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Initial Plan

Research Grant Costing: Improving the Process

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Module Code:

CM3203

Module Title:

One Semester Individual Project

40 Credits

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PROJECT DESCRIPTION

Within the school of Computer Science, the current process to calculate research grant funding is lacking efficiency, adding unnecessary staff time and resources to any funding request. The project being undertaken aims to refine the process, focusing on a step that has been identified as an area of issue by Michelle Aked (Senior Finance Officer). She has outlined the problem, which has been summarised below:

Whenever funding is required a back-and-forth exchange between the Research Administrator, Principal Investigator and School Manager occurs before a finalised Cost & Pricing (CAP) form is ready to be sent as part of the application. There is on average 2/3 scenarios of possible staff costs identified at the beginning of the process, these are investigated during the communications - meaning a high volume of messages are required to reach a final agreement.

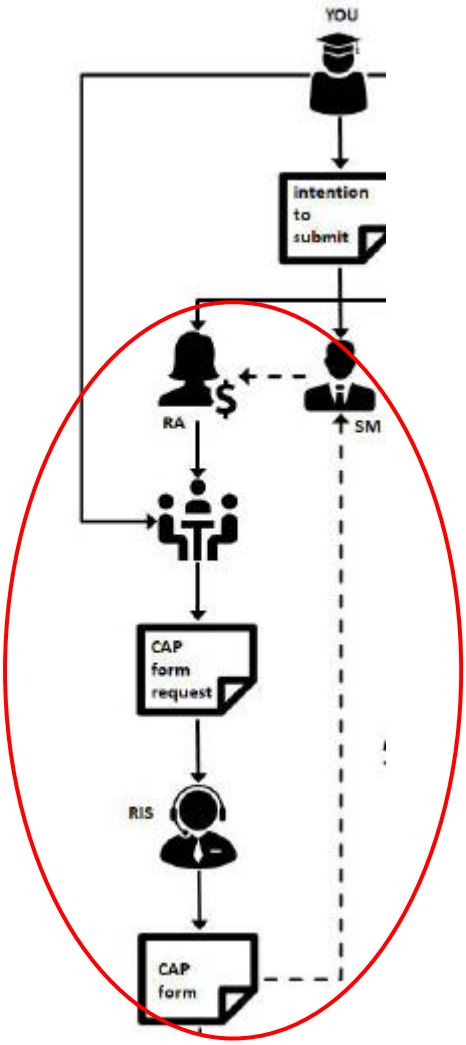
This step is the target of the project, with the aim of removing the time-sink of multiple messages being communicated by implementing a Tool to simplify the creation of the CAP form. The usage of the Tool will allow a single meeting to take place between the aforementioned staff, with the discussion and required modifications being applied there-and-then until the final agreement is reached. The time saved can then instead be allocated to focusing on other costs that previously may have been overlooked due to time pressure

There is also the secondary idea that the Tool can also be simple enough - with instructions of its usage - that the Principal Investigator themselves can quickly make use of it before completing the "intention to submit a funding application" form, to give them an approximation of the research cost. This could dissuade them from attempting their application until they better understand the funding they require; thus saving the Research Administrator, School Manager and Director of Research from being involved until the request is better planned.

The main research cost is the time of staff used, therefore most effort is put in to this area of the costing when a funding application is created. So, this is the area the Tool will focus on - as there is the biggest opportunity for time to be saved here.
The Tool will take user inputs and perform calculations based on known costs, to output Total Values. Multiple different scenarios will be inputted to view the effect on costs, allowing the user to most closely match their staff resource needs within the set budget.

The planned outcome of the project is the Excel Spreadsheet Tool that will be used in place of the current iterative process, reducing the time and staff resources needed per funding request – increasing the efficiency of the process.

Target Process



The process being targeted is part of the Pre-Application Process (Appendix A), specifically the iterative refinement of the CAP form. The rest of the process cannot be completed until the CAP form is finalised which can take 'at least five working days' to perform, slowing the funding request.

