ABSTRACT

Aims: In the previous decade, developments in machine learning techniques have drawn interest from the literature and corporate organizations to artificial intelligence technologies. However, despite the immense promise of AI technology for problem resolution, there are still limitations with practical application and a lack of expertise in employing AI strategically to produce business benefits. Customer Relationship Management (CRM) has recently experienced substantial developments. Companies have implemented AI-based CRM to effectively react to client inquiries and increase customer loyalty.

Study Design: Qualitative analysis.

Methodology: We have selected 15 publications from the research database for further investigation. The rapid growth of modern sales technology literature has resulted in a rich but fragmented representation of what sales technology is, raising the question of how its position within the sales process can be effectively defined.

Results: The results of the literature review enabled the author to recognize three major subfields of AI literature within the CRM domain (AI and machine learning techniques used for CRM activities, strategic management of AI-CRM integrations, and AI integration in Salesforce) and gather promising future development paths for each of these subfields. This study also proposes a three-step theoretical framework for AI deployment in CRM, which may help scholars further improve their expertise in this sector and managers create a suitable and consistent approach.
Conclusion: A conceptual framework is offered, with four sources of value creation discussed: (i) decision assistance; (ii) consumer and employee involvement; (iii) automation; and (iv) new services and products. These findings add to both conceptual and administrative views, with several prospects for developing new theories and management techniques.

Keywords: Artificial intelligence; Salesforce; CRM; Einstein automate; machine learning.

1. INTRODUCTION

An ordinary week in the life of a salesperson is chaotic. Pick up the bag early in the morning, grab the diary and cell phone, and travel according to the beat route provided, visiting various merchant locations, collecting orders, updating them on recent orders, and so on... Manual and administrative chores are projected to require over 30% of the daily time, which is a significant amount of time. This might often amount to 50% of the time spent on manual or administrative chores [1].

Many businesses have transitioned from a pen-and-paper approach to a digital application on a portable device - a cell phone or a tablet - in the form of Sales Force Automation (SFA) software. Many manual and administrative procedures have been automated, saving the field salesforce a significant amount of time [2].

The most basic sorts of apps cover largely field force management and order management capabilities such as attendance, beat planning and execution, travel expenditures, booking orders, occasionally taking stocks, enrolling new merchants, and occasionally some photos, among other things. Every day, a large amount of data is created by digital processes, which may be leveraged to provide important information for decision-making.

The ultimate goal of the field sales force is to maximize the company's product sales and market share. Typical beat administration is a tedious and time-consuming operation, especially in rural locations where the distribution network is far dispersed. Companies want to make the most use of their field sales force's time [3].

Adding AI-powered functionality to Salesforce may assist firms to stay ahead of their competitors. Artificial intelligence (AI) software sales are predicted to reach a total of $62.5 billion in the year 2022, a 21.3% rise from 2021. AI gives organizations better insights from data, optimizes mundane activities, boosts productivity, and offers personalized user experiences, resulting in more customer happiness, increased sales, and lower costs [4].

1.1 Role of Customer Relationship Management and Artificial Intelligence

Management may use the customer relationship management model to suggest that operations be divided into key stages, which include:

- Attract-customers;
- retain them and;
- Enhancing value to the customers.

The management is always ready to attract customers to the company by offering important products and services by keeping them and delivering value to them. This will allow consumers’ requests and needs to be addressed, as well as strengthen customer-management interactions. Customers who have a great deal of interest will help the organization grow and thrive in the long run. One of the primary goals of management’s responsibilities is to establish a group of people who will engage customers, understand their desires and expectations, and provide data to top management for quick choices. However, with the advent of AI, management is now leveraging the technology to maintain good and consistent connections with customers, appropriately engage them, understand their demands, and share the information with upper management for better decision-making [5].

1.2 What is a Salesforce

Salesforce is an international company and specialist in customer relationship management (CRM) solutions that connect businesses and customers. It is a CRM platform that allows for sales, marketing, commerce, and a unified picture of every customer. Salesforce is on the cloud, so employees can access it from wherever with an internet connection.

Salesforce launched Einstein Automate at Dreamforce 2020, an automation platform meant
to let clients automate activities and integrate apps using low-code or no-code solutions. Robotic process automation (RPA) is a critical component of business digital transformation plans.

One such integration is with Robotics Process Automation (RPA), which may automate Salesforce operations and procedures.

Salesforce, the market leader in CRM software, provides extensive integration solutions for the salesforce insurance business, allowing efficient and automated operations with Salesforce RPA integration [6].

