School of Computer Science & Statistics Research Ethics Application

Part A
Project Title: Developing a Privacy Canvas Model
Name of Lead Researcher (student in case of project work): Maurice Buckley
Lewis
TCD E-mail: bucklem8@tcd.ie
Course Name and Code (if applicable): Computer Science [UICS-ICSC-IF]
Estimated start date of survey/research: 11/3/2019
I confirm that I will (where relevant):
 http://www.tcd.ie/info_compliance/dp/legislation.php; Tell participants that any recordings, e.g. audio/video/photographs, will not be identifiable unless prior written permission has been given. I will obtain permission for specific reuse (in papers, talks, etc.) Provide participants with an information sheet (or web-page for web-based experiments) that describes the main procedures (a copy of the information sheet must be included with this application) Obtain informed consent for participation (a copy of the informed consent form must be included with this application) Should the research be observational, ask participants for their consent to be observed Tell participants that their participation is voluntary Tell participants that they may withdraw at any time and for any reason without penalty Give participants the option of omitting questions they do not wish to answer if a questionnaire is used Tell participants that their data will be treated with full confidentiality and that, if published, it will not be identified as theirs On request, debrief participants at the end of their participation (i.e. give them a brief explanation of the study) Verify that participants are 18 years or older and competent to supply consent. If the study involves participants viewing video displays then I will verify that they understand that if they or anyone in their family has a history of epilepsy then the participant is proceeding at their own risk Declare any potential conflict of interest to participants. Inform participants that in the extremely unlikely event that illicit activity is reported to me during the study I will be obliged to report it to appropriate authorities. Act in accordance with the information provided (i.e. if I tell participants I will not do something, then I will not do it).

Date:19/02/2019.....

Signed:Maurice Buckley...... Lead Researcher/student in case of project work

Part B

Please answer the following questions.		Yes/No
Has this research application or any application of a similar nature connected to this research project been refused ethical approval by another review committee of the College (or at the institutions of any collaborators)?		
Will your project involve photographing participants or electronic audio or video recordings?		NO
Will your project deliberately involve misleading participants in any way?		NO
Does this study contain commercially sensitive material?		NO
Is there a risk of participants experiencing either physical or psychological distress or discomfort? If yes, give details on a separate sheet and state what you will tell them to do if they should experience any such problems (e.g. who they can contact for help).		
Does your study involve any of the following?	Children (under 18 years of age)	NO
	People with intellectual or communication difficulties	NO
	Patients	NO

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Details of the Research Project Proposal must be submitted as a separate document to include the following information:

- 1. Title of project
- 2. Purpose of project including academic rationale
- 3. Brief description of methods and measurements to be used
- 4. Participants recruitment methods, number, age, gender, exclusion/inclusion criteria, including statistical justification for numbers of participants
- 5. Debriefing arrangements
- 6. A clear concise statement of the ethical considerations raised by the project and how you intend to deal with them
- 7. Cite any relevant legislation relevant to the project with the method of compliance e.g. Data Protection Act etc.

Part C
Tutt C
I confirm that the materials I have submitted provided a complete and accurate account of the research I propose to conduct in this context, including my assessment of the ethical ramifications.
Signed:Maurice Buckley
There is an obligation on the lead researcher to bring to the attention of the SCSS Research Ethics Committee any issues with ethical implications not clearly covered above.
Part D
If external or other TCD Ethics Committee approval has been received, please complete below.
External/TCD ethical approval has been received and no further ethical approval is required from the School's Research Ethical Committee. I have attached a copy of the external ethical approval for the School's Research Unit.
Signed:
Part E
If the research is proposed by an undergraduate or postgraduate student, please have the below section completed.
I confirm, as an academic supervisor of this proposed research that the documents at hand are complete (i.e. each item on the submission checklist is accounted for) and are in a form that is suitable for review by the SCSS Research Ethics Committ
Signed:
Signed:

Completed application forms together with supporting documentation should be submitted electronically to the online ethics system - https://webhost.tchpc.tcd.ie/research_ethics/ When your application has been reviewed and approved by the Ethics committee, hardcopies with original signatures should be submitted to the School of Computer Science & Statistics, Room 104, Lloyd Building, Trinity College, Dublin 2.

CHECKLIST

Please ensure that you have submitted the following documents with your application:

1.	SCSS Ethical Application Form	
2.	• Participant's Information Sheet must include the following:	
	a) Declarations from Part A of the application form;	
	b) Details provided to participants about how they were selected to participate;	
	c) Declaration of all conflicts of interest.	
3.	• Participant's Consent Form must include the following:	
	a) Declarations from Part A of the application form;	
	b) Researchers contact details provided for counter-signature (your participant	
	will keep one copy of the signed consent form and return a copy to you).	
4.	Research Project Proposal must include the following:	
	a) You must inform the Ethics Committee who your intended participants are	
	i.e. are they your work colleagues, class mates etc.	
	b) How will you recruit the participants i.e. how do you intend asking people to	
	take part in your research? For example, will you stand on Pearse Street	
	asking passers-by?	
	c) If your participants are under the age of 18, you must seek both	
	parental/guardian AND child consent.	
5.	• Intended questionnaire /survey/interview protocol/screen shots/representative	
	materials (as appropriate)	
6.	URL to intended on-line survey (as appropriate)	

Notes on Conflict of Interest

- 1. If your intended participants are work colleagues, you must declare a potential conflict of
 - interest: you are taking advantage of your existing relationships in order to make progress in your research. It is best to acknowledge this in your invitation to participants.
- 2. If your research is also intended to direct commercial or other exploitation, this must be declared. For example, "Please be advised that this research is being conducted by an employee of the company that supplies the product or service which form an object of study within the research."

