

Order Management System : A Cloud Based Web App

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Abstract— Software and IT industry professionals agree that cloud computing has become a global trend. Salesforce Order Management assists retailers across the spectrum in fulfilling, managing, and servicing orders. We created it from the bottom up to accommodate a robust workflow that includes real-time inventory, payment, and invoicing, as well as order allocation and fulfilment. Salesforce Order Management includes customized objects, actions and APIs, platform events, and Lightning components to help you manage orders received from your storefront. In addition, the Order Management Lightning console app provides Salesforce UI default functionality. A platform for tracking sales, orders, inventory, and fulfilment is known as an order management system. Salesforce Platform allows users to save and maintain data records.

Keywords— Cloud Computing, Order Management System (OMS), E-commerce, Customer Relationship Management, Objects in Salesforce.

I. INTRODUCTION

Salesforce is one of the most well-known cloud computing firms in the world, as well as the leader in Customer Relationship Management (CRM). Salesforce does not necessitate the installation of any software, hardware, or infrastructure, such as servers. All we need is access to the

Internet to get to Salesforce. This allows even non-techies to utilize the system and customize it to their needs. Salesforce.com (SFDC) was founded with its customer relationship management (CRM) service. The data were then divided into categories like sales cloud, service cloud, social cloud, statistics cloud, data cloud, marketing cloud, application cloud, and so on.

Salesforce Architecture:

Salesforce maintains data in a single database schema as a single instance of a software server with multiple tenants.

There is a single common application service shared by numerous customers when it comes to multi-tenant architecture. As a result, it is cost-effective. In a single-tenant building, on the other hand, all development and maintenance costs must be borne by one client. As a result, multi-tenant design is advantageous.

Salesforce's apps are built based on metadata. As a result, developers can concentrate completely on the development of applications. It's simple to configure and scale the metadata-driven platform.

APIs: Salesforce has many APIs available. The Salesforce Mobile App can be designed and customized using these tools. Every aspect of the Salesforce design has been meticulously planned and implemented.

An order management system (OMS) is a software system that is used to track all information and processes associated with an order, including order entry, inventory management, fulfilment, and after-sales services. A business and a buyer can both benefit from an OMS. Customers can check when an order will arrive and organizations can monitor inventory near-real-time.

OMS Architecture:

The architecture of an order management system (OMS) is made up of three tiers: engine, application, and database. The OMS engine controls the flow of data. The database allows high-speed, high-performance reporting and analytics, while the application tier delivers the functionality and security that the enterprise requires.

It is the role of coordinated supply chain management to oversee marketing, information technology, and logistics to please, retain, and attract new customers' supply chain logistics is a function of coordinated supply chain management to help satisfy, retain, and attract new consumers. When these situations arise, Customers' service expectations are fast rising as they are empowered and linked by mobile devices, and the logistical operations involved in order management are becoming more complex.

II. LITERATURE SURVEY

Library Management Systems are constructed expressly for the desires of libraries; nonetheless, due to the fact no libraries are alike, coping with their awesome holdings stays a difficulty. The motive of this undertaking turned to look at the use of a Customer Relationship Management platform (CRM) as an opportunity for conventional library control structures for smaller libraries that are having a hassle with problems like cost, maintenance, and specialized approaches. The CRM platform for this undertaking turned into Salesforce®, a cloud-primarily based software program corporation that worried about developing a fashionable library surrounding using bespoke approaches in a Salesforce database. Seven librarians inspected and analysed the database for expert grievance and ability changes.

This paper examines the number of facts that we devour every day is overwhelming. According to Jeff Desjardins, founder, and editor of Visual Capitalist, the arena has an estimate of forty-four zettabytes of facts. A zettabyte is 1,000 to the energy of seven or 1 with 21 zeros. Fortunately, maximum architects do now no longer want to manipulate facts that large, however, the length of the facts we manipulate continues to be staggering.

Over the decades, the e-commerce industry has been dominated by e-commerce ventures like Amazon or eBay or even FedEx or DHL. With the continuously rising demands shipping industries around the globe have scaled up their business. This has also increased maintenance and cyber-based management systems costs. We may consider developing some cloud computing projects with better features and reduced costs. Cloud-based shipping management systems can streamline the entire process of raising an order till the product is successfully delivered to the customer with nice feedback from the customer side. The efficiency of the data is enhanced to increase the automation and centralization of the data. The cost of the business gets reduced significantly and it allows greater visibility and better scope for all parts of the business.

This article analyses Salesforce's cloud-based vaccine management platform based on its working procedure and advantages. The most difficult task is to manufacture a large number of vaccinations and disseminate them to humans. The Salesforce platform is very beneficial to distribute that vaccination, and also, it manages the scheduling, dosage, and registration in a very efficient and simple manner. Moreover, the platform manages the collection and verification of cases, and also, it prepares a report based on the health status.

This paper examines if clients need to name an agent for instant help. In our project, we can display how you could upload Softphone, known as a name-manipulate tool, to the footer of the Salesforce console so that marketers can solution smartphone calls and replace client facts in Salesforce at the same time as talking with clients. Some heritage on CTI: Salesforce and its family provide many alternatives to select from, consisting of Open CTI, which offers you the blessings of cloud structure and much less maintenance. Sales force's online market for apps. it

creates a name middle to your organization's third-birthday birthday celebration CTI device that integrates with Salesforce. Add customers to the decision middle to do and get hold of calls with a Softphone in Salesforce.