![salesforce logo]

**Fig. 1. Salesforce CRM [6]**

### 1.3 Advantages of Integration of Salesforce

The following are the advantages of Salesforce [7]:

- Salesforce provides a comprehensive customer relationship management tool for tracking connections, business, and advertising.
- Scalable and adaptable: Salesforce can be tailored to the demands of enterprises of all sizes.
- Cloud-based: Remote access, automated upgrades, and strict security requirements.
- AppExchange: The platform offers a marketplace for already developed applications, connections, and specific to-industry solutions.
- Workflow and automation: Your team may automate jobs, standardize procedures, and increase productivity.
- Real-time analytics: Instantly gain knowledge about sales, marketing, and consumer behavior.
- Manage interactions with customers and collaborate on both Android and iOS devices with mobile access.
- Capabilities for integration: Connect Salesforce to other corporate platforms for data synchronization.
- Community and cooperation: Encourage cooperation, information sharing, and self-service.

### 1.4 Disadvantages of Salesforce

Along with its numerous benefits, Salesforce has a few drawbacks that businesses should be aware of [7]:

- Users may find it difficult to rapidly understand all of Salesforce’s functions due to the steep learning curve. The platform may be complicated, and users may need extensive training to become skilled in navigating and using its features successfully.
- Salesforce may be expensive, especially for larger firms or those wanting considerable customization. Pricing is often based on per-user monthly costs that may vary from a few hundred to thousands of dollars. Furthermore, if you choose additional functions, integrations, or storage space, your expenses may rise.
- Restricted mobile application functionality: Some Salesforce mobile app customers have observed difficulties. Certain desktop-only features and capabilities may not be completely accessible or suited for mobile devices.
- Salesforce enforces data storage constraints that enterprises may find limiting, particularly if they create and manage large volumes of data. As a result, businesses may need to invest in more storage space.
- Dependence on Internet access: Because Salesforce is essentially a cloud-based platform, customers rely substantially on consistent Internet connectivity. Users may encounter issues when internet connectivity is restricted or inconsistent.
- While Salesforce provides a broad set of customization options, setting and adjusting the platform to suit company needs can be challenging and need technical skill. More resources, such as administrators for Salesforce or consultants, may be required by organizations.
Table 1. List of integrated applications with Salesforce

<table>
<thead>
<tr>
<th>Applications</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OutFunnel</td>
<td>Outfunnel synchronizes your CRM list of contacts with the marketing automation technology, allowing you to perform automated campaigns and focus on the essential stuff.</td>
</tr>
<tr>
<td>Flair. hr</td>
<td>Flair. hr is an HR software created primarily to assist sophisticated HR departments' workflows.</td>
</tr>
<tr>
<td>Calendy</td>
<td>Calendly is a scheduling SaaS that is ideal for time-crunchressed professionals. This is unquestionably the future of conference scheduling.</td>
</tr>
<tr>
<td>JotForm</td>
<td>Jotform is based on the cloud form builder platform designed for organizations looking for a more robust and configurable data collection and management solution.</td>
</tr>
<tr>
<td>Woopra</td>
<td>The Woopra-Salesforce connector is ideal for improving your sales statistics with reliable Salesforce data. Importing past information from Salesforce using their Data Loader link allows you to easily assess your client journey. Furthermore, after you include Woopra's behavioral data in Salesforce, you will have additional information that is superior overall.</td>
</tr>
</tbody>
</table>

- Integration difficulties: Depending upon the degree of complexity of the integration needs, companies may need to commit substantial time and effort to achieve successful integration.

1.5 Salesforce Integration Applications

Following are some APIs that can be integrated with Salesforce [8].

To the best of our expertise, a comprehensive evaluation dedicated to analyzing the literature on AI in the CRM sector still lacking. Based on these assumptions, the purpose of this article is to trace the latest developments in the field of AI in CRM using Salesforce and, as a result, identify emerging themes and intriguing directions for future research. The authors undertake a thorough, transparent, and reproducible review of AI in CRM using current literature and electronic articles available on the internet for this purpose.

2. MATERIALS AND METHODS

We used multiple platforms for this study to choose the most recent research done on this topic. Google Scholar, IEEE, Web of Science, and Science Direct were also used. We only chose articles from 2018 to 2023, and when filtering, we utilized the “AND” query in the search field to retrieve relevant information. We completed 10 papers to analyze this report.

