Customer Relationship Management (CRM)

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Project Guide

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Introduction

- CRM is the development and maintenance of mutually beneficial long-term relationships with strategically significant customers.

- CRM is a shift from traditional marketing as it focuses on the retention of customers in addition to the acquisition of new customers.

- CRM enables organizations to gain 'competitive advantage' over competitors that supply similar products or services.

- CRM is a business philosophy based on upon individual customers and customised products and services supports by open lines of communication and feedback from the participating firms that mutually benefit both buying and selling organisations.

- CRM is ultimately what the company defines it to be depending on their business objectives.

Problem Identified :

    1. Not very much Centralized

    2. Irregular workflow.

    3. Low user adoption.

    4. Perspective.

Solution Proposed:

- A CRM solution will centralize all your data and make it easier for you to find what you need, exactly when you need it.

- CRM will help the seller to run their business efficiently with using our technology and also help them to improve good business sense.

Objectives

- ➢ To Improve the customer's journey.

- ➢ To Improve operational efficiency.

- ➢ To Generate more opportunities for the Companies.

- ➢ To provide analysis through web application

- ➢ To Expand the customer base.

- ➢ To improve customer Profitability.

Scope

➢ A CRM system is huge and important, which can be used by small and large companies as the main aim is to provide effective customer service..

➢ The ideal CRM system is a single repository for all data sources within a company that gives an atomistic real-time view of client data.

➢ CRM is a sound idea or approach for strengthening or retaining customer relationships while lower costs and increasing productivity and profitability in the workplace.

➢ A CRM system is important not just for dealing with existing clients, but also for obtaining new ones.

Literature Survey

Sr.no	Title	Author(s)	Year	Outcomes	Methodology	Result
1	Machine learning-based customer relationship management with chatbot automation and time series forecasting using ARIMA model.	P.S. Gopalakrishnan, G. Raghavendra Rao, K. Prasad	2020	The proposed system improved customer satisfaction and sales revenue by providing personalized recommendations and accurate sales forecasting.	The system used a combination of machine learning algorithms, including natural language processing, sentiment analysis, and ARIMA model for time series forecasting.	A case study showed that the system increased sales revenue by 30%.
2	Intelligent Chatbot-Based CRM System using Machine Learning and Time-Series Analysis	D. Sumathi, K. Saravanan	2021	The proposed system improved customer engagement and satisfaction by providing 24/7 support and accurate sales forecasting.	The system used a combination of machine learning algorithms, including natural language processing, sentiment analysis, and time-series analysis using ARIMA model.	A survey showed that 75% of the participants found the system helpful in addressing their queries.
3	Chatbot-Based CRM System with Time Series Analysis for Sales Forecasting	Chia-Wei Hsu, Chun-Hao Liao, Chia-Chen Chen	2021	The chatbot-based CRM system improved customer experience and sales forecasting accuracy by providing personalized recommendations and real-time insights.	The system used a combination of machine learning algorithms, including natural language processing, sentiment analysis, and time-series analysis using ARIMA model.	A case study showed that the system increased sales forecasting accuracy by 35%.

Proposed System

Features and Functionality

➢ **Feature 1: Providing Dashboard**

➢ **Feature 2: Option for Creating A new Ticket**

➢ **Feature 3: Creating a Quote Request**

Algorithm Used

➢ **Customer Relationship Management:**

1] Auto Regressive Integrated Moving Average (ARIMA) :

ARIMA, short for 'Auto Regressive Integrated Moving Average' is actually a class of models that 'explains' a given time series based on its own past values, that is, its own lags and the lagged forecast errors, so that equation can be used to forecast future values.

An ARIMA model is characterized by 3 terms: p, d, q

where,

p is the order of the AR term.

q is the order of the MA term.

d is the number of differencing required to make the time series stationary.

Outcomes of Project

➤ Customer Relationship Management enables a company to align its strategy with the needs of the customer in order to best meet those needs and thus ensure long-term customer loyalty.

➤ However, in order to be successful in these aims, the different company departments have to work together and use measures in a coordinated fashion.

➤ This purpose is achieved via a customer database which is analysed and updated using CRM software.

➤ This approach will be of particular interest to companies operating in highly competitive markets with less small company where it is difficult to attract new customers.

