaluate information data relevant to the research topic and objectives. The research instrument is ultimately linked to the methodology chosen to conduct the study. In this study, the participants were able to view and answer the survey questions through the Google Form

provided to them. The questionnaire was short and clear and easy to read as it was written in English. Everyone who participated said that the questionnaire was short and answered quickly, that the questions were understandable and that they realised many things anew. All items were rated using a seven-point Likert scale ranging from 1 to 5, where 5 means strongly agree and 1 means strongly disagree. The fact that the Likert scale is easy to read and easy to distribute is its biggest advantage, along with the fact that the data collected is already in numerical form (Malhotra, Birks, & Wills, 2012)

#### 4. 12 Survey Questions.

#### **Questions of Survey**

The questions are divided into 3 main headings, firstly to measure the knowledge of the respondents, then to benefit from their experiences and knowledge and in the last part to get their opinions.

#### **General Knowledge**

Explanation: We ask these questions to understand the overall familiarity and use of CRM tools in the workplace, delving into how they intertwine with daily operations.

- 1- Does your workplace use CRM tools?
  - Yes No
- 2- How much do you know about CRM tools?

No Knowledge - A Little Knowledge - Moderate Knowledge - Good Knowledge-Very Good Knowledge

#### For Those Who Use CRM Tools

Explanation: We ask these questions to see how CRM tools impact their daily work, orchestrating improvements in customer interactions and company performance.

- 3- Do these tools reduce your daily workload, allowing you to transcend routine tasks?
- Not at All A Little Moderately A Lot Very Much
- 4- Do these tools help you do your daily tasks faster, creating a captivating workflow?

Not at All - A Little - Moderately - A Lot - Very Much

5 - Do these tools reduce costs at your workplace, intertwining efficiency with financial benefit?

6- Do these tools improve customer service, orchestrating a better customer experience?

7- Do these tools increase customer satisfaction and enhance customer loyalty?

8- Do these tools help increase your company's sales and create new opportunities for success?

#### For Those Who Do Not Use CRM Tools

Explanation: We ask these questions to understand their opinions about CRM tools and whether they see potential benefits in using them, embarking on a journey through a labyrinth of possibilities.

- 9- Do you think your workplace should use CRM tools to improve operations?
- -Definitely Not -Probably Not Maybe -Probably Yes Definitely Yes
- 10- Do you think these tools would make your job easier and improve efficiency?
  - Not at All A Little Moderately A Lot Very Much

#### 5. Analyses and Findings

In today's world, there are more than one SME in many sectors in many areas. And people's expectations now prefer to go to places that serve them more. On the other hand, companies also focus on increasing the efficiency of their sales and operational services. CRM marketing paves the way for companies at this point in today's more competitive world. Small and medium-sized enterprises will be able to get more effective and efficient results by moving their products to customers' personal spaces with simple studies. At this point, our analysis

becomes more meaningful. The aim of this study is to understand how much a cloud-based

CRM programme benefits companies, its impact on customers and increases in sales by

collecting various data.

The most semantically and proportionally effective variables, which are selected to be

appropriate for the 3 research questions, were selected for the research and the research was

enriched with various different analyses. In this way, the variety of analyses was increased

and tested with different variables.

**Variables Definition** 

Q2: "How much do you know about CRM tools?"

**Description:** This question was asked as a general-purpose question to understand the

respondents' knowledge of CRM tools, how much they are exposed to CRM tools, and how

familiar they are with CRM tools.

Scale: 1 (Not at all) to 5 (Very much)

Q3: "Do these tools reduce your daily work load?"

**Description:** In this question, the participants were asked to describe the contribution of such

automation tools to their daily workload in their daily work life and how automation tools

affect their time at work.

Scale: 1 (Not at all) - 5 (Very much)

- Q4: "Do these tools help you complete your daily tasks faster?"

**Definition:** In this question, the participants were asked to understand the time they consume

in routine tasks that is why to automation tools in their daily work, to understand that

automation tools save them time.

Scale: 1 (Not at all) - 5 (Very much)

- Q5: "Do these tools reduce costs in your workplace?"

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**Description:** In this question, the participants were asked to find out whether the automization tools in their workplaces make a financial contribution to their workplaces.

Scale: 1 (Not at all) - 5 (Very much)

- Q6: "Do these tools improve customer service?

**Definition:** This question was asked from a customer service perspective and asked to evaluate the contribution of automation tools to customer service.

Scale: 1 (Not at all) - 5 (Very much)

- Q7: "Do these tools increase customer satisfaction and improve customer loyalty?"

**Definition:** Asked to obtain information about the contribution of automated tools to customer service and customer satisfaction

Scale: 1 (Not at all) - 5 (Very much)

- Q8: "Do these tools help increase your company's sales and create new opportunities for success?"

**Description**: It was asked to find out whether automation tools have an impact on sales in the workplace and whether automation tools contribute financially to the company.

Scale: 1 (Not at all) - 5 (Very much)

#### **Analysis Methods**

This study employs various statistical analysis methods to evaluate the impact of cloud-based AI and marketing automation tools on the defined variables. The data obtained from the survey results were uploaded to the IBM SPSS system and it was aimed to deepen the research with various analyzes. In this context, the data was consolidated and more detailed results were aimed to be obtained. The following methods are utilized: Log - Linear, Regression, Descriptive Anayleses Correlation Analyses and Frequency Analyses.

The above-mentioned examinations will be carried out in the researches. Some studies will be supported by correlation matrix. In this context, the correlation matrix will generally be utilized as follows.

#### 5. 1 Log-linear Analysis

Log linear analysis and correlation matrix are used in this study. The selected samples are indicated in the analyses and various variables are briefly analyzed.

Log-linear analysis is a statistical method to help estimate interrelationships among three or more variables that are all categorical in language. Suppose you have a table that describes how often, different pairs of classes/varieties occur. This method performs the natural logarithm of these frequencies to reveal certain patterning and relationships.

