Assignment 2

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| Group # | CP 5 |
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| Course | INFO8686 – Information Technology Business Analysis Capstone Project |
| Section | 5 |
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| Due Date | Jan 25, 2024 |

Catalyst Driving Business Excellence

Kitchener, Ontario

Generative AI Powered Voice Assistant Customer Service at Rogers

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# Problem statement and opportunity

## Problem Statement

Traditional customer service systems are often characterized by long call queues and extended delays, much to customers' frustration and severe business impact. The manual handling of complaints and prolonged wait times result in delays and inconsistencies in resolving issues, hurting customer satisfaction and waste of resources. According to the Commission for Complaints for Telecom-Television Services (CCTS), Rogers garnered the highest customer complaints among companies. The CCTS identified contract disputes and communication deficiencies as significant factors contributing to these complaints.

## Opportunity

The opportunity lies in developing an AI-powered complaint-resolution platform that uses artificial intelligence to handle customer complaint calls and address the issue of long wait times and resource waste. The project aims to implement Natural Language Processing algorithms to understand and interpret customer complaints accurately, identify the problem, and resolve the same. The system also aims to use predictive analytics to forecast recurring issues and prevent future complaints, thereby reducing the volume of calls. This involves using historical data to refine the system's language understanding, issue resolution, and customer interaction capabilities.

# 2. Project Scope

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| --- |
| **Project Title:** AI Customer Service Call Platform  **Date:** 25/01/2024  **Prepared by:** Catalyst Business Solutions |
| **Project Justification:**  Introducing an AI Customer Service call platform is driven by a strategic objective to elevate customer experience and operational efficiency. The deployment of an AI-driven system for managing customer service calls aligns with Rogers Telecommunication's commitment to reducing wait times, improving service accessibility, and optimizing human resources for tackling intricate issues. This initiative is essential for maintaining a competitive edge in the telecommunications industry by embracing innovative solutions to meet evolving customer expectations. |
| **Product Characteristics and Requirements:**   1. **Intelligent Call Handling:** The AI system should be capable of handling customer service calls intelligently, understanding and responding to a wide range of queries and issues. 2. **Efficient Call Routing:** Implement an efficient call routing mechanism to seamlessly direct customers to the AI system based on their needs. 3. **Natural Language Processing (NLP):** Incorporate NLP capabilities to ensure the AI system comprehends and responds to natural language inputs, providing a more human-like interaction. 4. **Integration with Existing Systems:** Ensure seamless integration with existing customer service and IT systems to access relevant customer information and provide accurate solutions. 5. **Scalability and Flexibility:** Design the platform to be scalable to accommodate potential increases in call volumes and flexible to adapt to evolving business requirements and technological advancements. 6. **Personalization Capabilities:** Implement personalization features that allow the AI system to tailor responses based on customer history, preferences, and previous interactions, enhancing overall customer engagement. |
| **Product User Acceptance Criteria:**   1. **Efficient Service Delivery:** Customers should experience a substantial reduction in wait times, enhancing overall service efficiency through the AI Customer Service call platform. 2. **Precision in Query Resolution:** The AI system must exhibit high accuracy in comprehending and effectively addressing diverse customer queries. 3. **Natural and Intuitive Interaction:** Users should perceive the interaction with the AI system as natural and intuitively user-friendly, contributing to a positive and seamless customer experience. 4. **Seamless Integration Experience:** Integration with existing systems should yield a cohesive and streamlined customer service process, ensuring a harmonious interaction between the AI platform and other operational components.   **Summary of Project Deliverables**   1. **Project management-related deliverables:** Business case, charter, team contract, scope statement, business approach document, RACI matrix, status reports, final project presentation, final project report, lessons learned report, and any other documents required to manage the project. 2. **Product-related deliverables:** As-is flow diagram, business requirements document, to-be process flow diagram, solution document, functional requirements, design documents, test documents, deployment strategy document, and any other documents required to develop the product. |