Block Diagram

Use Case Diagram

Customer Relationship Management System Use Case

DFD Diagram
(Level 0)

Customer Mnagement

Customer Feedback Management

Customer Relationship Management

Sales Management

Generate Invoices

Product Management

ZERO LEVEL DFD: Customer Relationship Management
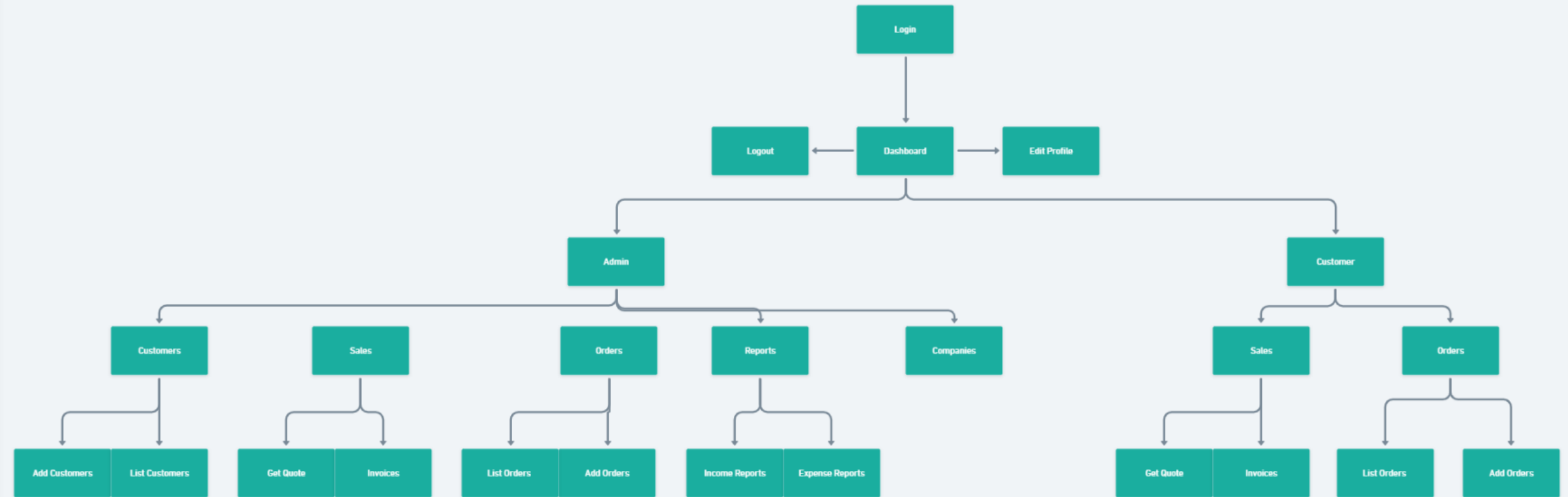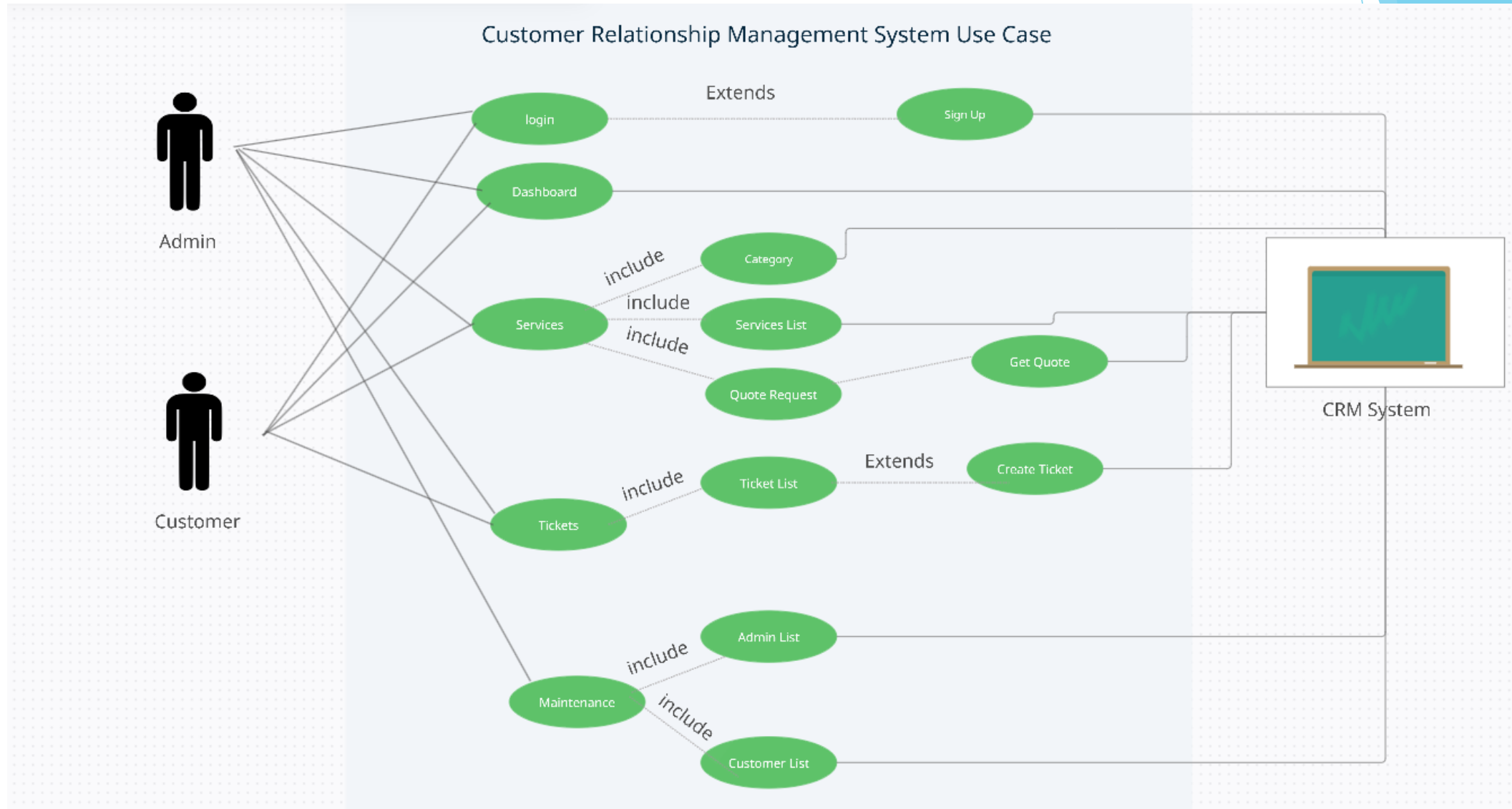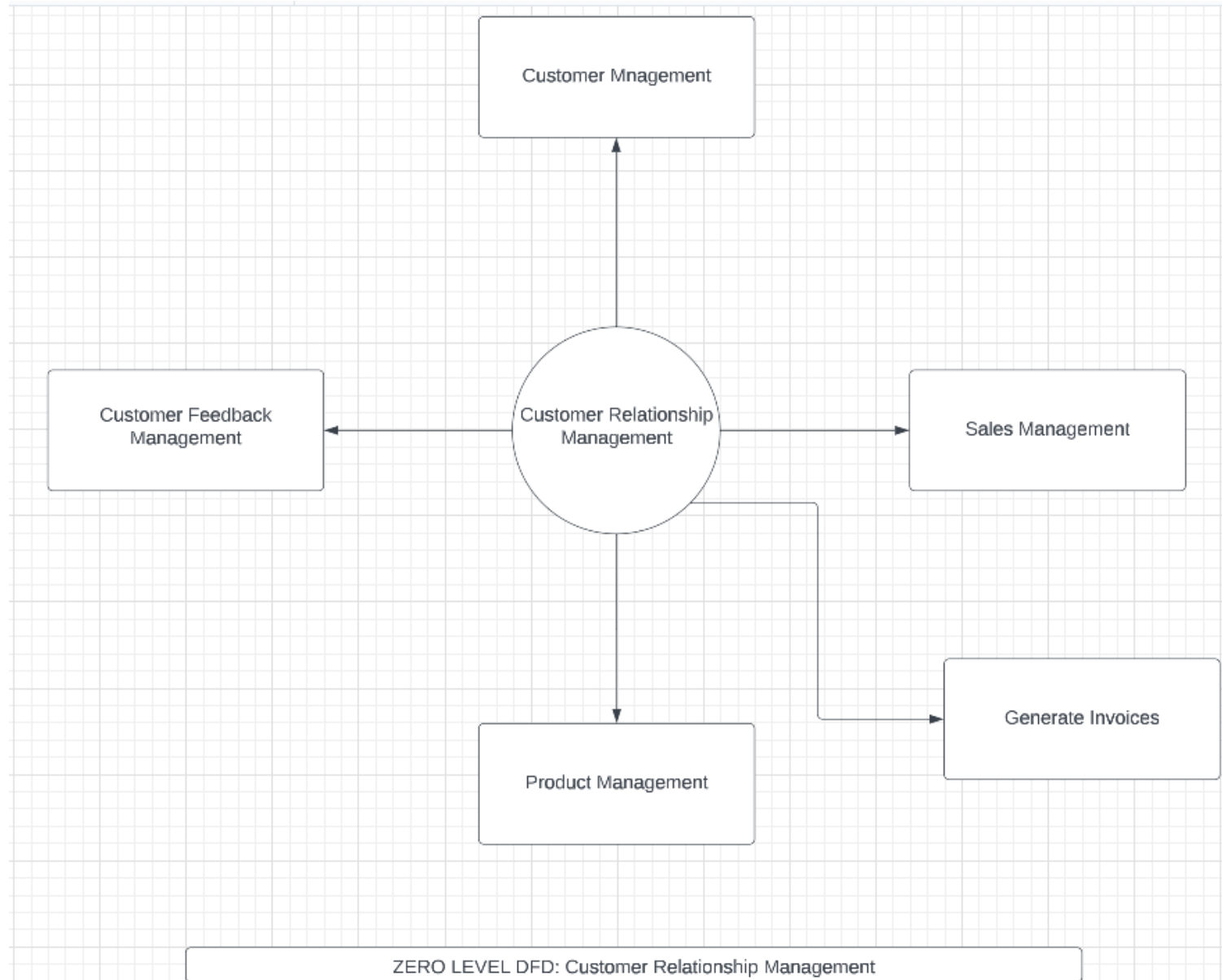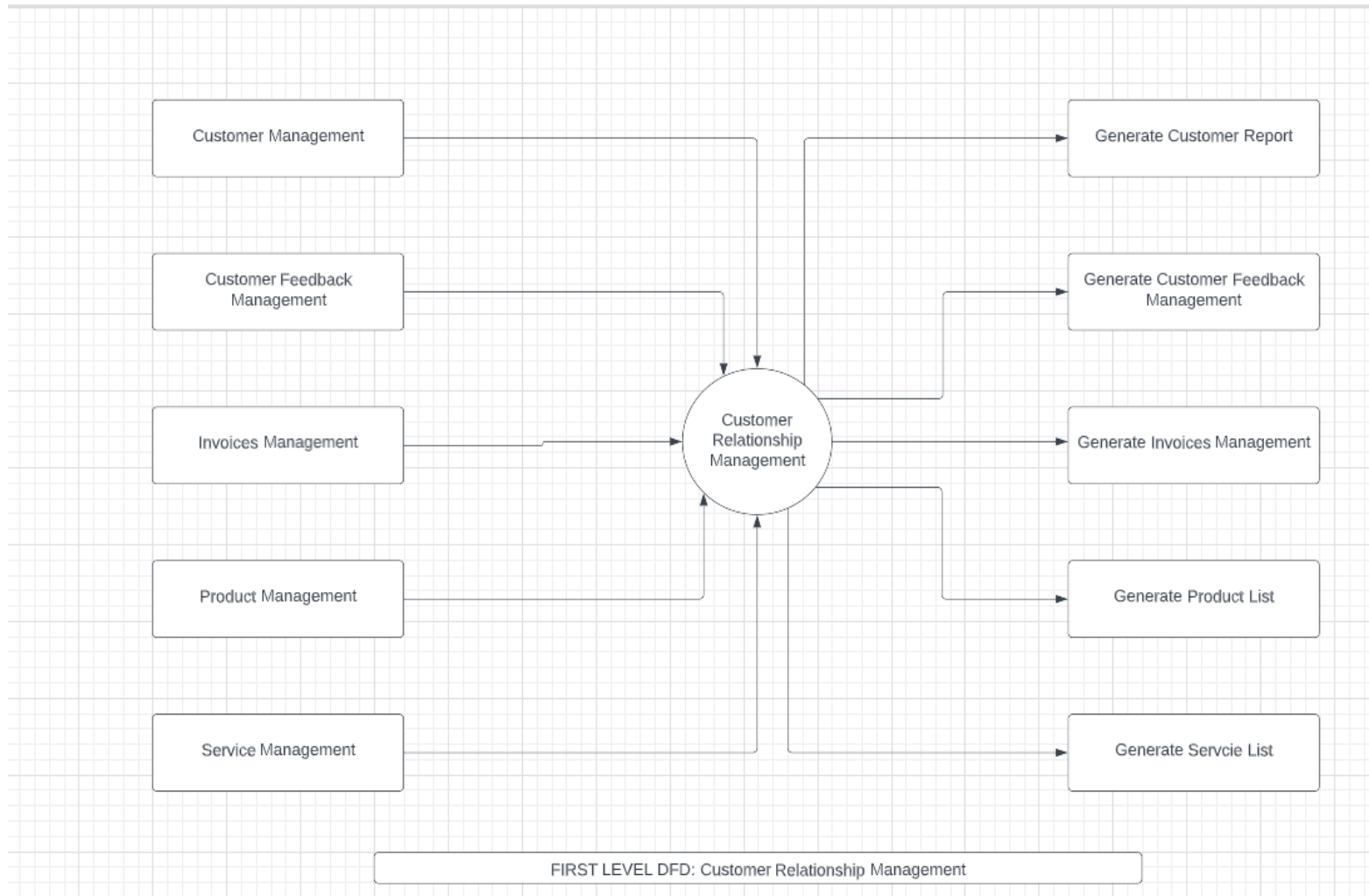
DFD Diagram
(Level 1)

