




MACQUARIE
University
SYDNEY • AUSTRALIA

COMP3850 Project Deliverable Certificate

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Rubric stream being followed for this deliverable <i>Note: the feasibility study has the same rubric for all streams.</i>	<i>DATA SCIENCE Rubric</i>

We, the undersigned members of the above Project Group, collectively and individually certify that the above Project Deliverable, as submitted, **is entirely our own work**, other than where explicitly indicated in the deliverable documentation.

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List of tasks completed for the deliverable and activities since last deliverable certificate with totals for each individual team member and whole team *(copy individual total row for each member and copy pages if more pages needed)*

Performed by <i>(Student Names)</i>	Duration <i>(hrs)</i>	Complexity <i>(L, M, H)</i>	Name of task	Checked by <i>(Initials)</i>
Cassandra Johns	4	M	Start of analysis. Basic data discovery with a few starting visualisations	TP
Cassandra Johns	1	L	Made logo	TP
Cassandra Johns	4	L	Contributed to the feasibility report.	TP
Tabitha Philip	2	M	Research project management styles and debate which style works best for the team with the Project Officer and Change officer	AG
Tabitha Philip	1.5	L	Edit feasibility and team manual	AG
Ava Gardiner	7	M	Wrote the Team Manual and started writing the Feasibility Study.	TP
Tabitha Philip	2	M	Contribute to Team manual and feasibility report	AG
Ava Gardiner	2	L	Edited and structured the Team Manual and Feasibility Study.	TP
Rory Ali	3	L	Base research for aspects of the project which are elaborated on within the feasibility document. These included research into project management approaches and also reaching out to sponsors for clarification on the project itself and what they specifically wanted from us going forwards. Findings then relayed to team leader directly and also shared in group discord	TP
Lachlan Yates	4	M	Wrote part of assumptions section, intangible benefits, alternative solution 1, conclusion, small tidy up of feasibility report.	TP
Lachlan Yates	1	L	Quick forecast of upcoming activities and jobs over next couple days.	TP

Tabitha Philip total	5.5			
Cassandra Johns total	9			
Lachlan Yates total	5			
Ava Gardiner total	9			
Rory Ali total	3			
Team Total	31.5			



DELIVERABLE 1
Feasibility Study & Team Manual

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PROJECT FEASIBILITY STUDY

1. INTRODUCTION

SAS Institute Australia have presented Data Synergy with a project involving one of their charity organisations: Zoe Empowers. Zoe Empowers is a program that teaches orphans within developing, poverty stricken countries the necessary skills to provide for themselves and to sustain a healthy, safe and meaningful life. SAS has tasked Data Synergy with extracting and analysing the data from Rwanda and Kenya to define what aspects of the program are working well in terms of individual self-sufficiency and factors that are not. For aspects of the program that are/are not working well in a certain region, SAS would like to know whether this serves true for the other and whether those factors should or shouldn't be adapted to either or countries. Data Synergy has broken down this potential project into five distinct categories (strategic, economic, technical, operational and planning) of feasibility in order to determine acceptance to carry out the project.

STRATEGIC

- Developing a comprehensive plan for data collection and analysis, including identifying data sources, methods for data cleaning and transformation, and selected appropriate analytics techniques.
- Ensuring that the project aligns with the overall strategic goals of SAS.

- Balancing the need for accuracy and reliability in the analysis with the need for efficiency and practicality in the data collection and analysis process.

ECONOMIC

- This project will come at no additional cost to SAS or Data Synergy as the tools and resources utilised are either SAS-owned or freely sourced.

TECHNICAL

- Ensuring that the data used for analysis is accurate, complete, and reliable.
- Combining data from different sources and systems in a way that is efficient and effective.
- Ensuring that sensitive information is protected and that any analysis complies with relevant data protection laws and regulations.
- Selecting appropriate software and tools for data analysis and visualisation.
- Identifying and implementing appropriate analytical techniques to measure program effectiveness.
- Ensuring that the necessary hardware and computing resources are available to support the project.

OPERATIONAL

- Ensuring that the necessary data is available for analysis and that it is in a usable format.
- Ensuring that the data is accurate, complete and consistent.
- Ensuring that the data is kept secure and that the privacy of the beneficiaries is protected.
- Ensuring that our team conducting the analysis has the necessary technical skills to work with the data and perform the required analysis.