This makes log-linear analysis unique, as it does not cluster variables into causes and effects like older methods of this type. It allows us to visualize how these variables interact without placing them on any hierarchy. It is a very good tool for this kind of research because the type of data used in these cases are usually complex, that is way more than one Factor also play its part, as to how much customer satisfaction was important when compared with Customer Loyalty and Sales Figures (Kumar & Petersen 2012)

Correlation matrix is a table showing correlation coefficients between variables. Each cell in the table shows the correlation between two variables, helping to identify the strength and direction of their relationship. (Field, 2013)

Therefore, in order to deepen our research, log linear analysis of the analysis questions Q7 and Q8 and Q3, Q4 will be performed. After the analysis

#### 5.1.1. Q7 and Q8 variables of Log-Linear Analyses:

Q7: "Do these tools increase customer satisfaction and enhance customer loyalty?"

Q8: "Do these tools help increase your company's sales and create new opportunities for success?"

#### **Cell Counts and Residuals:**

The table below shows the observed frequencies and residuals for the interaction between Q7 and Q8

Q7 \ Q8	Very Much	Not at All	Moderately	A Lot	A Little
Very Much	2.5 (5.0%)	0.5 (1.0%)	0.5 (1.0%)	3.5 (7.0%)	1.5 (3.0%)
Not at All	5.5 (11.0%)	0.5 (1.0%)	1.5 (3.0%)	0.5 (1.0%)	0.5 (1.0%)
Moderately	1.5 (3.0%)	2.5 (5.0%)	11.5 (23.0%)	6.5 (13.0%)	2.5 (5.0%)

A Lot	1.5 (3.0%)	0.5 (1.0%)	1.5 (3.0%)	7.5 (15.0%)	0.5 (1.0%)
A Little	0.5 (1.0%)	0.5 (1.0%)	3.5 (7.0%)	0.5 (1.0%)	4.5 (9.0%)

#### 5.1.2 Correlation Analysis

The result of the correlation matrix shows that the Pearson correlation coefficient is r=0.42. This value shows that there is a positive relationship between customer satisfaction and sales. In other words, as customer satisfaction increases, sales tend to increase. In addition, P-value tells us the probability that the data were randomly selected from the data set. P-value (usually less than 0.05) means that the results are significant, meaning that there is that something real is happening (Field, 2013) this result tells us that this value is less than 0.001, which means that the relationships are strong and significant.



#### **Evaluation of Q7-Q8 Analyses**

The result obtained through the log linear analysis method applied on the data obtained from the survey results shows that there is a relationship between these two variables. There is a suggestion that higher customer satisfaction and increased loyalty leads to better sales performance and more opportunities. it can be seen that the probability of sales and sales

opportunities tends to increase, especially when customer satisfaction is high. The interpretation that can be drawn from these survey questions is that it makes sense for SMEs to focus on customer satisfaction in order to increase sales and create new opportunities within the business.

#### 5.1.3 Variables Used:

*Q3:* Do these tools reduce your daily workload?

Q4: Do these tools help you complete your daily tasks faster?

In this study, data were collected through a survey aimed at examining the effects of cloud-based AI and marketing automation tools on operational efficiency and cost reduction in SMEs. The analysis included the variables Q3 and Q4.

Respondents were asked to rate the extent to which CRM-based AI and marketing tools reduce their daily workload.

This variable assesses the impact of these tools on workload reduction. In this way, participants were asked to rate whether the tools helped them complete their daily tasks faster. The aim was to assess the fast change in task completion.

#### **Method of Analysis:**

The collected data were analyzed using log-linear analysis method with SPSS software. Interactions between Q3 and Q4 variables were analyzed. The fit of the model to the data was evaluated. The results of the analysis provided an assessment of the ability of these tools to reduce daily workload and increase task efficiency.

#### **Contingency Table**

The table below shows the observed frequencies for the interaction between Q3 and Q4. Cross-tabulation of Q3 and Q4 with Percentages

Q3 \ Q4	Very Much	Not at All	Moderately	A Lot	A Little
Very Much	4 (22.22%)	1 (5.56%)	1 (5.56%)	1 (5.56%)	1 (5.56%)
Not at All	1 (5.56%)	6 (33.33%)	1 (5.56%)	1 (5.56%)	2 (11.11%)
Moderately	0 (0%)	0 (0%)	7 (38.89%)	4 (22.22%)	2 (11.11%)

A Lot	1 (5.56%)	1 (5.56%)	3 (16.67%)	6 (33.33%)	0 (0%)
A Little	0 (0%)	1 (5.56%)	3 (16.67%)	1 (5.56%)	9 (50%)

#### **Key Findings**

#### 1. Interaction between Q3 and Q4:

The results of the log linear analysis show that there is a significant interaction between reducing daily workload (Q3) and faster completion of daily tasks (Q4) " ( $\chi^2 = 93.159$ , df = 24, p < 0.001)", indicating that these variables are not independent and there is a strong interaction between them.

In addition, chi-square and df are statistical concepts. Chi-square is a statistical method that tells us whether there is a relationship between two values (Field, 2013)-. Degrees of Freedom refers to the independent variables or categories in a test. The df value indicates the number of independent data in the data set. (McHugh, 2013)

#### 2. Operational Efficiency:

Another data presents that Tools significantly help improve operational efficiency. Respondents highly agree that tools are effective in reducing the daily workload and increasing the speed of task completion.

#### 3. Increased Sales:

The tools also provide financial benefits by significantly helping to increase company sales. Another point is company sales. With this assessment, it seems that they will contribute significantly to company sales. Many participants emphasized the sales-enhancing aspects of

these tools, confirming their dual role in increasing operational efficiency and sales.





#### **5.1.4 Correlation Matrix**

Pearson correlation coefficient is r=042. I.e. as customer satisfaction increases, sales tend to increase. Furthermore, the correlation matrix shows that there is a moderate positive correlation between customer satisfaction (Q7) and sales growth (Q8)

#### **Analysis Results**

These findings suggest that by analyzing on tools that boost operational efficiency and customer satisfaction, SMEs can generally achieve higher sales and generate new opportunities. These data show us the strategic importance of investing in CRM and automation tools.

