



Industry and Community Project Group Plan

Research Project on Data Privacy and Its Education

Team 10

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Introduction

For decades, data has been a valuable asset for society. It is used in analytics or can be visualised to support business decisions (Fawcett & Provost, 2013) but more recently with technologies like AI, data became the tool to execute tasks that people deem difficult. Data driven AI can automate repetitive tasks and process information that humans are unable to comprehend (Joshi, 2017), and besides, these technologies are utilised in different areas such as finance or medicine (Joshi, 2017) to establish a convenient life for everyone. For instance, in 2018, an AI algorithm was written in Seoul National University to detect abnormal cell growth from images that human eyes cannot recognise (Greenfield, 2019).

However, With the rapid growth of these superhuman machines, many issues arise that harm individuals, organisations or governments. A notorious example is the Cambridge Analytica incident in 2018, where a political data firm gained access to large amounts of data acquired from Facebook and offered services to influence the behaviour of American voters (Granville, 2018). In another case, Microsoft deployed a chatbox to interact with young adult Twitter users, but shortly after the AI was released, it started publishing offensive tweets, strongly suggesting that AI can be biased (Dawson 2019).

To tackle similar challenges we are facing, many countries introduced measurements and data privacy policies. Based on the UNCTAD database (2020), more than 75 percent of the countries have drafted or finalised legislation on data protection, including Australia's Privacy Act that was partially adopted from the European Union's GDPR (Office of the Australian Information Commissioner, 2018). Similarly to the GDPR, The Australian Privacy Act was published to guide government agencies, private sectors and non-profit organisations on managing personal information (Office of the Australian Information Commissioner, 2018) and protecting citizens' privacy.

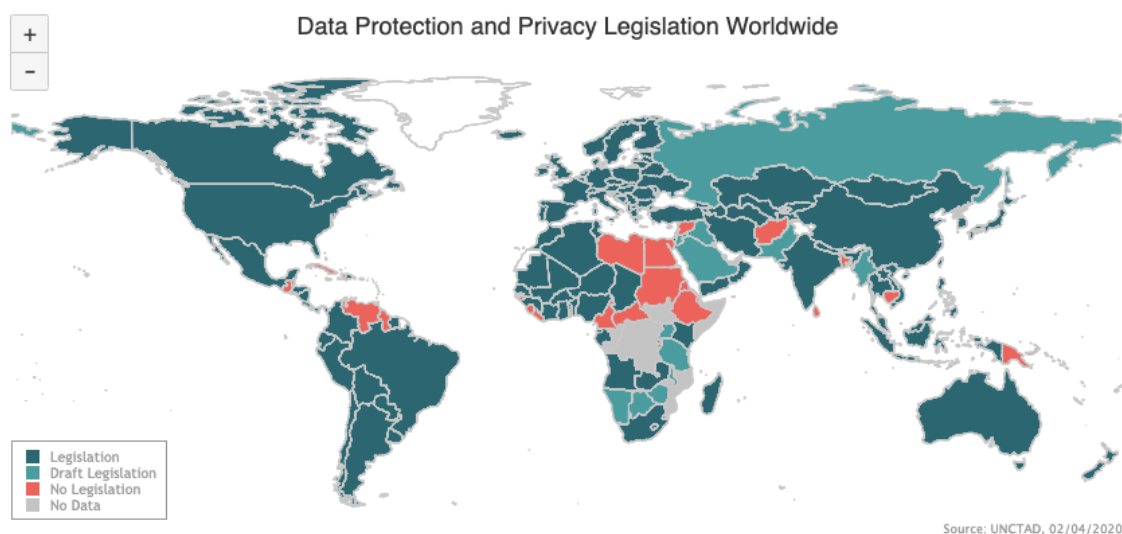


Figure 1: Data Protection and Privacy Legislation Worldwide, 2020

This action can be considered as an effective first step to raise awareness of the misuse of data (European Commission, 2019), yet it is uncertain whether legislative

measurements are sufficient to avoid future breaches. Hence, there may be a need for research to produce an informative report on new regulatory frameworks or proposals for data privacy in Australia. There could be various ways to improve data privacy, such as changing legislation or introducing a privacy framework within organisations, but our work will be focused around data literacy within Australian society.

Awareness of how our data is handled is critical as they can affect our decision making - just like in The US where an AI algorithm was used to assess the likelihood that someone will re-offend, but then the same algorithm turned out to be racially biased (Dawson, 2019). Therefore, by having a high awareness of what our data is being used for, individuals may be able to make a qualitative judgement on what they consent to when social media platforms or other entities request their personal information in order to defend themselves from data privacy problems.

