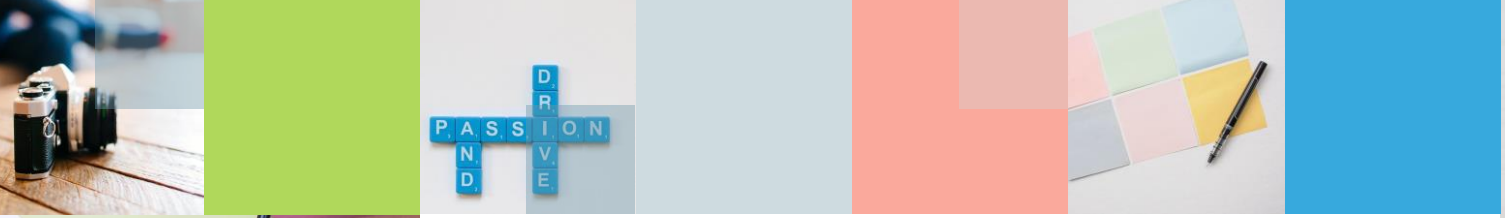
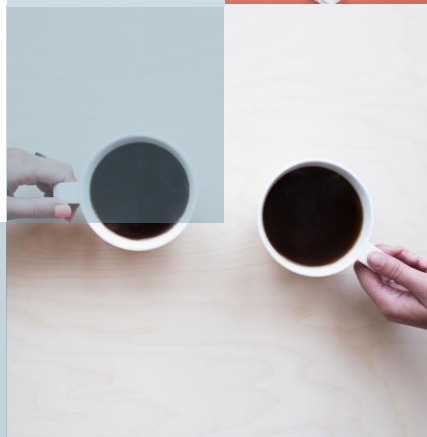
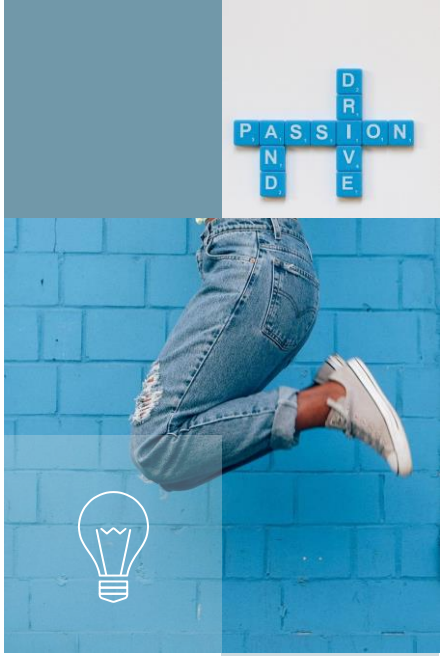


Using popular social network sites to support requirement elicitation, prioritization and negotiation



Team Members

- นายปฤษฎี ท่าดีสม
  รหัส 587 09188 21
- นางสาวสุพัตรา อินศรี
  รหัส 587 09761 21
- นางสาวปาริชาติ เกียรติเผ่า
  รหัส 587 09470 21
- นายคทาธิป พาณิช
  รหัส 587 09485 21
- นายภาคภูมิ แสงประสิทธิโชค
  รหัส 587 09537 21



Agenda

- Authors
- Published
- Citation
- Domain Problem
- Overview of The Research
- Proposed Method
- Evaluation Study Details
- Research Answer and Threats to Validity
- Future Work
- Comment and Suggestion

Authors

Norbeet Seyff[1,2]
Correspondence : norbert.seyff@fhnw.ch

Irina Todoran[2]

Kevin caluser[2]

Leif Singer[3]

Martin Glinz[2]

[1] University of Applied Sciences and Arts Northwestern Switzerland.
[2] University of Zurich, Switzerland.
[3] University of Victoria, Cannada.