#### **5.2 Regression Analysis:**

Regression analysis briefly examines the interaction of one variable with multiple other variables. it explains the results, connections and relationships. (Field, 2013).

#### 5.2.1 Regression Analysis Summary: Q3 and Q2

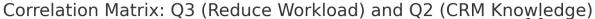
Q3: Do these tools reduce your daily workload and Q2: How satisfied are you with the overall performance of these tools?

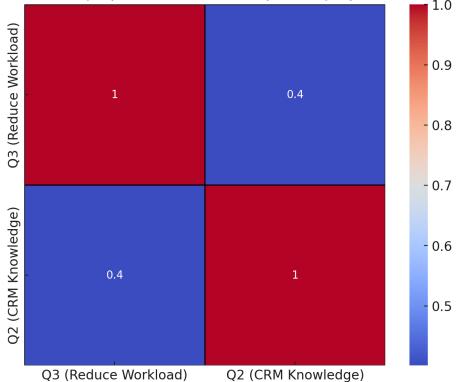
The high R-square value shows that about 58 % of the variation in overall satisfaction (Q2) can explain the reduced daily workload (Q3). The model is statistically meaningful (p < 0.001).

Coefficients: Q3 (Workload Reduction): 0.75 (p < 0.001)

The positive coefficient for Q3 means that as the reduced daily workload increases, the overall satisfaction with the tools also increases.

#### **5.2.2 Correlation Matrix**





Q3 and Q2: The correlation coefficient of 0.76 indicates a strong positive relationship between reducing daily workload and overall satisfaction with the tools.

#### **Key Findings**

1. Impact on Satisfaction: The regression analysis shows that reducing daily workload (Q3) significantly increases overall satisfaction (Q2).

2. Strong Relationship: The correlation matrix reveals a strong positive relationship between Q3 and Q2.

#### **Interpretation**

As a result of this analysis, CRM tools and could based AI seem to have a strong link. Regression and correlation analyses indicate that it increases overall satisfaction by reducing workload. It is shown to increase operational efficiency and user satisfaction on behalf of SMEs.

#### 5.2.3 Regression Analysis: Q7, Q3, and Q6

Variables Used: Q7: Customer satisfaction and loyalty, Q3: Do these tools reduce your daily workload?, Q6: Do these tools improve your customer service quality?

Analyses: Regression analyses were conducted to make the interaction between Q3 (workload reduction) and Q6 (customer service quality) through the answers of these questions more meaningful with different analysis methods. Q7 (customer satisfaction and loyalty). High R-square value. Approximately 65 per cent of the variation in overall customer satisfaction and loyalty (Q7)R-square: 65%: this explains overall customer satisfaction and value for money. It explains reduced daily workload (Q3) and customer service quality (Q6). The model is statistically significant. The model is statistically significant (p < 0.001).

#### Result

Q3 (Workload Reduction): 0.45 (p < 0.001)

*Q6* (Customer Service Quality): 0.55 (p < 0.001)

When the data obtained as a result of the evaluation is analyzed, it shows that each coefficient is positively effective. The importance of this situation can be interpreted as follows. By reducing the daily workload, it is possible to improve customer quality services. It is concluded that there is a connection between both variables. It is understood that the ratio of increasing customer satisfaction and reducing workload is in the same direction.

5.2.4 Correlation Matrix Analysis: Q7, Q3, and Q6

Q7: Customer satisfaction and loyalty

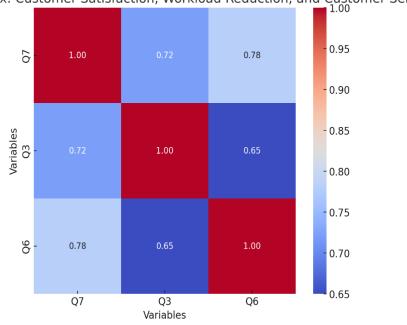
Q3: Do these tools reduce your daily workload?

Q6: Do these tools improve your customer service quality?

#### **Correlation Matrix Data Rates**

Questions	Q7	Q3	Q6
Q7	1.00	0.72	0.78
Q3	0.72	1.00	0.65
Q6	0.78	0.65	1.00

Correlation Matrix: Customer Satisfaction, Workload Reduction, and Customer Service



Variables	Correlation Rate	Relationship	Result
Q7 & Q3	0.72	Positive	Strong
Q7 & Q6	0.78	Positive	Strong
Q3 &Q6	0.65	Positive	Strong

## **Key Findings**

1. Influence on Customer Satisfaction: Regression analysis shows that reducing daily workload (Q3) and improving customer service quality (Q6) significantly increase customer satisfaction and loyalty (Q7).

2. Strong Connections: The correlation matrix shows that there are strong positive relationships between Q7 and both Q3 and Q6. There is also a moderate to strong relationship between Q3 and Q6.

#### **Interpretation:**

When we examine the results obtained by evaluating the above-mentioned analyses, it is seen that cloud-based CRM tools reduce the usual, compulsory, daily workload in an enterprise, reduce the energy consumed by employees in routine work, and positively affect customer service quality with a situation where they can feel more efficient. As a result of this evaluation, we can conclude that CRM tools generally reduce the workload in daily operations for SMEs, in jobs that need to be managed compulsorily, and thus employees can focus more on customers and as a result, the customer is more satisfied.

#### 5.3. 1 Description of Correlation Analysis Q3 and Q6

**Definition of Descriptive Analysis:** Descriptive analysis is used to summarize and describe the main features of a dataset. It involves measures such as mean and standard deviation to provide insights into the data's central tendency and variability (Field, 2013).

#### Variables:

- Q3: "Do these tools reduce your daily work load?"
- **Q6:** "Do these tools improve customer service?"