PROJECT AIMS AND OBJECTIVES

The main aim is to replace Step 5 of the Pre-Application Process (Appendix B) with a single meeting centred around the Tool, with the meeting output being the required CAP Form.
To achieve this, the following objectives will be met:

- Gaining an understanding of the Research Grant Application process
    - Assisted by documenting what currently occurs

- A professional correspondence with Michelle will be maintained across the course of the project
    - Meetings will be conducted to guide the project in the right direction

- A refined, updated Research Grant Application process will be designed and documented

- A Requirement Specification for the Tools functionality will be created
    - Outlining the values required for the Tool to work
    - Outlining the functionality performed by the Tool
    - Specifying the Tool outputs

- Costing Rules will be created
    - What original values are used
    - How figure totals are calculated
    - For ease of viewing and modifying if any rules need to change in future

- A prototype Excel Spreadsheet Tool will be produced
    - It will provide a base for additions to be made to once the project is finished
    - To aid the development of a complete Tool that Academic Staff can use to calculate funding request costs

- A User Guide explaining the Tools usage will be created

WORK PLAN

Due to the project being based on the requirements set by Michelle (client), an iterative agile process is the chosen decision for the project methodology.
There will be weekly, or biweekly meetings (dependent on need) to keep Michelle involved in the project direction and ensure it is meeting her expectations. This allows for any mis-direction to be quickly picked up on and rectified to minimise time wasted and ensure her requirements are satisfied.
Similarly, there will also be weekly meetings with Stuart (Supervisor) to assist with the creation of the Final Report.
Any significant holiday that will affect the plan has been identified.

The weekly plan is outlined below:

Italics indicates a vital project deliverable
Red highlights an unavoidable risk that is taken in to account

Pre-Week 1 < 28th Jan. 2018	Attend module lectures Explore potential projects Supervisor meeting - discuss project to undertake Project decision
Week 1 29th Jan. 2018 – 4th Feb. 2018	Ethical Approval requirements Meeting with Michelle Aked (Senior Finance Officer) Complete Project ***Initial Plan*** • Using information gained from meeting Explorative investigation of current process
Week 2 5th Feb. 2018 – 11th Feb. 2018	Meeting with Michelle • Brief about plan, make any suggested changes • Requirements discussion Submit Project ***Initial Plan*** • Deadline: 5th Feb. 2018 Deep investigation of Grant Funding process Gain a solid knowledge base to begin the project on Brief documentation of process (expanded upon during project write-up) Project **Requirements Specification** created and worked on

Week 3 12th Feb .2018 – 18th Feb. 2018	Project and Change Management Coursework begins • Takes time from the project Meeting with Michelle • Feedback about Requirements • Costing Rules discussion Continued work on **Requirements Specification** • Adjusted based on comments in meeting **Requirements Specification** completed
Week 4 19th Feb. 2018 – 25th Feb. 2018	**Costing Rules** document created and worked on • Deriving rules from current documentation and process Holiday - Stuart Project and Change Management Coursework
Week 5 26th Feb. 2018 – 4th Mar. 2018	Meeting with Michelle • Rules discussion Continued work on **Costing Rules** document • Adjusted based on comments in meeting Time available for minor adjustments to **Requirements Specification** • If alterations required due to additional information found during rule creation Possible Skype call with Stuart **Milestone 1 –** **Requirements Specification and Costing Rules completed and accepted by Michelle** Holiday - Stuart Project and Change Management Coursework
Week 6 5th Mar. 2018 – 11th Mar. 2018	**Spreadsheet Tool Design** created and completed • How the Tool will look • Areas where calculations are performed Project and Change Management Coursework Complete