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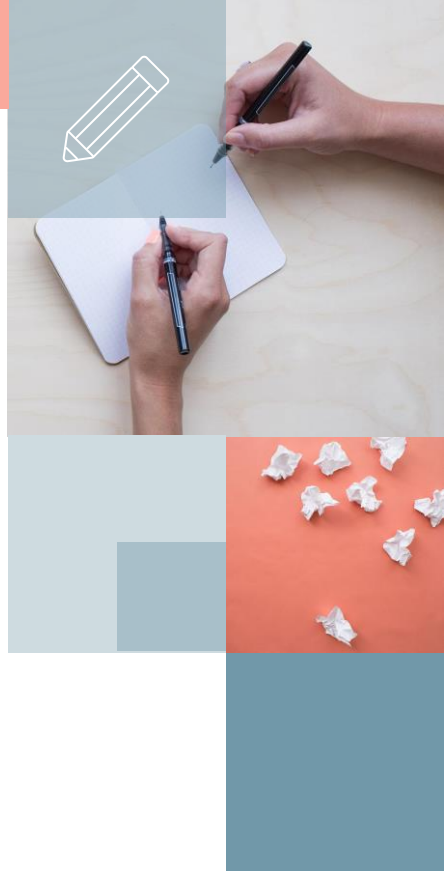

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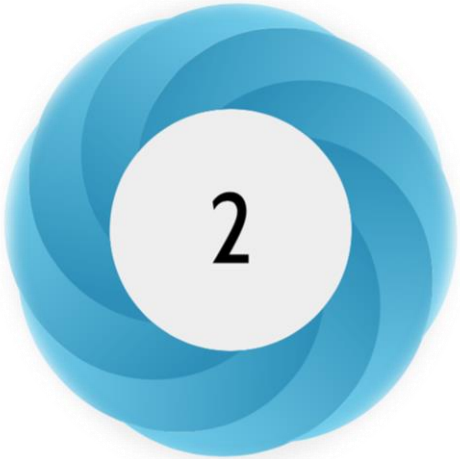
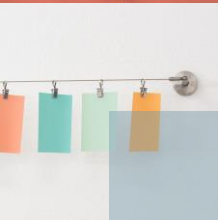
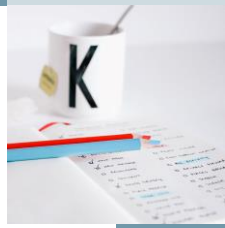






Reference : springer journal

Domain Problem

RE Approach do not sufficiently support non-traditional contexts such as

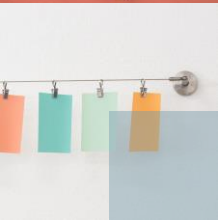
- *Mobile Computing*
- *Cloud Computing*
- *Software Ecosystems*

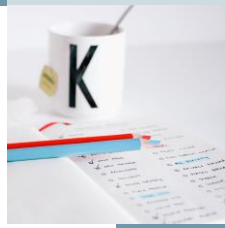
Overview of The Research

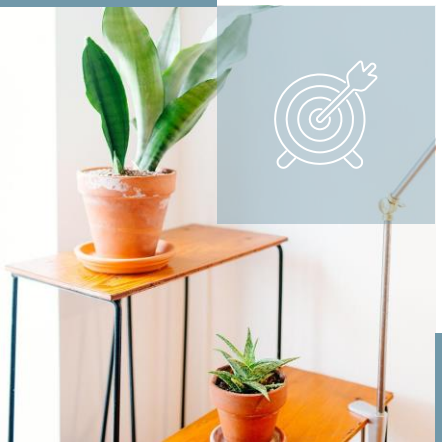
RQ1 : Can a *social network site support requirements* elicitation, prioritization and negotiation?

