

The aim of the University's *Research Ethics Policy* is to establish and promote good ethical practice in the conduct of academic research. The questionnaire is intended to enable researchers to undertake an initial self-assessment of ethical issues in their research. Ethical conduct is not primarily a matter of following fixed rules; it depends on researchers developing a considered, flexible and thoughtful practice.

The questionnaire aims to engage researchers discursively with the ethical dimensions of their work and potential ethical issues, and the main focus of any subsequent review is not to 'approve' or 'disapprove' of a project but to make sure that this process has taken place.

The *Research Ethics Policy* is available at www.rgu.ac.uk/research-ethics-policy

Student Name	Nanayakkara Unluvitige Anuradha
Supervisor	Dr. Subha Fernando
Project Title	Time-series forecasting in retail sales of pharmaceutical products based on day temperature and holidays
Course of Study	MSc Big Data Analytics
School/Department	Informatics Institute of Technology

PART 1: DESCRIPTIVE QUESTIONS

1.	Does the research involve, or does information in the research relate to: [see Guidance Note 1]	Yes	No
	(a) individual human subjects		No
	(b) groups (e.g. families, communities, crowds)		No
	(c) organisations		No
	(d) animals?		No
	(e) genetically-modified organisms www.rgu.ac.uk/hr/healthsafety/page.cfm?pge=26027#122628		No
	Please provide further details:		
2.	Will the research deal with information which is private or confidential? [see Guidance Note 2]	Yes	No
			No
Please provide further details:			

PART 2: THE IMPACT OF THE RESEARCH

3.	In the process of doing the research, is there any potential for harm to be done to, or costs to be imposed on: [see Guidance Note 3(i)]	Yes	No
	(a) research participants?		No
	(b) research subjects? [see Guidance Note 3(ii)]		No
	(c) you, as the researcher?		No
	(d) third parties? [see Guidance Note 3(iii)]		No
	Please state what you believe are the implications of the research:		
4.	When the research is complete, could negative consequences follow:	Yes	No
	(a) for research subjects		No
	(b) or elsewhere? [see Guidance Note 4]		No
	Please state what you believe are the consequences of the research:		

PART 3: ETHICAL PROCEDURES

5.	Does the research require informed consent or approval from: [see Guidance Note 5(i)]	Yes	No
	(a) research participants?		No
	(b) research subjects? [see Guidance Note 5(ii)]		No
	(c) external bodies? [see Guidance Note 5(iii)]		No
	If you answered yes to any of the above, please explain your answer:		

6.	Are there reasons why research subjects may need safeguards or protection? [see Guidance Note 6]	Yes	No
			No
If you answered yes to the above, please state the reasons and indicate the measures to be taken to address them:			
7.	Does the research involve any “regulated work with children” and/or “regulated work with protected adults”, therefore requiring membership of the <i>Protecting Vulnerable Groups (PVG) Scheme</i> ? [see Guidance Note 7]	Yes	No
			No
[Please note: if the research potentially involves “regulated work”, this MUST be raised with your HR Business Partner immediately. In this instance, the Human Resources Department will conduct a detailed assessment and will confirm whether or not PVG Membership is required.]			
(a) PVG membership is not required.			No
(b) PVG membership may be required for working with children.			No
(c) PVG membership may be required for working with protected adults.			No
(d) PVG membership may be required for working with both children and protected adults.			No
If you answered yes to (b), (c) or (d) above, please give further information about the work you will be required to undertake and the nature of the contact with these groups. Please provide as much detail as possible:			
Are you already a PVG member?		Yes	No
			No
If yes, please provide your PVG Scheme number:			
8.	Are specified procedures or safeguards required for recording, management, or storage of data? [see Guidance Note 8]	Yes	No
			No
If you answered yes to any of the above, please give details:			

PART 4: THE RESEARCH RELATIONSHIP

9.	Does the research require you to give or make undertakings to research participants or subjects about the use of data? [see Guidance Note 9]	Yes	No
			No
If you answered yes to the above, please outline the likely undertakings:			
10.	Is the research likely to be affected by the relationship with a sponsor, funder or employer? [see Guidance Note 10]	Yes	No
			No
If you answered yes to the above, please identify how the research may be affected:			

Part 5: Other Issues

11.	Are there any other ethical issues not covered by this form which you believe you should raise?	Yes	No
			No

Statement by Student

I believe that the information I have given in this form is correct, and that I have addressed the ethical issues as fully as possible at this stage.