DFD Diagram
(Level 2)
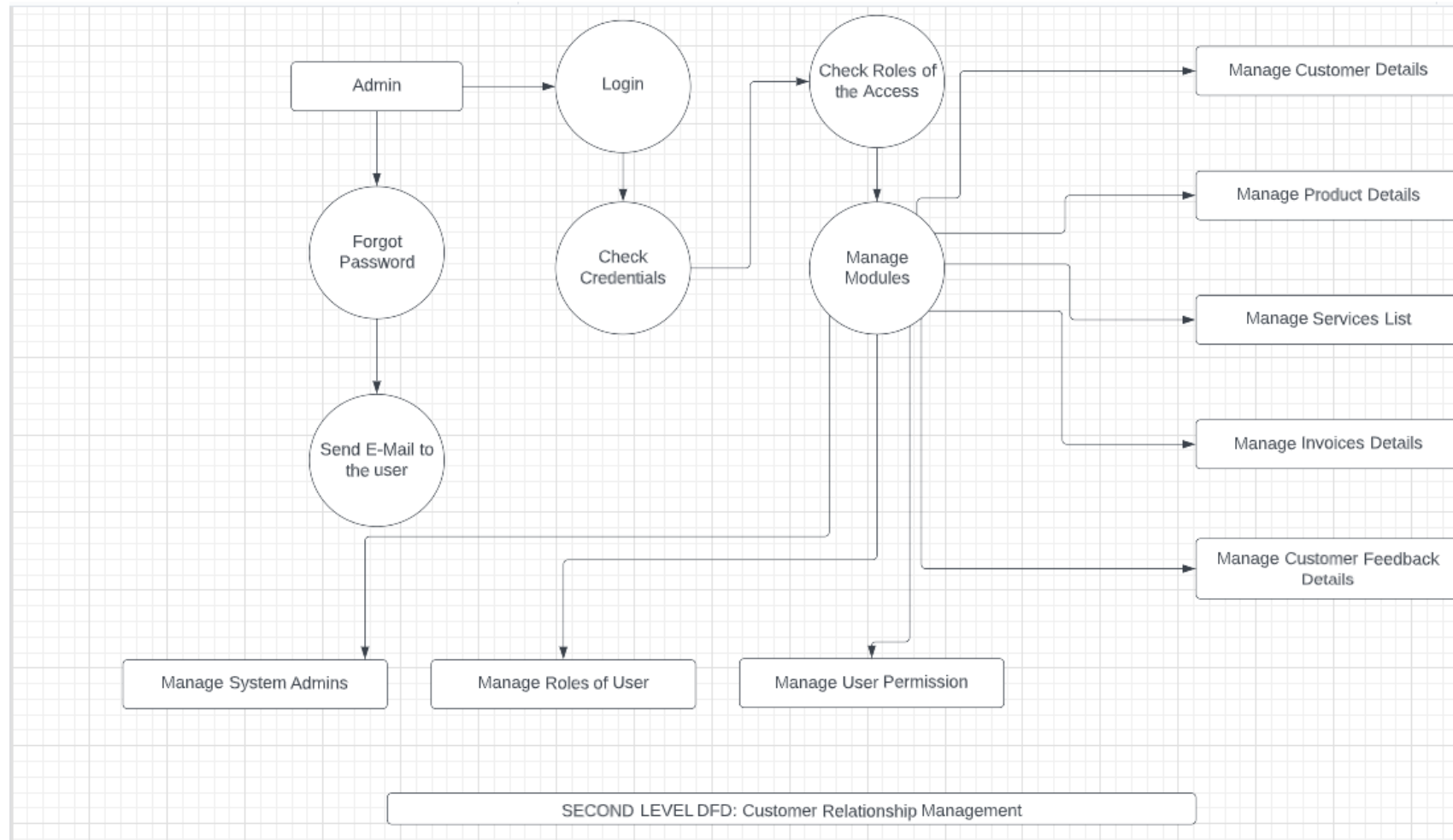
Technology Stack

FRONTEND : HTML
          CSS
          JAVASCRIPT

BACKEND(DB) : PHP
              MYSQL

OS: : WINDOWS

IDE : VS CODE

Suggestion in Review - 1

- **Proper Categorization**

- **Proper ML Explanation of Project**

- **Changes in PPT**

Result & Discussion

CRM benefits a company in a variety of ways. While the benefits vary by department or industry, six benefits of CRM platforms that affect every user include:

➢ Trustworthy reporting.

➢ Dashboards that visually showcase data.

➢ Proactive service.

➢ Efficiency enhanced by automation.

➢ Simplified collaboration.