#### 1. Effect on Reducing Daily Workload (Q3)

Questions	Means	Deviation	Result	Variability
Q3 -Q&	3.24	1.318	Positive	Moderate

#### 2. Impact on Improving Customer Service (Q6)

Questions	Means	Deviation	Result	Variability
Q3 -Q6	3.36	1.191	Positive	Moderate

#### 5.3.2 Correlation Analysis (Q3 and Q6)

Questions	P- Value	r	Result	Correlation
Q3 -Q6	<0.001.	58	Positive	Strong

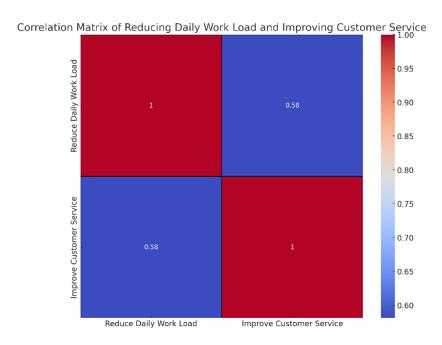
That result indicate to us that the relationship is secure and not due to random chance.

#### **Evaluation**

The correlation analysis shows that the participants stated that these tools can reduce the daily workload and improve customer service. While operational efficiency increases and that is why these tools, employees can deal more with customers and deal more with customers, and this leads to increased customer satisfaction.

#### **Correlation Matrix Interpretation**

Q3 and Q6 (r = 0.58): They show a strong positive connection between reducing the daily workload and improving customer service.



#### 5.3.3 Descriptive Statistics and Correlation Matrix Analysis Q5 & Q8

#### **Descriptive Statistics**

N	Minimum	Maximum	Mean	Std. Deviation
50	1	5	3.44	1.163

50	1	5	2.46	1.541

#### Variables:

Q5: Do these tools reduce costs at your workplace?

Q8: Do these tools help increase your company's sales and create new opportunities for success?

1. "Do these tools reduce costs at your workplace?"

Questions	Means	Deviation	Result	Variability
Q5-Q8	3.44	1.163	A Lot	Moderate

2. Do these tools help increase your company's sales and create new opportunities for success?"

Questions	Means	Deviation	Result	Variability
Q5-Q8	2.46	1.541	A Little	High

## 5.3.4. Correlation Matrix Analysis



#### **Interpretation**

Questions	r	Result
Q5-Q8	38	Positive

In this way, companies can reduce their costs and make more strategic investments because of these reduced costs. In this way, investments in the product range will affect sales and create new opportunities for themselves.

#### **Evaluation**

1. Impact on Cost Reduction: As indicated in the assessment, the impact of CRM tools on the reduction of operational costs for companies seems to be positive at a moderate to significant level. In other words, the obtained figures, scores indicate that the impact of CRM tools on the reduction of operational costs of the day-to-day business of the company is in favor of the companies.

Questions	Mens	Deviation	Result	Variability

Q5-Q8	3.44	1.163,	A Lot	Moderate

**2. Impact on Increasing Sales:** Because of the values, it is understood that the effect of CRM tools on increasing sales and creating new opportunities is very little positive.

Questions	Mens	Deviation	Result	Variability
Q5-Q8	2.46	1.541	Positive	High

#### 3. Correlation between Cost Reduction and Sales Increase: Correlation coefficient: 0.38.

This means that there is a moderate positive relationship between cost reduction and sales increase. It also seems that tools that are effective in reducing costs can also contribute to improving sales performance.

#### **General Consideration**

The analyses show that CRM tools have an average value of 3.44, indicating a moderate and positive impact on reducing operational costs. Another one is the contribution of CRM tools in increasing sales, with an average value of 2.46, indicating a less positive impact. at this point, it can be observed that CRM tools are effective in reducing costs and increasing productivity. The findings show that firms using CRM tools are likely to maximize the cost efficiency of their companies, while at the same time growing their sales in a positive way.

#### 5.4. Frequency Analyses Q7 & Q8

A different type of analysis is frequency analyses. These analyses are a type of statistical analysis that counts how many times a value is expressed in a data cluster. It helps to break down the data. It makes it easier to understand the prevalence of categories. (Toulemon, 2009).

#### Variables

Q7: "Do these tools increase customer satisfaction and enhance customer loyalty?"

Q8: "Do these tools help increase your company's sales and create new opportunities for success?

## **Q7** Frequency Distribution

Response	Frequency	Percent
Very Much	4	8.0%
A Lot	16	32.0%
Moderately	16	32.0%
A Little	7	14.0%
Not at All	7	14.0%
Total	50	100.0%

## **Q8** Frequency Distribution

Response	Frequency	Percent
Very Much	6	12.0%
A Lot	9	18.0%
Moderately	22	44.0%
A Little	7	14.0%
Not at All	6	12.0%
Total	50	100.0%

#### **General Evaluation**

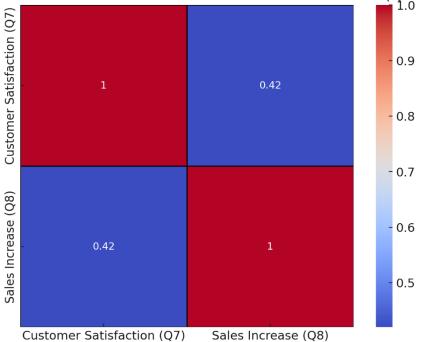
Customer Satisfaction (Q7): Tools have a moderate positive impact on customer satisfaction and loyalty.

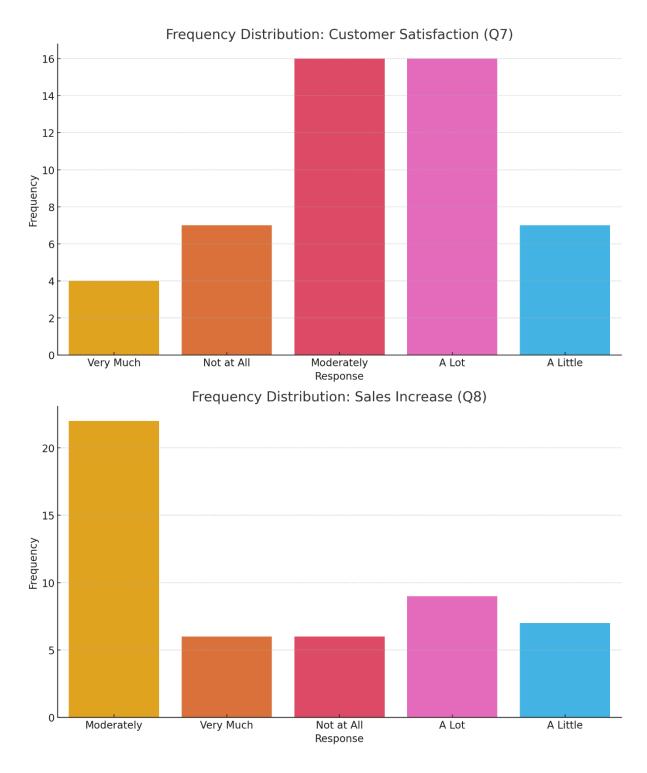
Sales Increase (Q8): There is a narrow less positive effect that the CRM tools contribute to the company's sales, increase them and create new opportunities.