Week 7 12th Mar. 2018 – 18th Mar. 2018	Meeting with Michelle • Feedback on the design of the Tool Make alterations to the **Tool Design** • Based on feedback in meeting **Draft Tool** created and worked on • Design should be accurate enough that the Tool creation is simple and will not take too long (a week)
Week 8 19th Mar. 2018 – 25th Mar. 2018	**Milestone 2 –** **Draft Tool completed** Testing performed on the Tool • Given to Michelle to test with a situation • Self-check for any errors Make alterations to Tool based on test results
Week 9 **Easter Break** **26**th Mar. 2018 – 1st Apr. 2018	Unavailable Time
Week 10 **Easter Break** 2nd Apr. 2018 – 8th Apr. 2018	Time allocated to writing of the project ***Final Report***
Week 11 **Easter Break** 9th Apr. 2018 – 15th Apr. 2018	Time allocated to writing of the project ***Final Report***
Week 12 16th Apr. 2018 – 22nd Apr. 2018	Meeting with Michelle to wrap-up Tool creation • Any final minor changes required • Majority of issues will have been fixed in Week 8, so this will be a close-out meeting Time allocated for extra vital fixes • Should not be required **Milestone 3 -** **Final Tool completed and accepted by Michelle** Time allocated to writing of the project ***Final Report***

Week 13 23rd Apr. 2018 – 29th Apr. 2018	Time allocated to writing of the project ***Final Report***
Week 14 30th Apr. 2018 – 5th May 2018	Project wrap-up • Finalizing Report - proofreading and editing **Milestone 4 -** Submit ***Final Report*** • Deadline: 5th May 2018 Begin Project Viva Plan

