



The study on the impact of IT investments on customer relationships, supply chain, and knowledge management

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ABSTRACT: Information technology (IT) investments have changed their way of business operations and interaction with customers, suppliers, and employees. This paper explores the impacts of IT investments on customer relationships, supply chains, and knowledge management.

First of all, IT investments have revolutionized customer relationship management CRM by enabling businesses to collect and analyze data and tracking customer interactions, loyalty, and retention. And IT has a continuous impact on supply chain management SCM by grasping IT tools such as ERP enterprise resource planning, businesses can well-organize their Supply chain operations, and reduce costs. IT investments enable their supply chain partners to collaborate more effectively and reduce lead times. It has also revolutionized knowledge management (KM) by starting businesses to capture, store, and share knowledge more efficiently and effectively. by capturing IT tools, businesses can improve knowledge transfer, and innovation leading to a competitive advantage.

IT investments have a major and drastic impact on customer relationships CRM, supply chains SCM, and knowledge management KM. organizations when investing in IT to see significant improvements in their business performance and competitive advantage.

Keywords: Customer relationship management, Supply chain Management, Knowledge Management.

I. INTRODUCTION

In today's digital world, businesses are rapidly increasing to IT sectors to grow and operate their operations and gain competitive advantage. It may have a continuous impact on various aspects of the business. Which includes CRM(customer relationship management), SCM(supply chain management), and KM(knowledge management). The use of these tools can help to streamline their business operations, automate processes, and to improve decision-making. Investments enable businesses to collect and analyze customer data, track interactions of customers, and provide services, resulting in improved satisfaction, loyalty, and retention.

Similarly in SCM and KM, Investments can help to optime the operations and store, and share the knowledge. It improves visibility and helps to reduce costs. By capturing IT tools the organization can manage its inventory, productions, and logistics more efficiently and effectively. And KMS helps to improve knowledge transfer, collaboration, and leading to improved business performance and competitive advantage.

In this paper of research, we identify and explore the Impacts of IT investments on the Information technology tools such as customer relationship management, supply chain management, and Knowledge management and study the impacts of Investments on IT solutions. By understanding the challenges and impact of IT investments and tools in these business areas, organizations can make informed decisions on how to capture and enter and use the technology to enhance their operations and achieve company goals.

Research Methodology:

To study the impacts of investments in information technology on customer relationship management CRM, supply chain management SCM, and knowledge management KM, conducted a systematic literature review. We searched electronic databases such as Scopus, google scholar, and in google using the keywords, customer relationship management CRM, supply chain management SCM, and knowledge management KM. we then looked into the results based on the relevance of our search according to our research question and inclusion, it includes articles that focus on the impacts of IT investments and then present the evidence and frameworks. Analyzed the articles systematically using continuous and thematic analysis approaches. Identified the key themes and patterns related to the impacts of It investments on customer relationship management, supply chain management, and knowledge management. Finally synthesized the findings of the literature review and summarized in a native form to explain by highlighting the main aspects of IT investments also discussed the limitations of the review and implications of the findings of the business solutions and research.

DATA COLLECTION

The collected data are processed and tabulated such as pie-charts and tables. The formula used to calculate t-test:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

The formula used to calculate Chi-square test:

$$X^2 = E \frac{(O-E)^2}{E}$$

SOURCES OF DATA COLLECTION**PRIMARY DATA**

Primary data is the data which is collected for the first time. This data is to be collected by conducting a survey through an online questionnaire.

SECONDARY DATA

Secondary data is the data which has already been collected or is already available. This data was collected from sources like Journals, internet and websites.

SAMPLING DESIGN

Sampling is the process of selecting observations to provide an adequate description and inferences of the population.

SAMPLE SIZE

The data is to be collected from approximately 50 respondents in Parul University and in the vicinity of Gurgaon

RESEARCH DESIGN

Research Design is Descriptive.

SAMPLE SELECTION

Sample selection has been done through convenience sampling.

