



UNIVERSITY OF WISCONSIN, PLATTEVILLE

UNITED STATES OF AMERICA

The educational project, by Joseph E. Agwaye, entitled Challenges of Developing and Managing Effective CRM (Customer Relationship Management) in Manufacturing – Review and Analysis, when completed, is to be submitted to the Graduate Faculty of the University of Wisconsin- Platteville in partial fulfillment of the requirements for the MASTER OF SCIENCE IN INTEGRATED SUPPLY CHAIN MANAGEMENT degree.

Approved: *Xiaotong Liu* Date: 12/27/2020

Project Advisor

Professor Xiaotong Liu, PhD

Suggested content descriptor Keywords: Customer relationship management, Supply chain management, risk assessment and

A Seminar Paper

Submitted to

the Graduate Faculty of the

University of Wisconsin - Platteville

in Partial Fulfillment

for the Degree of

MASTER OF SCIENCE IN INTEGRATED SUPPLY CHAIN MANAGEMENT

By

Joseph E. Agwaye

Year of Graduation: Fall 2020

Abstract

This research paper explores the complexities of the supply chain and the impact of developing and integrating good customer relationship management with along with the daily changes of manufacturing. The aim of this research is to create an understanding of manufacturing and customer relationship management while trying to develop relationship that can be beneficial to many organizations. Customer relationship management in today global economy is key to maximizing the output of many manufacturing firms and a major goal for this research is to understand the challenges facing many firms when it comes to developing and incorporating CRM into the organizational output. The research will be carried out through review of scholarly articles to understand these challenges. Conclusion of this research will show the importance of CRM to manufacturing and give organization a roadmap on how to navigate some of the challenges bound to affect CRM's incorporation into manufacturing firms.

Table of Contents

Abstract.....	3
Introduction	5
Statement of the Problem	5
Purpose of the Study.....	6
Significance of the Study.....	7
Literature Review.....	13
Methodology.....	20
Discussion.....	21
Formulation and Implementation of CRM in Organizations.....	21
Budget and Profitability	22
Stakeholder Management	23
Effective Customer Relationships Management	24
Methods of Customer Relationships management	24
Potential pitfall and Unknowns in CRM Implementation	25
Conclusion.....	30
References	31

Challenges of Developing and Managing Effective CRM (Customer Relationship Management)
in Manufacturing

Joseph E Agwaye

Under the Supervision of Professor Xiaotong Liu

Introduction

Statement of the Problem

In recent years, it emerged that customer relationship management is key to the successful day-to-day running of every organization and all businesses are continuously making effort to overcome the challenges that organizations must manage in order to successfully implement Customer relationship management (CRM). The past century has seen a move from the need to conduct transactions to that of managing relationships to promote productivity and profit. Customer relationship management (CRM) is a tool for handling all the company's affairs and dealings with its customers and prospective customers with the intent of improving business. To date, the CRM solutions allow organizations achieve a connection with customers, remove unnecessary processes, and improve profits. It also embodies a total business system with contributions from marketing, sales, and customer service, thereby establishing potential touchpoints that occur during the consumer's pathway. In the attempts to improve the possible challenges related to CRM, the industries have to think about new solutions and processes to manage their production and customers to drive their customer allegiance and returns. More so, the industries must acquire, adapt, and follow certain developed measures to gain and hold customers with higher precision and enriched results in both intra- and inter-organizational sectors.

Purpose of the Study

This paper attempts to study the challenges associated with developing effective customer relationship management in the global economy pertaining to customers in the global organizational sectors. The endeavors being made by many stakeholders in different sectors to customer satisfaction and consumer retain ship in the growing fast and tight global market environment of today. One of the goals for this research is to educate supply chain professionals and everyone within the organization on how efficient CRM can facilitate lean manufacturing and create better symmetry between customer demands and available plant capacity. Importantly, manufacturing is a constant balance of utilizing the available capacity to meet the demands of its customers. CRM tools will allow supply chain professionals to better understand how these limited resources can be used to not only meet the needs of the customer but exceed those needs.

Notably, over the years, there have been several articles and research that have attempted to explore the correlation between CRM and successful manufacturing. Also, several articles argue that the reasons many organizations fail to achieve success are due to their failure to adequately utilize CRM or have refused to pursue the numerous benefits of CRM. Some of these benefits include the ability of the CRM system to direct customer data and guarantees conflicts free transactions. A CRM system allows for closing quicker transactions by aiding faster and more effective responses to customer needs and requirements. More so, with effective CRM, consumers get more persuaded to turn their inquiries into purchases once they are responded to quickly. Good knowledge of customers, segmentation, customers' retention, better and speedier communication, and good protection of data privacy are all some of the benefits that can be improved in an organization to make customer relationships better for retention

Significance of the Study

This research is associated with the numerous benefits that organizations can derive from properly executed CRM, this research will describe the meaningful implications of creating comprehensive and efficient CRM capacities in every business as they face higher levels of competition and grow profits to better survive in today's business environment. Although the idea of CRM concerning marketing is conveniently understood by businesses, the incorporation aspect can prove challenging, due to many factors that need to be addressed during the implementation phase (Ghaziana, Hossainib, & Farsijani, 2016). Some of the major challenges in the integration stages of CRM in organizations will be discussed in this study. Educating and keeping organizations informed on the challenges of developing and managing effective CRM in manufacturing is crucial to businesses hence the need for this study. Importantly, in CRM, holding real-time contact with the consumer is key in minimizing the time gap between customer's questions and the response by the firm. CRM is the way of better analysis of customers' requirement to deliver vital products or services to the customer (Verma, Soni, & Kundu, 2011). Efforts should be made to minimize the time gap levels to zero at least in communicating with the customers for effective relationship. The other challenge is related to engaging customers to move over from low-value products to high-value products. Often stimulus are given to the customers when they switch to high-value products as a good CRM tactic.

