





#### Ahmed Ramadan Mahmoud

#### Project Name

**Smart Complaint Management System** 

#### Group Code

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## Smart Complaint Management

System to

Improve Internet

Services at

XCC Telecom



#### Complaint Registration

The system will automate various aspects of complaint management, including registration, tracking, resolution, and feedback collection.



#### Tracking and Resolution

The SCMS will leverage technology to streamline the complaint handling process, improving efficiency, customer satisfaction, and overall service quality.



#### Customer Feedback

By implementing an intelligent approach, the SCMS will enable XCC Telecom to respond to customer concerns more effectively and proactively, ultimately enhancing their online experience and fostering customer loyalty.



## Introducing the Smart Complaint Management System

- **Project Overview**: A system designed to improve customer complaint handling by streamlining the process, enhancing response time, and providing customers with real-time updates.
- Goal: To enhance the overall customer experience and reduce resolution time for complaints.

#### Seamless Customer Experience

The system is designed to revolutionize how we handle customer complaints, making the process smoother, faster, and more transparent.

#### **Efficient Issue Resolution**

Our staff will be able to resolve customer issues more efficiently, turning frustrations into satisfaction.

2

#### Real-Time Complaint Tracking

Customers will be able to track their complaints in real-time, providing them with visibility and peace of mind.

# Situation Statement: Identifying the Problem<a href="https://docs.google.com/document/d/1WcupUje9KF63B2hBM616ZrpNU08AQcQC/edit?usp=drive\_link&ouid=114688930971467225520&rtpof=true&sd=true">https://docs.google.com/document/d/1WcupUje9KF63B2hBM616ZrpNU08AQcQC/edit?usp=drive\_link&ouid=114688930971467225520&rtpof=true&sd=true</a>



#### Situation Statement

Xcc Telecom's current customer complaint management system is outdated and inefficient, resulting in slow and cumbersome service issue resolution.

Customers face extended wait times, averaging 30 minutes on hold, and a high volume of unresolved complaints, currently at 10% of all complaints.



#### **Effect**

If these issues are not addressed, the company will continue to face:

- Increased customer complaints and heightened pressure on customer service employees.
- Loss of existing customers and a higher churn rate.
- Decline in the company's reputation in the market, leading to a decreased market share.



#### **Impact**

- Heightened pressure on customer service teams, leading to reduced productivity and increased employee turnover due to stress.
- A higher churn rate as dissatisfied customers switch to competitors, resulting in a loss of revenue.
- A damaged reputation in the telecom market, leading to reduced market share and difficulty attracting new customers, despite the company's current 7 million subscriptions.



### SWOT Analysis: Evaluating Internal and External

Factorshttps://docs.google.com/document/d/1UMx1pw04W0guzeDAN1LQJc5fc-XIgaEw/edit?usp=drive\_link&ouid=114688930971467225520&rtpof=true&sd=true



- 1. Well-trained support team.
  - a. Good reputation in service delivery.
    - i. Updated infrastructure with fiber.



- 1. Inefficient complaint system.
  - a. High pressure on employees.
    - i. 3. Lack of modern technology



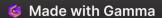
Increased demand for internet.

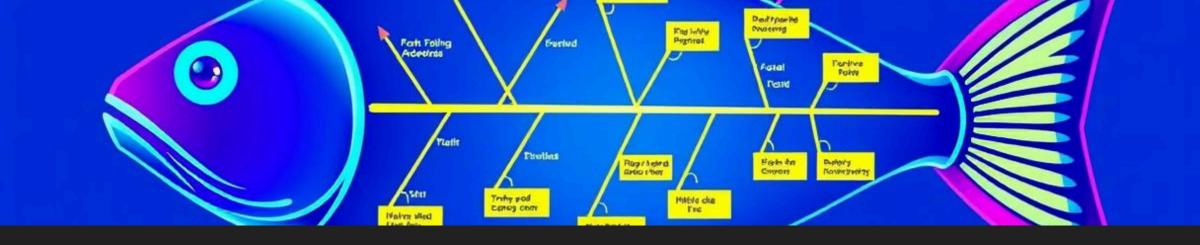
- 1. Using modern technology.
  - a. Employeedevelopmentopportunities.