Aims

As a preface, this project builds on the assumption that Personal Data misuse has a negative relationship with data privacy education. This is supported by the studies conducted by Herold (2011) that observes the relationship between an employee's lack of training and personal data breaches within companies. Further education beyond the scope of the project will seek to further prove this assumption.

Our project aims to find out whether each study group wants and needs further education regarding knowledge of data privacy and security, in order to improve their data privacy and protection. This project will group people through a cultural lens, specifically Hofstede's individualistic and collectivistic concept. It will also analyse different demographic and socio-economic groups to document the potential differences and similarities.

The primary goal is to analyse the existing relevant education system in Australia and identify those barriers that prevent people from receiving education on data privacy. Furthermore the overarching aim is to distinguish different approaches to education that would maximise uptake of personal data privacy information in those groups identified as problem areas.

Teams

Anchilee Scott-Kemmis

Bachelor of Arts and Social Sciences, Sociology



Anchilee's studies has allowed her to develop a deep understanding on functions of contemporary societies, focusing on social implications and issues that may arise in Australia and beyond Australia's borders. Coming from contrasting cultures and growing up in International Schools, Anchilee has interacted with people from various cultures which has broadened her understanding on culture, customs, education and perspectives globally.

Anchilee has experience working in a human resource consulting firm, concentrating on market analysis. This will be of use when conducting research for this project's topic. Anchilee's project motivation stems from her strong belief that changes in policies are driven by the reactions and demands of our globalised society.

Shiqi Jiang

Bachelor of Commerce, Accounting & Mathematics

Shiqi has a comprehensive understanding of data privacy from different cultural perspectives as a result of her international background, originating from China. She excels in conducting comparisons amongst various case studies, allowing her to develop a well-designed programme.

In the contemporary business world, Shiqi's disciplines have assisted in analysing the importance of personal information and it's security awareness stemming from a business perspective. Shiqi also has experience with the usage of excel in order to analyze the data acquired, it is essential when our group does the preliminary survey to collect the primary data in the first step.



Chay White

Bachelor of Commerce, Bachelor of Advanced Studies IV, Economics & International Business

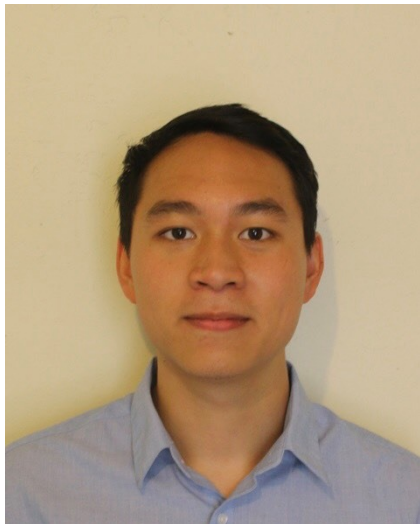
Chay has an academic background in Economics and International business with a focus on International Macroeconomic policy and history with two years' experience as an associate for APS Advisory, specifically in the M and A field. Importantly, Chay is able to combine his technical knowledge in the Finance field with his research and stakeholder focused economic education to provide an accurate analysis of the data privacy complex, while championing the search for the equilibrium level of data use and data privacy.

Chay has experience handling personal data where as a primary focus he worked in a team alongside the Minister of Health in Malawi MoH to increase the security of highly sensitive personal medical records.



Hoang Minh Le

Bachelor of Science, Computer Science & Data Science



With his Data Science background, Hoang is the perfect candidate to tackle the challenges posed in the complex data privacy landscape. While he studied AI in university, Hoang also worked with data during his internship - performing analysis on large data groups and writing analysis reports - therefore, he is able to understand the difficulties individuals and organisations experience with data privacy.

Hoang's knowledge in AI and coding will be useful during this project and having an IT perspective on data literacy or privacy is crucial in understanding the context of the problem area. Furthermore, being multilingual, Hoang has access to resources that English speakers may not, giving insight into a broader area of data privacy and education to cover international and cultural aspects of the research.

Approach

Double Diamond Strategy

To achieve success in this project, we have been implementing the Double Diamond Strategy (Scheinder, 2015):

Understand:

The deeper the knowledge we have on data privacy, the higher the chance we can develop the important questions. So it is necessary for the team to understand privacy policies from various nations and the current information society has about data through literature and media.

Define:

Understanding also suggests being able to think critically in the realms of the topic. With that being said, in this phase we will be able to form a problem or question within data privacy, and create an initial strategy to propose an answer to it.