The manufacturing.net and Manufacturing Business Technology research state that 41.1 % of manufacturing firms are presently utilizing the CRM system or are in the process of implementing the system in their organization (Al-Weshah, Al-Manasrah, & Al-Qatawneh, 2019). It means that a large number of manufacturing organizations have realized the necessities of CRM

systems in their organizations. Additionally, 70% of the companies that are using the CRM system or are in the process of using I have revenues that are greater than one billion dollars. Also, 60% of these businesses have revenues that range from 50 million dollars to one billion dollars. In general, manufacturing companies require a strategy and deliverables to successfully implement and use the CRM system. But the application of this system is not easy and that is why these companies face numerous challenges.

The primary challenge facing the implementation of CRM is cost. When the implementation of CRM is done in a rush and without robust planning, it can be a costly affair (Peppers, & Rogers, 2016). Therefore, businesses are advised to decide why their businesses require a CRM before implementing it (since this provides a clear picture of the type of CRM system needed and the execution techniques needed). With the necessary information, the business will be able to develop a budget instead of simply imitating the competitors' CRM strategies and working to implement a type of CRM that is not effective for the business (Peppers, & Rogers, 2016). To avoid incurring unnecessary costs, there is a need for business to discuss its IT resources, software, and hardware needed, the CRM providers, and total costs of ownership of different types of CRM so that the process of acquiring a CRM can be streamlined and ultimately help reduce costs.

Some businesses fail to define clear objectives that they intend to attain with a successful CRM implementation (Peppers, & Rogers, 2016). Other businesses have the objectives but have not made them measurable metrics and their failure to do so makes it challenging to evaluate the return on investment or core advantages of the system. Also, objectives help determine the functionalities that a business wants from the system. Some of the functionalities that a business would expect from the systems include increased sales, improved quality of customer service, and

enhanced marketing activities. Further, the CRM system can address some challenges that the business is facing when it comes to customer management (Peppers, & Rogers, 2016). Therefore, it is vital to have a clear idea of the objectives and important functionalities needed in the system since this is what will ensure the successful application of the CRM system.

Training and development of employees are needed (Matiş, & Ilieş, 2014). During the implementation of CRM in any company, there must be broad and extensive training done, and the potential users of the training must be trained from the early stages of the implementation process. Experts encourage companies to involve the users of the company right from the decision-making process and to picking key employees from every department to be trained extensively about the system (Matiş, & Ilieş, 2014). However, the depth of training is time-consuming and very costly, and some companies ignore the training altogether since they are not sure they will get a return on investment. Also, training only key personnel from each department means that they must educate other employees from their department, and yet these employees are not experts in CRM systems. The lack of proper training of employees leads to poor implementation of the CRM system and ultimately poor results. Further, there is the challenge of poor integration of the CRM system with other business management solutions such as the ERP and payroll. It is usually advisable for a business to plan for the integration needs of the CRM system in advance to prevent CRM implementation overkill and information surplus on personnel (Matiş, & Ilieş, 2014). For instance, a company can decide to dedicate one of the phases of implementation of the system for integration needs to guarantee the wide adoption of the CRM system in the company. But a majority of the businesses think that the system will integrate seamlessly in other business management solutions after its implementation and this has proven to be challenging when the system doesn't integrate since it makes the implementation seem useless.

Lack of communication channels is one reason why some manufacturing firms have not successfully implemented the CRM system. Usually, the CRM implementation and development decisions are done by the top management due to the budget and the process alterations that will occur after the implementation of the CRM (Migdadi, 2020). The management is required to communicate with all organizational employees and support the development and implementation procedure. However, due to a lack of effective communication channels, there is a lack of efficient communication, ultimately giving rise to insecurities and encouraging mental barriers in the minds of the employees. During the implementation process, lack of communication means that the implementation team will be unable to update any significant changes on the go, and they have to constantly rely on the management to go what they ought to do (Migdadi, 2020). Thus, in this case, instead of CRM eliminating the problems that it is supposed to eliminate, it gives rise to new problems hence giving the CRM development and implementation team double work. Further, what these manufacturing companies require is CRM software that is developed with a communication management module that will ensure the effective delivery of consumer services. For instance, if a consumer calls to inquire about the quality of a certain product and the customer service member who had spoken to the consumer is unavailable, instead of leaving the question unaddressed, the team customer service employee who has no prior knowledge of the previous discussion and rapidly pull-out notes like emails and phone call records (Migdadi, 2020). Therefore, with a lack of communication, it will be unable to effective implementation such as a system.

Moreover, there is the challenge of cross-organizational participation. The development and implementation of CRM is a company-wide program that involves the participation of all organizational members across all departments (Soltani, & Navimipour, 2016). Usually, CRM

programs are developed and implemented by cross-organization teams that have a representative from each functional department. The teams are meant to enhance cooperation and communication but putting into practice is challenging. Research shows only one of six companies have successfully installed the CRM software primarily because of confusion in the organization. It is difficult to bring all departments and employees on board with CRM despite companies making it clear that it is for the long-term success of the organization. Some employees, particularly in the sales and marketing department reject the system, thinking that the system will make their jobs redundant (Soltani, & Navimipour, 2016). Other employees are just not willing to accept change and they don't cooperate with the management and other personnel in the implementation of the system. Further, there is the challenge of stigma. A common misconception among manufacturing firms during the implementation and development of CRM is that the software system is technology-driven or that it is simply a technology. But this is not true since CRM is supported by a technological infrastructure that comprises software solutions utilized in the collection, evaluation, and interpretation of consumer data (Soltani, & Navimipour, 2016). Also, these technological aspects alone cannot make a company successful since CRM requires a clear and effective strategy with cross-organizational integration for it to be successful. CRM is only effective when a company has goals, metrics, and constant measurement of performance with consumers.