Notes for questionnaires and interviews

- 1. If your questionnaire is **paper based**, you must have the following **opt-out** clause on the top
 - each page of the questionnaire: "Each question is optional. Feel free to omit a response to any question; however the researcher would be grateful if all questions are responded to."
- 2. If you questionnaire is **on-line**, the first page of your questionnaire must repeat the content of the information sheet. This must be followed by the consent form. If the participant does not agree to the consent, they must automatically be exited from the questionnaire.
- 3. Each question must be **optional**.
- 4. The participant must have the option to 'not submit, exit without submitting' at the final submission point on your questionnaire.
- 5. If you have open-ended questions on your questionnaire you must warn the participant against naming **third parties**: "Please do not name third parties in any open text field of the questionnaire. Any such replies will be anonymised."
- 6. You must inform your participants regarding **illicit activity**: "In the extremely unlikely event that illicit activity is reported I will be obliged to report it to appropriate authorities."

School of Computer Science and Statistics Research Ethical Application Form

Project Title: Developing a Privacy Canvas Model

Project Purpose

This project aims to refine the "Privacy Canvas" by evaluating its use alongside the Business Model Canvas. This project intends to build on the work of the previous Privacy Canvas project which was completed by former student Peter O'Leary in April 2018. The Privacy Canvas is a tool that can be used by a business or on a project basis to help address privacy and data protection concerns. The Privacy Canvas has been modelled on the Business Model Canvas (Osterwalder & Pigneur, 2010), and can be used as a foundation for a business or project to address its data protection concerns. It is intended that the Privacy Canvas could be developed alongside the creation of a Business Model Canvas and could be further developed iteratively with the Business Model Canvas . A main motivation for this project is to consider the impact of the new "General Data Protection Regulation", which came into effect in May 2018, early on in the business innovation process.

This project is also Maurice Buckley's final year project for his fourth year as a Computer Science student in Trinity College Dublin.

Methods and Measurement

Participants will complete a copy of the Privacy Canvas on a laptop or computer with the prerequisite of the completion of a Business Model Canvas. This can be completed individually or by a group. Filling out the privacy canvas will not require the user to write their name or any other personal data. The participants will then be sent an electronic questionnaire to record their experience of using the canvas. The questionnaire results will be anonymized. This information will be used by the researchers to assess the effectiveness of the canvas.

Recruitment of Participants

Subjects will be selected from the MSc course CS7CS2 and other courses that have worked with the business canvas tool. The participants will be third level students between the ages of 18-30 and will include both males and females.

Subjects will also be selected from the colleges LaunchBox Program and other similar Innovation programs. These students will be able to take part in the study using their start-up projects.

Debriefing Arrangements

The debriefing section states that once their data is submitted it will not be possible to withdraw the

data from the study, as it will be anonymized. Participants will be informed that their information will not be held for longer than needed to validate the study and will only be used for the purposes of the study. Participants will also be explicitly warned that once their data is submitted and anonymized, it cannot be withdrawn from the study as it will no longer be identifiable.

Ethical Considerations Raised

One ethical issue could be linking of the answers from the questionnaire and the data used to the student in the class. To combat this issue, no names are required to fill out the Privacy canvas and the questionnaires are filled in anonymously. The prerequisite of having a completed Business Model Canvas may be an ethical issue as it may interfere with the anonymity of the research. Another possible ethical issue is that Dave Lewis (this project's supervisor) is involved in the grading of some of the students that may provide data for the project. The nature of a student's replies and whether they choose to participate in the study will not affect their grade for any of their courses. Participants will be clearly informed that they may choose to opt out of the study and that all result will be kept anonymous.

Legislation

This research will comply with the legal requirements laid down in the Irish Data protection act 1998 in its revised version of the 14th of October 2014.