Growing competition.

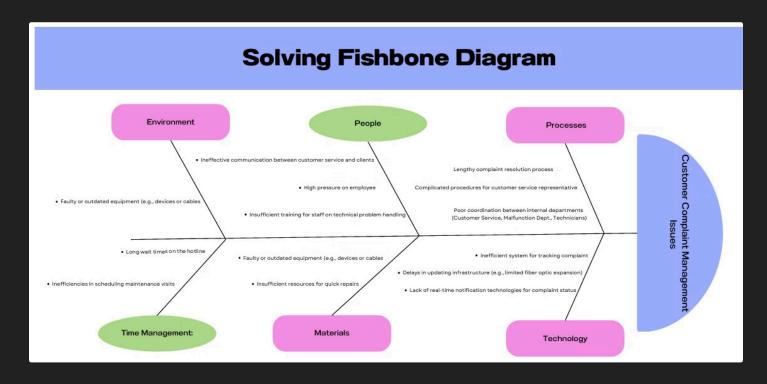
- 1. Regulatory changes.
  - a. Economic market shifts.





### Fishbone Diagram: Analyzing the Root Causes

Used a fishbone diagram to understand the root causes of our current challenges. This analysis has informed our approach, ensuring that the new system addresses the real pain points."



SMART Goals: Setting Specific, Measurable, Achievable, Relevant, and Time-Bound Objectives<a href="https://docs.g">https://docs.g</a> oogle.com/document/d/1bg yX6t501YQacBPPZWscv\_E779 Q2Rgef/edit? usp=drive\_link&ouid=1146 88930971467225520&rtpof= true&sd=true

"Our objectives are clear and focused. We aim to:

Improve customer service response times.

Provide real-time complaint tracking for customers.

Reduce the workload on customer service staff, and

Ensure technical issues are resolved faster.

This system will lead to happier customers, a more productive support team, and ultimately a stronger business."





### OKRs: Defining Objectives and Key Results to Track

Progress<a href="https://docs.google.com/document/d/10WMx2zQ1Kl5GcJj3AFYzYvErpasi9pyB/edit?usp=drive\_link&ouid=114688930971467225520">https://docs.google.com/document/d/10WMx2zQ1Kl5GcJj3AFYzYvErpasi9pyB/edit?usp=drive\_link&ouid=114688930971467225520</a>
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## O1: Enhance Customer Experience and Efficiency in Complaint Handling

- KR1: Launch an intelligent complaint management system within 3 months.
- KR2: Resolve 70% of complaints through automated analysis and prediction within the next 3 months.

KR3: Reduce average complaint resolution time from 5 days to 2 days within 6 months.

## O2: Improve Customer Satisfaction by Reducing Service Downtime

- KR1: Increase customer satisfaction ratings by 30% within 6 months through better system monitoring and quicker responses.
- KR2: Implement a real-time outage tracking and notification system within 3 months.

KR3: Decrease service downtime by 40% by deploying Al-powered monitoring for proactive issue detection.

## O3: Improve Communication and Efficiency between Departments

- KR1: Establish a seamless communication platform between technical support, customer service, and the operations team within 2 months.
- KR2: Ensure 95% of internal communications between departments are responded to within 24 hours by the end of the next 3 months.

KR3: Increase interdepartmental collaboration on complex cases by 20% through regular meetings and integrated project management tools

## O4: Optimize Resource Utilization to Reduce Customer Service Costs

- KR1: Introduce an Al-based resource allocation system to optimize technician dispatch, reducing unnecessary site visits by 30% within 4 months.
- KR2: Implement cloud-based software to track and manage resources, reducing overall operational costs by 20% within 6 months.

KR3: Ensure that 90% of issues are resolved remotely through system improvements, minimizing technician costs.