Additionally, CRM trends are becoming a challenge for the implementation and development of CRM in manufacturing companies (Cvijović, Kostić-Stanković, & Reljić, 2017). One of the trends is that of marketing being about influence. Consumers are getting smarter each day and the smarter they get, the more demanding they get hence the many challenges that CRM professionals experience. The CRM professionals are forced to have their systems continuously

address the demands of the consumers. Also, in the future, marketing will have to adapt to new customer purchasing tendencies meaning that flash sales and discount-based marketing are slowly being faced out. Consumers understand that if they wait, they get steep discounts since, in most cases, the patient consumers pay half the original price. Thus, consumers have learned to adjust their purchasing to adjust their buying to align with times the steepest discounts are available (Cvijović, Kostić-Stanković, & Reljić, 2017). Therefore, the companies have to make their CRM systems to influence consumers instead of offering them outdated incentives like discounts and flash sales if they want to maintain their productivity and sustainability.

Also, the search in CRM applications is currently clunky and fails to perform adequately (Cvijović, Kostić-Stanković, & Reljić, 2017). A majority of the present CRM systems cannot search for text notes and this is a significant limitation since if the salesforce of a manufacturing company tries to type notes in the automation tool, they will not be searchable. Therefore, many of these companies usually discourage their employees from taking notes hence they keep missing out on vital information that can be costly (Cvijović, Kostić-Stanković, & Reljić, 2017). Further, the inadequacy of the search engine means that the quality of the CRM system is limited and that there has to be a change to upgrade CRM functions so that they can properly function. In the current world, information sharing is vital, and social media platforms and blogs have better search tool features than CRM. Therefore, it is challenging to integrate CRM, which this platform meaning that manufacturing systems are missing out on vital information.

Despite the above issues, CRM is still without a doubt, the best way that an organization can show how much it values its customers and guarantee that there is high-quality customer service. CRM has a critical role in making sure that customer service, marketing, and sales departments in a company work together for the benefit of the consumers (Gaur, & Afaq, 2020).

Additionally, in recent years, CRM software has continuously proved its significance for many companies across industries due to its ability to manage various aspects of business-like customer relations, service management, marketing, and sales. But the failure of successful implementation of CRM cannot be ignored since companies incur expenses that cannot be recovered, and the future revenues of the company are negatively impacted.

Effective leadership is what ties the entire process together. Developing and implementing a CRM system without proper leadership can be likened to taking an aircraft that has no pilot (Gaur, & Afaq, 2020). It is because CEOs and executives of organizations are the ones who offer the insight and direction required to steer their businesses towards successful creation and application of the CRM system. Leaders are the ones who offer the ERP vendors the precise requirements of the manufacturing firm and supervise the implementation effectively. When the task of execution or any other vital process is handled by the employees, the implementation is not expected to be smooth since these employees not only possess insufficient business knowledge, but they might also not be authorized to access significant information, particularly about sales and finances (Gaur, & Afaq, 2020). Thus, the role of a company executive is not just limited to the selection of CRM software. The company leader must oversee the whole development and execution process and afterward motivate and help the employees to use the CRM software to enhance the productivity and sustainability of the company.

Literature Review

Manufacturing is the backbone of any nation's economy since they make an important difference in the GDP, employment, and export and import of a country. Over the past decades, the manufacturing sector has significantly evolved, and technology plays the principal faction as a catalyst for change (Aljawarneh, & Al-Omari, 2018). But despite the advancements and the

ability to manufacture companies to leverage business management solutions prompted by technology such as CRM, there have been significant challenges that manufacturing companies have faced. Manufacturers try to resolve these challenges so that they can enjoy the benefits of applying CRM. One of the rewards of CRM is efficient lead management. With CRM, Manufacturing companies will be able to grantee effective lead management since there will be automated routing by consolidated leads from social media platforms, company websites, and email and this information will be automatically given to the distributors so that they can fulfill the needs of consumers. Because of CRM, there will be a constant flow of data between the direct sales of the company and partner sales team that are aiding the company with ensuring faster ales. CRM will enable sales manufacturers to access data important to satisfying the consumer even when they are out of office since the manufacturer has the tools to handle the various ways in which data is gotten, such as the handling of sales email in an efficient and organized manner (Aljawarneh, & Al-Omari, 2018). The second significance of CRM is that it makes sure that manufacturers have detailed reports for making their marketing efforts easy. CRM provides manufacturing companies with information that enables them to make effective marketing strategies that guarantee the success of the business. With real-time analytics and insights on every marketing aspect, the sales team can track early indication of anything that is negatively impacting the sales so that the mistake can be rectified on time.

Additionally, there is an improved consumer experience with the implementation of CRM. The CRM system enables manufacturers to effectively connect with different consumers and offer them a convenient way of placing their inquiries, seeking solutions, obtain updates on the company products, and request for new products (Ge, Wang, Sun, Fu, & Sun, 2020). For the contractors, they can track, update, and accept the work given to them and even communicate through CRM.