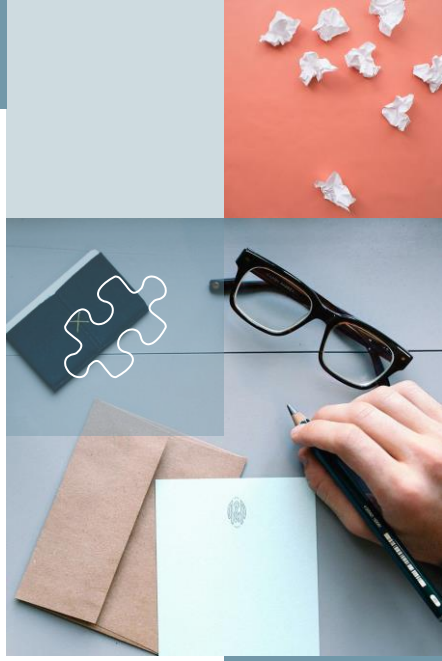
RQ2 : What are the *benefits of using a social network site approach* compared to existing elicitation, prioritization and negotiation techniques?

RQ3 : What are the *challenges and limitations* of using a social network site for requirements elicitation, prioritization and negotiation?





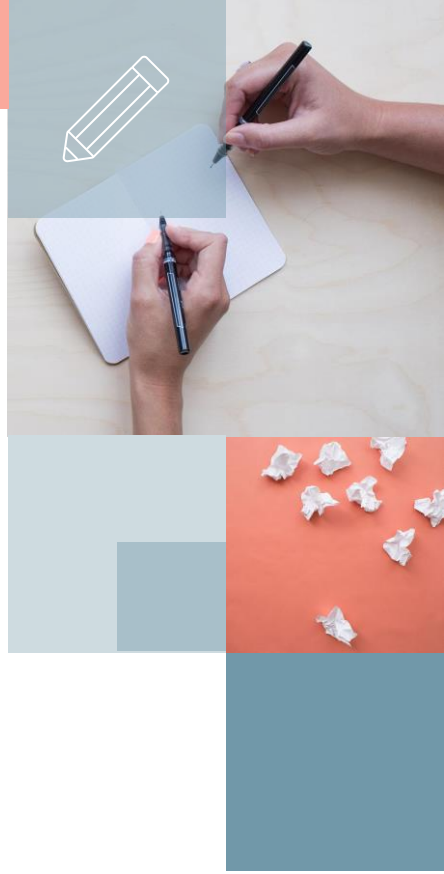




Proposed Method

Prepare Activities

- Set up a space for discussion.
- Provide key informaton about the project.