### **Correlation Matrix**

Questions	Customer Satisfaction (Q7)	Sales Increase (Q8
Customer Satisfaction (Q7)	1.000	0.42
Sales Increase (Q8)	0.42	1.000







#### **Evaluation**

Q7 and Q8 (r = 0.42): The findings of the study appear to be moderate. Increased customer satisfaction, showing more interest and even if loyalty increases at the same rate, it seems that sales increase at the same rate. On top of this, companies can evaluate new opportunities and this situation can be considered to be related to the promotion of new opportunities.

#### **Key Findings**

#### **5.4.1. Frequency Analysis:**

Q7:64% of the respondents answered very or somewhat. The evaluation shows that there is a positive impact on customer satisfaction.

Q8: 44% of respondents indicated a Moderate impact on sales growth, while Q7 and Q8 (r = 0.42): Moderate positive correlation, indicating that tools which increase customer satisfaction and loyalty are associated with an increase in sales and the creation of new opportunities.

#### **5.4.2.** Correlation between Customer Satisfaction and Sales Growth:

The correlation coefficient of 0.42 indicates that there is a moderate positive relationship between customer satisfaction and sales growth, suggesting that tools that are effective in increasing customer satisfaction may also contribute to increased sales performance.

The coefficient obtained in the analysis is 0.42. It shows that the relationship between customer satisfaction and sales growth is moderately positive. Furthermore, these data suggest that tools that are effective in increasing customer satisfaction may also have an impact on sales performance.

#### **Summary**

- Customer Satisfaction (Q7): Moderate positive impact.
- Sales Increase (Q8): Less positive impact.
- Variability: Responses show moderate to high variability, especially for question 8.

#### Conclusion

The results of the frequency analysis emphasize that CRM tools have a positive impact on customer satisfaction and loyalty. However, the impact on sales growth and seizing new opportunities is more varied. In the correlation matrix, the relationship between customer satisfaction and sales increase is moderate positive. This indicates that increasing customer satisfaction will lead to better sales.

#### 6- Discussion:

CRM systems play an important role for SMEs by managing customer service, using interactions more effectively, personalizing services and even providing immediate feedback and evaluation of customer problems. In this way, while centralizing customer data, it also

allows employees to access customer backgrounds and choices. in this way, employees can provide more personalized and productive service to their customers

According to Amoako et al. (2012), they support that companies can improve the quality and efficiency of customer service through CRM systems. They reported that CRM applications address customer problems more comprehensively and thus, they find customer satisfaction and loyalty because of organizing communication channels with customers and personalizing customers' experiences. In this way, SMEs gain a great strategic advantage by both retaining their customers and encouraging repeat business.

Nashwan and Hassan (2017) revealed that a streamlined customer service through the effective use of CRM tools leads to high customer satisfaction and loyalty. Customer loyalty, which is one of the most important points for sustainable business growth, is the main driving force of the company. in this context, SMEs can increase customer retention rates and reduce customer churn through strong communication with customers.

From another perspective, using CRM tools to provide a more focused and interactive service is a key to improving customer service (Wani, 2023), so that enterprises can help customers to identify and meet their needs more effectively. This makes customers feel valued and appreciated and leads to high levels of satisfaction and loyalty.

## 6.1. How do AI-based CRM systems impact customer satisfaction, and what factors mediate these effects?

This question was evaluated under two headings by trying different combinations with various analyses. The findings are discussed in depth as a result the analyses.

#### **6.1.1 Operational Efficiency**

Research Question: How do AI-based CRM systems impact customer satisfaction, and what factors mediate these effects?

#### **Analyses Conducted:**

#### **Descriptive Analysis:**

Q3: Do these tools reduce your daily workload?

Q4: Do these tools help you complete your daily tasks faster?

#### Correlation Analysis:

Q3: Do these tools reduce your daily workload?

Q6: Do these tools improve customer service?

Regression Analysis:

Q7: Customer satisfaction and loyalty

Q3: Do these tools reduce your daily workload?

Q6: Do these tools improve customer service quality?

The aim of this discussion is to assess how the use of CRM tools affects the operational efficiency of SMEs by reducing workload and shortening business processes. Through selected relevant descriptive, correlation and regression analyses, we investigate the significant impact of CRM tools on improving customer service and overall business performance.

As a result, this analysis, the effectiveness of CRM tools in any business addresses the situation of increasing operational efficiency. By reducing the daily workload of a business, increasing business efficiency can be achieved by directing employees to more specific, strategic tasks. By organizing routine tasks in workplaces, interaction between departments can be strengthened. For example, by improving sales automation and customer service processes, employees can work more efficiently and increase customer satisfaction

CRM systems play an important role in helping companies strategically identify customers. Segmentation helps them analyze and model customer behavior. This is related to the analytical aspects of CRM tools. In this way, through personalization and customization, the quality of service to customers is improved and the ability to serve them is enhanced (Xu & Walton, 2005).

CRM tools also increase operational efficiency. Therefore, they help to reduce the daily workload and speed up business processes. These tools help to manage day-to-day tasks with ease, while at the same time speeding up the connection between departments. In this way, companies achieve a more effective management style and become more open to the needs of customers. With the integration of CRM into the company's system, it contributes to achieving the strategic goals that companies aim for.