The manufacturer can collect all this information from the consumers and contracts and store it in the CRM database. Further, CRM enhances collaboration with distributors and dealers. CRM gives manufacturers the capability to be in control, consistent, and predict their distribution channel (Ge, Wang, Sun, Fu, & Sun, 2020). The CRM production solution permits one to evaluate and collect information from the entire distribution network which permits the manufacturer to recognize the gaps and gauge the performance of the distribution network. The insights got to provide the manufacturers with the knowledge that enables them to communicate clearly and provide guidance and tools that enable them to succeed. The collaboration abilities of CRM aid in the education of consumers and allow the manufacturers to respond to the distributors' inquiries quickly. Therefore, the definition and automation of procedures have enhanced collaboration with distributors in real-time.

To ensure that manufacturing companies enjoy the benefits of a good CRM system, they must ensure that CRM implementation and development is a success (Purbowo, & Suryadi, 2017, September). For CRM to be adopted successfully there must be adequate support from senior objectives. A CRM project involves the top management since they inspire and build credibility and more importantly, they drive opinions and culture in the companies. The early involvement of the top leaders sends a positive ripple effect throughout the entire companies and guarantees the success of a CRM project. additionally, a good project manager is vital for a CRM project's success since the managers are the most vital persons who run the project and influence how it develops.it is the project manager who will ensure that necessary steps are taken on time and that the goals of the CRM project are met (Purbowo, & Suryadi, 2017, September). A project manager doesn't necessarily have to have studied management. Instead, he must be a committed individual with contagious enthusiasm and a good eye for details. Further, during the implementation procedure

for CRM, manufacturing companies must set up inside usage protocols. Experts say that a CRM system are only as good as the data inputted and that is why it is vital to set common usage guidelines. For instance, there must be guidelines on how to include company data or register a sale. All employees must register all their sales in their CRM system to ensure that the sales manager has the correct sales report. Finally, sufficient training on how to utilize the CRM system must be provided.

The manufacturing business has never been harder or more multifaceted. Manufacturers are currently faced with stiff competition from overseas and domestic rivals and they must ensure that every aspect of their organization is running as seamlessly as possible. One of the major areas that manufacturing companies have been competing in is the efficient management of projects and workflows. Surveys are done on over 400 manufacturing firms by Tech Validate and Insightly shows that manufacturers face various project management and sales challenges as they are in the process of attaining the ultimate efficiency. Some of the issues are difficulty in the management of suppliers and consumers, difficulty in the organization of information, and difficulty in collaborating among the employees. These issues seriously undermine the manufacturing business and one of the best ways to solve these challenges is through customer relationship management solutions. Research shows that CRM solution aids manufacturers in various acritical ways and that is why despite the challenges, manufacturers seek to implement CRM.

CRM implementation enhances the overall efficiency of manufacturing firms through various ways such as readily providing information to companies hence ensuring meetings are shorter and administrative work is less burdensome and freeing time for employees so that they can focus on innovation and the actual manufacturing job. Further, CRM ensures augmented productivity for better sales. With customer data and sales data readily available and organized in

a single place, the sales cycle of manufacturing companies becomes short, meaning that the sales team becomes more effective. Also, with CRM implementation, manufacturing companies have happier customers. Complete and easily obtainable customer data means that the customer care teams, and sales team can provide individualized attention to every consumer hence the happy customers. Happy consumers tend to be loyal to a company.

Moreover, with the implementation of CRM, manufacturing companies can easily calculate their return on investment. For any manufacturing company, the implementation of a technology that enables easy calculation of return on investment is vital since many techniques can show the level of return on investment. The lack of techniques for calculating the return on investment is the reason why many manufacturing companies only show their return on investment yearly. Finally, the manufacturing business is tough and the last thing manufacturing firms need is internal inefficiencies that will reduce their competitiveness. Therefore, the implementation of a CRM solution helps manufacturers to optimize their internal procedures, workflows, and consumer interactions, hence enhancing their competitive advantage. Also, the significance of CRM systems is the primary reason why manufacturing firms continuously seek to address the challenges of effectively developing and managing CRM systems.

An increased number of organizations have realized the remunerations of having a customer management plan and developing and affecting CRM tool. But the main challenge lies in the successful development and management of a CRM system within an organization (Peppers, & Rogers, 2016). It is because an introduction of a CRM structure needs an alteration in approach to consumer management at the structural level. Therefore, CRM doesn't concern just one department like marketing, sales, and IT. Further, many manufacturing organizations have heard stories of how failed CRM experiments have been expensive for other manufacturing

organizations and that is why they are afraid of committing to developed and implementing a CRM strategy themselves (Peppers, & Rogers, 2016). Generally, the thought of failure has been a major obstacle for the implementation of any information technology system in a manufacturing company and CRM is no exception. Thus, there is a need for organizations to overcome these fears thorough evaluation of the benefits of successfully developing and implementing a CRM system and all the obstacles they might need to surpass to guarantee that new CRM solution brings the best possible maximum return on investment without severely damaging the current business practices and with little to no risk.

Most common during the implementation process is when the CRM product doesn't fit in the organization (Matiş, & Ilieş, 2014). Sometimes, the CRM product developed is not flexible enough to be customized to fit in an organization's growth and varying needs hence meaning that the company has lost the costs it used to develop the system since it is inapplicable. Likewise, sometimes, the CRM system is not conversant with the present trends like the mobile CRM and the social CRM and this means that it is not suitable for the future since it doesn't factor in the future needs of the company and manufacturing sector (Matiş, & Ilieş, 2014). When a CRM product doesn't fit in, it is expensive for a company since it incurs losses without and doesn't get the return on investment that it had hoped for. Therefore, there is a need for a company to ensure that a CRM product fits not only for the present business but for also a company's developing and changing needs.