# Project Charter

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| **Project Title**: Project Rogers |
| **Project Start Date:** 25/01/2024 **Projected Finish Date:** 21/04/2024 |
| **Budget Information:** The estimated budget for the project is $120000. |
| **Project Manager:** Aiswarya Raj, +(519)-xxx-xxxx, [araj0519@conestogac.on.ca](mailto:araj0519@conestogac.on.ca) |
| **Project Objectives:** The project aims to implement a generative AI-powered voice assistant customer service platform for Rogers. |
| **Success Criteria:**   1. Improve customer service experience by 80%. 2. Reduce average handling time of customer queries/issues. 3. Ensure accuracy in responses to queries by customers. 4. Reduce the number of escalations to human agents for queries. 5. Reduce costs in customer service operations by reducing the number of human agents. |
| **Approach:**   1. Define project objective and scope. 2. Schedule meetings with stakeholders at Rogers and gather requirements. 3. Analyze pain points and challenges in the current customer service at Rogers. 4. Research AI-powered voice assistant solutions available in the market. 5. Prepare Business Requirement Document and Solution Requirement Document. 6. Evaluate the feasibility of the proposed solution. 7. Map business requirements to functional requirements. 8. Design database and normalize. 9. Calculate and analyze ROI. 10. Prepare implementation strategy. 11. Prepare testing strategy. |

**Roles and Responsibilities**

| ***Name and Signature*** | ***Role*** | ***Organization*** | ***Contact Information*** |
| --- | --- | --- | --- |
| Nilesh Deshmukh | Sponsor | Rogers | +1(519)-819-xxxx |
| Aiswarya Raj | Project Manager | Catalyst | +1(226)-579-xxxx |
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| Het Chandubhai Patel | Business Analyst | Catalyst | +(226)-581-xxxx |

# Business Analysis Approach

## 4.1 Tasks with timeline

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| --- | --- |
| **Tasks to do** | **Duration** |
| Project Initiate | 1 Week |
| Define the opportunity | 1 Week |
| Communicate with decision-makers | 1 Week |
| RFI & BRD | 1 Week |
| AS-IS Process Flow | 1 Week |
| Solution Requirements | 1 Week |
| Solution Options | 1 Week |
| Database Design | 1 Week |
| Database Design Continued | 1 Week |
| Solution Selection | 1 Week |
| Risk Analysis | 1 Week |
| Communicate with decision-makers. | 1 Week |
| Communicating with decision-makers continued. | 1 Week |

## 4.2 Project flow

|  |
| --- |
| Project Initiation |
| Project Planning |
| Project Execution |
| Project Monitoring and Controlling |
| Project Closing |

## Deliverables Templates

|  |
| --- |
| Burndown Chart: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492189/View> |
| Business Analysis Approach: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492228/View> |
| Business Case Financials: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492190/View> |
| Business Case: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492191/View> |
| Cockburn Use Case Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492192/View> |
| Company BRD and RFI template Sample: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492193/View> |
| Communication Management Plan: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492194/View> |
| Cost Estimate: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492195/View> |
| Customer Acceptance Form: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492196/View> |
| Excel\_Draft\_Schedule: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492197/View> |
| Kick-off Meeting Agenda: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492198/View> |
| Payback Period Chart: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492199/View> |
| Progress Report: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492200/View> |
| Project Management Plan: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492201/View> |
| Project Organizational Chart: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492202/View> |
| Project Schedule: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492203/View> |
| Proposal\_Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492204/View> |
| RACI Chart: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492205/View> |
| RACI Matrix Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492206/View> |
| Release Plan Agile with Sprints: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492224/View> |
| Release Plan by Stages: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492225/View> |
| Request For Proposal: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492207/View> |
| Requirements Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492221/View> |
| Requirements Traceability Matrix: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492208/View> |
| RFI Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492213/View> |
| Run Chart: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492209/View> |
| Sample - RACI Matrix Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492210/View> |
| Scope Statement: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492211/View> |
| Solution Design Option Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492223/View> |
| Stakeholder Engagement Plan: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492226/View> |
| Stakeholder Register Template: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492212/View> |
| SWOT Analysis: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492214/View> |
| Team Charter: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492215/View> |
| Team Contract: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492227/View> |
| Team Performance Assessment: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492216/View> |
| Team Roster: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492217/View> |
| Transition Plan: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492218/View> |
| Testing Strategy: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492222/View> |
| Use Case Description Template 1: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492219/View> |
| Use Case Description Template 2: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492220/View> |
| Work Breakdown Structure: <https://conestoga.desire2learn.com/d2l/le/content/998083/viewContent/21492278/View> |

