#### Waterfall Deliverables - Part -1/2

#### **Waterfall Model Documents**

### **Document 1- Business case document template**

# Why is this project initiated?

The old banking system is outdated and doesn't meet the needs of the stakeholders involved. This leads to difficulties in managing financial information, delays in processing applications, and overall inefficiency in the processing.

The business case document explains why the project is necessary. It contains information like the author, version, project name, and ID. A RACI chart, modifications, and approvals should all be present in the document. It begins with an introduction that discusses the goals and objectives of the firm. In addition, it covers the project's history, scope (including both in- and out-of-scope functionalities), assumptions, limitations, and hazards. A business process overview that describes the current system (AS-IS) and suggested recommendations (TO-BE) for resolving issues is provided as the document's conclusion.

# What are the current problems?

Today's financial organizations and institutions need technologies with complete functions to bridge the gap between business workflow and customers. That's where the CRM system comes into play. Here are some points that can be good justifications for implementing a banking CRM-

- 1. The need to build loyal relationships with clients
- 2. The need to retain existing clients and ease the on boarding of the new ones
- 3. The need to keep all customers' info in one place
- 4. The need to automate financial processes and workflow
- The need to drive new business opportunities by expanding the customer base

# With this project how many problems could be solved?

The purpose of this project is to analyse, select, and implement a new banking CRM system for it streamlines key financial processes and workflows such as account on boarding, portfolio modelling and claims processing, provides closer integration with financial accounts and offers easy access to all data. Not only does it help banks serve customers bearer, but they can also provide a more personalized journey for their customers.

The goal is to improve the records availability and accessibility of information, collateral, forms, and documents related to the financial and non-financial process. Additionally, the project aims to reduce system, and system responses, leading to a more streamlined and efficient banking process.

#### What are the resources required?

- Peopleti Project team members from the Banking community and the IT department
- 2. a) 1 Business analyst (BA)
  - b) 1 Project manager (PM)
  - c) 1 UI/UX designer
  - d) 2 Front-end engineers
  - e) 2 Quality assurance engineers (QA)
  - f) 2 Testing engineers
  - g) 1 Android and 1 IOS I engineer
- How much organizational change is required to adopt this technology? The current solution has been in place for several years, and users are accustomed to its functionality. There may be resistance to change and a learning curve associated with adopting the new system. Justifying the investment in terms of ease of use, quality of information, speed of Accessibility, and ease of support and maintenance may be challenging. It is important to quantify improvements in system utilization and demonstrate the benefits to management.

#### Time frame to recover ROI?

- 1. **Time-**The implementation of the new system is expected to be completed within months.
- 2. **Budget-**The budget for the project should not exceed Rs. 50000000 and should cover hardware, software, training, and services.
- Other-Additional resources may be required for third-party software evaluation, site visits, and Dataquest reports, with a budget not exceeding Rs. 5000000

# How to identify Stakeholders?

To make the CRM implementation happen, the project team will need to follow the waterfall model phases diligently. The key deliverables would include a detailed requirements Document, system design specifications, a fully functional CRM system, comprehensive test Cases, and user documentation. Success criteria could include meeting project milestones, achieving a high user adoption rate, improved sales productivity, increased customer satisfaction, and positive feedback from stakeholders.

There has to be a significant effort toward identifying project stakeholders early on. This involves prioritizing stakeholders according to their vested interests in the project as well as their overall impact and influence on the project. The process of identifying stakeholders ideally starts when your sponsor approves the project charter.

#### 1. Project Charter

This document normally identifies the project head, key sponsors, clients, and influencers. The project charter can provide useful insights for identifying the stakeholders.

## 2. Reviewing the Enterprise Environmental Factors

The enterprise environmental factors (EEF) may involve factors such as competition, the company's structure, and industry standards. Reviewing these factors can help you identify the stakeholders.

# 3. Interviewing the influencers

Interviewing the project management experts and key stakeholders is also instrumental in identifying the key stakeholders.

## 4. Asking questions

Brainstorming sessions between the project team members and experts are a great way of greeting the stakeholders involved. For greeting a clearer picture, try answering these questionsti

- Who are this project's shareholders?
- Who is involved in the project? Directly or indirectly.
- Who gains if the project is successful?
- Who are the suppliers?
- Who can accept or reject the project?
- Who might be affected by the project's outcome?

#### **Document 2ti BA Strategy**

Write BA Approach strategy (As a business analyst, what are the steps that you would need to follow to complete a project - What Elicitation Techniques to apply, how to do Stakeholder Analysis RACI/ILS, What Documents to Write, What process to follow to Sign off on the Documents, How to take Approvals from the Client, What Communication Channels to establish n implement, How to Handle Change Requests, How to update the progress of the project to the Stakeholders, How to take signoff on the UAT- Client Project Acceptance Form )

This project, Customer Relationship Management For Banking System (CRM BANKING), implements a web system to provide an environment for the users to discover and manage all relationships of customers in a bank. Thus, the components needed to implement CRM BANKING are a database server, a web server, graphical user interface components, and a database interface Application Programming Interface (API) to programmatically access the database.

The following figure describes the. Interaction among the components used in CRM BANKING. Figure 1. CRM BANKING System Architecture The components used to build CRM BANKING were chosen with the following criteriati

- (i) The components should be shareware, i.e., available freely for non-commercial purposes,
- (ii) Be part of a standard, i.e., the do not 3 depend on a specific operating system and hence
- are easily portable across systems with ease
- (iii) Database server independent, so that new and different versions of the server can be plugged in easily. The user interface components are built by using HTML 6.0 forms, frames, and JavaScript. The applications are launched using Java Server Pages (JSP) and Java Servlet. JSP and Java Servlet were used because they are easily portable and can be

Reused. Also, it is easy to process whole user input from the HTML forms. Moreover, Java provides the convenient function, Java Database Connector (JDBC), to connect database. The database choice available to CRM BANKING is MySQL. MySQL is a real multi- user database and it is free. The availability of the JDBC driver for MySQL and the rapid performance of the access data are the most important reasons to choose it. Moreover, the same code could be used to link with another version of MySQL database by changing the proper JDBC driver, thus, making it database independent. 4 2.1 Software Interfaces. Internet browserti Netscape or Internet Explorer. Operating systemti Windows 98/Me/2000/XP or Unix/Linux. . Databaseti MySQL. . Compilerti JDK 1.4.2 . Languageti HTML IJAVA / JavaScript/ JSP. Database connectorti JDBC. JSP Container/ Web serverti Jakarta Tomcat. Before begin, it's important to lay the proper foundation. Knowing which requirements are most important for your company will make your search more effective and less time-consuming. Armed with the knowledge of the most common features and what they can do, you'll be able to quickly create a list of software worth pursuing.

#### 1. What goals are you trying to accomplish?

CRM evaluation needs to start with a plan and expectations. If you aren't clear on why you need a CRM, it's too easy to get burdened with a system that no one likes and that doesn't actually help your business grow. Here are some consideration.

- Are you looking for a full-fledged system, or just enough to replace your spreadsheet or pen-and-paper approach?
- Are you trying to serve a B2C customer base, or is your focus on the B2B space? B2C and B2B CRMs differ, so it's good to be aware of the nuances required for each.
- Do you need to migrate from a legacy system to a cloud-based solution to reduce the need for IT resources or provide bearer visibility?
   What are the outcomes you want from the software? This can include things like streamlined sales and marketing processes, integrated analytics and

performance tracking, access to advanced tools like VoIP and collaboration, and integrated customer service and sales processes.

Doing this will point you toward which products to look into further, using RFPs and other methods, and it will highlight the specific features you need to include on your CRM requirements checklist. It will also help you determine what level of customization you may need, as it's unlikely any CRM will have every capability out of the box.

# 2. How much technical assistance do you have access to?

Answering this will help you determine how much flexibility you have with the CRMs you look at. Some systems are user-friendly and don't require a lot of technical know-how to set up and manage. Others, however, require IT expertise.

In addition, the more complex the system is, the more involved it'll be to implement. You'll likely end up working with the vendor or an implementation partner, which is much easier if you have an in-house IT team. This is especially true for on premise solutions, where the customization options are more extensive and require deeper technical knowledge.

### 3. Database Management

Mastering data management of your customer database should be a high priority of your CRM platform, so you can ensure data integrity. In addition to storing records in a central location, the database can allow you to link data across different departments (such as sales and marketing) and view the relationships between different records. It also helps you maintain clear, up-to-date records and avoid duplicates.

- Comprehensive Records
- Link Between Databases
- Master Data

# 4. Marketing and Campaign Management

One of the most essential features of a CRM is marketing automation. They go hand-in- hand, so most CRMs offer marketing automation modules or have the ability to connect seamlessly with the top standalone marketing automation solutions.