TRINITY COLLEGE DUBLIN INFORMATION SHEET FOR PARTICIPANTS PRIVACY CANVAS

- 1. My name is Maurice Buckley, a final year student of Computer Science in Trinity College Dublin. This project aims to refine the "Privacy Canvas" by evaluating its use alongside the Business Model Canvas. The Privacy Canvas is a tool that can be used by a business or on a project basis to help address privacy and data protection concerns during the innovation process. The Privacy Canvas has been modelled on the Business Model Canvas and can be used as a foundation for a business or project to address its data protection concerns.
- 2. This project intends to build on the work of the previous Privacy Canvas project which was completed by former student Peter O'Leary in April 2018.
- 3. Participants will complete a copy of the Privacy Canvas on a laptop or computer and answer a questionnaire afterwards. The total time should take no longer than 45 minutes to complete. The completed privacy canvases and questionnaire answers will be used as empirical data for this project.
- 4. This project is voluntary, and participants have the right to withdraw or omit individual responses before they submit them. All information will be completely anonymously.
- 5. Participants were chosen due to prior completion of a Business Model Canvas or are currently in the innovation process where use of a privacy canvas could be applicable/beneficial.
- 6. The collected data will only be used by the researchers of this project and the anonymity of the data will remain in analysis, publication and presentation of resulting data and findings.
- 7. Participation in this project will not benefit the result of any module or coursework and will not be used for or against the participant.
- 8. To keep the anonymity of the data, please do not personalise the privacy canvas or questionnaire with any personal information that could be used to identify the participant.
- 9. The data will be stored for the duration of the project.
- 10. In the extremely unlikely event that illicit activity is reported I will be obliged to report it to the appropriate authorities
- 11. The project lead researcher can be contacted any time for any further questions relating to the participants participation in this project by emailing bucklem8@tcd.ie

Privacy Canvas Questionnaire Questions

All questions will be answered by picking 1 of 5 options from strongly agree to strongly disagree apart from questions in the which the participant is asked to give a more detailed response. Some questions possible answers will be inverted to strongly disagree to strongly agree to ensure the participant remains vigil and alert. The Questionnaire will be made and completed online and the first 10 questions will be the System Usability Scale (SUS).

- 1. I think that I would like to use this system frequently.
- 2. I found the system unnecessarily complex.
- 3. I thought the system was easy to use.
- 4. I think that I would need the support of a technical person to be able to use this system.
- 5. I found the various functions in this system were well integrated.
- 6. I thought there was too much inconsistency in this system.
- 7. I would imagine that most people would learn to use this system very quickly.
- 8. I found the system very cumbersome to use.
- 9. I felt very confident using the system.
- 10. I needed to learn a lot of things before I could get going with this system.
 - 11. Did completion of the Privacy Canvas help you address and give you a better understanding of privacy and data protection concerns for your project/business?
 - 12. Do you think that it is helpful to complete a Privacy Canvas alongside a Business Model Canvas?
 - 13. The privacy and data protection concern for my project/business were not applicable to the Privacy Canvas? If so please elaborate.
 - 14. The Privacy Canvas helped identify privacy or data concerns that were not previously thought about.
 - 15. The Privacy Canvas would be a useful tool in the project/business innovation process?

TRINITY COLLEGE DUBLIN INFORMED CONSENT FORM

LEAD RESEARCHERS: Maurice Buckley

BACKGROUND OF RESEARCH: This project aims to refine the "Privacy Canvas" by evaluating its use alongside the Business Model Canvas. The Privacy Canvas is a tool that can be used by a business or on a project basis to help address privacy and data protection concerns during the innovation process. The Privacy Canvas has been modelled on the Business Model Canvas.

This project is being undertaken by the researcher Maurice Buckley as part of his final year in Computer Science in Trinity College Dublin. This project builds upon on the work of the previous Privacy Canvas project which was completed by former student Peter O'Leary in April 2018.

PROCEDURES OF THIS STUDY: Participants will complete a copy of the Privacy Canvas on a laptop or computer and answer a questionnaire afterwards with the prerequisite of the completion of a Business Model Canvas. The total time should take no longer than 45 minutes to complete. The completed privacy canvases and questionnaire answers will be used as empirical data for this project. The data will remain anonymous and therefore should hold no risk to the participant.

PUBLICATION: The data collected will be used as part of the researcher's final year project and will be presented to and assessed by members of Trinity College Dublin. Individual results will be aggregated anonymously, and research reported on aggregate results.

DECLARATION:

- I am 18 years or older and am competent to provide consent.
- I have read, or had read to me, a document providing information about this research and this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction and understand the description of the research that is being provided to me.
- I agree that my data is used for scientific purposes and I have no objection that my data is published in scientific publications in a way that does not reveal my identity.
- I understand that if I make illicit activities known, these will be reported to appropriate authorities.
- I understand that I may stop electronic recordings at any time, and that I may at any time, even subsequent to my participation have such recordings destroyed (except in situations such as above).
- I understand that, subject to the constraints above, no recordings will be replayed in any public forum or made available to any audience other than the current researchers/research team.
- I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights.
- I understand that I may refuse to answer any question and that I may withdraw at any time without penalty.
- I understand that my participation is fully anonymous and that no personal details about me will be recorded.
- If the research involves viewing materials via a computer monitor> I understand that if I or anyone in my family has a history of epilepsy then I am proceeding at my own risk.
- I have received a copy of this agreement.

PARTICIPANT'S NAME: