

Data Ethics Canvas

Title	Description	Screen Time	Mood	Sleep	Average Aussie Screen Time
1. Data sources	Name and describe key data sources used in your project, whether you're collecting them yourself or getting access from third parties.	This data was recorded on smartphone system/applications based on IOS/Android of each team member. The data were then being manually updated on a shared Google Spreadsheet for team access.	This data was collected manually by 6 of our team members and were then being manually updated on a shared Google Spreadsheet for team access.	This data was track individually via an third-party IOS application called Pillow. App usage: https://pillow.app/	This data was extract from a media released from REVIEW.org in which the study conducted on over 1,000 people in Australia to learn more about their screen time patterns. https://www.reviews.org/au/mobile/aussie-screentime-in-a-lifetime/
2. Limitations in your data sources	Are there any limitations that might influence the outcomes of your project? Consider: <ul style="list-style-type: none"> • bias in data collection, inclusion, algorithm • gaps, omissions • other sensitivities such as data categorisation 	Many background apps were observed with a high value of screen time in seconds, therefore that was adjusted. Because of their unusually high value, these numbers are considered outliers.	It was originally meant to track our mood four times a day, at waking, lunch, dinner, and bedtime. In practice, however, this proved difficult to maintain. Furthermore, there is no timestamp synchronization between each user's	Despite the fact that there are no missing values from table columns, I discovered that there are occasional missing date records owing to technological issues such as phone crashes or automated IOS version updates,	Sampling issues: Relatively little may be known about the characteristics of people in online communities, aside from some basic demographic variables, and even this information may be questionable. Reliability:

			data records. It should also be noted that the mood variable's value is subjective, therefore each person has a different scale.	which was unexpected. Furthermore, because the CSV is generated by the Pillow app, the format of some of the column names is difficult to interpret and log in the R software while performing analysis.	Since this study was conducted by a company and was published under their website, it is not so clear about how much reliability this study is.
3. Sharing data with other organisations	Which people/organisations can see your data? (e.g. collection/storage apps, MDSI people, analysis tools you use, etc.)	<p>Access to the datasets: MDSI student who have access to the shred folder.</p> <p>Access to raw data: tracking apps stored the data.</p>	<p>Access to the datasets: MDSI student who have access to the shred folder.</p> <p>Access to raw data: tracking apps stored the data.</p>	<p>Access to the datasets: not sharing.</p> <p>Access to raw data: tracking apps stored the data.</p>	N/A
	Under what conditions?	<p>Team conditions: records were not to be shared with third parties in any scenario outside the project's requirements.</p>	<p>Team conditions: records were not to be shared with third parties in any scenario outside the project's requirements.</p>	<p>App conditions: subject to T&C. IOS system terms of use: https://www.apple.com/legal/internet-services/terms/site.html</p>	<p>Copyright: I am able to view and download a single copy of the Site Material for your non-commercial personal use.</p>

		App conditions: subject to T&C. Apple IOS Privacy Policy: https://www.apple.com/legal/privacy/en-ww/			
4. Relevant legislation and policies	What legislation or policies shape your use of this data? Consider data protection legislation, IP and database rights legislation, anti-discrimination laws, sector-specific data sharing policies/regulation (eg health, employment, taxation), sector-specific ethics legislation	TBU	TBU	TBU	TBU
5. Rights over data sources	Where did you get the data from? Is it data produced by an organisation or data collected directly from individuals?	Individual and group collect	Individual and group collect	Individually and via smartphone tracking application	Through an online study on the website
	Do you have permission or another basis on which you're allowed to use this data? What ongoing rights will the data source have? Have you agreed how the data will be used/destroyed within the group?	At the beginning of the project, the group has agreed on consenting the use of other data in this study is acceptable. For the raw dataset, we have the full	At the beginning of the project, the group has agreed on consenting the use of other data in this study is acceptable. For the raw dataset, we have the full	Since this data was collected on my phone, I have the full right to use it. This also be addressed in the Terms & Use of the tracking app: https://pillow.app/pillow-privacy-policy-	This was published on a public website

		rights to use the dataset for the purpose of analyse, study about the life habits of our group and to include the dataset in our report if necessary.	rights to use the dataset for the purpose of analyse, study about the life habits of our group to include the dataset in our report if necessary.	en	
6. Existing ethical frameworks	Countries, sectors and communities have existing ethical codes and frameworks. Which ones are relevant to this project?	UTS Code of Conduct: http://www.gsu.uts.edu.au/policies/code-conduct.html Data Science Ethics: https://data.blog.gov.uk/2015/12/08/data-science-ethics/ GDPR Principles: https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/principles/lawfulness-fairness-and-transparency/			Website T&C: https://www.reviews.org/about-us/terms-of-use/
7. Your reason for using this data	What is your primary purpose for using data in this project?	<p>To study the behaviour of using smart phone, particularly screen time usage and different app categories.</p> <p>We also want to compare and learn about relationship of</p>	To study the relationship of mood with other factors such as sleep patterns and smartphone usage.	To study about the individual sleep patterns and the relationship sleep quality with other activities.	To use the data as the large cohort data and making comparison to the findings in our group dataset.