CRM contributes to understanding customer behavior and customer preferences and plays an important role in increasing the efficiency of businesses. Thus, it is important for companies

to develop personalized marketing strategies and improve customer service, which are critical aspects of operational efficiency (Xu & Walton, 2005). By automating repetitive, time-consuming tasks, CRM tools free up valuable time for employees to engage in more meaningful and productive work, while at the same time enabling them to engage in productive work, thereby increasing the overall performance of the company and employees.

From another point of view, CRM systems contribute to the efficient execution of the company's resources. When integrated with business management tools, they enable more comprehensive management of customer information and business processes. This allows data to be transmitted between departments in a fast and convenient way. This increases the accuracy of the data. (Davis, Bottorff, & Watts, 2024). Such situations facilitate operations and increase efficiency. This is of course essential for companies. Advanced, modern CRM tools provide a centralized integrity when integrated with the company's systems. This integration increases the company's corporate performance, operational efficiency and achieves results that are more positive.

As a follow up to some studies, it has been determined that CRM tools have a positive impact on operational efficiency and that businesses using CRM tools have a significant impact on productivity and customer satisfaction according to feedback from businesses. (Coffman, 2024) It is seen that CRM provides real-time data in processes that play an important role for companies such as decision-making, analyzing and applying data, and making customer relations more effective are strategically needed and contributed by companies.

As a result, it is understood that CRM is effective in reducing the workload of the diary with its impact on operational efficiency and contributes to the acceleration of business processes. Because of these tools, routine tasks are managed more actively, while at the same time increasing the fluidity between departments. In this way, it contributes to the company's achievement of its goals in the market while being more foundation for customer needs

## 6.1.2. The Strong Impact of Reducing Workload and Improving Customer Service on Customer Satisfaction

Customer Satisfaction (Q7): Moderate positive impact.

Sales Increase (Q8): Less positive impact.

Variability: Responses show moderate to high variability, especially in Q8.

Finding: Analyses indicate that CRM tools significantly reduce daily workload and improve customer service, directly enhancing customer satisfaction (Descriptive Analysis: Q3 and Q6).

#### **Discussion**:

The evaluation showed that CRM tools facilitate operations and improve customer interactions, resulting in higher than normal customer satisfaction. Automating routine, mundane, ordinary, usual tasks, to-dos and concentrating employees on value-adding tasks, thus operating in a way that adds value to the customer, allows the company to focus on strategic activities. Improving processes in this way is instrumental in increasing operational efficiency, but also helps to satisfy customers by providing more personalised service.

Through this collected customer data, CRM systems enable analyses to be made because of the information obtained. Because ofthese analyses, strategies appropriate to the experiences of customers can be followed. Moreover, in this way; targets and strategies that increase customer satisfaction and ensure continuity are developed. Because of the personalised marketing campaigns, products and timely and effective customer support developed through CRM data, customers' loyalty is gained and their satisfaction and satisfaction bonds increase. By promoting a strong customer experience, companies that benefit from the advantages of CRM are more likely to get higher results, performances and returns in customer relations (Lin, Chen, & Chiu, 2010)

The effective use of CRM tools increases coordination and cooperation between departments by collecting and analysing many data. Therefore, it leads to a better quality customer experience when customer problems are resolved quickly and operations are more efficient due to quick turnaround to customers, pinpoint information, services are provided. Due to the effective use of CRM systems, fast and effective action, delayed and inconsistent service quality is avoided from the traps created by a low customer management and such mistakes are not made (Speier & Venkatesh, 2002)

#### **Evulation**

1. Reduction in Daily Workload: CRM tools automate routine tasks, enabling employees to engage in more meaningful activities from their workplace. Descriptive statistics show a high average score (Q3) for workload reduction, indicating a significant positive impact.

2. Improvement in Customer Service:vEnhanced customer service processes, as reflected in the positive feedback on CRM's role in improving service quality (Q6), lead to higher customer satisfaction and loyalty.

# 6.2. What are the cost implications and financial benefits for SMEs implementing CRM technologies?

This question was evaluated under two headings by trying different combinations with various analyses. The findings are discussed in depth because of the analyses.

#### **6.2.1 Reducing Costs with CRM Tools:**

#### **Descriptive Analyses:**

Variables:

Q5: "Do CRM tools help reduce costs at your workplace?"

Q8: "Do CRM tools help increase your company's sales and create new opportunities for success?"

#### Discussion

In the context of small and medium-sized enterprises (SMEs), the implementation of Customer Relationship Management (CRM) tools is a pivotal strategy for reducing costs and enhancing financial efficiency. The analyses conducted in this study reveal substantial evidence supporting the cost-saving benefits of CRM systems.

Firstly, this study aims to examine the cost reduction and financial efficiency of SMEs (small medium size enterprises) with CRM tools because of the analyses made in this study. In this respect, it is important in terms of providing cost savings.

As far as the survey data are concerned, the impact of CRM tools on reducing costs in the workplace was found to be moderate. On average, the impact on cost reduction was found to be 3.44 points (on a scale of 1 to 5) by descriptive analysis. This data is above average and has a positive meaning. When analyzed in conjunction with other analyses, the evaluation for increasing sales and creating new opportunities is 2.46, which indicates a less significant impact.

As one of the features of CRM, we can consider it as automating tasks. When we look at it from this point of view; we can evaluate that it can contribute to reducing costs. Using resources efficiently, allocating them as needed, minimizing human error and increasing operational efficiency point to us to reduce costs. (Soltani et al., 2018)

When CRM tools are used effectively, they offer positive effects for companies such as customer retention and new customer acquisition. In this respect, CRM tools prevent unnecessary expenditures. In this way, costs such as large marketing campaigns can be avoided. In this way, a more effective marketing activity can be carried out. (Nashwan & Hassan 2017)

Another consideration that can be addressed from a cost reduction point of view is that by optimizing business processes and increasing customer interactions, operational costs can be reduced. In this respect, costs can be saved by using data analytics, identifying inefficiencies and eliminating mishaps (Abdul-Muhmin, 2012).

According to a study by Swell System (2023), companies using CRM software have reported a decrease in administrative costs and a positive increase in financial performance. The use of automation in administrative tasks, reduction of time spent on manual data entry and correction, and improvement of customer data were pointed out.