STATISTICAL TOOLS USED

The SPSS software is to be used to tabulate and analyze the gathered data (Statistical Package for Social Sciences). It features Chi-Square analysis, the percentage technique, diagrams, pie charts, and tables, among other things.

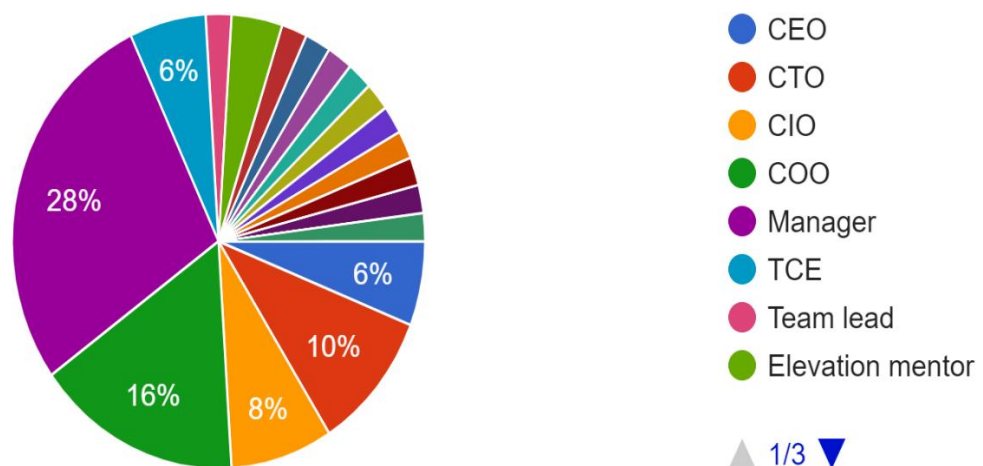
Tools of Analysis

1. Questionnaire
2. Percentage Analysis

ANALYSIS & INTERPRETATION:

what is your job title?

50 responses



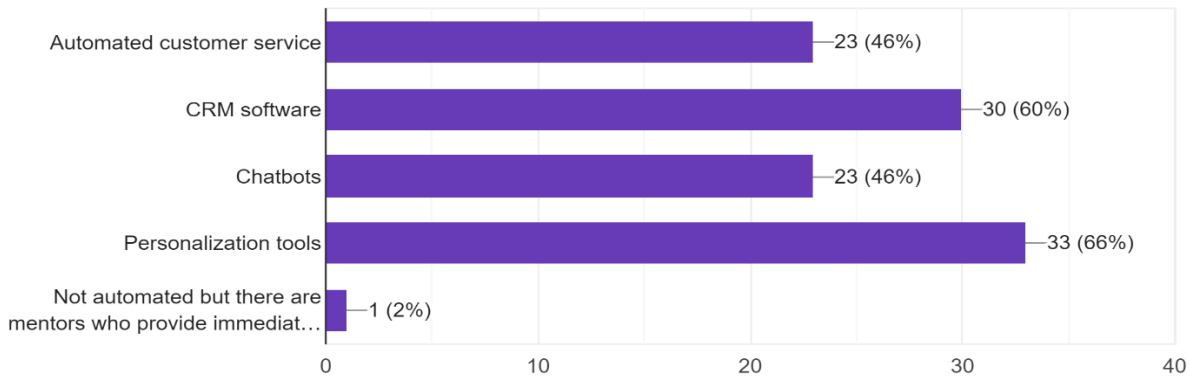
INTERPRETATION:

Out of all the respondents who participated in the study, 28% are managers and 16% are COO and 8% are CIO and others are CEO, CTO, TCE, Team lead and finally Elevation mentor respectively.

And they are typically early adopters of technology and may have a unique perspective on the impact of IT investments on customer relationship, supply chain, and knowledge management

what IT solutions were implemented and how have they impacted customer satisfaction?