## Stakeholder Analysis and Power Grid: Mapping Influence and Interest<u>https://docs.google.com/presentat</u>

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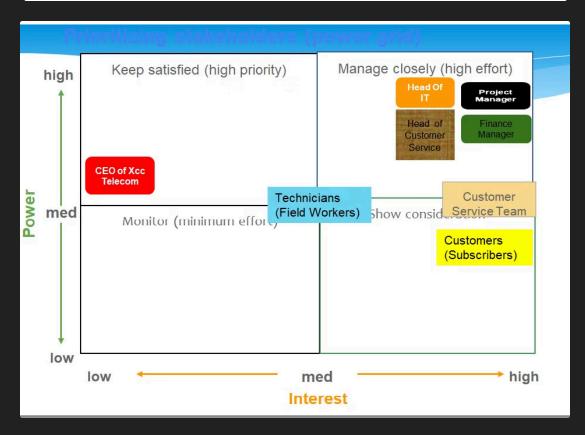
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"We have a strong team of stakeholders supporting this project. Key players include:

Understanding stakeholders (stakeholder analysis)							
Stakeholder	Role (Related to project)	Involvement	Impact	Power or Influence (H/M/L)	Interest (H/M/L)	Engagement	
Project Manager	Oversees project execution	High: Manages project execution and ensures all objectives are met	High: Overall project success depends on their decisions	Н	Н	Actively manage, daily communication.	
CEO of Xcc Telecom	Strategic oversight, ensures project aligns with company goals	Low: Provides high-level direction and approval	High: Responsible for overall company success.	Н	Medium	Keep informed, provide key approvals and guidance	
Head of Customer Service	Oversees customer service operations	Can give feedback on the customer experience	High: Direct impact on service efficiency and customer satisfaction	М	М	Regular updates, gather feedback, consult on needs	
Head of IT	Oversees system development and stability	High: Ensures the technical implementation and system performance	High: Critical to technical success and system reliability	Н	Н	Collaborate daily on technical decisions	
Finance Manager (Xcc Telecom)	Oversees project budget and resources	Medium: Monitors budget allocation and financial support	Medium: Ensures financial health of the project	Н	Н	Keep informed on budget and resource undates English (United State	

Understanding stakeholders (stakeholder analysis)							
Stakeholder	Role (Related to project)	Involvement	Impact	Power or Influence (H/M/L)	Interest (H/M/L)	Engagement	
Customer Service Team	End-users of the system	High: Uses the system for daily complaint resolution	High: Improved efficiency and reduced pressure	М	Н	Gather feedback, provide training	
Technicians (Field Workers)	Respond to technical issues	Medium: Will use the system to manage on-site visits	Medium: Better task allocation and tracking	М	М	Inform as needed, ensure clear task assignment	
Customers (Subscribers)	Receivers of improved service	Low: Provide feedback indirectly	High: Experience improved customer service	L	Н	Monitor, gather feedback through surveys	



High Influence, High Interest

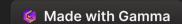
Project Manager , Head of IT , Finance Manager and