Additionally, some manufacturing companies lack integration capabilities, and this means that a CRM system will not work effectively since it will not be integrated with existing IT systems such as ERP, e-commerce ad marketing automation. In some instances, there is a lack of support from employees who are in charge of the existing systems while developing and implementing the

CRM, and that is why some manufacturing firms find the integration process a huge burden that it is time-consuming and expensive without any visible results (Migdadi, 2020). The lack of planning about integration needs from the development stage is what makes the implementation of CRM unsuccessful. Furthermore, one of the most ignored aspects during CRM development and application is the conclusion that once the tool is installed, employees will start using it and make good utilization as much as probable. But this isn't so since user acceptance is vital for CRM realization and a lot of manufacturing organizations don't have a suitable plan ahead for the preparation and development of employees. It is significant to have all-inclusive training packages to offer an understanding of the end-users of the systems and enable the employees to navigate the complex systems (Migdadi, 2020). Apart from usability, employees have to be informed about the importance of making the CRM system apart from their everyday routine and be encouraged to use it to improve their effectiveness.

Also, in some instances, manufacturing companies use CRM vendors, and these vendors lack expertise. If the vendor does not have sufficient understanding of the CRM system or they may have never assumed such CRM projects that are related to that of the manufacturing company, it may outcome in unseen obstacles that are challenging to overcome once the implementation procedure is underway (Soltani, & Navimipour, 2016). Similarly, the CRM vendor can be unprepared against the possible development and incorporation challenges hence leading to loss of valuable time and money. The problem is usually a result of manufacturing companies not evaluating the capabilities of the vendors and thoroughly assessing their credentials before entering into any contract with them. Another challenge is the lack of business insight because of the lack of clear objectives for the CRM project. Insights are drawn from available data after thorough consumer research and with no adequate action taken on the insights, the development and

implementation of CRM software will most be a failure (Soltani, & Navimipour, 2016). The CRM system put in place will be unable to completely address consumer issues, recognize opportunities, and complete more transactions.

Cultural shifts in manufacturing companies since many things' companies have rigid cultures (Gaur, & Afaq, 2020). Also, when CRM was first introduced in the manufacturing sector, it was seen as a technology meant for marketing. But various companies failed to optimize their CRM solutions hence the certainty that CRM functions finest as a company-wide arrangement. Therefore, manufacturing companies that select to accept CRM need to alter their product or manufacture orientation and become customer-centric companies but, it is difficult to get all functional departments and workers to agree that their jobs have one primary focus because in most cases, employees are resistant to change.

Methodology

The main method of approach for this paper will be descriptive and will involve the use of secondary data analysis of research and statistics applicable to the topic been discussed. Data collection will be focused on the challenges of developing and managing effective CRM (Customer Relationship Management) in Manufacturing and possible benefits associated with well-organized and practiced CRM. More research information and statistics will be obtained from reputable sources, other works and research will be reviewed from published credible work, theorist, peer reviewed academic journals and scholarly papers that can be used to demonstrate and support the presentation of this paper.

The secondary research retrieved from these various resources mentioned above will thereafter be analyzed, reviewed, and used to further the proposed argument of this research intended to educate businesses on the possible challenges of creating and managing effective

CRM in manufacturing and the benefits associated with effective CRM. These resources will further be used to illustrate that these challenges of developing and managing effective CRM in manufacturing does exist but can be overcome in any organization and promote businesses for profit.

In addition, these resources will be used to explain the decade background, current conditions, and motion for future changes and analysis of the discussion on CRM, which spans the creation of useful research information, and followed by problems, obstacles and, blockages to the CRM research. Up to date research on this topic and the future pathway for research is also discussed in this paper to analyze the progression. Data review of most relevant literature on CRM will be studied to identify progression from the angle of operational, analytical, strategic, and organizational decisions with focus on the different levels of decision making of CRM.

Discussion

Formulation and Implementation of CRM in Organizations

The rapid growth in today's CRM in global organizations is mostly due to the progress in communication and IT, privatization and regulations removals in upcoming economies, and the introduction of the global consumption. Importantly, as the era of globalization continues to manifest through the emergence of global companies, the importance of CRM in these companies has become increasingly significant (Davis, 2016). The obstacles facing implementation could vary depending on the organization, although most notable ones include wrong software, poor technology, failure to adapt to the current needs of the firm, and the unskillful process of initiating the new tool into the organization.

More so, the advancement in technologies comes with some complexity in marketing channels, such as too much data with not enough action. According to research findings, mid-tier

organizations are gathering their data together but have not decided on what to do with these data. This data-driven CRM retention strategy being pursued by most organizational sectors is what many firms are actively working towards with most still struggling with the data implementation stage (Davis, 2016). More so, joining the gap between acquisition and retaining has become a familiar concern in business CRM. Acquisition tactics have become more challenging, particularly when it comes to programmatic broadcasting, now available across major social platforms. This in itself can be a major challenge and according to Davis (2016), “there is a failure between acquisition and retention strategy, which mirrors the disconnect between sales and marketing in many organizational sectors”. This challenge is to move across the data from acquisition to leverage growth and retainership.

Even though there seems to be a consensus on the importance of CRM as a strategic tool among organizational managers, the return on investments in CRM tactics and programs seem to vary between organizations. Bohling, Bowman, LaValle, Mittal, Narayandas, Ramani (2006) noted that “several businesses have developed proven CRM practices to enhance their performance, yet failed CRM initiatives exist in large numbers among businesses”. These are some challenges that most businesses face as they strive to accomplish their set goals in CRM. Bohling et al., (2006), CRM initiative started in a big way, with 3.5 million members of the health insurance company moved from 15 legacy systems to two new platforms in a matter of minutes. However, implementation-related problems led to significant customer service glitches and caused as many as 6% of the firm’s customers to defect Bohling et al., (2006). There is a need to understand challenges that may cause the underlining uncertainty about the scope and size of the initial integration.