- Ensuring that the project is completed within a reasonable timeframe, taking into account any deadlines or other constraints.
- Ensuring that there is effective communication between our team conducting the analysis and our partner organisation.
- Ensuring that the recommendations resulting from the analysis can be implemented in a practical and effective manner within the context of the Zoe Empowers program.

PLANNING

- Having well defined project outcomes and deliverables in which the team is able to accomplish in an appropriate manner and within a feasible time frame.
- Utilising free and available tools to carry out project tasks and subtask.
- Utilising the appropriate project management methodology to accomplish project deliverables.

1.1. PROBLEM IDENTIFICATION

The problem is to evaluate the effectiveness of the Zoe Empowers program by analysing how demographics and macroeconomic factors from Rwanda and Kenya influence individuals' self-sufficiency. The aim is to provide actionable recommendations to assist Zoe Empowers in addressing the needs of the individuals and communities they serve moving forward.

1.2. OPPORTUNITIES

- **Improved Impact Measurement:** The project presents an opportunity to improve Zoe Empowers' impact measurement strategy and identify areas where the program can be more effective.

- **Evidence-Based Decision-Making:** The project can provide Zoe Empowers with data-driven insights and recommendations to inform their decision-making and improve their program.
- **Better Understanding of Program Effectiveness:** By analysing the data, the project can provide insights into which interventions are most effective and in which contexts, which can help Zoe Empowers to tailor their approach and resources more effectively.
- **Increased Transparency and Accountability:** By implementing an advanced analytics approach, Zoe Empowers can demonstrate the impact of their program to donors, partners, and other stakeholders.
- **Opportunities for Program Expansion:** By identifying successful interventions and effective strategies, the project can provide opportunities for Zoe Empowers to expand their program and reach more children in need.
- **Improved Resource Allocation:** The project can help Zoe Empowers to allocate their resources more effectively and efficiently, maximising the impact of their program.
- **Increased Collaboration and Partnerships:** The project can facilitate collaboration and partnerships with other organisations, governments, and stakeholders to address the root causes of poverty and promote sustainable development.
- **Knowledge Sharing and Capacity Building:** The project can provide opportunities for knowledge sharing and capacity building, empowering Zoe Empowers staff and partners to better understand and utilise data in their work.
- **Improved Program Sustainability:** By identifying successful interventions and effective strategies, the project can contribute to the long-term sustainability of the program and its impact on the children and communities it serves.
- **Positive Social Impact:** Ultimately, the project presents an opportunity to create positive social impact by empowering children to improve all areas of life, breaking the cycle of poverty, and promoting sustainable development.

1.3. MANDATES

After consulting with Jordan Mowlai, Senior Associate Technical Consultant at SAS, it has been determined that there are no statutory or managerial mandates obliging completion of this project. The key objective of this project is to comprehensively evaluate the effectiveness of the Zoe Empowers program. To achieve this objective, SAS has requested a detailed exploration of the program's various demographic factors and macroeconomic considerations that may impact an individual's self-sufficiency. According to Jordan, the project has been designed as an open-ended project to allow us the flexibility to discover meaningful insights that can be utilised to generate a recommendations report, highlighting how Zoe Empowers can address the needs of the individuals and communities they serve moving forward.

1.4. ASSUMPTIONS

- It is assumed that access to necessary data to measure the effectiveness of Zoe Empowers program is available, accessible, and in a usable format.
- It is assumed that the data is of sufficient quality and consistency to support accurate and meaningful analysis.
- It is assumed that the necessary data analytics tools and technologies are available and can be used to analyse and visualise the data effectively.
- It is assumed that SAS will be engaged throughout the project and will provide feedback and support as needed.
- It is assumed that the project will be completed within the defined timeline, and any potential delays or obstacles will be addressed promptly to ensure timely completion.
- It is assumed that the permittance of available external systems will be of direct beneficial assistance to conducting research for the project.
- It is assumed that predictive modelling falls within the scope of the project where forecasting predictive outcomes are essential to successful analysis and research.

- It is assumed that weekly sprint meetings between the team and fortnightly meetings with sponsors will greatly benefit the progress of the project.
- It is assumed that the agile methodology will allow the team to effectively complete the project while adapting to change both efficiently and effectively as we collectively progress.
- It is assumed that the team will remain within the scope of the project plan, working to reduce the risk of scope creeping, to ensure that we deliver a solution that meets MVP.