# Business Stakeholder Engagement Plan **Version** 1.0

Date: 01/23/2023

**Project Name**: Generative AI powered Voice Assistant Customer Service

## 5.1 Stakeholder communications requirements

1. Business Sponsor: Approves Project budgets, Point of Contact for Change Requests, Budget Tracking
2. Project Manager (Rogers): Requires updates on Project status, task status, RAID log, and product documents.
3. Operations Lead (Rogers): Requires Solution design documents, reviews them, and provides integration requirements to Catalyst.
4. Engineering Lead (Rogers): Provides Technical specifications and infrastructure requirements to Catalyst, Requires Database design documents and Architecture documents.
5. Customer Service Director (Rogers): Provides Customer service department operations reports and provides requirements from the CSD standpoint.
6. Project Manager (Catalyst): Produces Project plan and Status reports to Rogers’s stakeholders.
7. Business Analysts (Catalyst): Conducts Requirements sessions with Rogers’s Stakeholders, produces requirements documentation for Project Manager
8. Solution Architect (Catalyst): Designs Architecture and Database with BA’s, confirms the feasibility of solution with BA’s and Rogers’s stakeholders through meetings and documentation.

## 5.2. Communications summary

| **Stakeholders** | **Communications Name** | **Delivery Method/Format** | **Producer** | **Due/Frequency** |
| --- | --- | --- | --- | --- |
| All Stakeholders | Project status report | Presentation and Email | Project Manager (Catalyst) | Weekly |
| All Stakeholders | Project Kick-off | Meeting | Project Manager (Catalyst) | Once |
| BA, PM (Rogers), Operations and Engineering Lead (Rogers) | Requirements Interview | Meeting | BA | As and when required |
| BA, SA, PM (Rogers), Operations and Engineering Lead (Rogers) | Design Review | Meeting | BA | Weekly |
| Steering Committee and PM (Rogers, Catalyst) | Steering Committee Update | Meeting | PM (Rogers) | Monthly |
| BA, SA, PM (Rogers), Operations and Engineering Lead (Rogers) | Solution Design | Meeting and Document – Shared Folder | SA | Weekly |
| All Stakeholders | Update RAID log | Document – Shared Folder | BA | Weekly |
| Business Sponsor, PM (Rogers) | Budget Review | Meeting | PM (Catalyst) | Bi-weekly |

## 5.3 Comments/Guidelines

1. All communications should be recorded for future reference.
2. Status updates should be accurate to prevent delays in the project.

## 5.4 Escalation procedures

1. First Level: Direct communication between people involved (through email or meeting).
2. Second Level: Involvement of Project Manager for issue resolution.
3. Third Level: Involvement of Business Sponsor for issue resolution.

## 5.5 Revision procedures

1. This document will be reviewed weekly to make any necessary changes.
2. Any changes to this document should be approved by the Project Manager (Rogers and Catalyst)
3. Older versions of this document will be archived for future reference.

## Glossary of Common Terminology

1. BA: Business Analyst
2. SA: Solution Architect
3. Stakeholder: Any individual that is involved in the execution of a project
4. CSD: Customer Service Department

# References

1. Communication Management Plan. (2023). Retrieved from <https://conestoga.desire2learn.com/d2l/le/content/877052/viewContent/18435785/View>