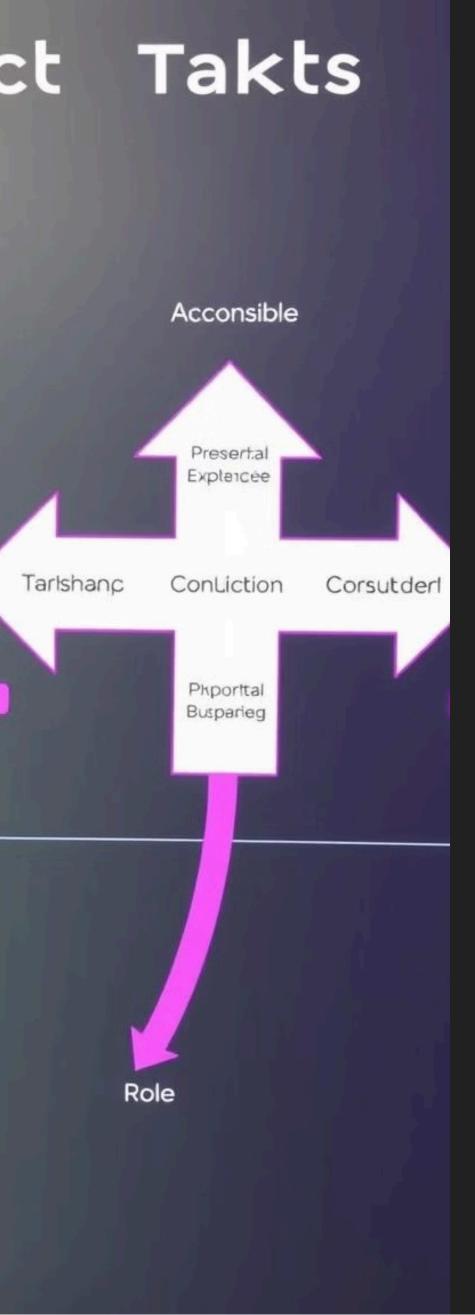
High Influence, Low Interest

CEO of Xcc Telecom and industry associations.

Low Influence, High Interest

Head of Customer Service and Technical Support Team





RACI Chart: Clarifying
Roles and
Responsibilities<a href="https://docs.google.com/document/d/1Z5sPvtkEq6pc6HmKErc9">https://docs.google.com/document/d/1Z5sPvtkEq6pc6HmKErc9</a>
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The **RACI Chart** for our project. This chart helps define the roles and responsibilities of each team member. For example, we have who is **Responsible** for executing tasks, who is **Accountable** for decision-making, who is **Consulted** for advice and guidance, and who is **Informed** about the progress. This ensures clarity in roles, avoids any overlap in responsibilities, and enhances the efficiency of our team to smoothly achieve the project goals."

	RACI Chart  Smart Complaint Management System to Improve Custome Experience"					tomer	
	Responsible The one who completes the task						
	Accou	ıntable	The or	ne who is answera	ible for the	61	
	Const	Consulted			The one who offers advice		
	Infor	med	The or	ne who needs to b	e informed		
Task	Project Manager	IT Manager	Developers	Technical Support Team	Training Team	Consultants	Customers
Analyze current complaint process	R	А		С		I	1
Design the system	A	R	C			С	
Develop the system	A	С	R			I	
Test the system	A	R	C	I		I	
Train employees	I	С			R	A	
	A	R		С		I	
Implement the system						A	I



Project Charter: Outlining the Scope,
Objectives, and
Deliverables<a href="https://docs.google.com/document/d/1061d1ZJLrRG\_5jQ7HTyWE5KfR1TqeUB/edit?">https://docs.google.com/document/d/1061d1ZJLrRG\_5jQ7HTyWE5KfR1TqeUB/edit?</a>

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#### Project Scope

"The scope of our project involves designing, developing, and deploying a Smart Complaint Management System. This system will streamline customer complaint handling, enhance tracking, and improve response times for Xcc Telecom's customer service."

#### **Project Objectives**

"Our main objectives are to reduce complaint resolution time, provide real-time tracking for customers, and optimize internal processes, ultimately boosting customer satisfaction and operational efficiency."

#### Key Deliverables

"The key deliverables include the fully functional complaint management system, training for staff, a user-friendly interface for customers, and post-implementation support for smooth system adoption."

## Work Breakdown Structure (WBS)<a href="https://drive.google.com/drive/folde/rs/180-Pgq5Vkzv0KIZadtIjRHI8sJxI1b3m?">https://drive.google.com/drive/folde/rs/180-Pgq5Vkzv0KIZadtIjRHI8sJxI1b3m?</a> <a href="mailto:usp=drive\_link">usp=drive\_link</a>