III. KEY CONCEPTS

CLOUD COMPUTING

Cloud computing is usually defined as storing and managing the data over the cloud, rather than on a local server. Cloud computing is easy to understand. All applications are developed and run in the web browser. Using the internet connection, users and developers will have access to whole applications thus eliminating the complexity and overhead of the maintained environment.

Unlike traditional business applications which are complicated, expensive, and need experts to install, run, update and secure, cloud computing can be accessed anywhere with an online connection. In traditional systems, the entire infrastructure must work together. For such type of seamless interaction, and for the smooth run of the system, constant maintenance is always required. With cloud computing, there is no necessity to invest money in acquiring and supporting hardware and software infrastructure, thus decreasing the potential cost for users and developers.

The main impact of cloud computing is on the responsiveness of IT systems. With the cloud computing environment, we can add users and developers instantly, and the applications can be deployed rapidly into the cloud which reduces the user request response time. As the complexity of the internal systems is removed, the organization can speed up the entire IT process.

E-COMMERCE

Salesforce's B2C e-commerce solution optimizes conversions across all digital channels - online, mobile, social, and more. By using a single platform to manage all customer engagement channels, Salesforce Commerce Cloud simplifies the process of creating, launching, and maintaining multiple sites. It allows you to create seamless eCommerce experiences that inspire and convert today's connected shoppers. Your business can go to market faster and smarter using our e-commerce software that delivers personalized customer experiences across mobile, digital, and social platforms.

Traditionally, there are four types of e-commerce: business-to-consumer (B2C), business-to-business(B2B), consumer-to-consumer (C2C).

An E-commerce transaction is defined as an online commercial transaction. Websites like Amazon, Flipkart, Shopify, Myntra, eBay, Quikr, and Olx provide E-commerce services. Up to \$27 trillion could be spent on retail e-commerce by 2020.

CUSTOMER RELATIONSHIP MANAGEMENT

CRM stands for Customer Relationship Management.

CRM software program manages the connection among a

organisation and its clients as its call suggests. By preserving a database, CRM allows agencies and their personnel to investigate patron interactions, churn rates, and shopping for patterns. Customer facts is contained on this database, along with their identity numbers, beyond shopping for history (orders), and different details. Due to this, this utility enables agencies recognize patron conduct and examine in which to make investments to be able to maximize income and decrease

losses. Additionally, it enables keep a wholesome courting with the patron with the aid of using dealing with a huge database.

What are the steps in the CRM process?

- Reach potential customers
- Transition leads to actual customers
- Establish a relationship and build loyalty
- Encourage additional sales and upgrades
- Retain customers

OBJECTS IN SALESFORCE:

Salesforce has a number of standard objects. Accounts, contacts, leads, and opportunities are all examples of common business items. Custom objects are objects that you develop to store data relevant to your business or industry.

Salesforce objects are database tables that let you store data unique to a company. The two types of Salesforce objects are: Typical Items include: Users, contracts, reports, dashboards, and other standard items provided by salesforce.com.

There are three kinds of Salesforce objects:

Standard Objects – The objects already created for you by the Salesforce platform.

Custom Objects – These are the objects created by you based on your business processes.

External Objects – The objects which you create a map to the data stored outside your organization.

IV. CONCLUSION

As eCommerce demand continues to accelerate, a better order management system is certainly a way for you to better manage your business operations. Business goals of all sizes can be met using this convenient and productive system. In addition to an OMS, an organization can also benefit from investing in other technology firms. With the growing digital world, people are expecting all their work to be done digitally, so it is imperative to choose tech solutions that help businesses to advance based on their capabilities. Hence, OMS helps businesses to develop healthy relationships with customers.

V. FUTURE SCOPE

Using an Automated Order Management System, no user involvement will be needed within the order processing phase. Market demands and expectations will have to be met by future order management processes.

In the future, analytics and digital transformation will power a new era of agile, cost-effective, and efficient order management for the end-user.

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REFERENCES

- [1] Stacy S McDonald. Salesforce® CRM: A Library Management Solution. A Master's Paper for the M.S. in I.S. degree. April 2021, 58 pages. Advisor: Stephanie W. Haas
- [2] Salesforce Data Architecture Author: Dipankar Jyoti & James A. Hutcherson Chapter First Online: 21 January 2021
- [3] Cloud-Based Shipping Management System Publisher: IEEE Author: Vivek Sharma; Aamod Krishna Tiwari; Ayush Srivastava; Divyanshu Srivastava
- [4] Salesforce Vaccine for Real-Time Service in Cloud Author: Monika Mehra, Pradeep Jha, Himanshu Arora, Khushboo Verma & Himalaya Singh Conference paper First Online: 26 October 2021
- [5] Building a Salesforce-Powered Front Office (A Quick-Start Guide) Authors Rashed A. Chowdhury
- [6] Rakesh Kumar JECRC Foundation, Extremely effective CRM Solution Using Salesforce October 2014, Conference: Journal of Emerging Technologies and Innovative Research Volume: Volume 1 Issue 5.
- [7] Abby Jenkins Product Marketing Manager, Order Management Systems: What Is an OMS and How Does it Work? October 12, 2020.
- [8] Pawan Kumar Gupta Year: 2019, How Order Management Can Help You Deliver the "Perfect Order".
- [9] Author: Dr.Tariq Sheakh Year: 2018, A Study of Inventory Management System Case Study.
- [10] Author: Anuradha Manchar; Ankit Chouhan Year: 2017, Salesforce CRM: A new way of managing customer relationships in a cloud environment, Publisher: IEEE.