

PROJECT CHARTER – 2024 DATA SCIENCE TEAMS PROJECT 1

1.0 PROJECT IDENTIFICATION	
Project Name	<i>InsureInnovative: App-Enabled Communication Channel</i>
Project Overview	<i>The project aims to improve communication between a Medicare Insurance Company and its senior clients through customized technology solutions. It primarily benefits seniors and their caregivers, focusing on user-friendly digital platforms like a mobile app and effective email communication. The approach emphasizes simplicity, accessibility, and security, ensuring the tools developed meet the specific needs of the elderly while adhering to healthcare regulations.</i>
Key Constituents	<p><i>Describe the external stakeholders/audience for the pitch</i></p> <p><u><i>Insurance Companies & Healthcare Payers:</i></u> <i>Stakeholders who are interested in an efficient and cost-effective solution</i></p> <p><u><i>Seniors:</i></u> <i>Primary beneficiaries who will be using the digital platform</i></p> <p><u><i>Tech-Savvy Seniors & Early Adopters:</i></u> <i>Seniors who are already using technology actively and have a keen interest in being ambassadors or testers for the project</i></p> <p><u><i>Healthcare Providers:</i></u> <i>Doctors, nurses, and all medical professionals who would interact through the platforms, communicating with the seniors</i></p> <p><u><i>Family Members & Caregivers:</i></u> <i>Close individuals to the seniors who may be responsible for assisting them with healthcare decisions</i></p> <p><u><i>Policy Makers & Government:</i></u> <i>Those who are concerned with public health, regulatory compliance such as HIPAA, and the accessibility of healthcare services</i></p> <p><u><i>Technology Providers & Developers:</i></u> <i>Companies that produce and provide various communication technologies who would be willing to collaborate</i></p> <p><u><i>Investors & Funders:</i></u> <i>Organizations or people who are interested in the commercial or social aspects of the project, including the return on investment</i></p> <p><u><i>Research & Academic Entities:</i></u> <i>Those interested in the data and insights generated from the project who would like to conduct research in geriatric care and technology in healthcare</i></p>
Project Team	<i>Team 4: Ananya Nimbalkar, Aryaan Upadhyay, Tessoro Stefan, Trang Hoang</i>

2.0 BACKGROUND AND JUSTIFICATION
<p><i>Explain details about the challenge</i></p> <ul style="list-style-type: none"><i>What is the request?</i><p><i>Our request is to modernize our approach to connecting providers with seniors through medicare, an insurance company, as well as create a user-friendly platform that allows seniors to easily access items such as health records, appointments, etc.</i></p><i>Why is the solution needed?</i><p><i>The insurance industry has become saturated with different companies trying to incorporate usage of data science and automation into their operations. This is evident with different players within the industry using techniques such as NLP being used to analyze textual claims while being streamlined. It is important our firm is ahead and in tune with the disruptions that generative AI is creating to streamline our operations and improve our profit margins. Also, with the healthcare industry heavily relying on physical copies of everything, the urgency to digitize as many things as possible is imperative to reduce mistakes and optimize the current system.</i></p><i>Be sure to include a few details about the beneficiaries of the solution</i><p><i>The primary beneficiaries of this solution are senior clients of the Medicare Insurance Company, who often face challenges with traditional communication methods due to age-related factors like reduced</i></p>

tech-savviness or physical impairments. Additionally, caregivers and family members assisting these seniors in managing their health and insurance matters will also benefit, as the solution aims to simplify and personalize the process of accessing healthcare information and services.

3.0 PROJECT OBJECTIVES (PURPOSE)

Create a bulleted list of goals for the solution you are creating. What will it do?

- Improve patient care by easing lines of communication between providers, payers, and patients
- Modernizing technology usage in the healthcare industry by making use of LLMs and other data science techniques
- Diversify the existing revenue streams by adding this as a premium feature for an insurance package
- Improve accessibility and engagement rates to patient care by tailoring communication to individual needs and preferences of seniors

4.0 PROJECT SCOPE

Describe the range of the solution in terms of what and who it will help (as well as what is not included).

- Included in the Project Scope
 - Primary focus on senior clients, with a secondary focus on caregivers and family members who assist seniors.
 - We will develop and implement a user-friendly mobile app with the enhancement of existing IVR systems and email communications.
 - This app will be specifically tailored for seniors with components of simplicity, larger fonts and voice-command features, which ensures accessibility.
 - The app will provide health advice, appointment reminders, medication instructions, and insurance information.
- Excluded from the Project Scope
 - The design and functionality of the technologies will not cater to the broader, non-senior client base of the insurance company.
 - Direct medical service, diagnoses or treatments will not be provided through our platforms as the focus is on information and advice.
 - The project will not include physical/in-person assistance for using the technologies.
 - The initial phase will not include multilingual support, focusing primarily on English, and 24/7 support will not be initially available as well.

5.0 KEY PROJECT DELIVERABLES

Provide a list of tangible items that will be produced during the initiative. Can include explicit items being created to get the project approved/funded/accepted (e.g., pitch deck, demo, business case, etc.) as well as components of the ultimate solution (e.g., a web interface for users, a database capturing the inputs, etc.)