Explore:

In order to find an answer to our question, we will follow different strategies and techniques. Some may not lead us to a result, and so being open-minded to new ideas is crucial to accomplish the goal.

Create:

As a solution is found, the team needs to construct the result in a report format and present it to the panel. It is important to convey the work process clearly to receive valuable feedback.

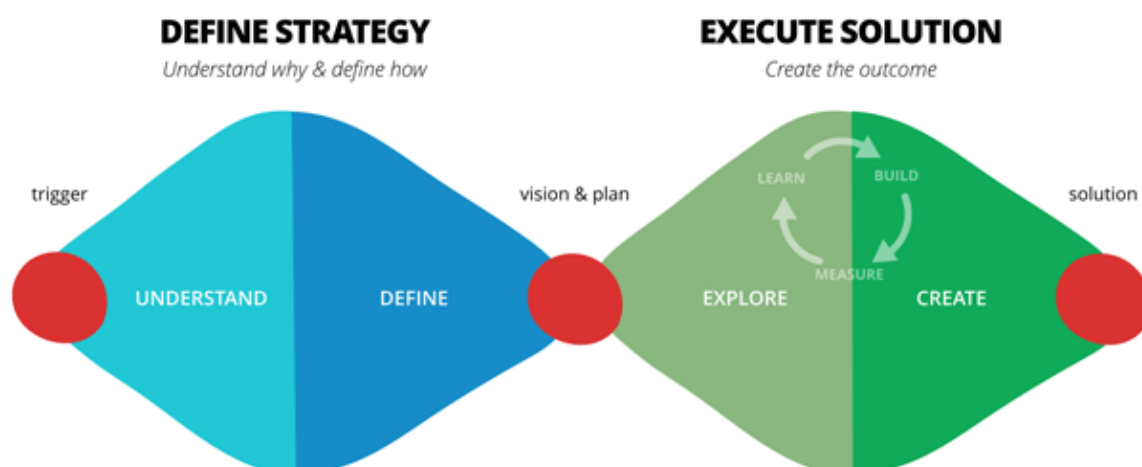


Figure 2: The Double Diamond Strategy, 2015

Deployment of work does not suggest a finished project. Every phase can move back to a previous phase depending on the team's collaboration and thought process. Therefore, it is important to recognise when to step back and when to move forward.

Project Management

In the process of project management, our group members always utilise Zoom to communicate with each other. Individual team meetings on Zoom allows the team to mimic face to face contact. Furthermore, a google drive has been utilised to compile research. Other uses include the sharing of ideas, relevant references, notes and accomplished goals which allows every member to be aware of current progress.

Framework

Stakeholder analysis

A modified stakeholder analysis will be utilised to allow a holistic analysis of the complex problem area of personal data privacy education. It will allow the team to conceptualise the interrelation between the parties and build the teams knowledge of their behaviours, interrelations, intentions, interests, agendas, resources and their influence on the topic area. The data gathered will be used to create frameworks to direct these stakeholders, suggest objectives and assess the feasibility of implementing personal data protection education (Brugha, R., & Varvasovszky, Z. 2000).