Budget and Profitability

This can be a major challenge in many firms as it plays a crucial role in the successful CRM program. Most organizations thrive on a strict budget hoping to attain a better quality of life for consumers along with meeting budgeted requirements. After all, organization's governments agencies, and public services are ran by taxpayers' money which makes them answerable to their customers. Most companies initiate CRM programs with the sole aim of grouping their customers and engaging profitable consumers favorably. However, this is done slightly differently in the case of public sector, as all consumers need to be attended to equally. Also, the idea of not being profit driven makes it even more challenging for convincing stakeholders, getting requisite approvals and Governments approvals, thus must provide customers with transparent and impartial visibility to the policies and rules (Perna, n.d).

Stakeholder Management

A major part CRM when it is adopted by an organization points to the probable challenges and opportunities concerning its initiation. CRM integration influences the firm in terms of people's way of handling task and this could create a major hinderance during its adoption phase. CRM greatly involves IT enterprise with wide integration of technologies working together, such as data warehouse, Web site, intranet/extranet, phone support system, accounting, sales, marketing, and production (Bose, 2002). CRM as a marketing IT tool helps organizations in handling customer relationships and it affects how firms gather, save, and distribute information about consumers and competitors which influences how customer relationships can be handled. Therefore, how the new tool links to the user's routines and organizational processes is essential and also change drivers are equally a critical challenge while engaging these enterprises. The resistance to change sometimes among staff and other users is pretty high due to the breadth of services offered (Perna, n.d).

Effective Customer Relationships Management

CRM helps organizations develop relationships with its customer which, in turn, fosters customer retention and loyalty along with improving sales and marketing for desired profit goals. Therefore, CRM tends to convert leads into contacts, which is to say leads that have expressed interest in buying products or have bought in the past and hope to buy again in the future (Perna, n.d). Importantly, customer trust and resources are equal necessities that influence an organization's bottom line; CRM is an organization's tool that drives an increase in profits for a business hence the vital role it plays cannot be overemphasized. Effective customer relationships management according to Perna (n.d) entails at least two fundamental elements that companies need to focus on such as technology and people. Technology in CRM solutions plays a major role because it gives the system the ability to save, process, and share customer data so that it can be used as critical information by firm's managers. A CRM software includes basic elements such as databases, analytical tools to create, manage and evaluate information about customers, and decision support systems such as data mining capabilities. The other building block that is key to effective CRM is people who claim that individual employees are the building blocks for handling customer relationships (Perna, n.d).

Methods of Customer Relationships management

CRM could depend on using and targeting the right tools for the appropriate customers and sectors. More so, it can be implemented in different varieties of ways such as webpages, social media campaigns, phone calls, group chats, email, posters, post mail, and other various marketing aids that can be incorporated into a CRM drive. Due to CRM's adaptability, it benefits all businesses sizes, small and large and the ability to use and maintain a CRM software is a good platform for an increasing sales and marketing system (Bolton & Tarasi, 2007). Although,

the cost may be a concern for some of these options since paying membership dues for software can be pricier over time than on-site models. It is important to note any firm will benefit from keeping a record that can be associated with leads for prospective customers. In the same way, many businesses can benefit from CRM solution, and it is beneficial to start using CRM for all business activities before it becomes essential. Likewise, companies need to take into account their operations and sales force when choosing which CRM solution to adopt: It is key to consider and note what customer information is relevant to the company sales process and also, how often contacts to clients will be made before they make purchases and if they will return for repeat business transactions to the company. These are all quality methods that all businesses should engage in and if companies are not exploring their CRM options, that could be a huge oversight for such companies (Bolton & Tarasi, 2007).

Potential pitfall and Unknowns in CRM Implementation

- Implementation of CRM negates that the firm think about the issue of consumer trust and privacy (Boulding, Staelin, Ehret, & Johnson, 2005). Implementation considerations such as trustworthiness and privacy must be taken into account, so consumers feel secure enough to trust the organization. Information reciprocity breaks down to prevent consumers from getting out of most needed relationships. These are important factors in the implementation process and customers need to be willing to give all the required information by the businesses (Boulding, Staelin, Ehret & Johnston, 2005). As soon as customers become aware of how organizations are utilizing CRM to target their transaction habits, many customers are likely to become skeptical about the organization's activities and are likely to try to be strategic in their day-to-day activities with the organization. The ability of companies to protect consumers private information

is also very important to building the needed trust between the customers and the business. So, with customers' willingness to provide data and their satisfaction with the firm relationship, these firms must take great care in monitoring and managing customer perceptions of trust and fairness (Boulding, Staelin, Ehret & Johnston, 2005).

- Managing issues of fairness. More so, fairness management is key in this process as fairness, transparency, and trust are required for CRM schemes that may create a great threat if they misused. The possibility of developing CRM to lead customers to think that they are being ripped off and some customers are better serviced than others could bring a major downfall to the company, hence the need for equal services. Creating a pricing scheme that creates a differential value proposition for various market segments could also raise the issue of trust and fairness because the focus is for the business to use information about customers to get more value for the business and therefore create less value for the customers (Boulding, Staelin, Ehret & Johnston, 2005).
- Inappropriate and incomplete use of CRM metrics can put the firm at risk of developing core rigidities, leading to long term failure (Boulding, Staelin, Ehret & Johnston (2005). It is not uncommon in the 21st century that mutually beneficial customer relationships are the main focus of businesses and CRM is the clue to forming this type of relationship. Utilizing CRM, businesses will be more aware of their customers and more informed on how they can help them to meet their requirements and choices. Also, CRM is a way for marketing and sales to acquire new consumers, but it can also serve as a tool for keeping an existing customer satisfied, therefore measuring marketing success through metrics is essential.