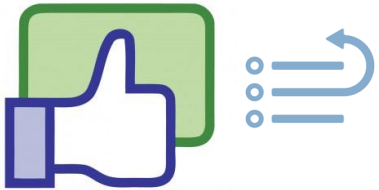


Implement RE Activities

Invitation of participants

Participants brainstorm ideas

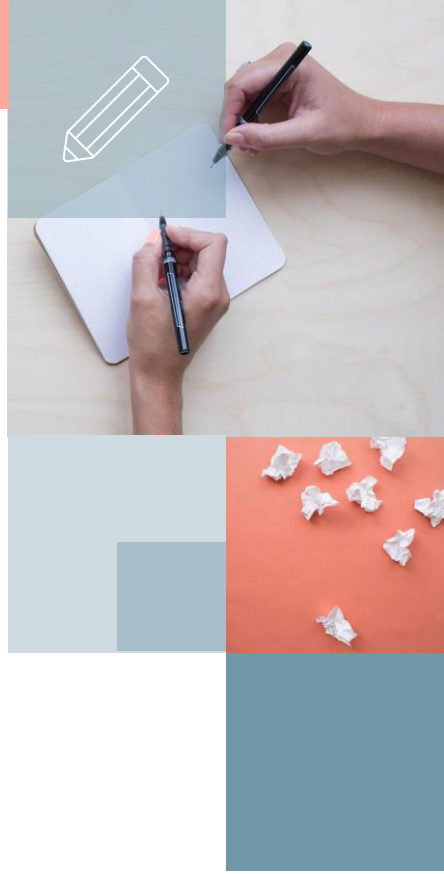
Participants discuss ideas



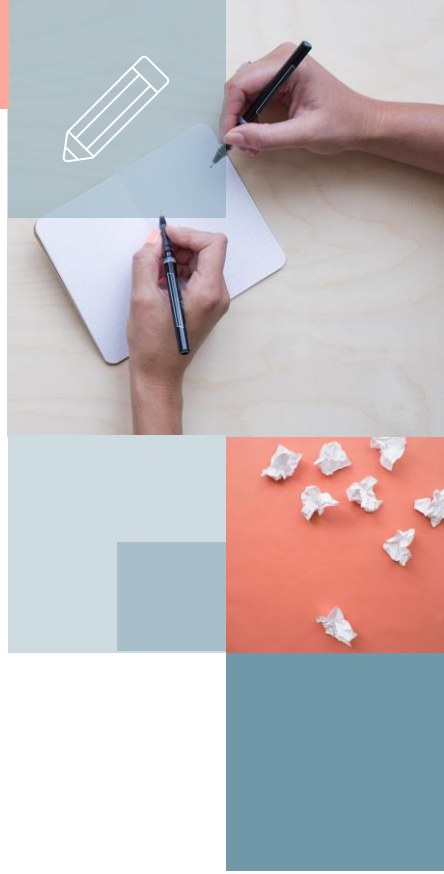
Participants approve and prioritize ideas

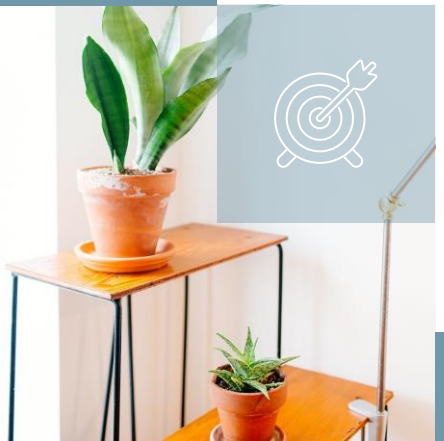
Analysis and Follow-up

- Transcribe ideas into prioritized requirements.



Select Social Network

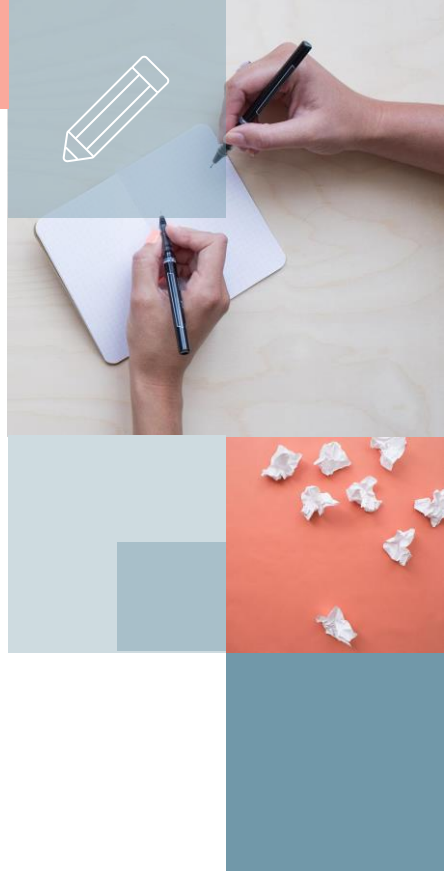




Executing

Evaluation Study I

- Participants know RE basic.
- Participants can select any kind of project for performing requirement elicitations.
- Participants should follow CPRE criteria.

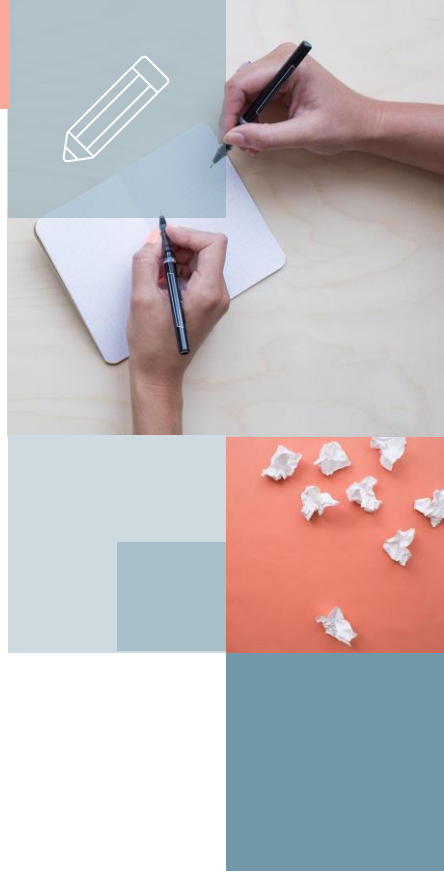


Evaluation Study I (Result)

- End users were able to follow the process and communicated their needs.
- Moderation was insufficient.
- Most of the content was created within the first days.
- Prioritization results were insufficient.
- No snowball effect.

Evaluation Study II

- ❑ Participants advance knowledge in RE.
- ❑ Force participants to select 2 Topics.
  - ✓ Fridge of the Future (FoF)
  - ✓ Smartphone of the Future (SoF)
- ❑ Participants should invite friend dramatically.



Evaluation Study II (Result)

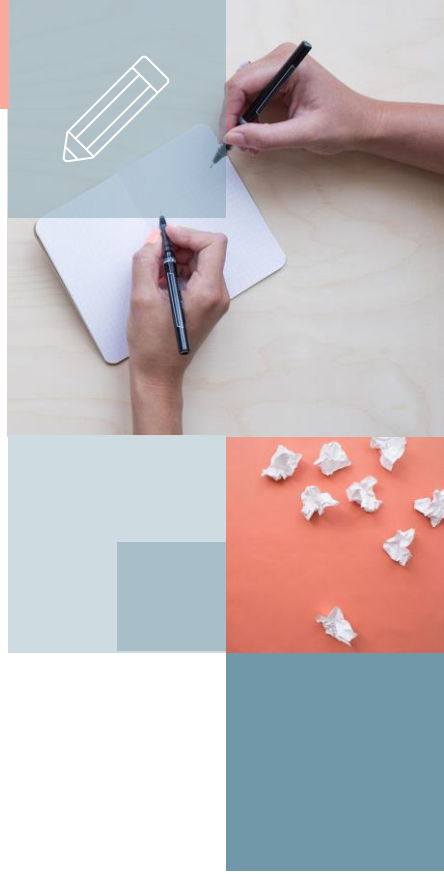
- No prerequisites required for participants.
- Factors improving success.
- Consolidation and prioritization.
- Again, no snowball effect
- Friendship and interests made friends participate.
- Knowledge and skills.

Evaluation Study III

- Participants don’t have RE approach experience.
- Participants can select individual topic.
- Invite stakeholders – friend or fellow students.

Evaluation Study III (Result)

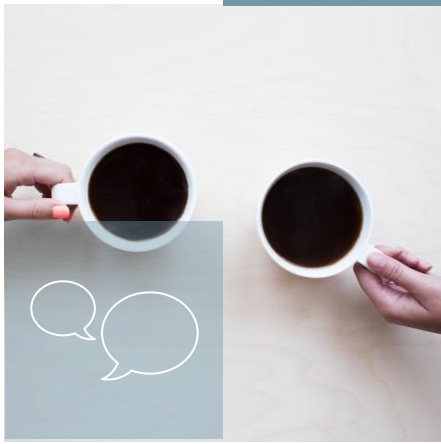
- A motivated moderator is success factor.
- Students were satisfied.
- Sense of duty and interest made students participate.
- Minor differences between friends and fellow students.
- Requirements prioritization worked.
- The discrepancy of the Smartphone group.



Research Answer

RQ1 : Can a social network site support requirements elicitation, prioritization and negotiation?