		smart phone usage behaviour with other group and individual data within this study.			
	What are you attempting to do?	Above	Above	Above	Above
	How could this data be used to gain insight that could lead to innovation (new apps, research insight, insight into your personal selves, etc.)?	Self-awareness of unhealthy sleep patterns to be corrected.	Self-awareness of unhealthy sleep patterns to be corrected.	Self-awareness of unhealthy sleep patterns to be corrected.	Self-awareness of unhealthy sleep patterns to be corrected.
	Are there existing projects or services that attempt to gain this kind of insight? Do they have any ethical issues?	Several academic studies have been conducted to study about human habit patterns and the relationship of different activities factors that can likely have an impact on mental & physical health.			
	Are you making things better? How? For whom?	In terms of personal impact, the study can help me identify the insight gaining from life habit observations and thus, can correct the negative behaviour if any.			N/A
8. Communicating your purpose	Do people, especially those the data is about or who are impacted by its use, understand your purpose?	Yes. Explicit permission was given by data subjects, including analysis pointing to aliases			No. As numbers are summarised by city, no identification of individuals is possible. This is, no personal information is comprised.

9. Positive effects on people	Beyond you as a group, which individuals, demographics or organisations could be positively affected by this project?	TBC	TBC	TBC	TBC
	How will they be positively affected?	TBC	TBC	TBC	TBC
	How could you increase the positive impact of this project?	TBC	TBC	TBC	TBC
	How are you measuring positive impact?	TBC	TBC	TBC	TBC
10. Negative effects on people	Who could be negatively affected by this project?				
	Could the manner in which this data is collected, shared or used: <ul style="list-style-type: none"> - cause harm? - be used to target, profile or prejudice people? - unfairly restrict access (eg exclusive arrangements)? Could people perceive it to be harmful?				
11. Minimising negative impact	What steps can you take to minimise harm?	Follow Australian Privacy Principles: https://www.oaic.gov.au/privacy/australian-privacy-principles/read-the-australian-privacy-principles E.g. Do not require access to raw data – i.e. diary text entries-			

		Follow Australian Cyber Security Manual to keep data secure: https://www.cyber.gov.au/sites/default/files/2019-04/Australian%20Government%20Information%20Security%20Manual%2028APR19%29_0.pdf			
	Are there measures you could take to reduce limitations in your data sources?	TBU	TBU	TBU	TBU
	Could you monitor potential negative impact to support mitigating activities?	TBU	TBU	TBU	TBU
	What benefits will these actions add to your project?	TBU	TBU	TBU	TBU
	How are you measuring negative impact?	TBU	TBU	TBU	TBU
12. Engaging with people	How can people engage with you?	Through email duongthucanh.nguyen@student.uts.edu.au Or Slack group chat that was setup at the beginning of the study			
	Can people affected appeal or request changes to the service?	Yes, Group communication through Slack private group chat remains open. Direct communication is available via email: duongthucanh.nguyen@student.uts.edu.au		N/A	N/A
	To what extent?	TBU	TBU	TBU	TBU
	Are the appeal mechanisms reasonable?	TBU	TBU	TBU	TBU
13. Communicating risks and issues	Are you building into the project the thoughts, ideas and considerations of people affected by your project? How?	TBU	TBU	TBU	TBU

	Are you communicating potential risks or issues?	TBU	TBU	TBU	TBU
	How are limitations and risks being communicated to people? Consider: <ul style="list-style-type: none"> - those the data is about - those impacted by its use or affected by your project - organisations using data 	TBU	TBU	TBU	TBU
	What methods are you using?	TBU	TBU	TBU	TBU
14. Reviews and iterations	How will ongoing issues related to data ethics be monitored and discussed?	TBU	TBU	TBU	TBU
	When will your responses to the canvas be reviewed or updated?	TBU	TBU	TBU	TBU
15. Your actions	What actions are you going to take before moving forward with this project?	TBU	TBU	TBU	TBU
	Which of them should take priority?	TBU	TBU	TBU	TBU
	Who will be responsible for these actions and who needs to be involved in them?	TBU	TBU	TBU	TBU
	Will you publish your actions and answers to this canvas openly?	TBU	TBU	TBU	TBU