- Successful implementation of CRM requires that organizations join knowledge about competition and competitive reaction into CRM (Boulding, Staelin, Ehret & Johnston (2005). CRM is an extensive business and marketing tool that joins technology, process, people, and competitions, after successful implementation. The efficient management and motivation of the team is also an important determinant of effective customer management and good implementation of CRM and this, in turn, drives customer satisfaction, profitability, and retention. However, success in this area is difficult to attain and even harder to sustain, especially in organizations focusing on minimizing costs and maximizing returns to shareholders. Notably, firms should focus on customers, competitors, and company capabilities in addition to focusing on the issue of retaining in the amid competitive reaction, and failure to include competition into a firm's CRM activities will likely put it at serious risk (Boulding, Staelin, Ehret & Johnston, 2005).

Effective CRM implementation requires coordination of channels, technologies, customers, and employees (Boulding, Staelin, Ehret & Johnston (2005). The acquisition of new customers involves high costs, technology, and good staff management, making effective CVM need analytical capabilities to recognize profitable and loyal clients for one specific company. The effective CVM installation process begins with collecting the most valuable customers for the organization. These are consumers who are likely to return to the organization over a period. Boulding, Staelin, Ehret, & Johnston (2005) emphasized that to “achieve total customer satisfaction and long-term relationships, integration between marketing, customer service, and effective CVM implementation must be discovered and applied”. Importantly, employees are a vital part of the delivery of effective CRM activities; therefore, organizational challenges associated with CRM are a key area that requires the business attention. Data and technology

processes and systems are equally important for CRM activities, but without appropriate human interaction with these processes and systems, the returns on investments in these areas could be a failure (Boulding, Staelin, Ehret & Johnston, 2005).

Considerably uncertainty in regards to the implementation of CRM and the understanding of the effects of CRM activities have led to more general methodological considerations Boulding, Staelin, Ehret & Johnston (2005). There are multiple issues and challenges associated with the CRM methods which may include inappropriate CRM, not fitting desired firm strategy, lack of incorporation tools, lack of customer service of the CRM vendor, lack of employee adoption, and lack of business understanding. In an attempt for scholars who are keen on following research in the field of CRM to further evaluate issues related to effective CRM implementation Boulding, Staelin, Ehret & Johnston (2005) have some important recommendations on certain methodological issues that researchers should consider when investigating CRM research.

CRM research must have the necessary tools ready for the intended results. More so, several different firm performance measures should be utilized such as profit, revenues, retention, and satisfaction, a consolidation of satisfaction and retention, and finally, firm owners whose main focus is profit maximization (Boulding, Staelin, Ehret & Johnston, 2005). Future studies should also provide substantial proof concerning the results of CRM activities.

Implementation Issues...According to Bull (2003) "CRM touches nearly all aspect of the businesses and for that reason, it has been recommended that firms should follow a holistic approach as the holistic perspective places CRM at the middle of the business with a customer orientated processes and the incorporation of CRM systems". More so, holistic approaches to CRM help businesses organize and efficiently follow the development of all consumer's contact

points or channels of important functionality that the businesses need to thrive. Also, another implementation challenge is that of sourcing. Notably, businesses have little to no choice but to outsource a large part of their CRM solution as they lack the capabilities to create CRM software and, in most cases, about 60 percent of in-house CRM software are likely to fail, therefore, timing is crucial because setting up in-house CRM could be very time consuming and costly to fail (Bull, 2003). Another aspect of implementing issues is the challenge delivering the strategy successfully. CRM solutions are only efficient and successful if they deliver desirable results such as being customer focused with improved organizational profitability through direct and effective customer management. Businesses CRM must remember that effective CRM strategies are repetitive and continually growing; hence the CRM chosen needs to be in touch with the latest trend to maintain effective and profitability for the business (Bull, 2003).

CRM is technologically orientated and progress in database management technologies such as data mining and data warehousing are necessary to the performance and potency of CRM solutions. It is true to some extent that larger businesses tend to invest more in CRM businesses and strongly believe that CRM has caused them to remain competitive. However, the conclusion appears to be that the main goal of CRM Strategy in greater supply chain businesses is to advance organizational profitability, efficiency, and customer relationships and if the CRM strategy isn't driving profitability, after a defined period, then the business is failing in this regards and methods should be immediately changed in a different direction (Bull, 2003).

Lastly, it is also important to note that companies gain a better way of understanding customer needs and wants to improve the way their product portfolio is offered to them through CRM implementation and the more they know about their customers, their buying preferences and behavior, the more their offers will be on target (Bull, 2003).

Conclusion

In today's largely competitive businesses environment and with so many services and products to choose from, customers know what they want, and loyalty seems to be a thing of old; hence the need for CRM implementation and at the same time cost and profit associated with CRM implementation is highly considered to determine the efficacy of it. The force of CRM installation on the firm productive operational cost efficiency and the ability for the firms to create profits from this adventure to the business is crucial. The right CRM tool helps businesses raise the average consumer lifespan by maximizing satisfaction and retention. It also targets more higher appraisal that can eventually lead through profitable marketing. More so, CRM makes the sales process more efficient, meaning the business can sell more of its products in less time (Krasnikov, Jayachandran, & Kumar, 2009).