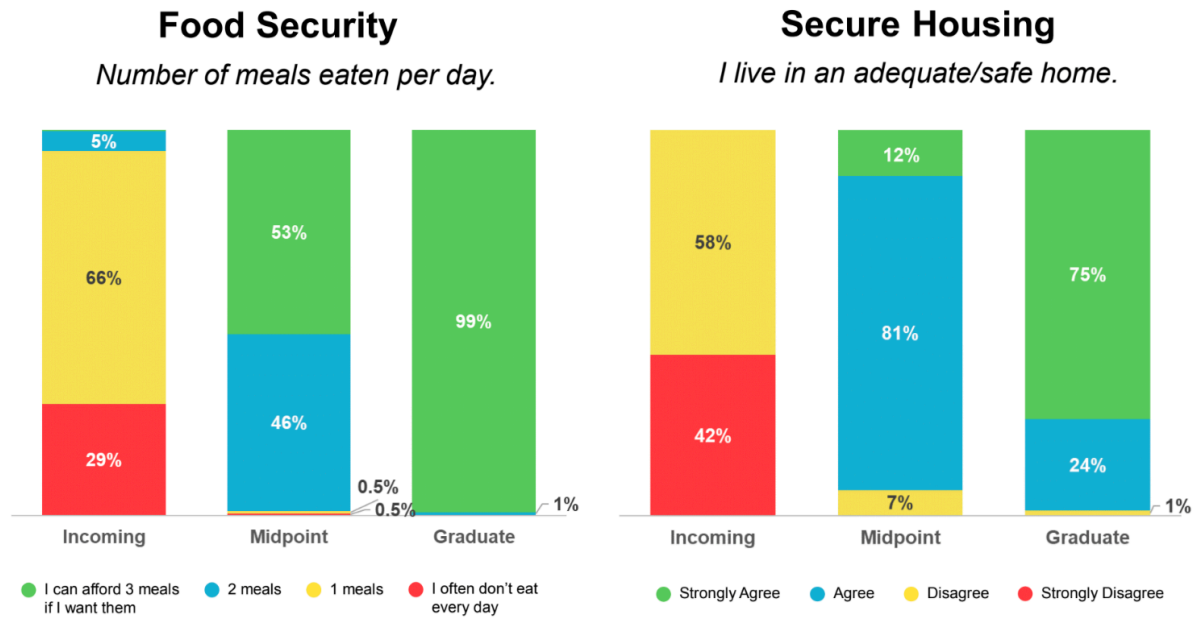
2. CURRENT SITUATION

Zoe takes pride in demonstrating their effectiveness through statistical information.



(Zoe Empowers, 2023) They understand that data demonstrates the reality of their work. That the research and numbers prove their methods improve the lives of those they support.

SAS has already done some preliminary analysis for Zoe. Their analysis is displayed on Zoe's website, for example this is under their Impact Data, Kenya Data Highlights.



(Zoe Empowers, 2023) SAS has already provided these insights for Zoe. It will be beneficial to use these parliamentary visualisations as a springboard for our progress at the start of this project. Showing us places that have already been researched by SAS will help us in not informing Zoe of information that they are already aware of.

The current situation creates extra pressure to produce creative insights about the impact of Zoe's work. Luckily SAS is currently the world's largest privately held software company with 45 years of business analytics and they are directly providing us with access to their learners version of their owned data analytics software called Viya.



(SAS, 2023) Additionally we will have access to the same data sets that they used to extract the information for Zoe and the scope to curate new data from any new sources we come across in our research.

3. BENEFITS

Estimating the benefits that would be realised by solving the problem is crucial to determining the value and impact of the project. The benefits can be categorised as tangible and intangible.

3.1. TANGIBLE BENEFITS

- **Cost Savings:** SAS will be making immense cost savings by sourcing out this task to Data Synergy. The task itself comes at no additional cost to either SAS or the Zoe Empowers organisation. When compared to a contracted approach SAS is able to see these significant cost savings as the task would require costly contracting of a project team and data specialists.

- **Time Savings:** Data Synergy is able to complete this task within a twelve week period and present its findings in an appropriate format that meets both the minimum requirements and SAS's expectations and standards.
- **New Products and Services:** SAS will benefit from the final product being a report detailing all the findings from the Zoe Empower's data and any data describing short falls or areas of improvement within the program to bring back to their charity organisation.