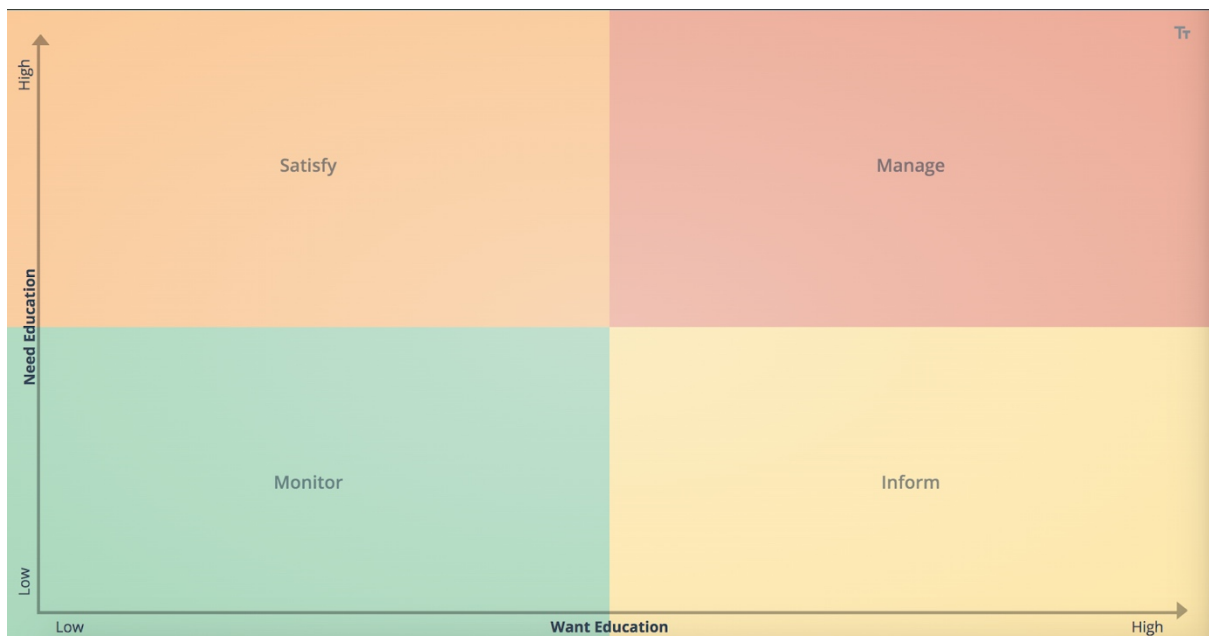


Figure 3: Modified Stakeholder Analysis (Need/Want for Education), 2020

SWOT

Throughout the process of research, data collection and analysis it is important for the team to strategically monitor and evaluate the suitability of the methods of research and analysis. This will allow us to both continuously evaluate the project as well as ensure the validity of the results and conclusion. External influences are described as opportunities or threats for the project, the team's internal capabilities are identified as strong or weak. From the analysis, amendments can be made to the strategic plan to mitigate any risks (Johnson and Scholes, 1990).



Figure 4: SWOT analysis framework, 2020

Research Method

Data Analysis

Another approach this project will take on is the data analysis aspect through the lens of sociology. In the sociological field, data analysis stems from qualitative and quantitative research. Nevertheless, the qualitative aspect will be approached here. Using the *Explanatory* type of research, we will be able to provide an answer towards *why* certain occurrences happen in the social world. This method seeks to provide or develop explanations and phenomenons that occur within the social world (Given, 2008) The results of the study can often sometimes be specific to an individual too, permitting for insight on a much deeper level (Allebeck, Mastekaasa, 2004) Another approach that this research will take is the analysis of the data through using two types of content analysis, selective reduction referring to reducing the categories and draw focus on specific words or patterns within the sample group (Columbia Public Health, 2020) and manifest coding which refers to what the researcher can see, what themes pop up or how many specific words appear in the data and sample as a collective (Cash, Snider, 2014)

Literature review

The body of the team's research will be formed by literature review, working to source and interpret reports and journal articles that provide insight into the personal data education landscape. The majority of this research will be conducted through databases, accessed using Sydney University libraries online portal and will include JSTOR and Business Source Ultimate via Ebsco. The research will be collated under the relevant research area and will largely be compiled by the team member responsible for an area of study. With a body of relevant research available to the team, we will be able to analyse the data and make inferences about the personal data privacy landscape. This will allow us to target areas for further research and, depending on the findings, allow us to make informed suggestions relevant to the topic. Roles and Responsibility

Roles and Responsibilities

Responsibility Table			
Hoang	Shiqi	Ann	Chay
Contribute to Survey	contribute to survey	Contribute to Survey	Contribute to Survey
Data Analysis	questionnaire construct	Conducting research in a sociological framework	conducting research into demographic framework
Literature Review	case study comparison	explore themes	Research into prior education framework
Searching for Existing Data	conducting research in socio-economic framework	proof reading in order to maintain cohesion	SWOT Analysis

Anchilee Scott-Kemmis

Anchilee's responsibilities include conducting research on sociological theories that may or may not support the results of the data collected through the primary research. She will also explore varying fields and themes on the education of data and privacy policies, comparing individualistic and collectivist cultures and examining intergenerational perspectives, naturally stemming from her sociology perspective. Anchilee will cultivate ideas and approaches in order to develop survey questions that can be sent out to the different clusters of people that are being studied and explored. This will be done through Anchilee's understanding of qualitative methodologies and alongside other group members allowing for maximum efficiency. Finally, Anchilee will also be responsible for proofreading the research and documentations other group members may have acquired in order to maintain cohesion.

Shiqi Jiang

Shiqi's responsibilities in the group includes drafting and finalising the survey based on her excel experiences. This involves leading discussions around the questions that we will pose to our research group. As the result of her commerce background, her other responsibility is to focus on the socio-economic perspectives of the topic. The collection of information will focus on assigning individuals to subgroups, focusing on the threats they are facing in relation to security awareness, estimating the benefits they will receive after the education. Furthermore, Shiqi will utilise her international background to provide sufficient comparison and analysis amongst case studies from different countries.