References

- Aljawarneh, N., & Al-Omari, Z. (2018). The role of enterprise resource planning systems ERP in improving customer relationship management CRM: An empirical study of Safeway company of Jordan. *International Journal of Business and Management*, 13(8), 86-100.
- Al-Weshah, G. A., Al-Manasrah, E., & Al-Qatawneh, M. (2019). Customer relationship management systems and organizational performance: Quantitative evidence from the Jordanian telecommunication industry. *Journal of Marketing Communications*, 25(8), 799-819.
- Buttle, F. (2009). Customer relationship management: Concepts and technology. *Sydney: a Butterworth-Heinemann, 1*.
- Bolton, R., N. & Tarasi. C.O. (2007). managing customer relationship
[https://www.researchgate.net/publication/235294141Managing Customer Relationships](https://www.researchgate.net/publication/235294141Managing_Customer_Relationships)
- Boulding, W. Staelin, R. Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: what is known, potential pitfalls, and where to go? *Journal of Marketing*, Vol. 69, No. 4, pp. 155-166 Published by Sage Publications, Inc. on behalf of American Marketing Association
- Bill.C. (2003). Strategic issues in customer relationship management (CRM) implementation
Business process management journal Vol. 9 No. 5 <http://www.emeraldinsight.com/researchregister>
- Bohling, T., Bowman, D., LaValle, S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan. R. (2006). CRM Implementation: Effectiveness Issues and Insights. *Journal of Service Research*, Volume 9, No. 2,
- Bose, R. (2002). Customer relationship management. Key components for IT success. *Industrial management and data systems*, 15.

Cvijović, J., Kostić-Stanković, M., & Reljić, M. (2017). Customer relationship management in banking industry: Modern approach. *Industrija*, 45(3), 151-165.

Davis, B. (2016). 10 key challenges facing CRM marketers. Retrieved from <https://econsultancy.com/10-key-challenges-facing-crm-marketers/>

Gaur, L., & Afaq, A. (2020). Metamorphosis of CRM: incorporation of social media to customer relationship management in the hospitality industry. In *Handbook of Research on Engineering Innovations and Technology Management in Organizations* (pp. 1-23). IGI Global.

Ghaziana, A., Hossainib, M., H. Farsijani. H. (2016). The effect of customer relationship management and its significant relationship by customers' reactions in LG Company.

Retrieved from <https://core.ac.uk/download/pdf/82178569.pdf>

Ge, J., Wang, F., Sun, H., Fu, L., & Sun, M. (2020). Research on the maturity of big data management capability of intelligent manufacturing enterprise. *Systems Research and Behavioral Science*, 37(4), 646-662.

Light, B.A (2000).

Review of the issues associated with customer relationship management systems in Smithson S, Cricar J, Podlogar M and Avgerinou S (Eds). Retrieved from <http://usir.salford.ac.uk/17288>

Krasnikov, A., Jayachandran, S., & Kumar. V. (2009). The impact of customer relationship management implementation on cost and profit efficiencies: *Evidence from the U.S. commercial banking industry*. Retrieved from Journal of Marketing, Vol. 73, Published by: Sage Publications, Inc. on behalf of American Marketing Association

Perna. A. (n.d). Implementing and using CRM to handle business relationships: intra- and intraorganizational effects in an Italian company. Retrieved from <https://www.impgroup.org/uploads/papers/7963.pdf>

- Thryambakam, P., & Bethapud. A. (2013). Customer relationship management challenges in hospitality and tourism faced by various. Stakeholders in Andhra Pradesh. *Global journal of management and business studies*. ISSN 2248-9878 Volume 3, Number 11
- Matiş, C., & Ilieş, L. (2014). Customer relationship management in the insurance industry. *Procedia Economics and Finance*, 15, 1138-1145.
- Migdadi, M. M. (2020). Knowledge management, customer relationship management and innovation capabilities. *Journal of Business & Industrial Marketing*.
- Mwai, L. K. (2017). Customer relationship management practices, firm characteristics, market orientation, and performance of large-scale manufacturing firms in Kenya (Doctoral dissertation, University of Nairobi).
- Patalas-Maliszewska, J., & Kłos, S. (2017, September). Knowledge sharing using customer relationship management systems in NPD processes-research results from polish and german manufacturing companies. In *International Conference on Information Systems Architecture and Technology* (pp. 346-354). Springer, Cham.
- Patalas-Maliszewska, J., & Kłos, S. (2019). The Effect of Knowledge Sharing Using Customer Relationship Management Systems in Manufacturing Companies. *Tehnički vjesnik*, 26(1), 1-6.
- Peppers, D., & Rogers, M. (2016). *Managing customer experience and relationships: A strategic framework*. John Wiley & Sons.
- Purbowo, A. N., & Suryadi, A. I. (2017, September). Web-based application customer relationship management for helping sales analysis on bike manufacturerS. In *2017 International Conference on Soft Computing, Intelligent System and Information Technology (ICSIIT)* (pp. 347-352). IEEE.

Rajendiran, P., Sekar, K., Sinivasan, B., & Manikandan, R. Customer relationship management in the manufacturing in the manufacturing industry, using data mining techniques.

Savita, V., Umang, S., Anirban, K. (2011). Customer Relationship Management Challenges

In E-business. Mechanical Engineering Department, Indian Institute of Technology Delhi.

https://www.researchgate.net/publication/262003520_Customer_Relationship_Management_Challenges_in_e-business

Soltani, Z., & Navimipour, N. J. (2016). Customer relationship management mechanisms: A systematic review of the state-of-the-art literature and recommendations for future research. *Computers in Human Behavior*, 61, 667-688.

Verma, S., Soni, U., & Kundu, A. (2011). Customer relationship management challenges in E business. National conference on industrial engineering, 3-4.