Marketing automation allows you to be more efficient with your marketing, especially at scale. It offers capabilities like batch email marketing and event-based marketing, where you create a sequence of messages that each automatically triggers when a contact takes a specific action. When you're dealing with hundreds or thousands of contacts at different

CRMs can track customer data like spending habits, likes, dislikes and other attributes to bearer qualify them. This data can be used to drive targeted marketing campaigns. Campaign analysis tracks campaign delivery and analyses ROI for individual campaigns to improve future efforts.

- Campaign Design
- Batch Email Marketing

- Autoresponders
- Email Tracking
- Triggered Email
- Customer Targeting
- Campaign Analysis
- Campaign Delivery
- Competitor Tracking

# 5. Lead Management

Two critical parts of customer relationship management are generating leads and properly managing them. CRMs come with embeddable web forms that capture leads and store the pre- defined criteria to route them to the appropriate sales rep.

Pipelines are a common visual tool that make it easy for users to move leads through the funnel and gain visibility into which leads are most likely to convert or about to churn so sales and marketing know who to follow up with.

- Lead Generation
- Lead Capture
- Lead Distribution
- Web Forms
- Pipeline Tracking
- Lead Follow-Up

# 6. Sales Automation

It's essential to know how well your CRM manages opportunities and how marketing and sales teams can collaborate. Users of CRM systems can manage sales opportunities from the first contact to sales closure, assigning each lead to the most qualified sales rep to Nurture them and ensuring every lead gets a Rention .

You should be able to move contacts through specific record stages. For example, Lead, Contact, Customer. These stages should be available right out of the box but also should be deeply customizable to fit your unique selling cycle.

- Opportunity Management
- Sales Collaboration
- Territory Management
- Win/Loss Analysis
- Quoting

# 7. Workflow Automation and Employee Management

A good CRM will make your teams more efficient and productive. To that end, many include workflow automation features, such as sending reminders of a scheduled sales call or notifications when a new lead enters the system.

Other tools allow users to create to-do lists, access a shared calendar, connect with

Customers on social media and integrate with third-party productivity tools. On the employee side, look for features for tracking performance and storing employee records.

- Group Calendar
- Task Scheduling and Tracking
- · Performance Tracking
- Employee Records
- Organizational Hierarchy
- Workflow Management
- Social CRM

# 8. Business Intelligence and Reporting

Check that the solution provides business intelligence (BI) features that can accurately monitor and measure customer service factors. Your CRM needs to easily give you insight into customer satisfaction for bearer customer retention. BI also allows you to monitor new customer acquisitions to gain great client references in the future.

Furthermore, check that the automation and sharing of these reports are easy to set up. Nothing's worse than trying to pull reports acer monitoring data only to realize it hasn't been set up properly. Find out if the software is frequently updated with upgrades and enhancements, and if that is included in the fee.

- Sales Intelligence
- Sales Reporting
- Sales Forecasting
- Activity Dashboard
- Revenue Cycle Modelling
- Business Intelligence

#### 9. Deployment Environment

Many CRMs are web-based, also called SaaS platforms, which is a common requirement when shopping for a CRM. Salesforce is a popular example of a web-based (or cloud) CRM that many people gravitate towards due to its robust functionality and easy integration.

On-premise solutions are installed on your own managed servers and maintained by an internal team. On-premise solutions demand a higher overhead cost along with more space and more technical knowledge to implement, but they come with some unique benefits. These benefits include higher levels of control and customization, as well as direct security

- oversight.
- On-Premise
- Cloud/Web-Based
- Hybrid

## **SDLC Methodologies -**

# 1) Planning

In the Planning phase they Discuss about solving of crucial problems because effective customer relationship management (CRM) is essential for business success. By implementing a robust CRM system, the organization can streamline sales processes, improve customer satisfaction, increase customer retention, and ultimately drive revenue growth.

The proposed CRM solution will provide a centralized database for storing and managing customer information, including contact details, purchase history, preferences, and communication history. It will enable sales teams to track leads, manage sales pipelines, and automate routine tasks. Additionally, it will facilitate beRer collaboration among teams, enhance customer service, and enable datadriven decision-making.

# 2) Requirement Analysis

At this stage BA take meeting with all project stakeholder (external). The problem will be solved by implementing a CRM system using the waterfall model. The waterfall model is a sequential approach that consists of distinct phases, including requirements gathering, system design, implementation, testing, and deployment. By following this structured methodology, we can ensure a systematic and organized approach to CRM implementation.

#### 3) Design

Following points discuss in Design

Lay out-Responsive web design Business Rule- clear session on log out Colour scheme- Blue/

Grey Programming language- java

As an BA I need prepare test case of online CRM banking system. The use case diagram always communicates with client on the design and solution documents. I design I will also initiate the preparation of end user manuals.

Updates RTM on time

GUI designer will look into transient classes and designs all possible screens for the ITsolution.

# 4) Implementation (Coding Phase)

I need to organizes JAD sessions online Banking CRM process

I need to understand all queries of technical team during coding. Update end user manuals As a team we need to conduct regular status meeting with technical team and the client and tuning client for participation in UAT.

#### Update RTM

# 5) Testing

- BA performs high level testing
- Test data is requested by BA from client Take signoff from client on client project

## 6) Deployment

Plans and organizes training sessions for end users. Coordinates to complete and share end user manuals.

As a BA I choose Waterfall model for this Projects and following are the Reason Which Influence me to choose Waterfall model -

Waterfall model is based on verification and validation of each phase of developing online agricultural product store.

This Waterfall model properly work with small projects. Water fall model is used when the requirements of the user are fixed. As requirement in here is fixed so we will use Waterfall model here.

#### **RACI MATRICS -**

The RACI matrix is a responsibility matrix, also known as the RACI matrix, or the ARCI matrix. It is a model that describes the participation of different people to complete tasks and deliverables for a project or business process. Thus, its aim is to solve the lack of clarity of who does what in projects.

RACI is pronounced 'ray-see', it has been around since the 1950s, and originally it was called the 'Decision Rights Matrix'. This business process can be used for meetings, on boarding and, large tasks, but is generally associated with project management. The advantage of using this tool is increased teamwork, collaboration and communication, creating a simple language to discuss roles and responsibilities in an organisation. Additionally, the RACI Matrix can be known as the 'Responsibility Assignment Matrix'

#### **RACI MATRICX**

Task	SP ON CE R	He ad Del iver y	PRO JEC T MAN AGE R	Dev elo per jav aSe nior	De vel op ers Jav a	De vel ope rsJ ava JU NIO R	TES TER	Sta ke hol der s Ke y-	BA
Requirement gathering			A/I		Α			С	R
Analysis			1						R
Development			1	C/A	R	R	$\overline{}$		
Testing		$\neg$	1				R		
Implementation		$\dashv$	ı	1			_		R
UAT	1		R				_	_	С

For the Stakeholder Analysis I need to following three steps

Step 1ti Identify your stakeholders

In step I need to I identify all internal as well as external stakeholders of this project such as

Following are internal stakeholders

Project Manager

Senior Java Developer

Java Developers

**Network Admin** 

**DBAdmin** 

**Testers** 

BA

Following are internal stakeholders Project sponsor



Financial Head

**Project Coordinator** 

Key stakeholders

# Step 2 Prioritize your stakeholders

**Prioritise according to the quadrant into which stakeholders fall**. If the stakeholder has low impact and low influence, they will naturally be a lower priority in engagement. The opposite is true for those who have a high impact and high influence.

# Step 3 Understand your key stakeholders.

all external are key stakeholder

Project sponsor

Financial Head

**Project Coordinator** 

Key stakeholders

# **What Documents to Write**

Following documents to write

Document (FSD)

Document (SRD)

Project vision Document. Business Analysis Plan.

Business Requirements Document.

Functional requirement specification (FRS)/ Functional Specification

System requirement specification (SRS)/ System Requirement

# What process follow to Sign off on the Documents

As BA I will prefer to mode of sign off on Email and Physically sign of documents. Once the Project vision Document are prepared email It Project sponsor and CC to Financial Head Project Coordinator, Key stakeholders, Project Manager. Once a Business Requirements Document take Physically sign of Project sponsor, take help from. Functional requirement specification (FRS)/ Functional Specification Document (FSD) and System requirement specification (SRS)/ System Requirement Document (SRD) Document are prepared email It Project sponsor and CC to Financial Head, Project Coordinator, Key stakeholders and Project Manager.