The following are the definitions and rationale for selecting these terms. According to Kumar et al., we regarded AI to be a general phrase referring to a system that can imitate people and do activities intelligently. Artificial intelligence is a broad word, but it mainly refers to the use of machine learning - especially deep learning for allowing programs [9]. The ubiquity of AI applications in CRM, in particular, involves machine learning (ML) with its successor technologies, notably the use of deep learning [10]. As a result, because the phrases "machine learning," "deep learning," and "artificial intelligence" are closely related and frequently used interchangeably, we included them all in the search string [11]. We specifically considered machine learning (ML) as a branch of AI that can gather information from data, detect patterns, and make selections with minimal human intervention [9], and deep learning as a technological advances evolution of ML that can acquire from data as well as from its mistakes without human intervention [12].

Given that CRM is connected to and frequently interchanged with the terms "customer experience" and "customer journey," we included the latter in the search string. Similarly, consumer journey research and CRM are frequently intertwined, since CRM is viewed as a source for customer journey mapping by CRM providers (e.g., salesforce) as well as academics, allowing data centralized management and making it available to multiple touchpoints. Furthermore, considering the speed of today's servers and the advanced capabilities of Big Data analytics tools, some have speculated that customer journey analysis may be the new CRM [13].

The emergence of modern technologies for sales literature has ended up resulting in a rich but
confused perception regarding what sales technology is, posing the issue of how its role in the sales process may be successfully characterized. It is hard to monitor a company’s progress, for example, in the digitalization of the sales process. Evaluating efforts and achievements at the salesman level may be significantly more challenging. There are no established rules or benchmarks for assessing the technological growth of sales procedures and sales organizations [14].

(i) Sales leaders should create and foster a work atmosphere in which salespeople use technology in the desired behavior, taking into consideration the numerous peculiarities of sales technology. Consider the following scenarios: a salesperson performing operational tasks, such as sending data with colleagues and managers, implementing or tracking the state of inventory, or learning about existing, new, and comparable products;

(ii) a salesperson trying to carry out strategic tasks, such as scanning potential leads, determining the most significant customers from a list of existing customers, or learning about existing, new, and competitive products;

3. RESULTS AND DISCUSSION

A CRM centralizes all data concerning accounts, contacts, leads, prospects, customer interactions, and sales activities. This information is gathered from a variety of sources, including marketing automation tools that give insight from things, internet pages, calls, emails, client lists, and social networks. Contacts and accounts enhancement products and services, outreach and engagement, connections, and account mapping are all examples of sales-derived sources. While there is some overlap, SFA gives a more in-depth insight into the sales process, suggests ways to optimize some procedures, and prioritizes the most important activities. Dashboards that give visibility into pipeline, projections, and seller performance are included in SFA. SFA may have been labeled a misnomer in the past because there is nothing automatic about an application that requires sales professionals to enter the data many times. AI is increasingly making it easier and more effective to automate sales activities and interactions, such as offering suggestions and assisting in the prioritization of tasks that can’t be automated, such as determining who to reach out to what to offer, and when. Gartner identified two distinct themes from hundreds of discussions with sales force automation executives [15].

We can develop a plan for the automation of the sales force with these prospects in mind.

- Forecasting: Use AI and predictive skills, as well as individual seller proclivities, to anticipate and find elements that improve prediction accuracy.
- Lead scoring: Marketing uses artificial intelligence to offer optimized leads, decrease guessing, uncover hidden links, and connect dependencies on data.
- Pricing optimization: Experiment with variable-price solutions to maximize earnings across client and product ranges.
- Personalized content: Create enticing material that is customized to individual requirements to encourage more meaningful human connections.
- Guided selling: AI-powered coaching uses real-time purchasing signals to inform salespeople what to do next, which campaign to send, which items to promote, and when to contact to maximize opportunities and complete transactions quicker.
- Chatbots: Collect the front-end data from clients and provide best-practice replies before contacting a more knowledgeable human vendor.
- Lead, account, and opportunity management: Use AI to identify leads and opportunities that are in danger of stagnating, as well as to revive inactive accounts.

3.1 AI-powered CRM

A CRM system allows businesses to track and analyze their relationships with consumers, vendors, and staff members. It makes an effort to strengthen and maintain these commercial connections to maximize sales effectiveness and profitability. CRM systems may gain access to customers’ interaction histories and sales information by collecting current and prospective customer data. CRM systems can then decide which services and products are required to optimize sales operations. Overall, the software helps businesses better understand their customers. Companies who have a better understanding of their customers can:
• Create more successful marketing tactics;
• Discover new sales possibilities;
• Provide better customer service.

According to one study, current customers generate 65% of a company's income, and acquiring a new client cost almost five times as much as keeping an existing one happy. As a result, businesses must comprehend consumers and take specific measures to maintain positive relationships with them and boost key performance indicators in sales [16].