Signature:		Date:	2020-09-05
-------------------	---	--------------	-------------------

If any ethical issues arise during the course of the research, students should complete a further Student Project Ethical Review (SPER) form.

The *Research Ethics Policy* is available at www.rgu.ac.uk/research-ethics-policy

PART 6: TO BE COMPLETED BY THE SUPERVISOR

12.	Does the research have potentially negative implications for the University? [see Guidance Note 11]	Yes	No
If you answered yes to the above, please explain your answer:			
13.	Are any potential conflicts of interest likely to arise in the course of the research? [see Guidance Note 12]	Yes	No
If you answered yes to the above, please identify the potential conflicts:			
14.	Are you satisfied that the student has engaged adequately with the ethical implications of the work? [see Guidance Note 13]	Yes	No
If you answered no to the above, please identify the potential issues:			
15. Appraisal: Please select one of the following			
i. The research project should proceed in its present form – no further action is required			
ii. The research project requires ethical approval by the School Ethics Review Panel (SERP) (or equivalent)			
iii. The research project requires ethical review by the University's Research Ethics Sub-Committee			
iv. The project needs to be returned to the student for modification prior to further action			
v. The research project requires ethical review by an external body (N.B. Question 5 above). If this applies, please give these details:			
Title of External Body providing ethical review			
Address of External Body			
Anticipated date when External Body may consider project			

AFFIRMATION BY SUPERVISOR

I have read the student's responses and have discussed ethical issues arising with the student. I can confirm that, to the best of my understanding, the information presented by the student is correct and appropriate to allow an informed judgement on whether further ethical approval is required.

Signature:**Date:****2020-09-05**

① Guidance Note 1

Ethical principles normally apply to information, data, and derivative substances in the same way as they apply to the subjects themselves. Consequently, work with individual financial data is governed by the principles of work with individual human subjects, and work with animal tissue is governed by the principles of work with animals. [\[return to Question 1\]](#)

① Guidance Note 2

The Australian National Health and Medical Research Council argues: "Individuals have a sphere of life from which they should be able to exclude any intrusion ... A major application of the concept of privacy is information privacy: the interest of a person in controlling access to and use of any information personal to that person." This principle applies to all information about a person, whether or not it is obtained directly from that person. The area that is private is conventional and culturally defined; in the UK it commonly includes income and family arrangements.

The information obtained in research is not, however, necessarily private. Some material is in the public sphere, which includes published and broadcast material, academic discourse, and the activities of government. Activities undertaken in a public place are public, rather than private, if they are openly displayed (e.g. artistic exhibition or attendance at a public event) or subject to public regulation (e.g. driving)."

[\[return to Question 2\]](#)

① Guidance Note 3

- (i) "Harm" refers to negative consequences beyond those which would occur in the normal course of events. Costs may include putting subjects under stress, causing them anxiety, or even wasting their time. The question asks only about potential harm. Potential harm is not cancelled out by potential benefit. Broader consequences are considered in the following question. Reviews of information are also subject to ethical consideration. It should never be assumed that no harm can be done to people simply by writing about them.
- (ii) "Research subjects" includes not just participants and informants but those about whom data is collected. The term covers any research subject, including humans, animals, and inanimate subject matter.
- (iii) The University has a responsibility to avoid putting you at risk, and potentially dangerous situations should always be drawn to the University's attention.
- (iv) "Third parties" include any person, group or organisation who may be affected by the process of the research.

[\[return to Question 3\]](#)

① Guidance Note 4

"Elsewhere" is an open category, intended to include consequences for third parties, sections of the community (e.g. "the voluntary sector"), the economy ("the catering industry") or the environment. ("the national park"), globally, and generalities which are harder to identify (e.g. "animal welfare"). Student researchers should never assume that their work is harmless only because they don't believe others will read it.