# **How to take Approvals from the Client?**

As BA for all business documents I would like to take approval from Project sponsor and Financial Head, Project Coordinator, Key stakeholders on email. For Approvals I remainder them by call or top-up on this mail. Once get approval from Project sponsor and Financial Head, Project Coordinator, Key stakeholders.

## What Communication Channels to establish and implement

Following communication channels I prefer to establish and implement Face-to-face

communication. The Face- to-face communication channel I will used at requirement gathering time because I have Interview with stakeholders. This mode of communication will help me at that time. Video conferencing, Emails.

#### **How to Handle Change Requests?**

By used following why I will handle change request

Determine the Scope of the Change

Determine the Scope of Incorporating the Change

Gain Approval or Rejection of the Change

Communicate and Implement an Approved Change Request

# How to update the progress of the project to the Stakeholders?

Understand stakeholder needs.

Proactively listen to your stakeholders' concerns.

Develop and execute a communication plan.

Utilize online collaboration tools to share regular progress. Send out weekly or biweekly

status reports.

#### How to take signoff on the UAT- Client Project Acceptance Form

To finish up the project sign off process, write a small report to other stakeholders or

executives. Briefly describe how closely the project adhered to the initial project plan, what risks or issues occurred and whether the project was a success in general.

# **Project Sign-off Sheet**

Version Date: 28/05/2023

# Project Name: Online Banking CRM

# **Project Goals:**

- 1. The need to automate financial processes and workflow
- 2. The need to keep all customers' info in one place
- 3. The need to build loyal relationships with clients
- 4. The need to drive new business opportunities by expanding the customer base
- 5. The need to retain existing clients and ease the onboarding of the new ones

Project Manager: - Mr. Mahesh

Sponsor:-Mr. Venkat

Start Date: 01/01/2022

Planned Complete Date: 25/05/2023

Actual Complete Date: 25/04/23

Variance: Total Project Duraon: 17 months

Days Past the Planned Compleon

Date:25/05/2023

Planned Budget:5 Cr

Actual Budget: 5.4 Cr

Variance: .4 Cr

Project Deliverables: summarize the core value proposition of the CRM implementation project, emphasizing the benefits it will bring to the organization, such as improved sales efficiency, enhanced customer satisfaction, and increased revenue. Remind the audience that the proposed solution aligns with business goals, provides a clear project plan, and follows a proven methodology. Reiterate the importance of approving the proposal to meet stakeholders' expectations and drive the organization's success

By signing this document, I acknowledge that I have delivered all the stated deliverables at the agreed to quality levels.

**Project Manager Signature:** 

By signing this document, I acknowledge that I have received all the stated deliverables at the agreed to quality levels.

Sponsor Signature:

Date:25/05/2023. Remarks:

This project Elicita: on Techniques -

Following Elicitation Techniques should I prefer as a business analyst in this Project and also clarify why select this Elicitation Techniques.

# **Prototyping**

According to my knowledge prototyping in visual representation of your ideas allows us to test our ideas directly with users before developing into a fully-fledged product is called as prototyping. Prototype is a scaled down version of a product.

For this online Banking CRM project as a Business analyst before product launch I need to represent ideas on a paper and check with these ideas external stakeholder and internal stakeholders. As BA I need to used prototyping technical. before pending money into market solve this three questions.

Does the product solve the user problem?

Does it score high our user desirability?

Is it user-friendly?

If visual representation of my Ideas solve above questions, then I go for design phase of project development.

# **Brainstorming**

Brainstorming can have done individual or group, in this technique we collect the user ideas and those ideas reviewed and analyse and checked whether given ideas are relevant to include within the system requirement, user or stakeholder come with innovative ideas to define their requirement. Brainstorming is effective with group of 8 to 12 people it helps to get the good number of idea from user and stakeholders also it uses to find the all possible solution of the problem and understand the new opportunities.

# **Change Request**

For the purposes of this document, a Change is defined as the addition, modification, or removal of a configuration item (CI), service, or service component, and/or its associated elements. When as a I receives a request of change from the client Due to change in government taxation structure, I will analyses the request and clarifies exactly what the request is asking me to do in that-

# 1. Feasibilty Study

Basically, this is the first step I am as Business Analyst does whenever come across the Change Requests. This Feasibility Study helps me in answering the possible question like "Are we supposed to proceed with the proposed project change requirements?". If yes, he will go accept the change request and goes to the Impact Analysis. This change has occurred due to CRM mobile application addition change as BA we need to change privies taxation structure change.

When a change is requested, as a Business Analyst I should follow the following steps. In simple terms,

- 1. Firstly, I need to documents the change requests.
- 2.BA identifies whether the change in the ongoing project is really worth it or not.

CRM mobile application addition is priority to consider point according to

CRM mobile application addition is priority to consider point according to

that I need to develop documents and into on-going sprint.

- 3. Project Manager should approve the change requests. If yes, the project will move furtherly. As a BA I will Take Approval from PM and PO on Email and forward this mail to all team and done this change on priority Bases.
- 4.Business Analyst along with the Project Manager ensure whether the change is a minor or a major change.
- 5.If the new requirement is a major change, they make sure that it should not impact the delivery date of the project or any changes in the project scope.

6.Also try to help the other stakeholders to understand the importance of change requests which helps to reduce the negative impact of the project.

# ONLINE CRM BANKING PROJECT

ONLINE BANKING CRM
CHANGE REQUEST

Project Details:	
Project Name:	
ONLINEBANKINGCRM	
Request #:	Date of Request:
001	24.04.2023
Requested By:	
MR. VENKAT (SPONCER)	
Request Descrip:on:	
Wants to add mobile applica:on for bo	th android and IOS
Parsons for this Change Page at	
Reasons for this Change Request:	
Due to covid and wu many employees	are working from mobile. That's why
mobile applica:on version is also need	ded

#### Op:ons considered to implement the change:

Project Manager should approve the change requests. If yes, the project will move furtherly. Taken approval for PM. It should not impact the delivery date of the project or any changes in the project scope.

# Impact of each op:on (Cost, Scope, Schedule, Quality):

not impact the delivery date of the project or any changes in the project scope.

Extra cost will be .4 Cr.

Extra 2 resources need to be added. One for android and another one for IOS.

# Chosen solu:on:

As per requirement and current market scenario we have to deliver the same. All the stakeholders and Project manager is agreed with the same.

# Approval Signature(s) and Date(s):

Typically the change approvers will include the Change Manager, <u>Project Sponsor</u>, <u>Project Manager</u> and the <u>Risk Manager</u>.

# **Document 3- Functional Specifications**

Project name	Online Banking CRM
Customer name	HDFCBANK
Project Version	1.0
Project Sponsor	Mr Venkat
Project Manager	Mr Mahesh
Project Ini:a:on date	01.01.2022

# Functional Requirement specifications:

ReqID	Req Name	Req Descrip:on	Priority
FR0001	Login	User should be able to login to the applica:on t	10
FR0002	Change Password	User should change password every 3 months	10
FR0002	Create Lead	CRM user can create lead	9
FR0003	View Contact	CRM user can view contacts	7
FR0004	Find Opportunity	User can analyse and find oppertunites	8
FR0005	Filter	User can apply filter to perform par:cular job	7
FR0006	Track	User can track status of created leads	6
FR0007	Perform mee:ngs	CRM user can perform mee:ng using of the applica:on	7
FR0008	Assign tasks	User can assign tasks by using of the applica:on	8
FR0009	Notes	User can make Notes	6
FR0010	Arrange Calls	CRM user can arrange calls and also can arrange follow up calls	7
FR0011	Emails	User can send mails	10
FR0012	User access	As a admin it can give access to the par:cular users	9

FR0013	Set Targets	As a admin it can assign targets to the users as instructed by the key stakeholders	8
FR0014	Reminders	CRM system can send reminders	7
NFR0001	Page Loading :me	Page should get load with in 2 seconds	9
NFR0002	Technical supported system	Applica:on can be used in android and iOS system.	8
NFR0003	OTP:me limit	Max 10 sec limit should be there	10
NFR0004	Email & sms alert	Any lead status change user should get alert	9
NFR0005	Log out system	If user will not use the applica:on for 15 minutes system will logout automa:cally	8

# **Document 4- Requirement Traceability Matrix**

ReqID	R e q Name	R e q descrip:on	Design	Di	T1	D2	T2	UAT
FR0001	login	User must be able to login to access the applica:on	Yés	Yés	Yés	Yés	Yés	YES
FR0002	Chang e Passw ord	password	Yés	Pending	No	Yés	Yés	YES
FR0003	Create Lead	CRM user can create lead	Yés	Pending	No	Yés	Yés	YES
FR0004	View Conta ct	CRM user can view contacts	Yes	Yés	Yés	Yés	Yés	YES
FR0005	Find Oppor tunity	User can analyse and fi n d oppertuni: es	No	No	No	No	No	No

