

DEPARTMENT OF INFORMATION SYSTEMS INF3011F- IT PROJECT MANAGEMENT MAY 2023

Final Project Report: Linking project proposals to academic staff/experts.

TEAM 10

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PART ONE

1.1 Introduction/Background

UCT Knowledge Co-op is an organization that builds on the tradition of social responsiveness by means of making it easier for community partners to access UCT's skills and professional expertise. It works to match expertise within UCT to external groups approaching it with research collaboration requests. The Co-op mediates between the partners to jointly reformulate the questions into manageable student projects. The researcher and community partner are supported throughout the project to ensure that the outcome is beneficial to both parties. This gave rise to communication barriers between the two parties as community partners found it difficult to attain information or solutions to their problems from the academic sector because there was no common language "simpler connection point" between them.

1.1.1 High level expectation (assuming outcome):

A solution that creates a bridge between experts and the community, such that community partners are able to attain information on experts in certain fields and on various problems they have as well as tap into what research is taking place at UCT.

1.2 Business Objectives

- Reduce the time taken to conduct operations.
- Bridge the barriers between experts and community.
- Create better opportunities for the UCT network and community partners through events, workshops, training etc. offered on the solution.
- Enhance communication between academic experts and community partners.

1.3 The Situation of Concern/Problem Definition (User, Context, Needs, Insights)

1.3.1 Problems

- Cannot substantially connect community partners with appropriate field experts.
- Unused and stagnant research data
- Language barriers (differences between academic presentation and community presentation).

1.3.2 Opportunities

- A solution that bridges the barriers between experts and community.
- An outlet where information can be shared with people.
- a space that induces dialogue engagement between the two parties.

1.4 Assumptions and Constraints

1.4.1 Assumptions

- The project specification will not change.
- The Knowledge Co-op will be able to organise funding to implement the solution.

1.4.2 Constraints

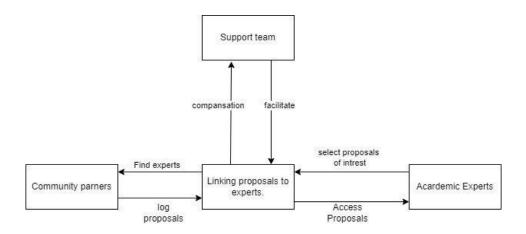
- No budget in place for the project.
- The project should be completed within 9 weeks.

1.5 Stakeholder Analysis (External)

Table1: All external stakeholders

Role	Name	Organization/Role	Contact Information
Users	Academic Staff, community partners	UCT Knowledge Co-Op	
Facilitators	Support Staff	UCT Knowledge Co-Op	

Context Diagram



Sign off:

Comments: Users' contact information could not be obtained due to the magnitude and confidentiality reasons.

1.6 Proposed Solutions/Ideas (all ideas presented in iteration one including their strength and weaknesses)

1.6.1 Solution 1

An IT platform (app) where all the relevant information about community partners, UCT academic staff and the projects that are at hand. The information will be stored using a database system. One of the key features will be the search mechanism where a party is able to search for what they are looking for using a Key. A Key could be a problem that the community partners need help with. (e.g., Sanitation). The results of the search would be the academic staff that are experts on the problem and the community partners who need help on the problem.

Pros:

- A well-managed system allows for faster processes.
- Solves the major concern of communities not knowing which expert can solve their problem.
- Convenience (community partners don't need to go to various meetings or steps to get connected to the experts, they can do it from the comfort of their organisation.
- Efficient data storage mechanism.

Cons:

- Would need to employ or create an IT environment(costly).
- Data sensitivity.
- Efficiency (applications crash).

1.6.2 Solution 2

Introduction of a 2 Division Newsletter. One division will be aimed at Academia/Researchers and the other for the community partners and people beyond knowledge co-op. Parties can sign up for customized newsletters using a designated USSD code. This information can easily be made available on Knowledge co-op's existing website. Once a member has signed up, the newsletters will be delivered to them via email. Users can go through and read up on UCT researchers, ongoing research, available topics and even information on the community partners. All academic experts /community partners listed in the newsletters will have their own unique USSD code that any interested party can dial to get in contact to facilitate a partnership/collaboration.

Pros:

- Easy to implement.
- Blend of traditional and technological communication.
- Cost effective (free for users).
- Outreach is measurable.

Cons:

- Usage of 3rd party newsletter software will incur subscription costs.
- Personalization/Customization is limited.

1.6.3 Solution 3

The Knowledge Co-op will hold seminars and invite research experts in specific areas. Seminars may be generic or field specific. The UCT experts will have the stage and explain what they do for example UCT researchers in artificial intelligence: the researchers will bring light to most challenges in the field and provide sample problems and how to formulate research questions so that it makes it more clear for the researchers to understand what is required from them. Community partners will also have the stage where they explain how they relay information, and how they deem useful information, such that the experts do not provide information that does not help the NGOs in any way. They will be able to conduct Research topic/ field work discussions and Q&A engagements with the community partners. This encourages more dialogue between community partners and UCT experts such that it makes it much easier for both parties to understand each other and limits the language barrier.

Pros:

- Ability to break the language barrier because there will be continuous dialogue between experts and community partners.
- Eliminates ambiguity.

Cons:

- UCT has too many research fields, it would take a lot of time and planning to effectively invite all the research experts.
- The solution is based on people management, using dialogue to solve the language barrier, could take a long time to be effective, meaning we would need a repeat of seminars.
- It is highly probable for both the UCT experts and community partners to not pitch up for the seminars due to time constraints.

1.7 Final/Selected Solution (detailed description of the final solution including all relevant visuals and any other supporting/additional resources.)

The final solution selected is the newsletter coupled with the continuous seminars. Knowledge co-op will hold seminars and invite research experts in specific areas/fields. Seminars may be generic or field specific. The newsletter will serve as an information outlet for the Co-op. The UCT experts will have the stage and explain what they do e.g., UCT researchers in artificial intelligence: the researchers will bring light to most challenges in the field and provide sample problems and how to formulate research questions so that it makes it more clear for the researchers to understand what is

required from them. Similarly, community partners will also be given the opportunity to present, explain how they relay information, and how they deem useful information, such that the experts do not provide information that does not help the NGOs in any way. Overall, both parties will be able to conduct Research topic/ field work discussions and Q&A engagements with each other.

The information gathered from these seminars can then be fuelled into the newsletter. The combination is perfect because the newsletter will not only relay feedback on past seminars but also feed into the future seminars and announce the outline of forthcoming ones as well. Other types of information relating to Knowledge Co-op can also be shared through the newsletter such as available research topics, on-going projects, past projects etc. Registration for seminar attendance can be done by clicking on the newsletter invitation box. This combination will not only bridge the gap that exists but build lasting relationships for both clients.

Specialist software is needed to set up any online newsletter since everyday email accounts, like Gmail cannot be used. There is specific email marketing software available, such as *Direct Mail* and *SendX*. For this solution *SendX* has been chosen as the ideal software as it provides all the necessary infrastructure needed and more importantly it is cost-effective when we take into consideration our sponsor.

Tools required:

- Newsletter software (SendX)
- A landing website (The Knowledge Co-ops existing website)

High level overview of Implementation process

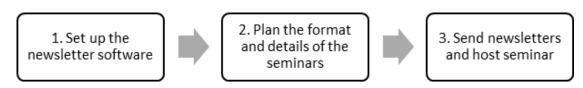


Diagram 1. Implementation process

1.7.1 Detailed Implementation process (based on Diagram 1)

1. Set up Newsletter Software

- To get started visit the SendX website(<u>www.sendx.io</u>) and create a SendX account under the organisation's name (various packages are available at different costs, refer to section 1.7.2 cost analysis)
- All tools to build your own newsletter sign up form, create populated newsletters can be found on your SendX dashboard. Once a sign-up form has been created, it can easily be embedded into the Knowledge co-op's live website and again this is also done on your SendX dashboard.
- Once all is set, users can now sign up for the newsletter via the knowledge Co-op website. The sign-up form will appear as a pop-up in most cases and expand once clicked (Refer to *User guide* below).

2. Plan the format of the seminar.

- Choose a suitable venue/setting and schedule: Frequent monthly seminars can be conducted online via Zoom as webinars and in-person seminars can be hosted as little as 2-4 times in a year.
- Pick a focus area/research field for every individual seminar.
- Plan for equipment and technology needs.
- Select speakers or presenters.

3. Send newsletters and host seminars.

- Once you've planned all the intricate details of the seminar you can now edit your newsletter
 campaigns to provide all the relevant details (relating to the seminars) and choose recipients.
 Tagging and segmentation make it easy to organize your list based on any attributes, including
 contact behaviours and custom properties.
- Select a distribution schedule for seminar related newsletters. Your schedule for these will mostly depend on the seminar schedule. E.g., If you host seminars monthly then newsletters announcing these events will need to be released 2 weeks prior to each event.
- Attendees will RSVP by clicking on the newsletter.
- The final step will be to host the seminars and use the newsletters to send out information that the Knowledge Co-op wants to share such as feedback from the seminars and so much more.

Refer to the **appendix 1** for additional resources.

<u>User guide</u>

Users will have to sign up for the newsletter via the Knowledge co-ops website. Depicted below is a user's interaction.

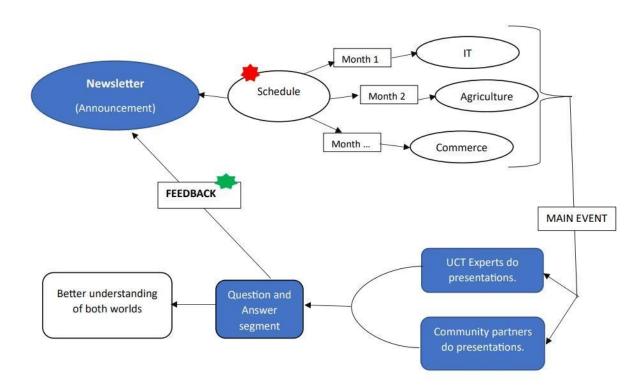


Figure 1: Knowledge co-op website with pop-up



Figure 2: Sign-up form

Flow of events



- *
- Problems community partners have may not correlate with the planned sequence.
- Figure out which fields attendees mostly interact with, and which are of most interest.

1.7.2 Cost Analysis

The final solution makes use of third-party software to implement the newsletter, a cost analysis for this has been conducted. Do note that this however does not include the cost of hosting a seminar as the Knowledge Co-op will make use of UCT's available resources (venues etc.).

Table 2: SendX pricing plans depending on the number of subscribers.

Number of mailing list subscribers	Monthly plan	Yearly plan
n< 1000	\$9.99p/m = R183,29 p/m	\$7.49p/m = R137,42 p/m
1000 <n>10000</n>	\$59.99p/m = R1100,68 p/m	\$44.99p/m = R825,46 p/m
10000 <n>15000</n>	\$79.99p/m = R1467,63 p/m	59.99p/m = R1100,68 p/m

*Key

Exchange rate at time of analysis: \$ 1 = ZAR 18,35

APPENDIX

APPENDIX 1: SendX Demo

Here is a link to a fully detailed demo on creating a SendX account, how it works and a full product walkthrough video. SendX Product Walkthrough (wistia.com

APPENDIX 2: Prototyping cycle Phase 1