[\[return to Question 4\]](#)

① Guidance Note 5

- (i) Research in the public sphere (question 2) may not require the consent or approval of research subjects. The advice of the Canadian Tri-Boards is that "REBs (research ethics boards) should recognize that certain types of research - particularly biographies, artistic criticism or public policy research - may legitimately have a negative effect on organizations or on public figures in, for example, politics, the arts or business. Such research does not require the consent of the subject ... Consent is not required from organizations such as corporations or governments for research about their institutions".

There is a general presumption that consent should be obtained from subjects whenever the information is private. The requirement to seek consent can, however, be waived in certain exceptional cases, for example where there is necessary deception, or where the consent of a

subject may jeopardise the welfare of an informant. All such cases require explicit ethical review and an extended justification.

(ii) The consent of research *subjects* cannot be presumed because the consent of *informants* has been obtained. For example, one member of a family cannot necessarily be taken to speak for others, and an employer cannot always give consent on behalf of employees.

(iii) The consent of *external bodies* is required for several types of research, including e.g.

- research relating to the NHS
- research for work with dangerous substances, and
- research involving experimentation with animals.

The existence of external consent does not ethically exclude the project from consideration by the University, or vice-versa. Please provide a brief description of the project as submitted to the external body for ethical review.

[\[return to Question 5\]](#)

① Guidance Note 6

This may apply, for example, to human subjects who are regarded as vulnerable (e.g. children or prisoners) and to animals. Consent should not be taken as sufficient protection.

[\[return to Question 6\]](#)

① Guidance Note 7

(i) Regulated work normally involves caring for, supervising or working with individuals who participate in an organised activity. There are two types of regulated work: regulated work with **children** and regulated work with **protected adults**.

(ii) **Children** are all people under the age of 18.

(iii) **Protected adults** are individuals aged 16 or over who are provided with (and thus receive) a type of care, support or welfare service. It is a service-based definition and avoids labelling adults on the basis of disability. A person will be a protected adult for the duration that they are receiving the service. Therefore some adults will be protected most of the time (e.g. residents within a care home) whereas others will only be protected for short periods (e.g. whilst receiving medical treatment at a hospital).

(iv) Further details can be found at www.rgu.ac.uk/about/governance/policies-and-legal/disclosure-scotland and www.disclosurescotland.co.uk/pvg/pvg_index.html.

Alternatively, you may want to discuss this with your HR Representative:

<https://you.rgu.ac.uk/org/hr/SitePages/Meet%20the%20HR%20Team.aspx>.

[\[return to Question 7\]](#)

① Guidance Note 8

Private data should be presumed to be under the control of the person or organisation to whom it relates. Anonymity is not a sufficient condition for confidentiality. Removing names from a report, or using aggregate data, may not be enough to ensure that respondents cannot be recognised or identified; and even where material is not identifiable except by the person who gave it, using it in ways that go beyond the terms on which it has been given may be a breach of trust.

[\[return to Question 8\]](#)

① Guidance Note 9

The integrity of the researcher, and the status of future research, requires that such undertakings should be respected. Promises should not be given in circumstances where they cannot be kept. For example, a researcher is not at liberty to conceal criminal activity and consequently cannot offer unconditional confidentiality in a study of such activity.

[\[return to Question 9\]](#)

① Guidance Note 10

Students who are undertaking research within the context of a work placement or employment should be aware that this is likely to have implications for the research and should identify what those implications are.

Sponsorship includes the grant of access to material by a responsible organisation.

[\[return to Question 10\]](#)

① Guidance Note 11

The University needs to know if the research may jeopardise its reputation through, for example, work for oppressive governments or other research relationships (e.g. work for tobacco firms) that might compromise or bias the research. Negative consequences in the form of criticism of the University or negative evaluations by students are legitimate potential outcomes.

[\[return to Question 12\]](#)

① Guidance Note 12

This includes, for example, conflicts between researchers, funders, stakeholders, employers and other research projects.

[\[return to Question 13\]](#)

① Guidance Note 13

In signifying agreement, principal supervisors are accepting part of the ethical responsibility for the project.

[\[return to Question 14\]](#)