3.2. INTANGIBLE BENEFITS

- **Improved 'Customer' Experience:** By identifying areas within the Zoe Empower's program that are not working well in particular regions, the report's findings will help provide an opportunity to fix these flaws, thereby enhancing the program and providing a better experience and overall satisfaction for the individuals involved.
- **Employee Morale:** Conducting research to enhance the Zoe Empower's program will align with the values of SAS. Where the work provides a fulfilling experience and showcases to employees that SAS is committed to improving its services for both themselves and more importantly program participants.
- **Increased Control:** Undertaking research to identify both successful and unsuccessful aspects of Zoe Empowers, enables SAS to maintain effective program control and implement measures to address gaps to make informed decisions. Failure to conduct research could result in unrecognised gaps within the program which may result in unrecognised areas for improvement and impacts on time and costs, ultimately leading to a loss of potential for SAS.
- **Improved Communication Processes:** The course of our project will involve extensive engagement with other team members and sponsors, which will enable us to identify areas of the project that are successful or need improvement. Reflection, meetings, and feedback during and after the project will help to enhance communication for both current and future projects.

4. ALTERNATIVE SOLUTIONS

4.1. ALTERNATIVE 1: Alternative Use of Coding Language/Data Analytics Platform

4.1.1. ADVANTAGES

- **Strategic:** Conducting research using alternative tools while working towards a project solution could see the solution achieved in a more timely and efficient manner. So too could it prove a greater chance of achieving solutions and goals.
- **Economic:** Little to no costs as we are already in possession of said tools and platforms.
- **Technical:** Technical ease of use where experience and access to alternative tools would prove advantageous.
- **Operational:** SAS has provided us with SAS Viya, a fully integrated, open sources, cloud-native technology platform to assist us through the progression of our project. For all members, this is an unfamiliar tool that we have little to no experience with, seeing us devote extra time and effort to learning this tool. Alternatively, the ease of use of other familiar technologies and languages such as R, could provide an alternative operational solution enhancing our performance.
- **Planning Issues:** Less planning required as familiarity and understanding of alternative tools is already established.

4.1.2. DISADVANTAGE

- **Strategic:** Filtering data into alternative tools could prove a longer route to achieving a solution. Viya provides us the strategic capability to filter data into the platform and quickly be provided with visual solutions.

- **Economic:** Should we source alternative languages and platforms, that perhaps require financial payment to acquire, costs to team members can incur. Viya remains a free and available platform for the team.
- **Technical:** Alternative languages and platforms could require extensive contribution of time to learn and understand.
- **Operational:** Should team members use tools of alternative choice, project findings and work could fall outside the scope of the project and become too diversified. Viya will ensure all members are on par with each other's operations of research.
- **Planning Issues:** Not all team members are versed in alternative tools. Planning to learn these alternative tools over Viya, provided to us by SAS, would make learning/using alternative tools void.

4.2. ALTERNATIVE TWO: NO ACTION

The no action alternative, would be to refuse SAS's proposed project and provide a 'no action' statement resulting in either work, benefit or outcome. A no action would not necessarily mean that the project is not feasible, rather that Data Synergy would not be able to provide services of any benefit as the issues/proposed project has been previously addressed or solved. A no action simply lets others know that their company will be saving time and money from not proceeding with the project.

4.2.1. ADVANTAGES

- **Strategic:** There has already been analysis done for Zoe Empowers done by SAS. The strategic advantage of not doing any more analysis is the effort to find new information can be directed elsewhere. However, they have chosen to employ Data Synergy to perform new analysis for them.
- **Economic:** Costs very little.
- **Technical:** Not Technical requirements

- **Operational:** There would no longer need to be employing Data Synergy, to discontinue our business relationship would provide a space for a redirection of their operational efforts.
- **Planning:** No planning required

4.2.2. DISADVANTAGES

- **Strategic:** There is no gain for Zoe Empowers. No new information is curated. They will be left with only what they already know. The possibility of never gaining new interesting knowledge that could help Zoe Empowers in their charity efforts is a waste of potential positive social change.
- **Economic:** Employing Data Synergy and overseeing our progress for no gain, is a waste of time and resources.
- **Technical:** Resources that could be used for building insights are not used. SAS has a software solution that is perfect for generating new insights and other solutions are also free to use.
- **Operational:** SAS would not need to employ Data Synergy any longer if this was the outcome. This would mean that there would have been a total loss of time and operational cost to SAS.
- **Planning:** The planning already taken place will become redundant.