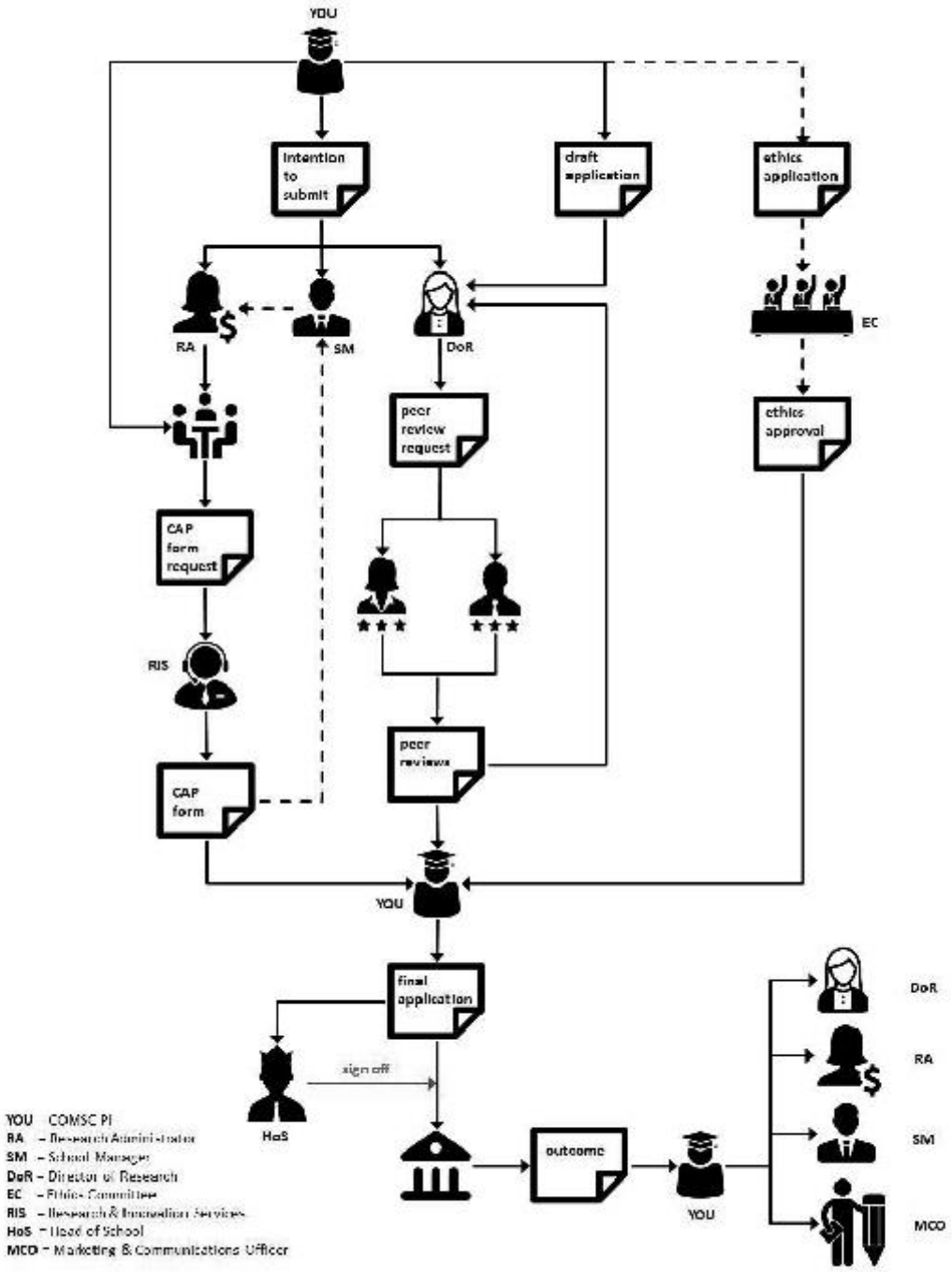
ETHICAL APPROVAL

Based on discussions with those involved in the project and reading the Ethics Guidance, the following conclusion has been reached:

The data required to run the Research Grant project does **not** have a requirement for approval from the Research Ethics Committee, as it will not make use of human data at any point during the planned project life.
The reason for this is any data provided will be 'dummy data' that will be substituted for the actual, when the project is complete.

If at any time during the project the need for such human data arises, the Ethical Approval Form shall be completed appropriately.

APPENDICES



Appendix A: Research Funding Pre-application Process Diagram

Pre-application process

1. **PI** e–mails a completed "intention to submit a funding application" form to **RA, SM** and **DoR** at least **2 weeks** before submission.
2. **RA** organises a face-to-face meeting with **PI** to create a CAP (costing & pricing) request form.
3. **RA** e-mails the CAP request form to **RIS**.
4. **RIS** returns an initial CAP form to **RA**.
5. The CAP form is iteratively refined by **RA** in collaboration with **PI** and **SM**.
6. Meanwhile, **PI** continues to work on the funding application and sends a draft version (including all relevant documents, e.g. case for support, justification of resources, impact summary, etc.) to the **DoR**.
7. The **DoR** sends the draft application to two academics for peer review.
8. Peer reviewers send their reviews to both **PI** and **DoR**.
9. If needed, **PI** applies for ethical approval. Details on this procedure are available here: http://www.cs.cf.ac.uk/ethics/
10. **PI** finalises the application taking into account the peer reviews and sends the final version together with the CAP form and response to peer reviews to **RA** for signing by the **HoS**.
11. Once the **HoS** has signed off the CAP form, **PI** submits the application to the funding body.
12. **PI** receives the outcome and forwards it to **RA, SM** and **DoR**.
13. If successful, **PI** drafts a news item and sends it to **MCO** to publicise on the web site and social media.

NOTE: Please allow at least 5 working days for completion of each task.
Some tasks can be run in parallel (see overleaf).

Acronym	Definition	Role holder	Contact
DoR	Director of Research	Irena Spasić	spasici@cardiff.ac.uk
EC	Ethics Committee	Federico Cerutti Liam Turner	comsc-ethics@cardiff.ac.uk
HoS	Head of School	Stuart Allen	allensm@cardiff.ac.uk
MCO	Marketing & Communications Officer	Sarah Morgan	morgans54@cardiff.ac.uk
PI	principal investigator in COMSC		
RA	Research Administrator	Michelle Aked	comsc-research@cardiff.ac.uk
RIS	Research & Innovation Services	N/A	Will be contacted by the RA on your behalf.
SM	School Manager	Rob Davies	daviesjr@cardiff.ac.uk

Appendix B: Research Funding Pre-application Process Steps