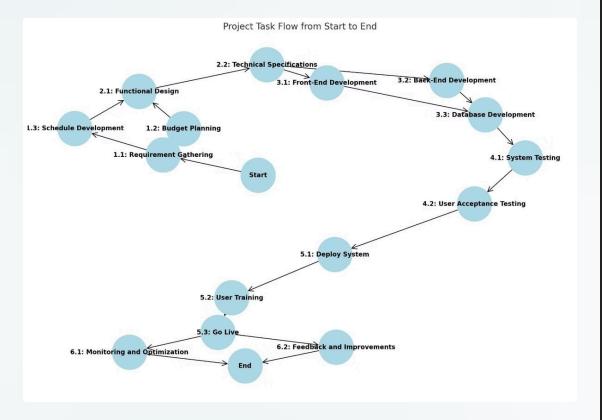
Smart Complaint Management System WBS Spreadsheet	مصر الرقمية	) sigj			وارة الأنصــــــــــــــــــــــــــــــــــــ
Milestone	Task ID	Task	Owner	Duration (days)	Notes
	1.1	Requirement Gathering	Project Manager	7	Includes stakeholder meetings
	1.2	Budget Planning	Finance Manager	5	Budget approval required
1. Project Planning	1.3	Schedule Development	Project Manager	3	Create project timeline
	2.1	Functional Design	IT Department	10	Define systemarchitecture
2. System Design	2.2	Technical Specifications	IT Department	7	Technical documentation
	3.1	Front-End Development	Development Team	15	Develop UI for system
	3.2	Back-End Development	Development Team	20	Build core system functions
3. System Development	3.3	Database Development	Development Team	10	Configure database
	4.1	System Testing	QA Team	5	Test system functionality
4. Testing and Quality Assurance	4.2	User Acceptance Testing	End Users	3	Ensure user feedback is collected
	5.1	Deploy System	IT Department	3	Deploy to all regions
	5.2	User Training	HR/Training Team	2	Train all customer service staff
5. Implementation and Deployment	5.3	Go Live	IT Department	1	System goes live
	6.1	Monitoring and Optimization	IT Department	10	Ongoing system monitoring
6. Post-Implementation Support	6.2	Feedback and Improvements		5	Gather feedback and improve

Our Work Breakdown Structure is designed to keep the

project on track. It includes six major milestones:

- First, Project Planning, where we gathered requirements and planned the budget.
- Next, System Design, which outlines both the functional and technical specifications.
- Then, the actual System Development, broken into front-end, back-end, and database development.
- Testing and Quality Assurance, followed by Implementation and Deployment.
- Finally, Post-Implementation Support, where we monitor the system and gather feedback to continuously improve.

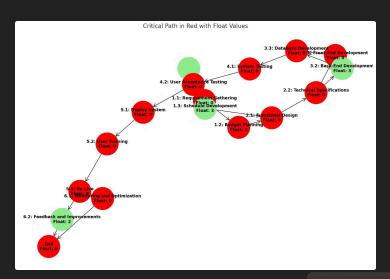
This structured approach allows us to stay organized, focused, and aligned with our goals."



WBS & Milestones and , Critical Path and Float https://drive.goog le.com/drive/folders/180-Pgq5Vkzv0KIZadtIjRHI8sJxI1b3m?usp=drive\_link

Activity ID		Precedence	<b>Duration (Days)</b>
Α	Finalize project scope, objectives, and deliverables	•	5
В	Gather detailed requirements	Α	7
С	Document all technical and functional requirements	В	5
D	Create Wireframes and Mockups	С	7
E	Design Review with Klar	D	3
F	Finalize UI/UX Design	E	5
G	Define Al and Product Recommendation Engine Architecture	С	7
Н	Design Backend Infrastructure	G	7
	Database Schema Design	Н	5
J	Develop Skin Analysis Algorithm	G	10
K	Train Al Model with Data	J	8
L	Test Al for Product Recommendation Accuracy	K	5
M	Build Product Database	1	7
N	Integrate Product Information	M	5
0	Implement Product Matching Algorithm	N	6
P	Develop Android App	F	10
Q	Develop iOS App	F	10
R	User Interface Implementation	F	8
S	Build User Registration and Authentication System		7
Т	Implement Al Processing System	S	7
U	Create Product Recommendation Engine	Т	8
V	Test Skin Analysis on Sample Data	L	5
W	Validate Product Recommendations	V	4
Х	Review Al Output with Dermatologists	W	6
Y	Usability Testing for User Interface	R	5
Z	Functional Testing for Core Features	Y	5
AA	Functional Testing for Core Features	U	4
AB	Penetration Testing	AA	5

"Notice that the system development and testing phases are where we expect to spend the most time, but these are also the areas that will bring the most value to the business."