Discussion
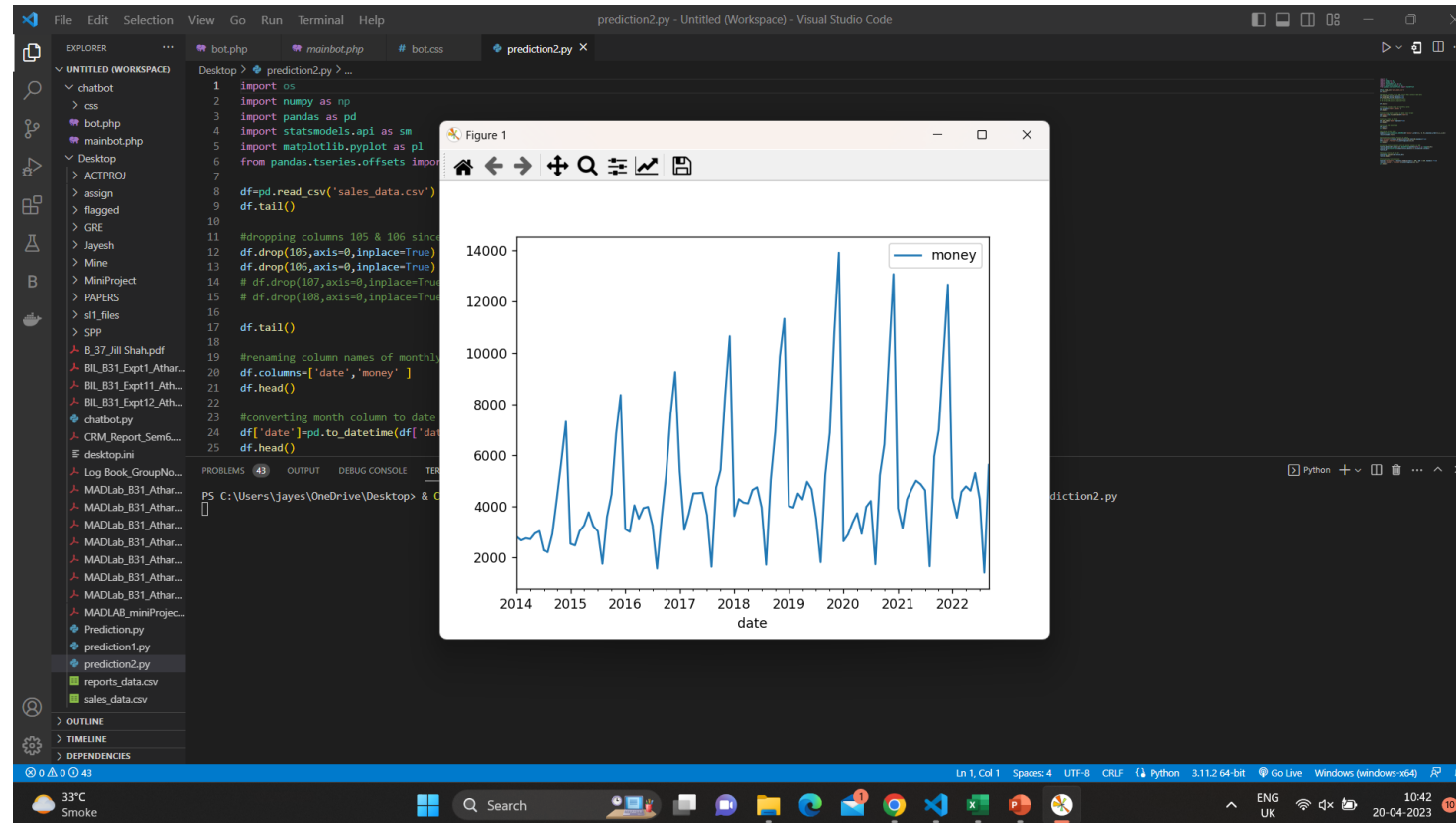
Discussion

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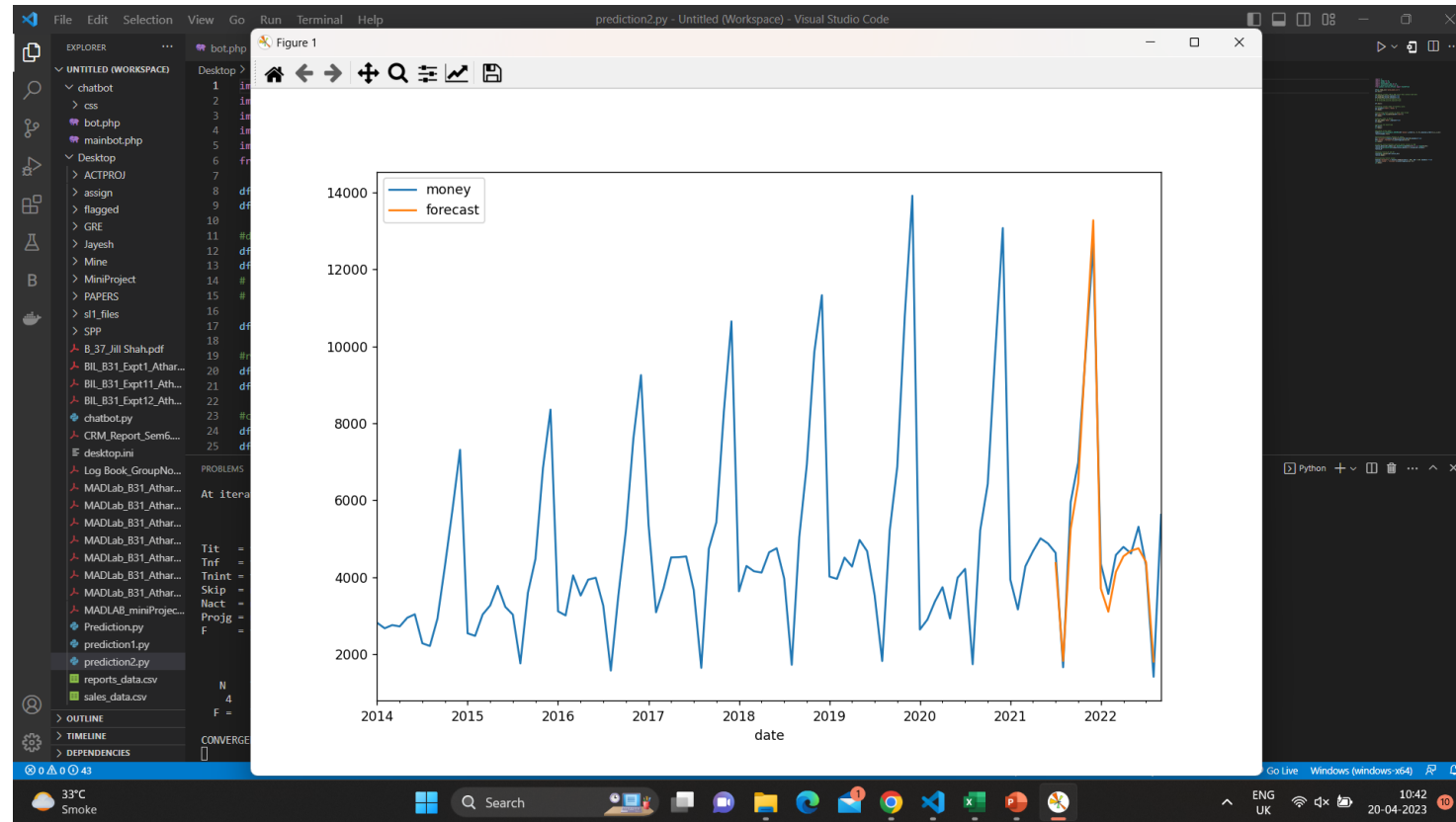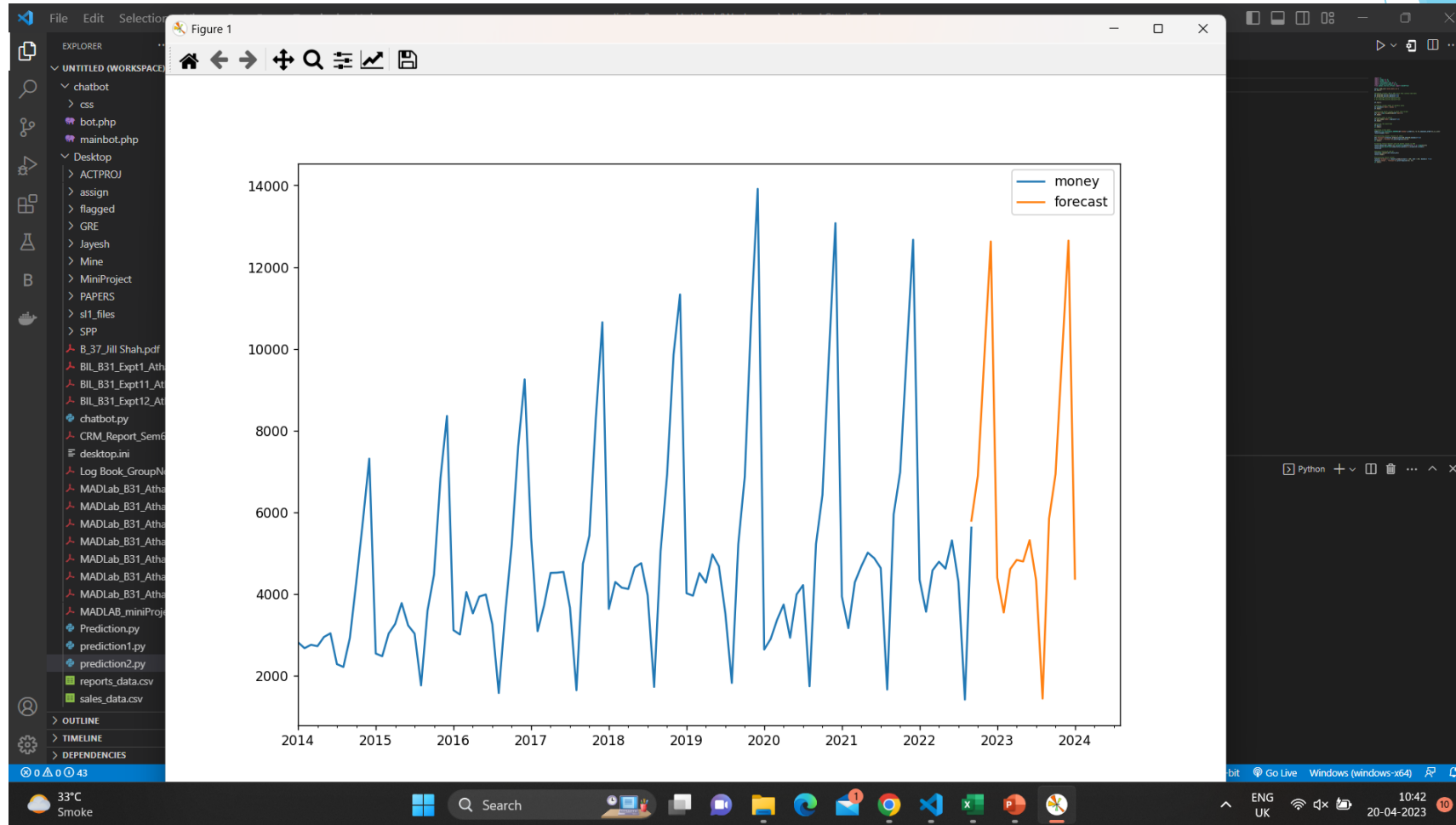# Discussion

Discussion

Discussion

Conclusion & Future Scope

➢ Customer Relationship management is a business strategy that enables a business organization to maximize revenue, customer satisfaction, profitability through strategic mobilization, organization, and management of customer's interests and desires.

➢ CRM in the automotive industry is strategically used a model mechanism for brand promotion and customer attraction.

➢ The technology comes with imperative customer analysis measures using technological systems for business organization, automation, and synchronization of the business sales, customer services, marketing, and technical support.

➢ **Key CRM Challenges to Overcome**

➢ Being used to the new system leaving the old one behind

➢ Ability to analyze the CRM data correctly

➢ Picking the right CRM that blends in precisely

➢ Non-expert CRM solution provider

➢ Not retrieving enough actionable business insight

➢ Integration in competencies

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THANK YOU!!!!