FR0006	Filter	User can apply filter to perform par: cular job	Yés	No	No	Yés	Yés	YES
FR0007	Track	User can track status of created leads	Yes	No	No	Yés	Yés	YES
FR0008	Perfor m mee:	CRM user c a n perform mee:ng using of the applica:on	Yes	No	No	Yés	Yés	YES
FR0009	Assign tasks	User can assign tasks by using of t h e applica:on	Yés	Yés	Yés	Yés	Yés	YES
FR0010	Notes	User can make Notes	Yés	No	No	Yés	Yés	YES
FR0011	Arran g e Calls	CRM user can arrange calls and also can arrange follow up calls	Yés	No	No	Yés	Yés	YES
FR0012	Emails	User can send mails	Yes	No	No	Yés	Yés	YES
FR0013	User	As a admin it can give access to t h e par: cular users	Yes	Yés	Yes	Yes	Yés	YES

		As a admin						
		it can assign						
		targets to						
		the users as						
		instructed						
	Set	by the key						
	Target	stakeholder						
FR0014	S	S	Yes	No	No	Yes	Yes	YES
		C R M						
		system can						
	Remin	s e n d						
FR0015	ders	reminders	Yes	Yes	Yes	Yes	Yes	YES
	Page	Page should						
	Loadi	getload						
NFR00	n g	with in 2						
01	:me	seconds	Yés	Yés	Yes	Yés	Yes	YES
NFR00	Tec	Applica:on						
02	hni	can be used						
	cal	in android						
	suppor	and iOS						
	ted system	system.	Yes	No	No	Yes	Yes	YES
NFR00			ic.	110	140	ic.	IC.	1113
03	OT	Max 10 sec						
0.5	P:m	limitshould						
	e limit	be there	Yes	No	No	Yes	Yes	YES
NFR00		Any lead						
04		sta tu s						
	Email	changeuser						
	& sms	should get						
	alert	alert	Yés	Yés	Yes	Yes	Yés	YES
NFR00		If user will						
05		not use the						
		applica:on						
		for 15						
		minutes						
	Log	system will						
	o u t	logout						
	syste							
	m	ly	Yés	No	No	Yés	Yes	YES
	o u t syste	for 15 minutes system will logout automa:cal	Yés	No	No	Yés	Yes	YES



Online Banking CRM Project
Srishti Gupta

# Contents

ONLINE Banking CRM
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Document Revisions
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Codes Used in RACI Chart
RACI Chart
4. Introduc:on
4.1.Business Goals
4.2.Business Objec:ves
4.3.Business Rules
4.4.Background
4.5.Project Objec:ve
5. Assump:ons
6. Constraints
7. Risks
Technological Risks
Skills Risks
Poli:cal Risks
Business Risks
Requirements Risks
Other Risks
8. Business Process Overview
9. Business Requirements
10.Appendices

#### 1. Document Revisions

Date	Version Number	Document Changes			
01/01/2022	0.1	Ini:al Draa			
04/05/2022	0.2	Android CRM mobile applica:on			
09/09/2022	0.3	IOS CRM mobile applica:on			
06/01/2023	0.4	Lead tracking new feature addi:on			

# 2. Approvals

Role	Name	Title	Signature	Date
Project Sponsor	Mr Venkat			25/05/2 023
Business Owner	Ms Priyanka			25/05/2 023
Project Manager	Mr Mahesh			25/05/2 023
System Architect	Ms Riya			25/05/2 023
Development Lead	Ms Sweta			25/05/2 023
User Experience Lead	Mr Punam			25/05/2 023
Quality Lead	Mr Arnab			25/05/2 023
Content Lead	Mr Saroj			25/05/2 023

#### 3. RACI Chart for This Document

The RACI chart identifies the persons who need to be contacted whenever changes are made to this document. RACI stands for responsible, accountable, consulted, and informed. These are the main codes that appear in a RACI chart, used here to describe the roles played by team members and stakeholders in the production of the BRD. They are adapted from charts used to assign roles and responsibilities during a project.( RACI Can be made for IT side[Project stakeholder] as mentioned above, apart from that Can also Be made for Client side[Business Stakeholder]).

Code	es Used in RACI Char	t
*	Authorize	Has ultimate signing authority for any changes to the
docu	iment.	
R	Responsible	Responsible for creating this document.
Α	Accountable	Accountable for accuracy of this document (for example, the project manager)
S docu	Supports iment	Provides supporting services in the production of this
С	Consulted	Provides input (such as an interviewee).
Ţ	Informed	Must be informed of any changes.  RACI Chart

Task	SP ON CE R	He ad Del iver y	PRO JEC T MAN AGE R	Dev elo per jav aSe nior	De vel op ers Jav a	De vel ope rsJ ava JU NIO R	TES TER	Sta ke hol der s Ke	ВА
Requirement gathering			A/I		Α			С	R
Analysis			1						R
Development			1	C/A	R	R			
Testing			1				R		
Implementation			i	1			$\neg$		R
UAT	1		R						С

# 4. Introduction

#### 4.1. Business Goals

The purpose of this project is to analyse, select, and implement a new banking CRM system for it streamlines key financial processes and workflows such as account on boarding, forms, and documents related to the financial and non-financial process. Additionally, the portfolio modelling and claims processing, provides closer integration with financial accounts and offers easy access to all data. Not only does it help banks serve customers bearer, but they can also provide a more personalized journey for their customers. The goal is to improve the records availability and accessibility of information, collateral, project aims to reduce system downtime, wait times, and system response times, leading to a more streamlined and efficient banking process.

According to Salesforce's survey, 51% of consumers expect banks to understand their needs and come up with relevant suggestions before they even make contact. That's why banks should adopt a customerfocused approach to their services by switching to a feature-rich customer relationship management (CRM) solution.

# 4.2. Business Objectives

Today's financial organizations and institutions need technologies with complete functions to bridge the gap between business workflow and customers. That's where the CRM system comes into play. Here are some points that can be good justifications for implementing a banking CRM.

- The need to build loyal relationships with clients
- The need to retain existing clients and ease the on boarding of the new ones
- The need to keep all customers' info in one place
- The need to automate financial processes and workflow
- The need to drive new business opportunities by expanding the customer base

Also for this project we should make CRM mobile application also for both android and iOS.

Also we should make a ELearning process for awareness of the change process to the users.

#### 4.3. Business Rules

The success of the proposed project will be measured by the following criteria:

Improved records availability and accessibility of information, collateral and documents by X%.

- Reduction in system downtime by Y%.
- Decrease in wait times for customers and staff by Z%.
- Improved system response times, with an average response time of less than X seconds.
- enabling visualizing information
- Generating a variety of reports to gain in-depth insights
- Minimizing the number of mundane administrative tasks
- Streamlining document management

CRM evaluation needs to start with a plan and expectations. If you aren't clear on why you need a CRM, it's too easy to get burdened with a system that no one likes and that doesn't actually help your business grow. Here are some considerations.

- Are you looking for a full-fledged system, or just enough to replace your spreadsheet or pen-and-paper approach?
- Are you trying to serve a B2C customer base, or is your focus on the B2B space? B2C and B2B CRMs differ, so it's good to be aware of the nuances required for each.

- Do you need to migrate from a legacy system to a cloud-based solution to reduce the need for IT resources or provide bearer visibility?
- What are the outcomes you want from the software? This can include things like streamlined sales and marketing processes, integrated analytics and performance tracking, access to advanced tools like VoIP and collaboration, and integrated customer service and sales processes.

#### 4.4. Background

The old banking mis system is outdated and doesn't meet the needs of the stakeholders involved. This leads to difficulties in managing financial information, delays in processing applications, and overall inefficiency in the processing.

Here are some points that can be good justifications for implementing a banking CRM-

- The need to build loyal relationships with clients
- The need to retain existing clients and ease the onboarding of the new ones
- The need to keep all customers' info in one place
- The need to automate financial processes and workflow
- The need to drive new business opportunities by expanding the customer base

#### 4.5. Project Objective

The purpose of this project is to analyse, select, and implement a new banking CRM system for it streamlines key financial processes and workflows such as account on boarding, portfolio modelling and claims processing, provides closer integration with financial accounts and offers easy access to all data. Not only does it help banks serve customers bearer, but they can also provide a more personalized journey for their customers.

**Contact Management-** with this feature, you can easily store and retrieve clients' contact information such as names, phone numbers, addresses, transactional data, current account balances, etc.