#### Project Budget

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"Now, let's talk numbers. The total project budget is set at 2,000,000 EGP, which translates to around \$40,000. We've accounted for labor, materials, and fixed costs. We'll be tracking our spending closely, with a focus on staying under budget while delivering high-quality results."

"I assure you that cost control is a priority, and we have a system in place to monitor every expenditure."

#### Project Risk

Management<u>https://docs.google.com/documen</u> t/d/1YphqrXkE3rcXKkHL9UISIhXPX6jpTu9M/edi t?

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#### Objective:

Outline potential risks for the project launch and mitigation plans.

#### Key Risks & Mitigation:

#### **Budget Risks:**

- **Increased Licensing Fees**: Mitigate by negotiating and getting multiple quotes.
- **Unforeseen Development Costs**: Mitigate with a contingency budget.
- **Equipment Costs Exceed Estimates**: Mitigate by reviewing quotes regularly.

#### Schedule Risks (Training):

- **Trainer Unavailability**: Mitigate by cross-training staff.
- Delayed Training Materials: Mitigate by starting material development early.
- Employees Unable to Complete Training: Mitigate by scheduling during low-demand periods.

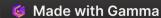
#### Risk Probability & Impact:

#### High Risk:

• 50-100% chance of occurrence with significant operational/financial impact.

#### Medium Risk:

• 10-49% chance of occurrence with moderate impact.



# Project Communication Planhttps://docs.google.com/spreadsheets/ d/10GciFiCiZyVGxMbQdlpOeji9KtT5gP50/edit? usp=drive\_link&ouid=114688930971467225520 &rtpof=true&sd=true

#### **Key Communications:**

#### 1. Core Project Team

- Daily Meetings at 10 AM (In-Person/Video)
- o Goal: Track project planning, updates, and progress.

#### 2. Development Team

- Weekly Design Reviews every Monday (Video/Email)
- o Goal: Ensure system design alignment.

#### 3. Finance Manager

- o Bi-weekly Budget Updates (Video/Email)
- o Goal: Track spending vs forecast.

#### 4. IT Department

- o Bi-weekly System Testing Review (Video/Reports)
- o Goal: Address bugs and technical issues.

#### 5. Customer Service Team

- Training Coordination (As needed, Email/In-Person)
- Goal: Ensure complete training for staff.

#### 6. CEO & Senior Leadership

- Monthly Milestone Updates (Video/Presentation)
- Goal: Provide high-level project progress.

#### 7. End Users (Test Group)

- User Acceptance Testing Feedback (Email/Survey)
- Goal: Collect feedback on system functionality.

#### 8. Stakeholders (Xcc Telecom)

- Monthly Status Reports (Email/Presentation)
- Goal: Keep stakeholders informed on key risks and project progress.:

#### Project

## Planhttps://docs.google.com/spreadsheets/d/1fz47kms1o9u51uPG\_NDw8eslTf9KxMhN/edit?usp=drive\_link&ouid=114688930971467225520&rtpof=true&sd=true

<b>Project Smart</b>	Complaint Ma	anagement Syste	m : Operations &	Training Plan

Description: This is a document resource overview for the Operations and Training plan for Xcc Telecom's Smart Complaint Management System.

Owner: Ahmed Ramadan Mahmoud

Status: Draft

Status. Diait	
Key Docs	Description
<u>Project charter</u>	An overview of the project, key elements and expectations
Statement of work	Identifies the work that is included in the project and the pricing that was quoted initially.
Risk management plan	Identifies the potential risks to the project, their likelihood, and how you plan to mitigate them if they become realized.
<u>Schedule</u>	Identifies the planned schedule as well as any changes through out the project lifecycle.
<u>Budget</u>	Identifies the planned budget as well as any over and under runs. Allows you to estimate the cost at completion.
Communication plan	Identifies how often, what type of communication method, and what information your stakeholders needs to know
Shared folder	Folder with all relevant documentation
RACI chart	Identifies who is responsible, accountable, consulted and informed within the project.