The following are three main reasons for integrating AI into CRM tools [17]:

Handling a greater volume of unstructured data: Client data rises in proportion to the number of transactions. Organizations are going to be able to get to know their customers as they process more data about them. They will, however, have to work harder to obtain meaningful information because the majority of the data is unstructured. While unstructured information which accounts for around 90% of all data is difficult to analyze, AI systems can convert unstructured data to structured data. After converting unstructured data to structured data, machine learning algorithms may detect trends and provide vital insights to organizations. Given the growing volume of data, AI technology offers enterprises scalable choices for managing a larger volume of data more rapidly and efficiently.

Increasing relationship complexity: Aside from the growing volume of data, the growing number of transactions affects business operations and relationships. This complexity makes identifying corporate relationships and properly analyzing consumer patterns more challenging. Salespeople invest over fifty percent of their CRM time seeking to better manage CRM obligations. By automation nearly all of these operations and delivering considerable insights, AI technology offers the ability to swiftly solve this obstacle.

Growing popularity: At the end of 2016, there was a surge in interest in AI-powered CRM systems. The following causes can be linked to this expansion: AI advances enable the technology to be integrated into CRM systems, which are becoming increasingly popular among businesses. As processes get more complex and the volume of customer data increases, the impact of AI on CRM systems becomes more obvious.

3.2 Einstein Automate

Einstein Automate is a suite of automated processes, integrating, digital interactions and artificial intelligence (AI) features built within the Salesforce Platform. MuleSoft RPA (Robotic Process Automation), Einstein Document Reader, and Digital Process Automation are among the new offerings.

Organizations require automated workflows to manage time-consuming operations like confirming user account details as they transition to digital-first customer experiences. In fact, according to a recent MuleSoft poll, 77% of business and IT decision-makers are currently utilizing or planning to employ automation technologies to boost productivity. Customers of Salesforce are no exception, with an average of 38.2 billion operations automated and 116 billion Einstein predictions executed daily as of July 2021.

The capabilities of Einstein Automate make it simple to click, develop, and deploy workflow automation to manage and track traditional tasks. Customers may choose from hundreds of pre-built, specific to an industry best practice workflow, or utilize sophisticated low-code tools to create unique process automation in a matter of minutes [18].

Einstein automates is compress of three features [18]:

• MuleSoft RPA: New RPA features replace repetitive chores with bots that can intelligently handle documents, enter data, or take action on the user's behalf without requiring any programming. These bots can operate with any system or application, including PDF documents, spreadsheets, and even disconnected older systems, thanks to MuleSoft RPA.
• Einstein Document Reader: Use Einstein’s ability to scan documents like driver’s licenses and I-9s, and then act on that data in Salesforce Flow with just a few clicks, minimizing human error and enhancing accuracy.
• Digital Process Automation: Using drag-and-drop tools, business users can build rules for automation and logic, retrieve information from documents, and
incorporate them into automated workflows – all without writing code.

3.3 Robotics Process Automation (RPA)

RPA is the technology that allows computers to be programmed to perform jobs that were previously performed by humans. Such jobs include data entry, form filling, and overseeing digital procedures.

RPA may be employed to automate a variety of business processes, such as those in banking, healthcare, and retail. While RPA is typically thought of as a way to reduce labor expenses, it may also help to improve accuracy and efficiency.

Furthermore, RPA may assist organizations in expanding their operations without growing their workforce. As a result, RPA is a versatile technology that may be utilized to reduce costs and enhance operations in a range of industries.

The Benefits of Salesforce Integration RPA in the Workplace [19].

- Processing of claims

Claim processing is one of the most promising RPA applications in the insurance industry.

Claims processing is critical to the insurance business, but it is also notoriously time-consuming and error-prone. By automating the claim filing process, insurers may reduce the amount of time spent processing claims while increasing accuracy. RPA may also be used to automate other insurance industry tasks such as policy registration and renewals.

By automating these repetitive and often onerous tasks, insurers may free up workers to concentrate on other value-added operations such as customer care and fraud protection.

RPA can therefore assist to enhance the general effectiveness and efficiency of the insurance sector.

- Underwriting

RPA may assist the insurance business with a variety of underwriting duties such as data input, policy verification, and claim processing. Such scenarios can aid in increasing precision and effectiveness while decreasing expenses. RPA can, for example, be used for automated data input for new regulations. This can aid in reducing mistakes and expediting the underwriting process. Furthermore, RPA may be utilized to validate policy conditions and terms for client information. This can assist to guarantee that consumers are obtaining the coverage they require and that the insurance is free of faults. Finally, RPA may be utilized to automate the processing of claims. This can assist to expedite the procedure for filing claims and minimize the length of time clients must wait.