**Lead Management:** thanks to this feature, banking employees can automatically qualify, analyse and nurture the leads to be converted into new banking clients.

**Marketing Campaign Management:** with this feature, you can identify the strategies and create, design and run marketing campaigns that meet your business goals.

**Pipeline and Funnel Monitoring-**thanks to this feature, banks can monitor funnels and pipelines, estimate effectiveness/ineffectiveness and make appropriate changes.

**Reporting** with this feature, you can have a bearer understanding of how your business is going on and make wise decisions.

**Sales Automation, analytics and forecasting** -with this feature, you can automate a plethora of time-consuming and paper-based processes to direct future strategies and make more precise forecasts for specific audience segments.

**Integration Capabilities**- this feature allows you to connect applications, APIs, and devices across your banking organization to organize a more efficient and productive environment.

## 5. Assumptions

Financial organizations and institutions need technologies with complete functions to bridge the gap between business workflow and customers. That's where the CRM system comes into play. Here are some points that can be good justifications for implementing a banking CRM.

- The need to build loyal relationships with clients
- The need to retain existing clients and ease the on boarding of the new ones
- The need to keep all customers' info in one place
- The need to automate financial processes and workflow
- The need to drive new business opportunities by expanding the customer base

# The success of the proposed project will be measured by the following criteria:

- Improved records availability and accessibility of information, collateral and documents by X%.
- Reduction in system downtime by Y%.
- Decrease in wait times for customers and staff by Z%.
- Improved system response times, with an average response time of less than X seconds.
- enabling visualizing information
- generating a variety of reports to gain in-depth insights
- minimizing the number of mundane administrative tasks
- streamlining document management

Here we have outlined key benefits you can derive from implementing a banking CRM. Keep on reading!

**Increased productivity-** you can greatly boost the productivity of your teams, streamline the banking workflow by completely automating essential business processes in your financial organization.

**360-degree view of every customer-** you can get detailed information about every customer account and gain in-depth insight into their journey and experience with your bank or financial organization.

**Beier forecasting-** with customized reports, you can gain a much deeper understanding of your customers and make data-driven decisions to anticipate their needs as well as close more deals.

**Enhanced communication and collaboration-** teams can quickly share information about the deals and leads. Not only does it help you make the process more efficient.

#### 6. Constraints

The current solution has been in place for several years, and users are accustomed to its functionality. There may be resistance to change and a learning curve associated with adopting the new system.

Justifying the investment in terms of ease of use, quality of information, speed of accessibility, and ease of support and maintenance may be challenging. It is important to quantify improvements in system utilization and demonstrate the benefits to management.

#### 7. Risks

- Going over budget and time (project risk)
- Poor user adoption (business risk)
- Issues with customizations (technical risk)
- Turnover of critical project resources (project risk)
- Major business process changes right before deploy (business risk)
- Vendor software upgrades (technical risk)
- Avoid- Major business process changes right before deploy
- Mitigate- Going over budget and time
- Transfer-Pass the risk up or out to another entity.
- Accept- Poor user adoption

# **CRM Risk Management Strategies**

If risks occur, they become issues, but if you manage the risk thoughtfully, you can avoid that escalation. Identifying and prioritizing risks is half the barley. The other half of the barley involves planning your approach through a risk response strategy.

For example, staged roll-outs organized by common groups of users or functionality requirements keep project goals top-of-mind while breaking down the implementation into smaller, more digestible pieces. In this way, the risks for each segment can be assessed as necessary without overwhelming the development team.

#### RISKAVOIDANCE-

As you may be able to guess, risk avoidance involves strategies to avoid the identified risks altogether. You're taking proactive steps to eliminate the risk by pueng the right measures in place to start with. Some examples of this might be ensuring your requirements are clear so that customizations are developed correctly the first time or performing product selection against your requirements so that the CRM you choose is already known to meet the majority of your needs.

#### **2 RISKTRANSFER**

Transferring the risk involves sharing or completely shiaing the ownership of the risk with a third party. In most cases, this transferring of risk is specific to financial risks that are taken on by an organization like an insurance company, a GDPR consultant, etc. When you transfer risk, you are shiaing the liability in addition to the ownership of the risk itself.

#### **3 RISK MITIGATION**

When you work to mitigate risk, you are trying to lessen its potential effect by lowering its exposure below your "acceptable" threshold. You defined what's acceptable during the initial phases of your risk analysis, so now you'll use those standards to help you target a response. For example, if one of your risks is that your data will no longer be GDPR GDPR expert involved in the process. That person would be briefed on the CRM design and consulted on every design decision to ensure the implementation team is complying with their set GDPR standards.

#### **4 RISK ACCEPTANCE**

As the saying goes, we must accept the things we cannot change. In certain cases, you will have to do just that. It's not ideal of course, but it is a necessary strategy for two main situation Either the risks are minor enough that you can choose to handle them in the moment if they come up, or the necessary response is simply not possible due to lack of resources, budget, or time.

# Technological Risks

 Issues with customizations Always avoid so much customisa:on. Try to convince with the exis:ng one.

#### Skills Risks

Poor user adop:on. Try to educate user about the new CRM system.
 Also arrange a proper Learning for users.

#### Poli:cal Risks

 Major business process changes right before deploy. Always try to mi:gate all these things with proper stakeholder interac:ons.

# Business Risks

o Going over budget and :me.

#### Requirements Risks

 Vendor soaware upgrades. Should give proper aaer sales service to the client.

#### Other Risks

Turnover of critical project resources

## 8. Business Process Overview

A banking CRM is similar to a traditional one that helps manage and build relationships with potential customers through automated workflows, customization options, social media tools, etc. However, banking CRM differs in use - it streamlines key financial processes and workflows such as account on boarding, portfolio modelling and claims processing, provides closer integration with financial accounts

and offers easy access to all data. Not only does it help banks serve customers be Rer, but they can also provide a more personalized journey for their customers.

#### AS IS-

The old banking mis system is outdated and doesn't meet the needs of the stakeholders involved. This leads to difficulties in managing financial information, delays in processing applications, and overall inefficiency in the processing.

Today's financial organizations and institutions need technologies with complete functions to bridge the gap between business workflow and customers. That's where the CRM system comes into play. Here are some points that can be good

Justifications for implementing a banking CRM-

- Build loyal relationships with clients
- · Retain existing clients and ease the on boarding of the new ones
- Keep all customers' info in one place
- Need to automate financial processes and workflow
- Need to drive new business opportunities by expanding the customer base

#### TO BE-

Align goals with the business requirements. Before you start the development process, you need to identify your business goals and ways to contribute to them with the new CRM. In addition to that, it's imperative to define the list of the requirements and functions of the final CRM solution.

- enabling bearer storing and using the information on potential and existing customers;
- · enabling visualizing information;
- generating a variety of reports to gain in-depth insights;
- streamlining document management;
- Minimizing the number of mundane administrative tasks.

Having that in mind, our development team has come up with a great concept in developing a CRM to meet all the business needs and requirements in the banking sector. Let's delve into the

#### 9. Business Requirements

#### Importance of Requirements Gathering

Requirements gathering is a fundamental part of any business decision. It helps generate a list of system, functional and technical requirements from the different stakeholders involved in the process. Being confident about what requirements to look for ensures your expectations with the deliverables are clear, and that eventually enables you to make the right choice when it comes to selecting a CRM solution for your business.

No one knows your business bearer than you. So it's important to figure out your expectations from the platform before you start looking for one. Once you know what you want the software to do for your organization, it becomes way easier to evaluate solutions that line up with your needs.

# **Needs Analysis**

Before you begin, it's important to lay the proper foundation. Knowing which requirements are most important for your company will make your search more effective and less time- consuming. Armed with the knowledge of the most common features and what they can do, you'll be able to quickly create a list of soaware worth pursuing.

To help, we've created a list of four questions you can ask to kick-start the

# 1. What goals are you trying to accomplish?

Your CRM evaluation needs to start with a plan and expectations. If you aren't clear on why you need a CRM, it's too easy to get burdened with a system that no one likes and that doesn't actually help your business grow. Here are some considerations:

- Are you looking for a full-fledged system, or just enough to replace your spreadsheet or pen-and-paper approach?
- Are you trying to serve a B2C customer base, or is your focus on the B2B space? B2C and B2B CRMs differ, so it's good to be aware of the nuances required for each.

# 2. How much technical assistance do you have access to?

Answering this will help you determine how much flexibility you have with the CRMs you look at. Some systems are user-friendly and don't require a lot of technical know-how to set up and manage. Others, however, require IT expertise.