50 responses

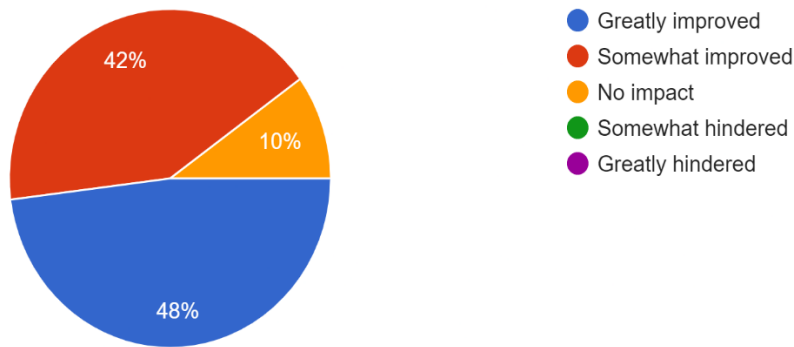


INTERPRETATION:

Out of all the respondents who participated in the study, IT solutions were implemented and they impacted the customer satisfaction in Automated customer service, CRM software, Chatbots, Personalization tools, and not Automated but there are mentors who provide immediately in the organization on IT investments on customer relationship, supply chain, and knowledge management.

How has IT impacted your company's ability to provide personalized services to customers?

50 responses

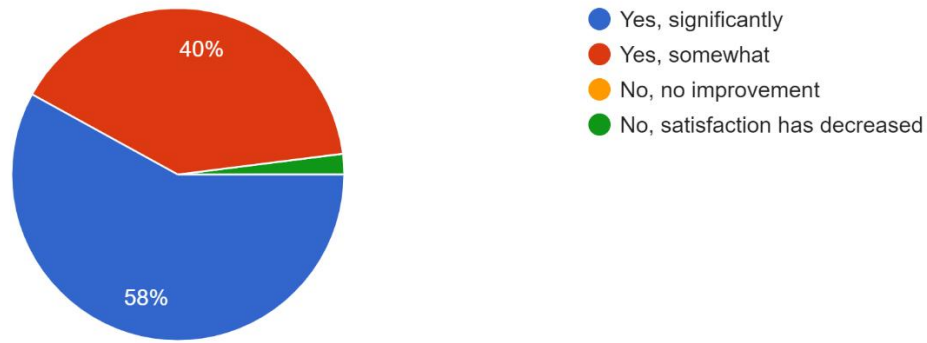


INTERPRETATION:

Out of all the respondents who participated in the study, 48% of the respondents have great improvement in the company’s ability to provide personal services and 42% have improved somewhat and 10% of the employees have responded of no impact on the ability to provide personalized services, as they are typically early adopters of technology and may have a unique perspective on the impact of IT investments on customer relationship, supply chain, and knowledge management.

Have you seen an improvement in customer satisfaction since implementing IT solutions for CRM?

50 responses

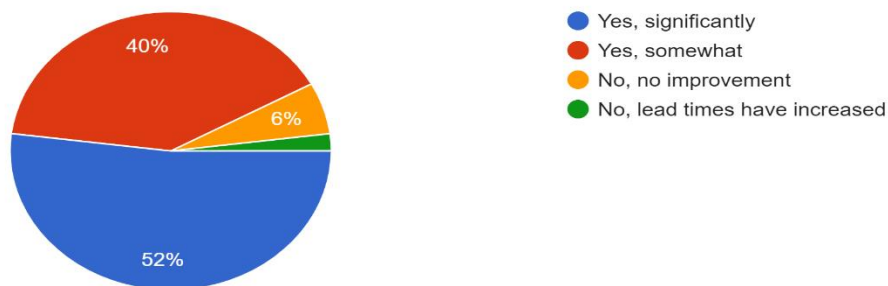


INTERPRETATION:

Out of all the respondents in the above survey, the improvement in customer satisfaction has been improved significantly by the 58% respondents in the survey and 40% have been responded somewhat it has been improved since implementing the IT solutions for CRM.