5. RECOMMENDED SOLUTIONS

The recommended solution is to primarily use the SAS provided data tool Viya, to conduct data analysis and produce results. Not using Viya has its advantages, more specified data analysis approaches and more detailed control over how the data is manipulated. Some of these other programming solutions will be used and those have been listed in the team manual, tool section. However, the skills required to use these platforms take far longer to learn than Viya, which aims to simplify the data analysis

process. Using Viya primarily will help team collaboration and communication within Data Synergy and SAS.

6. CONCLUSION

Ultimately, SAS Institute's proposed project involving their partnered charity organisation Zoe Empowers, has been deemed feasible for action by Data Synergy. Data Synergy has evaluated the benefits of the project including factor analysis of solutions and has forecasted the completion of the project to fall within the requested time frame of June 2023.



TEAM MANUAL

1. ROLES AND RESPONSIBILITIES

- **PROJECT MANAGER: TABITHA**

Our Project Manager Tabitha, is responsible for leading the team, planning and organising project resources, and ensuring project goals and objectives are met within the defined scope and schedule. In addition, Tabitha will manage risks, communicate progress and performance, and ensure that our partner organisations are satisfied with project outcomes. Therefore, effective leadership, communication, and risk management skills are essential for the success of our project.

- **PROJECT OFFICER: AVA**

Ava, our Project Officer, is a crucial member of the team, providing essential support to Tabitha in coordinating and ensuring timely completion of project activities. She will be responsible for monitoring progress, preparing reports, and collaborating with our partner organisation. Working closely with the project team, Ava will play a critical role in ensuring the smooth and efficient execution of the project.

- **CHANGE MANAGER/ PROJECT OFFICER: RORY**

Rory, our Change Manager, plays a critical role in ensuring the efficient management of all changes to project scope, timelines, and deliverables. He will work closely with Tabitha to assess the impact of changes, communicate them to our partner organisation, and mitigate any associated risks to ensure project success. Rory will also be assisting Ava in the support role of a Project Officer, ensuring the timely delivery of critical documentation and the coordination of project activities.

- **DATA SPECIALIST: CASSANDRA**

Cassandra, our Data Specialist, will be responsible for collecting, analysing, and interpreting data to provide valuable insights for informed decision-making. Her responsibilities will also include ensuring the accuracy and quality of data and effectively communicating her findings and recommendations to our partner organisation. Cassandra's contributions are critical to support evidence-based decision-making and improve the overall outcomes of the project.

- **BUSINESS ANALYST/ CHANGE OFFICER: LACHLAN**

Lachlan, our Business Analyst (BA), plays an essential role in ensuring the project aligns with the team's objectives and our partner organisations' needs. His responsibilities include conducting research, gathering and analysing data, documenting requirements, developing and implementing solutions, and communicating with our partner organisations. Through his expertise and insights, Lachlan will contribute significantly to the success of the project. Alongside the role of BA, Lachlan will also assist Rory in Change management by forecasting/ predicting any risk that may happen in the foreseeable future of the project especially when certain tasks and outcomes change. Mitigating risk and blockages within the project is key to the success of the team and its deliverables.

It can be noted that while the project is of a data science nature, Cassandra is the only member with a specialist understanding in this field. All other members have agreed to both provide Cassandra help with her collection and interpretation of data while also agreeing to devote extra time to learn how to use SAS Viya. This will ensure

Cassandra is not isolated with large amounts of technical work, and members are able to effectively contribute.

2. TEAM VALUES

As a team, we hold ourselves to a high standard of professionalism and conduct. Our success depends on how we work together, communicate with one another, and treat each other with respect and dignity. Therefore, we have established a set of values that guide our behaviour and help us achieve our goals.