#### 3. What size is your business?

Not all CRM systems are built equal. Some cater to small businesses while others are much more suitable for large enterprises. Vendors offer a wide range of functionality, and with that comes varying levels of complexity.

#### 4. Does the vendor offer industry-specific solutions?

Although CRMs are robust, you should know whether they have features that support the industry your company is in.

# **Key Requirements**

Through extensive experience and research, we've compiled a comprehensive CRM evaluation checklist of the most critical CRM requirements to look for when researching and comparing vendors for your business.

#### 1. Contact Management

Contact management is a core component of CRM solutions, allowing companies to collect, store and act on data from prospects, leads and customers. The best systems can maintain bearer contact management, easy proposal creations and more. CRMs enable users to manage appointments with prospects, leads, colleagues, vendors and other contacts.

- Contact Management
- Case Management
- Activity Management
- Shared Contacts
- Appointment Management
- Internal Collaboration
- Document and File Management
- Data Import and Export

# 2. Client Interaction Tracking

Once leads become customers, it's important that you're able to manage all the touchpoints between them and your business. CRMs provide tools for handling and keeping track of your interactions with clients, such as invoices, purchase history and order status. Dashboards act as a central hub of information, so it's easy to see a record of a customer's interactions with your brand.

- Account Management
- Interaction Management
- Payment Management
- Customer Segmentation
- Filtered Views

#### 3. Database Management

Mastering data management of your customer database should be a high priority of your CRM platform, so you can ensure data integrity.

- Comprehensive Records
- Link Between Databases
- Master Data

# 4. Workflow Automation and Employee Management

A good CRM will make your teams more efficient and productive. To that end, many include workflow automation features, such as sending reminders of a scheduled sales call or notifications when a new lead enters the system.

- Group Calendar
- Task Scheduling and Tracking
- Performance Tracking
- Employee Records
- Organizational Hierarchy
- Workflow Management

Social CRM

# 8. Business Intelligence and Reporting

Check that the solution provides business intelligence (BI) features that can accurately monitor and measure customer service factors. Your CRM needs to easily give you insight into customer satisfaction for bearer customer retention. BI also allows you to monitor new customer acquisitions to gain great client references in the future.

- 10. Appendices-
- 1. http://www.google.co.in/
- 2. http://www.licindia.in/
- . http://www.licindia.in/periodic\_moneyback\_003\_features.htm
- 3. http://www.sbilife.co.in/sbilife/content/home
- . http://www.sbilife.co.in/sbilife/content/9 817
- 4. http://www.idbifortis.com/

.http://www.idbifortis.com/Incomesurance/Why\_Incomesurance.aspx?mm=3&I m

1=1

- 5. www.metlife.co.in
- 6. www.hdfcinsurance.com

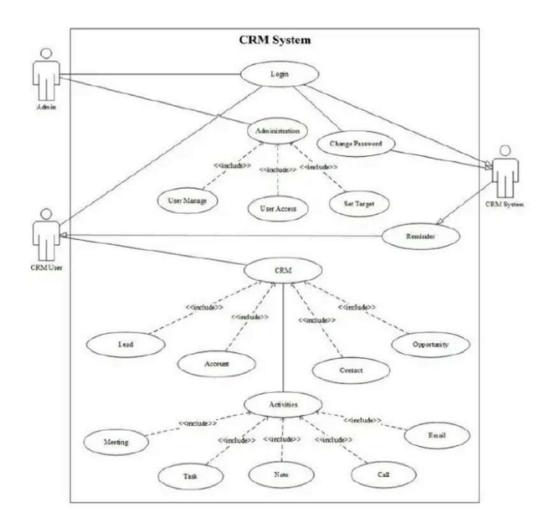
http://www.hdfcinsurance.com/Products/SavingsPlans/MoneyBack.aspx

- 7. www.cagonreligare.com
- 8. http://www.scribd.com
- 9. www.irda.org

#### Other Materials:

- . > Marketing Management by Philip Kotler.
- > Product Brochures

**Document 6- Use case specification document** 



# **Use Case Specification -**

Table 3.4.1 Describes about "login" process of our project and it gives us an understanding how the process works in project. Login process has three primary paths. In this three primary path have two exceptional paths.

Table 3.4.1: Use case description of Login

Use case name:	Login
Actor:	Admin, CRM User
Pre-condition:	None
Primary Path:	Enter user Email     Enter Password     Click "Login" Button
Exceptional Path:	3.1 Please Enter Registered Email 3.2 Email or Password is not valid

Table 3.4.2 Describes about "Change Password" process of our project. Change Password process has four primary paths. In this four primary path have two exceptional paths.

Table 3.4.2: Use case description of Change Password

Use case name:	Change Password		
Actor:	Admin, CRM User		
Pre-condition:	Login		
Primary Path:	Enter Old Password		
	<ol><li>Enter New Password</li></ol>		
	<ol><li>Confirm New Password</li></ol>		
	4. Click "Change Password" Button		
Exceptional Path:	3.1 Please enter the same value		
	4.1 Your old password is incorrect		

Table 3.4.3 Describes about "User Manage" process of our project and it gives us an understanding how this process works in project. User Manage process has eight primary paths. In this eight primary path have two exceptional paths.

Table 3.4.3: Use case description of User Manage.

Use case name:	User Manage				
Actor:	Admin				
Pre-condition:	Login				
Primary Path:	Enter Employee Information				
	2. Select Employee Category				
	<ol> <li>Click "Go" Button to search</li> </ol>				
	4. Select Number of List				
	<ol><li>Click "Edit" Button to Update Employee</li></ol>				
	Information				
	<ol><li>Click "Delete" Button to Delete Employee</li></ol>				
	Information				
	7. Click "Access" Button to Access Employee				
	Information				
	8. Click "Add New" Button to Create Employee				
Exceptional Path:	1.1 Employee Information is not correct				
	3.1 List of Employee is empty				

Table 3.4.4 Describes about "User Access" process of our project and it is gives us an understanding how this process works in project. User Access process has three primary paths. In this three primary path have two exceptional paths.

Table 3.4.4: Use case description of User Access.

Use case name:	User Access
Actor:	Admin
Pre-condition:	Login
Primary Path:	Enter Employee Information     Click "Go" Button to search     Select Number of List
Exceptional Path:	1.1 Employee Information is not correct 2.1 No search result found

Table 3.4.5 Describes about "Set Target" process of our project and it gives us an understanding how this process works in project. Set Target process has five primary paths. In this five primary paths have two exceptional paths.

Table 3.4.5: Use case description of Set Target.

Use case name:	Set Target
Actor:	Admin
Pre-condition:	Login
Primary Path:	Enter Employee Name
	<ol><li>Or click "Search" Button to add Employee</li></ol>
	3. Select Target Year
	4. Enter Value (Amount in Taka)
	<ol> <li>Click "Create Sales Target" Button</li> </ol>
Exceptional Path:	1.1 No matches found
	3.1 No matches found

Table 3.4.6 Describes about "Lead" process of our project and it gives us an understanding how this process works in project. Lead process has seven primary paths. In this seven primary path have two exceptional paths.

Table 3.4.6: Use case description of Lead.

Use case name:	Lead
Actor:	CRM User
Pre-condition:	Login
Primary Path:	1. Enter Leads Information
	2. Select Leads Category
	<ol><li>Click "Go" Button to search</li></ol>
	4. Select Number of List
	5. Click "Edit" Icon to Update Lead
	6. Click "Delete" Icon to Delete Lead
	7. Click "Add New" Button to Create Lead
Exceptional Path:	1.1 Lead Information is not correct
	3.1 List of Leads is empty

Table 3.4.7 Describes about "Account" process of our project and it gives us an understanding how this process works in project. Account process has seven primary paths. In this seven primary path have two exceptional paths.

Table 3.4.7: Use case description of Account.

Use case name:	Account
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Accounts Information
	2. Select Accounts Category
	<ol><li>Click "Go" Button to search</li></ol>
	4. Select Number of List
	<ol><li>Click "Edit" Icon to Update Accounts</li></ol>
	<ol><li>Click "Delete" Icon to Delete Account</li></ol>
	7. Click "Add New" Button to Create Account

Table 3.4.8 Describes about "Contact" process of our project and it gives us an understanding how this process works in project. Contact process has eight primary paths. In this eight primary path have two exceptional paths.

Table 3.4.8: Use case description of Contact.