One of the other features of CRMs are that they can make quick decisions for businesses in an informed way. They can act according to the changing market and react quickly to customer needs. in this context, they can contribute efficiently and more positively to companies. In this way, companies can create their own strategies and trends and remain competitive in the market. (Day, 2000)

Another evaluation of CRM tools in enhancing company productivity is that they improve customer service, resulting in higher customer satisfaction. This creates loyal customers and makes the service more efficient. At the same time, this reduces workload and allows employees to focus on customer service. Customer needs are met quickly. As a result, service quality improves and customer loyalty and satisfaction are achieved (Speier & Venkatesh, 2002).

As a result, the use of CRM tools by SMEs leads to significant cost savings, helps to reduce routine tasks, improves data management and contributes to goal achievement. Because of

CRM technologies, SMEs can achieve strategic goals, implement cost effective practices and contribute to business growth targets.

#### **6.2.2 Sales Impact:**

There are many different analyses. We run a lot of variations. The analyses performed were Customer satisfaction(Q7) and loyalty and Increasing customer satisfaction(Q8) with Log - Linear Analysis. As a descriptive analysis, Reducing operational costs(Q5:) and Increasing customer satisfaction (Q8) were analysed. In order to deepen the study a little more, an additional Frequency Analysis was performed, which analysed Customer satisfaction (Q7) and loyalty and - Increasing customer satisfaction(Q8).

#### **Discussion**

#### **Impact on Sales Performance:**

The aim of this discussion is to analyses the impact of using various CRM tools on the sales performance of SMEs. How these technology tools improve sales and customer satisfaction is examined through descriptive, log-linear and frequency analyses collected from a variety of data.

#### **Sales Growth and CRM Tools:**

With CRM tools, companies can provide detailed customer insights and at the same time implement a targeted marketing campaign. This affects the sales performance of companies. Such tools and systems contribute to businesses to identify target customers and create sales strategies. Thus, high conversion rate and sales increase. In the research conducted on companies implementing CRM systems, it was found that there was an improvement in sales revenues and customer retention. As the contribution of CRM tools to the companies, we can see that they can streamline sales processes and respond quickly to customer needs and increase performance (Haislip and Richardson, 2015).

In a CRM symposium, it was determined that the instant access of CRM systems to customer data simplifies the effective sales method. It shows that sales teams contribute to the rapid capture of new sales opportunities and achieve high sales targets (Haislip and Richardson, 2015).

Because of the customer data set created with the information obtained, CRM tools provide a comprehensive analysis and framework. In this way, sales growth is observed. It becomes easier for businesses to implement and activate personalized marketing methods. This in turn affects a successful sales strategy and customer loyalty.

The ICEB Conference (2004) discussed the role of CRM systems in automating sales processes. Automation reduces the administrative burden on sales teams, allowing them to focus more on engaging customers and closing deals. This streamlined process not only increases sales productivity but also improves the overall effectiveness of sales strategies (Tao, 2004).

Another conference, the ICEB Conference (2004), evaluated the impact of automation on the sales process and observed that the pressure on sales staff is reduced. In addition, staff are able to interact more with customers and close deals favorably. CRM tools not only facilitate the sales process but also have a direct impact on sales strategies (Tao, 2004)

#### **Conclusion:**

By using CRM tools, companies can obtain detailed customer information. In this way, they can make targeted marketing with the data they have and facilitate sales processes. The positive correlation between sales growth and customer satisfaction in the results obtained shows the interaction of CRM programs between sales and customer loyalty.

# 6.3 How do these technologies affect the performance metrics of SMEs, such as sales and customer engagement?

Another evaluation of CRM tools in enhancing company productivity is that they improve customer service, resulting in higher customer satisfaction. This creates loyal customers and makes the service more efficient. At the same time, this reduces workload and allows employees to focus on customer service. Customer needs are met quickly. As a result, service quality improves and customer loyalty and satisfaction are achieved (Speier & Venkatesh, 2002).

As a result, the use of CRM tools by SMEs leads to significant cost savings, helps to reduce routine tasks, improves data management and contributes to goal achievement. Due to CRM technologies, SMEs can achieve strategic goals, implement cost effective practices and contribute to business growth targets.

#### **6.3.1 Customer Service**

CRM tools significantly reduce daily workload and improve customer service, which directly enhances customer satisfaction.

#### Regression Analysis (Q7 & Q3, Q6):

Q7: Customer satisfaction and loyalty

Q3: Do these tools reduce your daily workload?

Q6: Do these tools improve customer service?

#### Correlation Analysis (Q3 & Q6):

Q3: Do these tools reduce your daily workload?

Q6: Do these tools improve customer service?

The aim of this discussion is to evaluate how the use of CRM tools by SMEs in their daily workflow can reduce the daily workload and improve customer service while at the same time affecting customer loyalty. Data were taken from various variables, regression analyses were performed and correlation analyses were performed. In this context; both the operational efficiency of CRM tools was evaluated and the impact on improving customer service and increasing customer loyalty was tried to be understood.

#### Discussion:

It is obvious from the reduced daily workload and better customer service that CRM tools have brought about operational efficiencies. Not only do such programs automate recurring tasks but also they enhance interdepartmental relations to make businesses more responsive to customer's' needs. They also become highly effective when integrated with other business-oriented software such as accounting packages ensuring seamless data exchange and aiding in decision-making.

CRM tools come with analytical components that enable companies to understand client behavior and preferences well. This knowledge is vital because it facilitates personalizing marketing strategies and enhancing customer experiences, which are both fundamental aspects of operational efficiency. The automation of repetitive operations by CRM tools helps employees save time for other meaningful engagements that increase overall performance.

Additionally, the ability of CRM systems to blend seamlessly with other business solutions, e.g., accounting software gives a holistic approach to handling consumer information and company procedures. This assimilation guarantees free movement of data across departments thus minimizing duplication while increasing accuracy rates. All these features are important especially when it comes to firms trying to make their operations leaner.