Chay White

Chay's education in the field of macro economics involves the study of stakeholders and equilibriums to formulate an understanding of a wider context. Therefore his responsibilities lie in conducting research into whether demographics inform an individual's decision making around education on data privacy. Chay will also explore possible links between the need and want for education on personal data security and an individual's level of prior education. Chay will utilise his experience in primary research and analysis in his current role at APS advisory to work with the team to formulate an appropriate and insightful survey and with Hoang and analyse the data collected.

Hoang Minh Le

Since Hoang has experience with data analysis and different softwares, it was natural to assign him the tasks of gathering and analysing data. He also prefers the practical side of the research and feels productive when he can create something useful, and so he also volunteered to format reports for the project. Other than that, Hoang is multilingual and due to growing up in Budapest, he is interested in how European organisations - especially Hungarian companies - as well as EU societies view education on data privacy. With that in mind, he is happy to review case studies about EU's attempts of data protection, especially in Hungarian.

Expected Outcome

Collectivist vs Individualistic

We expect that individuals who live in the realms of an individualistic culture will want to receive education on privacy policies in comparison to collectivist cultures, where they have developed understandings that personal data may be acquired for the benefit of the greater good, thus not as protective of their data as other existing cultures.

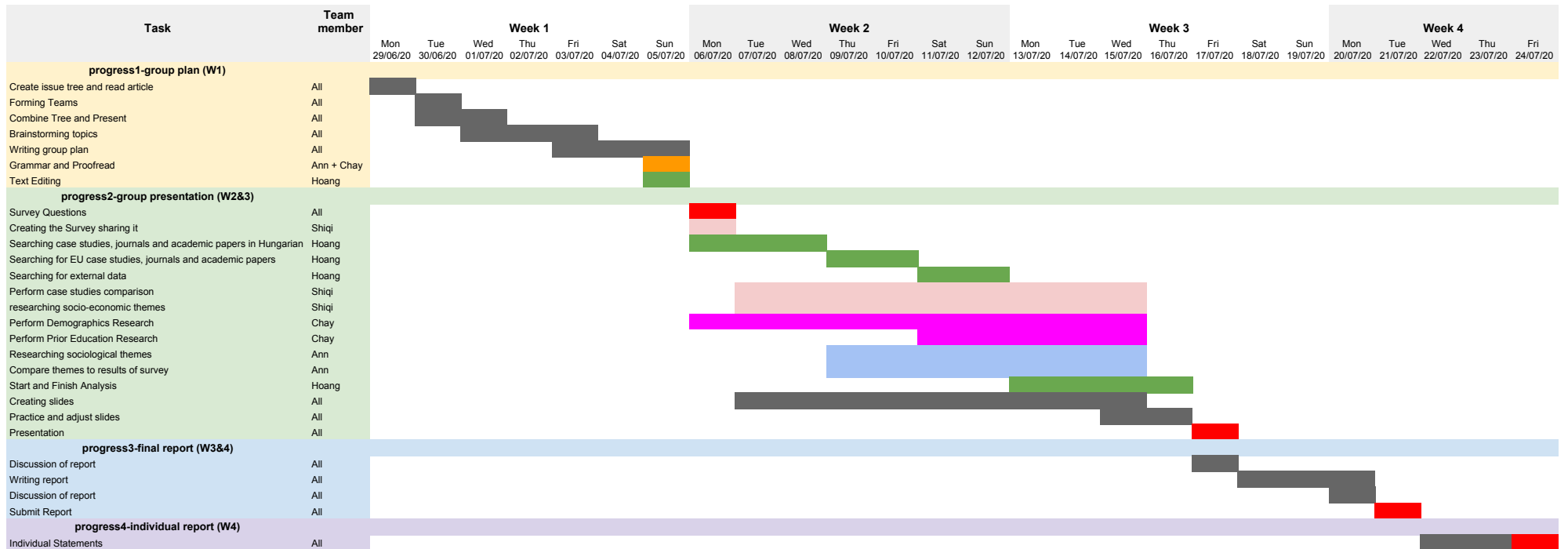
Demographics

We hypothesize that older generations (45+y/o) will experience a higher need for education but a lower want for education. However, with younger demographics (<45y/o) the relationship will be reversed. We also believe that women are more likely to want and need data privacy education than men, due to social pressures and higher rates of online transactions.

Socio-Economic

We expect that clusters of different income and education levels will have different desires for education due to different reasons and backgrounds. The expectation is that the lower-income and education group need education on individual data privacy more than others.

TimeTable



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