Name	Description
User Interfaces	Designed interfaces for apps and websites, optimized for senior users.
Database Systems	Databases to store user data, preferences, and interaction histories.
Mobile Application	A fully functional mobile app tailored for senior users, with features like medication reminders, appointment scheduling, etc.
IVR System	A telephonic system that allows seniors to receive information and perform certain actions via phone.
Training Materials	Guides, video tutorials, and FAQs for users and staff.
Pitch Deck	A presentation for potential stakeholders and funders, highlighting key aspects of the project.
Budget Plan	Detailed breakdown of project costs, resources needed and a financial plan.

Demo	A tutorial of InsureInnovative that showcases key components
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6.0 MILESTONE STEPS AND DATES

Items 1-7 are your real deliverables for this project. You will not adjust Items 1-7.

Items 8 and above are hypothetical for the purposes of simulating the project; as such, please insert key milestones for project delivery (e.g., data processing, model development, web design, QA, etc.). You can add more rows if needed.

Item	Major Events / Milestones	Completion Date*
1.	Choose Topic (actual)	1/17/2024
2.	Refine Approach Through Client Questions (actual)	1/22/2024
3.	Project Charter (actual)	1/24/2024
4.	Design Solution/Development Plan (actual)	2/5/2024
5.	Prepare Pitch Deck and Supplemental Support Assets (actual)	2/16/2024
6.	Present Solution (actual)	2/20/2024
7.	Project Authorization (actual)	2/23/2024
8.	Technology Assessment and Selection (Hypothetical)	2/7/2024
9.	UI and UX Design Finalization (Hypothetical)	2/11/2024
10.	Prototype Development and Testing (Hypothetical)	2/18/2024
11.	Interactive Demo (Hypothetical)	2/23/2024
12.	Project Go-Live	2/23/2024

*Dates subject to change

7.0 RISKS (AND CONTINGENCIES)

Describe some of the risks to project success and contingency plans to mitigate/remediate risks.

Risk Label	Description
Data Privacy	Handling sensitive health information requires compliance teams to prevent data breaches and ensure privacy. We will implement robust cybersecurity measures and audit security protocols as well as conduct employee training on data security.
Different Hospital Health Systems	Hospitals might have different methods to store their data. This can propose difficulty in building data pipelines and integrating to the apps. The solutions would be implemented state-wise because usually hospitals within a state share the same health systems.
Tech Barriers Among Seniors	Seniors might face challenges in adopting new technologies due to lack of familiarity or physical limitations (like impaired vision or dexterity). We will provide extensive training and user-friendly guides, the app will have enlarged text and simple navigation as well as IVR and other accessibility options.
Change Resistance	Staff may be resistant to adopting new technologies or changing existing processes. We will engage staff early in the process through training and open communication.
Tech Glitches/System Failures	New technology systems can face technical glitches or downtimes, impacting service delivery. We will have a strong IT support team and we will conduct thorough testing before full implementation of our solution.
Budget Overrun	Project costs frequently exceed initial estimates, leading to budget strain. We hope to have a detailed project budget with a contingency fund and we will monitor expenses closely and conduct regular financial reviews to stay on track.

8.0 PROJECT'S CRITERIA FOR SUCCESS (MUST BE MEASURABLE)

Bullet out the specific items you think are necessary for a) convincing your audience to fund the project and b) determining the actual solution is a success.

- a. We need market research and data to show potential market size as well as the potential competitive standards across the medicare insurance industry. We also need a cost-benefit analysis and stakeholder endorsements in order to convince the audience to fund the project. In addition, it is important to have a cohesive and concise plan for the project, accounting for various potential concerns to increase the audience's trust in us.
- b. We need comparative analysis between the performance of the new communication methods against the traditional methods in terms of effectiveness and efficiency, as well as a cost efficiency analysis considering both the short-term and long-term financial impacts. We also need to ensure adherence to all relevant healthcare regulations and data privacy laws through compliance strategies.

9.0 TEAM APPROACH

Describe how the team will communicate. Be specific. What are the goals of each meeting? How will you keep track of the work being done?

The team will meet weekly/bi-weekly, depending on the project phase. The goal of each meeting is to update and review progress on individual tasks, share findings and review data analyses, as well as problem-solve and plan for upcoming periods and discuss deadlines. We will use a task board, a project management tool, in order to create tasks, assign them to team members and track progress. We will use GitHub for these tasks, as it allows all this functionality.

How will conflicts be managed within the group? How will decisions be made in order to ensure cohesion within the group?

We will try to arrive at a unanimous decision, however if a conflict arises, it will be managed with constructive feedback culture and neutral mediation. Decisions will be made inclusively and through regular review meetings in order to ensure cohesion within the group. We will encourage an environment where everyone in the group can express their opinions respectfully.

10.0 INTERNAL TEAM SIGNOFF

Project Member (Print Name)	Signature	Date
Ananya Nimbalkar	<i>Ananya Nimbalkar</i>	1/23/2024
Aryaan Upadhyay	<i>Aryaan Upadhyay</i>	1/23/2024
Tessora Stefan	<i>Tessora Stefan</i>	1/23/2024
Trang Hoang	<i>Trang Hoang</i>	1/23/2024