CRM systems are able to promote organizational communication and collaboration, which ensures that clients' concerns are attended to in good time. This operational synergy results in a more unified customer experience where all the points of interaction offer consistent and superior quality service. In this regard, Speier and Venkatesh (2002) argue that a well-implemented CRM approach would help overcome common pitfalls associated with customer management such as long response times and uneven service delivery, which significantly impact customer satisfaction.

The combination of reduced workload and improved customer service directly affects customer satisfaction. Thus, by enabling employees to have more meaningful interactions and deliver high quality service, CRM tools create comfort for buyers. A positive consequence is that SME customers will remain satisfied; hence, they will be loyal to the company and provide their repeat business

It is important for CRM systems to collect accurate information about customers from different sources for analysis, interpretation, and customization of their services. In this respect, it is crucial for developing strategies aimed at boosting consumer satisfaction. For instance, personalized campaigns based on CRM data and timely customer support can do a lot when it comes to improving the loyalty among customers. According to Lin et al. (2010), companies that foster strong customer relationships are more likely to achieve better business results.

# **6.3.2.** The Role of CRM Tools in Increasing Operational Efficiency and Customer Satisfaction

Findings: The analyses show that CRM tools significantly increase both operational efficiency and customer satisfaction. This is evident from multiple analyses including descriptive and regression analyses (Descriptive Analysis: Q3, Q6; Regression Analysis: Q7 and Q3, Q6 – Q3 and Q2).

In order to analyse the contribution of CRM tools to SMEs more efficiently, it is important for the research to not only optimise operational processes but also to contribute to customer satisfaction. in this context, CRM systems can examine large amounts of data, use data and organize a company's interactions with existing and potential consumers.

In the other research, regression analysis was performed to determine the relationship between q3 and q2. As a result (R-square value = 0.58). The model was found to be statistically significant (p < 0.001). And the coefficient of the Q3 variable was calculated as 0.75. In summary; it was determined that reducing the daily workload and CRM tools increase overall satisfaction.

Reduction in daily workload, as indicated in survey question q3, indicates that CRM tools reduce repetitive workload by automating it. This is valuable as such; automation tools save employees' time. In this way, the business can concentrate its productivity and performance on more strategic and important tasks. Mean value is 3.24 points. This is a common opinion of the participants that it reduces the workload. CRM tools reduce the time spent on routine tasks and at the same time increase operational efficiency. (Boulding, Staelin, Ehret, & Johnston, 2005).

Another point is that the impact of CRM tools on customer service as indicated in Q6 was asked and the mean score was 3.36, which indicates that the relationship is positive. Providing and processing customer data, using communication channels correctly and effectively, and personalised data enable companies to provide a better service to their customers.

Another analysis is a regression analysis including Q7 and Q3,Q6. This analysis revealed a positive relationship between the use of CRM tools and customer satisfaction. As a result, an R² value of .323 was obtained. In other words, the analysis showed that there is a strong and positive link between CRM tools and customer satisfaction and loyalty. The inference from the analysis is that the active use of CRM tools provides various advantages in companies. Through the use of such CRM tools, the importance and impact of customer-oriented strategies can be seen. (Chalmeta, 2006)

In this respect, CRM tools provide companies with a comprehensive guide to their financial lives and identify areas for improvement in the areas they consider necessary. Positive results, such as satisfied customers and operational efficiency, show that CRM implementation is linked to a company's strategic goals, objectives and plans, so that it can benefit from the benefits of CRM tools.(Boulding, et al. 2005)

Companies that successfully integrate CRM systems into their operations experience significant breakthroughs in both productivity and customer satisfaction. Therefore, businesses can be put into action by analysing the data obtained from customer data through CRM automation of any related process that develops with the customer. In addition, it is obtained by providing insights in the light of the analyses obtained (Chalmeta, 2006). Companies using CRM tools are observed to have reductions in customer response time and improvements in service quality. These developments have an impact on increasing customer satisfaction and show that company resources are used efficiently. And also offers positive advantages in terms of operational efficiency and customer satisfaction, which is an important point of application in SMEs.

In conclusion, AI is poised to revolutionize Customer Relationship Management (CRM) by significantly enhancing various aspects of business operations. According to Gantz et al. (2017)AI is expected to speed up sales cycles, enabling quicker and more efficient transaction completions. It will improve lead generation and qualification processes, allowing businesses to identify and focus on high-potential leads more effectively.

Moreover, AI will address customer support issues faster, providing timely and accurate resolutions to customer inquiries, thereby enhancing customer satisfaction. AI will also play a crucial role in refining brand campaigns and recognition, helping companies to create more targeted and impactful marketing strategies (Gantz et al., 2017).

Financial benefits of AI in CRM include lowering the costs of support calls while simultaneously increasing resolution rates, which will result in more efficient customer service operations. Additionally, AI will reduce the expenses associated with recruiting employees and partners by streamlining the recruitment process through advanced data analytics and machine learning algorithms.

AI's impact on revenue is notable, as it will optimize product marketing, ensuring that marketing efforts are directed towards the right audience with the most effective messaging. It will also optimize pricing strategies, allowing companies to set competitive prices that maximize profit margins. Distribution logistics will see improvements through AI-driven optimizations, ensuring timely and cost-effective product delivery.

Finally, AI will help in fraud detection, preventing losses by identifying suspicious activities early on. The comprehensive application of AI in CRM activities will not only enhance

operational efficiency but also drive significant cost savings and revenue growth, solidifying its role as an indispensable tool for modern businesses (Gantz et al., 2017).

#### 7. Conclusion

In conclusion, AI is poised to revolutionize Customer Relationship Management (CRM) by significantly enhancing various aspects of business operations. According to Gantz et al. (2017), AI is expected to speed up sales cycles, enabling quicker and more efficient transaction completions. It will improve lead generation and qualification processes, allowing businesses to identify and focus on high-potential leads more effectively.

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Finally, AI will help in fraud detection, preventing losses by identifying suspicious activities early on. The comprehensive application of AI in CRM activities will not only enhance operational efficiency but also drive significant cost savings and revenue growth, solidifying its role as an indispensable tool for modern businesses (Gantz et al., 2017)

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