Use case name:	Contact
Actor:	CRM User
Pre-condition:	Login
Primary Path:	1. Enter Contacts Information
	2. Select Contacts Category
	3. Select Industry Category
	<ol> <li>Click "Go" Button to search</li> </ol>
	5. Select Number of List
	<ol><li>Click "Edit" Icon to Update Contacts</li></ol>
	7. Click "Delete" Icon to Delete Contact
	8. Click "Add New" Button to Create Contacts
Exceptional Path:	1.1 Contact Information is not correct
	4.1 List of Contacts is empty
	4.1 List of Contacts is empty

Table 3.4.9 Describes about "Opportunity" process of our project and it gives us an understanding how this process works in project. Opportunity process has six primary paths. In this six primary path have two exceptional paths.

Table 3.4.9: Use case description of Opportunity.

Use case name:	Opportunity
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Opportunities Information
	<ol><li>Click "Go" Button to search</li></ol>
	3. Select Number of List
	<ol> <li>Click "Edit" Icon to Update Opportunities</li> </ol>
	<ol><li>Click "Delete" Icon to Delete Opportunity</li></ol>
	<ol><li>Click "Add New" Button to Create</li></ol>
	Opportunities
Exceptional Path:	1.1 Opportunity Information is not correct
	2.1 List of Opportunities is empty

Table 3.4.10 Describes about "Meeting" process of our project and it gives us an understanding how this process works in project. Meeting process has seven primary paths. In this seven primary path have two exceptional paths.

Table 3.4.10: Use case description of Meeting.

Use case name:	Meeting
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Meeting Information     Select Meeting Category
	Click "Go" Button to search
	4. Select Number of List
	<ol><li>Click "Edit" Icon to Update Meeting</li></ol>
	<ol><li>Click "Delete" Icon to Delete Meeting</li></ol>
	<ol><li>Click "Add New" Button to Create</li></ol>

Table 3.4.11 Describes about "Task" process of our project and it gives us an Understanding how this process works in project. Task process has seven primary paths. In this seven primary path have two exceptional paths.

Table 3.4.11: Use case description of Task.

Use case name:	Task
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Task Information
	2. Select Task Category
	<ol><li>Click "Go" Button to search</li></ol>
	4. Select Number of List
	<ol><li>Click "Edit" Icon to Update Tasks</li></ol>
	6. Click "Delete" Icon to Delete Task
	7. Click "Add New" Button to Create Task
Exceptional Path:	1.1 Task Information is not correct
	3.1 List of Task is empty

Table 3.4.12 Describes about "Note" process of our project and it gives us an understanding how this process works in project. Note process has six primary paths. In this six primary path have two exceptional paths.

Table 3.4.12: Use case description of Note.

Use case name:	Note
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Note Information
	<ol><li>Click "Go" Button to search</li></ol>
	3. Select Number of List
	4. Click "Edit" Icon to Update Notes
	<ol><li>Click "Delete" Icon to Delete Note</li></ol>
	<ol><li>Click "Add New" Button to Create Note</li></ol>
Exceptional Path:	1.1 Note Information is not correct
	2.1 List of Note is empty

Table 3.4.13 Describes about "Call" process of our project and it gives us an understanding how this process works in project. Call process has seven primary paths. In this seven primary path have two exceptional paths.

Table 3.4.13: Use case description of Call.

Use case name:	Call
Actor:	CRM User
Pre-condition:	Login
Primary Path:	Enter Call Information
	2. Select Call Category
	<ol><li>Click "Go" Button to search</li></ol>
	4. Select Number of List
	<ol><li>Click "Edit" Icon to Update Calls</li></ol>
	6. Click "Delete" Icon to Delete Call
	<ol><li>Click "Add New" Button to Create Call</li></ol>

Table 3.4.14 Describes about "Email" process of our project and it gives us an understanding how this process works in project. Email process has five primary paths. In this five primary path have two exceptional paths.

Table 3.4.14: Use case description of Email.

Use case name:	Email
Actor:	CRM User
Pre-condition:	Login
Primary Path:	1. Enter Email Information
	<ol><li>Click "Go" Button to search</li></ol>
	3. Select Number of List
	4. Click "Subject Title" to see Email details
	<ol><li>Click "Compose" Button to Create Email</li></ol>
Exceptional Path:	1.1 Email Information is not correct
	2.1 List of Email is empty

# **Data Flow Diagrams**

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination.

A DFD describes what data flow (logical) rather than how they are processed, so it does not depend on hardware, software, data structure or file organization. Data flowcharts can range from simple, even hand-drawn process overviews, to in-depth, mul ti- level DFDs that dig progressively deeper into how the data is handled. They can be used to analyse an existing system or model a new one.

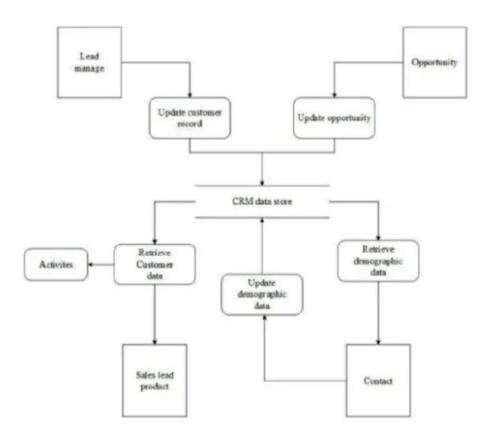
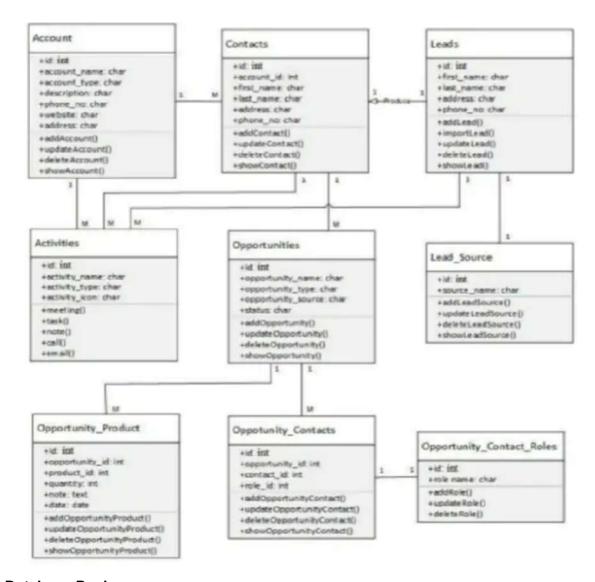


Figure 4.1.1: Data Flow Diagram of online CRM

# 4.2 UML Class Diagram:

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application.

Class diagram shows a collection of classes, interfaces, associations, collaborations,



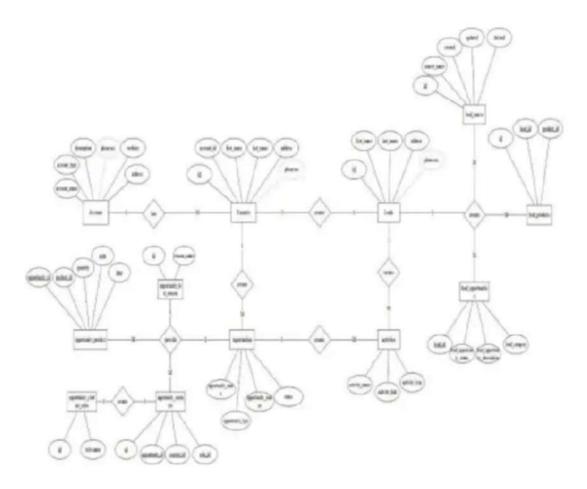
#### **Database Design**

A database design is a collection of stored data organized in such a way that the data requirements are satisfied by the database. The general objective is to make information access easy, quick, inexpensive and flexible for the user. There are also some specific objectives like controlled redundancy from failure, privacy, security and performance. A collection of relative records makes up a table. To design and store data to the needed forms Primary keyti - A primary key is a special relational database table column (or combination of columns) designated to uniquely identify all table records. or group of columns in a relational database table that provides a link between data in two tables.

#### E-R Diagramti

Entity Relationship Diagram, also known as ERD, ER Diagram or ER model, is a type of structural diagram for use in database design. An ERD contains different symbols and connectors that visualize two important information; the major en titi es within the system scope, and the inter-relationships among these en titi es. It is most

oaen used to design or database tables are prepared. Two essential seengs for a database are- Foreign keyti - A foreign key is a column



debug relational databases in the fields of soaware engineering, business information systems, education and research. They use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of en titi es, relationships and their atributes.