Have you noticed a decrease in lead times in your supply chain since implementing IT solutions?

50 responses

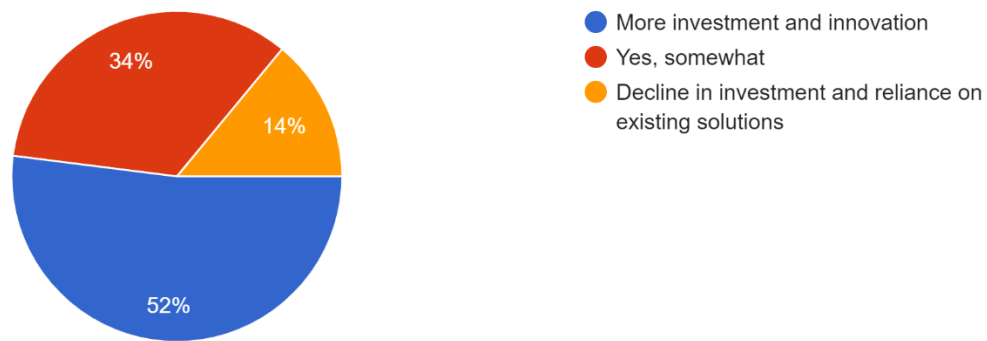


INTERPRETATION:

Out of the respondents who participated in the above survey the lead times in the supply chain have been decrease the information given by the respondents significantly 52% the lead times has been decreased. And 40 % of respondents somewhat changes has been made since the implementation of IT solutions in SCM.

What do you think the future holds for IT investments in customer relationship, supply chain, and knowledge management?

50 responses



INTERPRETATION:

Out of the respondents who participated in the above survey the lead times in the supply chain have been decreasing the information given by the respondents significantly 52% think that the future holds for the IT investments in CRM, SCM, KM on investing more on innovation and 34% have some what the future holds and 14% believe that in declining in investment and reliance on existing solutions.

Findings:

The study on the impact of IT investments on customer relationship, supply chain, and knowledge management found the following:

1. IT investments have a significant impact on customer relationship management. The majority of the respondents believed that IT investments help organizations to better understand their customers, provide personalized services, and build long-term relationships.
2. IT investments have a positive impact on supply chain management. The respondents believed that IT investments improve supply chain visibility, reduce operational costs, and increase efficiency.
3. IT investments have a significant impact on knowledge management. The majority of the respondents believed that IT investments improve knowledge sharing, enhance collaboration, and facilitate innovation.

Age plays a significant role in how individuals perceive the impact of IT investments on different business areas. Younger respondents were more likely to believe that IT investments have a more significant impact on customer relationship management, while older respondents were more likely to believe that IT investments have a more significant impact on knowledge management

CONCLUSION:

In conclusion, the study on the impacts of IT investments on customer relationship, supply chain, and knowledge management has shown that investing in IT solutions can have a significant positive impact on various business areas. The study found that IT investments have a positive impact on customer relationship management by improving customer understanding, personalization, and building long-term relationships. IT investments also

improve supply chain management by enhancing supply chain visibility, reducing operational costs, and increasing efficiency. Furthermore, IT investments improve knowledge management by improving knowledge sharing, enhancing collaboration, and facilitating innovation.

Based on the findings, it is recommended that organizations invest in IT solutions that improve customer relationship management, supply chain management, and knowledge management. By doing so, organizations can improve their business processes, enhance their competitiveness, and provide better services to their customers. In today's digital era, IT investments are essential for organizations to survive and thrive in a highly competitive environment. Therefore, organizations must continuously evaluate their IT investments and ensure that they align with their business goals and objectives.

Overall, the study highlights the importance of IT investments and the significant positive impact they can have on various business areas. As technology continues to evolve, organizations must continue to adapt and invest in IT solutions to remain competitive and meet the changing needs of their customers and employees.

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