- **Respect:** We treat each other with respect and dignity, regardless of our differences in opinions, backgrounds, or roles.
- **Communication:** We communicate openly and honestly with each other, listen actively, and strive to understand each other's perspectives.
- **Accountability:** We take ownership of our responsibilities and deliver on our commitments to the team.
- **Collaboration:** We work together towards a common goal, leveraging each other's strengths and supporting each other's weaknesses.
- **Continuous Improvement:** We are committed to learning and growing as individuals and as a team, and we actively seek feedback and opportunities for improvement.
- **Innovation:** We encourage creativity and exploration, and we embrace new ideas and approaches.
- **Trust:** We trust each other's intentions and capabilities, and we act with integrity and transparency.
- **Empathy:** We seek to understand and appreciate each other's feelings, perspectives, and needs, and we strive to support each other's well-being.
- **Flexibility:** We adapt to changing circumstances and challenges, and we are open to new approaches and solutions.
- **Fun:** We create a positive and enjoyable team culture, and we celebrate our successes and milestones together.

By upholding these values, we can build a strong and effective team that delivers high-quality work and supports each other along the way.

3. ACS CODE OF PROFESSIONAL CONDUCT

As professionals in our field, it is crucial that we not only possess the necessary technical skills and knowledge, but also maintain a high standard of ethics and values. Our team must demonstrate professionalism, integrity, and respect in all our interactions and activities, both within the team and with our partner organisation, SAS. By adhering to these values, we can create a positive impact on the wider community and promote the betterment of society. The ACS codes of professional conduct provide us with clear guidelines on how to achieve these goals and ensure that our work aligns with the highest standards of professional conduct.

- **Primacy of the Public Interest:** Members should consider the impact of their work on the public and prioritise the welfare of the public over personal or professional interests.
- **Enhancing Quality of Life:** Members should strive to enhance the quality of life of individuals, society, and the environment through their work.
- **Honesty:** Members should be truthful and transparent in their work and not engage in deceitful or fraudulent activities.
- **Competence:** Members should maintain high standards of technical and professional competence and continuously develop their skills and knowledge.
- **Professional Development:** Members should promote the professional development of their team members and contribute to the advancement of the profession.
- **Professionalism:** Members should behave with integrity, respect, and professionalism in all their professional dealings.
- **Compliance with the Law:** Members should comply with all relevant laws and regulations governing their work.

- **Avoiding Discrimination:** Members should not discriminate against others based on factors such as race, gender, age, religion, or sexual orientation.
- **Privacy:** Members should respect the privacy of individuals and protect the confidentiality of personal information.
- **Ethical Leadership:** Members in leadership positions should promote ethical behaviour among their team members and take responsibility for ensuring ethical conduct within their organisation.

4. PROJECT MANAGEMENT APPROACH

Our project will be a challenging endeavour, requiring a project management approach that is both effective and adaptive. One of the primary obstacles we will face is the constant change in requirements and evolving understanding of the problem. This necessitates an approach that can seamlessly be adaptive to these changes. After careful consideration, we have chosen to implement the Agile Methodology, specifically the Scrum framework approach (Schwalbe & Jonathan Lau , 2018). Scrum provides us with an iterative and flexible framework that welcomes change and can be adapted to facilitate any changing requirements. With the Scrum framework alongside the Agile Methodology, we are able to break down our project into smaller sprints, each with a specific goal to accomplish. This approach enables us to deliver increments of the final product in each weekly sprint to our sponsor SAS, providing us with frequent opportunities for review and feedback.

The scrum approach also consists of a series of ‘artefacts’ these include the backlog, sprint planning, (bi-weekly) stand-ups, sprint reviews and the retrospective (DRUMOND, 2023). The backlog contains a breakdown of smaller subtasks within the project which get addressed and tasked in sprint planning. Sprint planning takes tasks from the backlog into the actionable items for the week and it is constantly addressed in bi-weekly stand-ups (one with the delivery partner) to weed out any problems or opportunities that may be encountered (DRUMOND, 2023). A sprint review is held after each deliverable

to understand what was accomplished and for it to be signed off by the team leader and lastly the retrospective is a critical review of what did and didn't work well for the deliverables accomplished each week.

5. TOOLS

During the course of our project, we will use the following tools.