#### **Document7- Screens and pages**

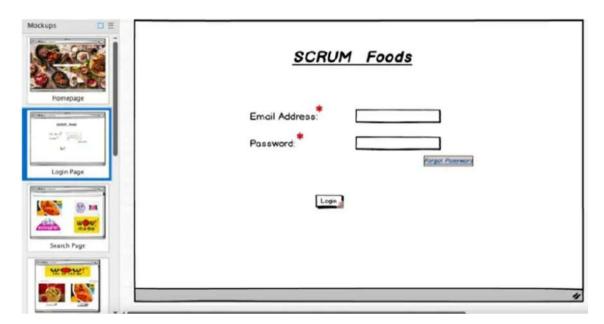
Please follow the following steps to create the mock-ups

- 1. Kindly use balsamic or Axure.
- 2. Always start with a home page of an application.
- 3. Take a feature and follow it to the end
- a. Eg: Home page of SCRUM Foods
- b. Select Login- Create a login page
- c. Let's assume, you want to search a restaurant
- d. Search page- Type the restaurant name and select the dish

- e. Add to cart page
- f. Payment page
- g. Logout page

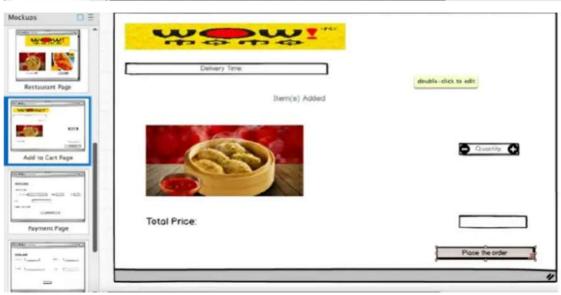
# Page 1



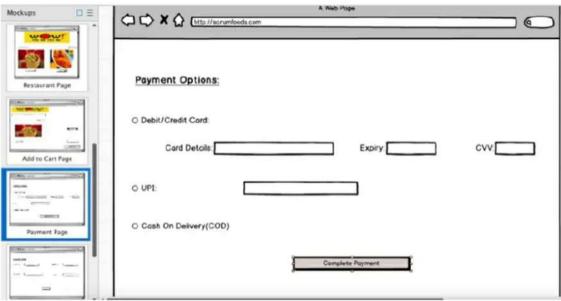


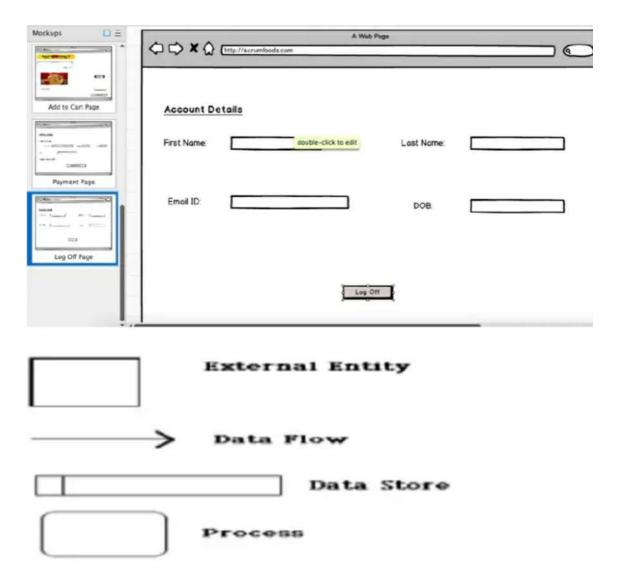
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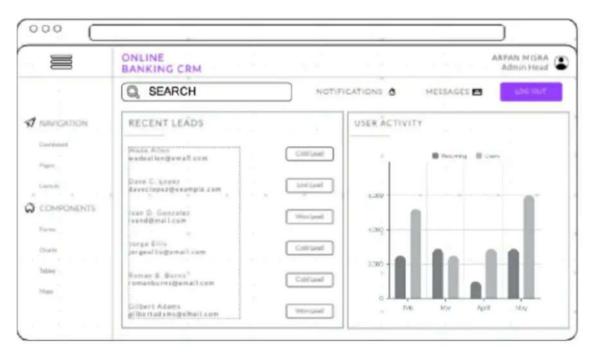




These are symbols that represent data flows, data sources, data transformations and Data storage. The points at which data are transformed are represented by enclosed Figures, usually circles, which are called nodes.

#### **Document 8- Tools-Visio and Axure**





Balsamic Wireframes is a user interface design tool for creating wireframes (sometimes called mock-ups or low-fidelity prototypes). You can use it to generate digital sketches of your idea or concept for an application or website, to facilitate discussion and understanding before any code is written.

#### **Document 9- BA experience**

My experience as BA in following phases:

# 1. Requirement gathering:

Currently, leaders in the banking sector aim to save their companies from bankruptcy and retain existing clients as well as simplify the on boarding of new ones. That's why banking can't go without CRM. In addition to that, Employees will have all the necessary tools to gather clients' data that helps them deliver more personalized service and increase customer engagement.

Function	Tests Performed	Results
Inquire user	<ul> <li>Verify all required input validated.</li> <li>Make sure all the required information appeared and same content as database.</li> </ul>	Pass
Add user	Verify all required input validated.      Make sure all input data stored in database.	Pass
Edit user	Verify all required input validated.      Make sure all modified data stored in database.	Pass
Delete user	Verify all required input validated.      Make sure deleted data removed from database.	Pass
Customer Inquiry	<ul> <li>Verify all required input validated.</li> <li>Make sure all the required information appeared and same content as database.</li> <li>Verify all data transferring from pervious input is correct.</li> <li>Make sure all calculations are correct.</li> </ul>	Pass
Channel Affinity measuring by transactions	<ul> <li>Verify all input validated.</li> <li>Verify all data transferring from pervious input is correct.</li> <li>Make sure all the required information appeared.</li> <li>Make sure all displayed data is from a selected time interval.</li> <li>Make sure all calculations are correct.</li> <li>Check all the displayed data transfer to string correctly.</li> </ul>	Pass

Function	Tests Performed	Results
Channel Affinity measuring by customers applying	<ul> <li>Verify all input validated.</li> <li>Verify all data transferring from pervious input is correct.</li> <li>Make sure all the required information appeared.</li> <li>Make sure all displayed data is from a selected range of age or a selected type of gender.</li> <li>Make sure all calculations are correct.</li> </ul>	Pass
	Check all the displayed data transfer to string correctly.	
Percentile Analysis by customer personal information groups	<ul> <li>Verify all input validated.</li> <li>Verify all data transferring from pervious input is correct.</li> <li>Make sure all the required information appeared.</li> <li>Make sure all displayed data is from a selected range of age, a selected type of gender, or a selected type of account.</li> <li>Make sure all calculations are correct.</li> <li>Check all the displayed data transfer to string correctly.</li> </ul>	Pass
Percentile Analysis by account groups	<ul> <li>Verify all input validated.</li> <li>Verify all data transferring from pervious input is correct.</li> <li>Make sure all the required information appeared.</li> <li>Make sure all displayed data is from a selected range of account balance, or a selected duration/term.</li> <li>Make sure all calculations are correct.</li> <li>Check all the displayed data transfer to string correctly.</li> </ul>	Pass

At the very start, our Business Analyst had an interview with stakeholders to elicit all the requirements for the future solution. Only by gathering all the essential informati on can the BA specialist prepare the functional specifications for the project. Based on the functional requirements specification, our team could define the users' roles, their journeys, features and functionality, etc. . The system included a procurement manager, financial director and administrator. The banking CRM includes the following features.

- Contact Management
- Lead Management
- Customer Engagement
- Marketing Management
- Pipeline and Funnel Monitoring
- Integration Capabilities
- Workflow Automation

With the Opportunities feature, you can simplify your business workflow and accelerate overall service productivity within an opportunity cycle. The opportunity cycle includes the following phases - Assessment Needed, Proposal, Negotiation, Closed Won. Not only does it help you visualize the steps within your sales process, but you can also identify the chances of winning the deal.

- M is a must-have requirement. Something that's essential to the project and that's not negotiable.
- S is a should-have requirement. Something we need in the project if at all possible
- C stands for could-have. Something that's nice to have in case we have extra time and budget.
  - W is a will not have requirement. Something that's out of scope, at least this time around.

### 2. Requirement Analysis

#### **Data Flow Diagrams**

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination.

Unit test is the basic level of testing. It verifies the functionality and performance of individual software modules and ensures that they work correctly. The unit testing result of CRM BANKING are shown in Table 11.

Function	Tests Performed	Results
Login page	Verify handling valid data input.	Pass
	<ul> <li>Check all the buttons work properly.</li> </ul>	
Administrator menu	Check all the links work as expected.	Pass
Manager menu	<ul> <li>Check all the links work as expected.</li> </ul>	Pass
Agent menu	Check all the links work as expected.	Pass
Clerk menu	Check all the links work as expected.	Pass