- Regulatory Adherence

Regulatory compliance is another prospective use case for RPA in the insurance business. The insurance industry is highly regulated, and avoiding costly fines and other consequences is critical. RPA may help by automating repetitive and time-consuming compliance operations including gathering and analyzing data, organizing documents, and report preparation. This allows insurance business workers to concentrate on more important activities while lowering the chance of human mistakes. Furthermore, RPA can give the openness and audit ability that regulators frequently demand. Insurance businesses may enhance their bottom line while reducing regulatory risk by automating compliance-related duties.

- Policy Renewals for Automation

RPA may provide several benefits to the insurance business, ranging from automating policy renewals to aiding with comparative shopping. RPA may help insurance businesses save both time and cash on policy renewals by automatically gathering and entering data into the relevant systems. This not only allows staff to concentrate on other activities, but it also decreases the possibility of mistakes.

Furthermore, RPA may be used to compare insurance products on behalf of clients. RPA may easily produce a list of possibilities from many providers by inputting simple parameters such as region and service needs. This not only spares clients’ time but also ensures that they receive the greatest bargain possible on their insurance. RPA is set to become a more significant tool as the insurance business evolves.

- Queries and resolutions that are automated

RPAs (robotic process automation) may benefit insurance firms in a variety of ways. One method
is to provide customer support via automated inquiries and resolutions. This can assist in minimising the length of time consumers must endure on hold while also increasing customer satisfaction.

RPAs can also assist with claim processing. RPAs can assist speed up the claims procedure and eliminate mistakes by automating monotonous and time-consuming operations like data input. Furthermore, RPAs may be utilized to detect fraud. RPAs can assist identify possible fraud situations and save the organization money by analyzing data trends.

4. CONCLUSION

The way most companies function and operate is being transformed by artificial intelligence. The influence of AI is visible in all major businesses throughout the world, from production to supply chain and logistics. AI-driven tactics and analytics methodologies are being used by a growing variety of firms to capitalize on their valuable corporate data and consumer insights. Mentioning that it is clear that AI has become an essential component of modern CRM systems. In reality, numerous retail, online shopping, and manufacturing businesses employ business intelligence solutions to improve their CRM systems and sales efforts. As a result, they can conduct successful marketing. As a result, the combination of AI with customer relationship management opens the door to a more successful business.

The main topic is that sales leaders at the organization where the study was done are using AI technology. SFA adoption theorizes that high rates of adoption are connected with ease of use as well as perceived value, according to prior work. According to the findings of this study, sales leaders view the tool as an asset for generating money and increasing customer experience, hence improving sales success. As a result, we may infer that AI has a favorable influence on the role of sales in a computerized sales environment.

5. LIMITATIONS AND FUTURE WORK

Researchers can further enhance the field's theory by recognizing common patterns across techniques used for diverse CRM-related purposes and applications, or by uncovering novel methods for business applications that can be used to perform unusual CRM-related tasks. A convolutional neural network (CNN), for example, has been used to analyze textual data [20], but it may also be used for various information sources (e.g. time-series data) or to achieve a different goal (e.g. sentiment and intent assessments of customer reviews). As a result, future research can look at incorporating time-series data into forecasting customer churn models based on a CNN or incorporating time-series data into sentiment and intent assessments of customer reviews based on a CNN.

What is clear is that humans will interact with unprocessed data less and less, and their work will be more influenced by AI [21]. As a result, future research should look at what people's new responsibilities will be, what talents a firm will need to be competitive, and how humans will interact with AI. Furthermore, humans must be able to discern the rationale behind a particular decision and check the ethical principles of the action; hence, AI must be built with an ethical rule-based framework. However, we discovered a scarcity of studies on the ethics of AI-CRM integration. Future research can also examine ethical dilemmas via the prism of several already present theories of ethical behavior, such as deontological, utilitarian, or virtue ethics [22] and so assist managers in finding the appropriate balance between ethical issue considerations and AI application effectiveness.

COMPETING INTERESTS

Author has declared that there are no known competing financial interests or non-financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

4. Cousineau, Daniel. The impact of Artificial Intelligence within a digital sales environment: A quantitative view of
salesforce automation adoption and perceived value. Diss. Dublin, National College of Ireland; 2020.

© 2023 Kalliuta; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here: https://www.sdiarticle5.com/review-history/102970