- **SAS Viya:** SAS Viya is an analytical data tool that will be used by our team to produce a visualisation of the Zoe Empowers data to conduct a findings, analysis and recommendations report and a presentation that provides SAS with the information they need to assess Zoe Empowers' program effectiveness.
- **Google Docs:** Google Docs will be used to create our findings, analysis and recommendations reports. Additionally, Multiple team members can also work simultaneously with changes tracked and automatically saved.
- **Google Slides:** In the final presentation, our team will use Google Slides to present our overview, methodology, findings, recommendations, and conclusion to our partner organisation, SAS. Additionally, Multiple team members can also work simultaneously as changes are tracked and automatically saved.
- **R Studio:** R studio provides a platform for the development of statistically significant information. Additionally, it provides in-depth ways to develop visual insights and manipulation of data through packages such as, GG-Plot2, Purr and Dplyr. It is an IDE for the programming language and statistical analysis language R. Visualisations will be exported from this to aid in the project deliverables.
- **Jupyter Notebook:** Jupyter Notebook is an IDE for the programming language Python, which has proficiencies in machine learning algorithms and predictive modelling. It may be used if the scope is expanded. It additionally can be used in the same way as SAS Viya and RStudio which provides a breadth of versatility.
- **Trello:** Will be used as a project management tool to visually see what tasks and subtasks are needed to be done in order to meet deliverables by the appointed

deadline. Although trello is more inline with the Kanban approach the team will greatly benefit from seeing tasks visually checked off and those awaiting tasking. This is inline with the backlogging methods of Scrum.

- **GitHub:** Will be used to access deliverables and see what files have been modified by which team members. It will also serve as a homepage/ archive for already submitted deliverables throughout the project for quick reference in the future.
- **Discord:** Will be used as a communication channel for the project team. The communication server is broken down into sections that align with general communication, weekly minutes and meetings, reports, resources, team member schedule and an assessments calendar.

6. COMMUNICATION PLAN

Our plan is to hold a meeting once or twice a week. These meetings will be primarily online via Zoom, although there will be a couple of face-to-face meetings at Macquarie University Library during the project's production phase. A Discord server has also been set up to easily communicate and share information about the project. Every fortnight, our team will meet with SAS for 30 minutes online to ask questions, show progress, and receive feedback on the project.

6.1. MEETING SCHEDULE

9:30 am - 10 am on Tuesdays: Meeting with partner organisation, SAS. (Online).

10:15 am - 10:30 am on Tuesdays: Weekly team meeting sprint. (In-person, on campus).

7. CHANGE MANAGEMENT

To manage change effectively, the team will follow these steps:

- **Anticipate change:** Keep an open mind and anticipate that change may be necessary throughout the project. Stay flexible and be prepared to adapt to new situations.
- **Communicate the need for change:** If changes need to be made, communicate them clearly to the team. Explain why the changes are necessary and what impact they will have on the project.
- **Involve the team:** Involve the entire team in the change process. Encourage them to share their perspectives and ideas on how to manage the change effectively.
- **Develop a plan:** Develop a plan for managing the change. This may include setting new goals, reassigning roles and responsibilities, adjusting timelines, or other necessary changes.
- **Monitor progress:** Monitor progress closely to ensure that the change is being implemented effectively. Schedule regular check-ins to assess how well the change is being managed and to make any necessary adjustments.
- **Celebrate successes:** Finally, celebrate successes along the way. Recognise and reward team members for their hard work and accomplishments. This can help build morale and maintain a positive team environment.

By following these steps, our team can manage change effectively and ensure the success of the project.

8. CONFLICT MANAGEMENT

To manage conflict effectively, our team can follow these steps:

- **Establish clear communication channels:** Create a communication plan and encourage team members to share their concerns openly and respectfully.
- **Set ground rules:** Establish a shared understanding of the project's goals, timeline, and how conflicts will be addressed when they arise.

- **Address conflicts early:** When conflicts arise, address them early on before they escalate. Schedule a separate meeting or discussion to specifically address the issue at hand.
- **Encourage active listening:** Encourage team members to actively listen to each other's perspectives and work collaboratively to find a resolution that works for everyone.
- **Stay focused on the project's goals:** Avoid personal attacks or blame and instead focus on the issues at hand. This can help maintain a positive and productive team environment.
- **Inability to resolve conflict:** should there be no alternative to resolution of conflict, the group will acknowledge that the conflict exists and either manage it with a solution that best dissolves a large amount of the conflict, or alternatively withdraw from the conflict completely.

By following these steps, our team can manage conflicts effectively, ensure the success of the project, and build stronger relationships and communication skills.

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