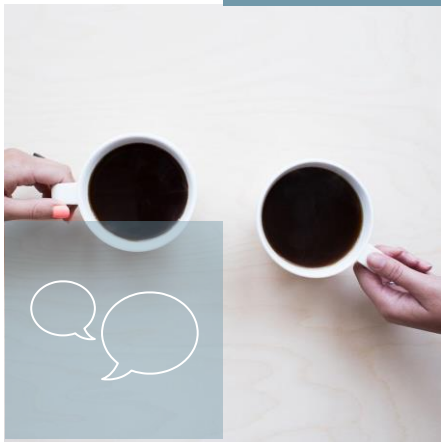
Using as SNS-based RE approach could increase end user involvement in RE and support projects.



Research Answer(Cont.)

RQ2: What are the benefits of using a social network site approach compared to existing elicitation, prioritization and negotiation techniques?

SNS approach supports the gathering of needs without adding any learning overhead to users.



Research Answer(Cont.)

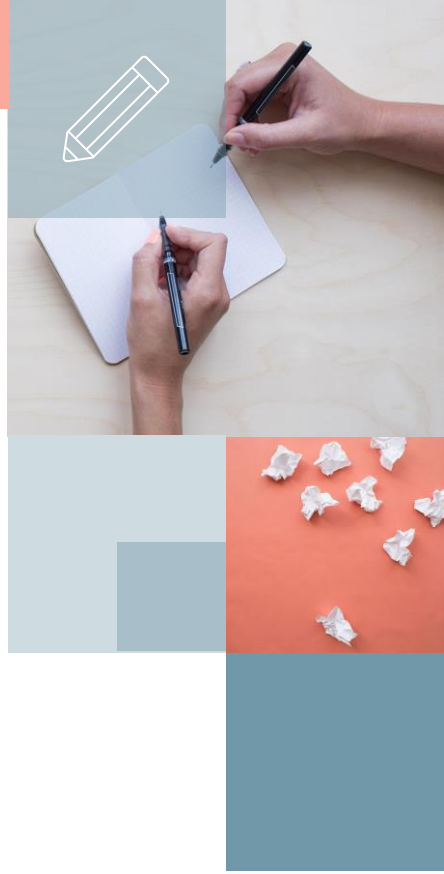
RQ3: What are the challenges and limitations of using a social network site for requirements elicitation, prioritization and negotiation ?

Challenges

- Using Facebook posts to bring brainstorming.
- Using Facebook likes allow the communication of approval and support requirement prioritization.
- Comments to posts support requirement negotiation.

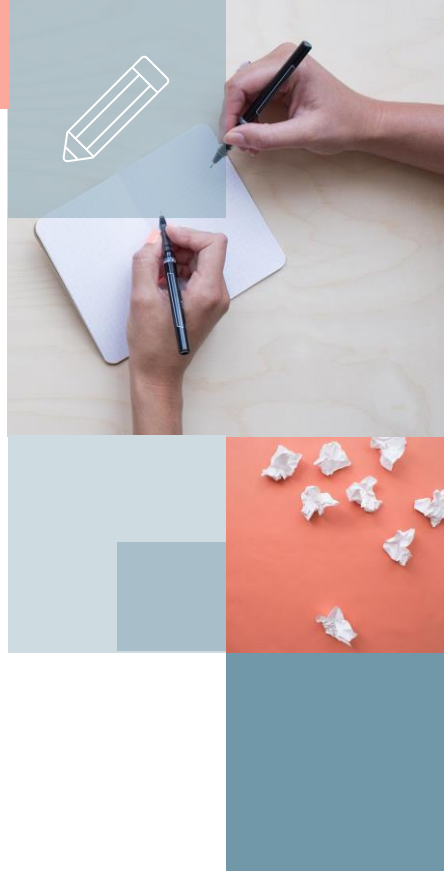
Threats to Validity

- Heavily relied on the participation of RE students and friend of moderators.
- Uncontrolled environment in private groups.
- The results cannot make statistically significant claims.



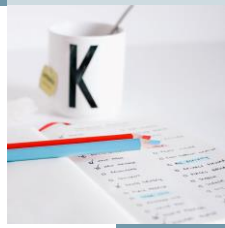
Future Work

- Research should be :
  - Better understanding risks and issues
  - Evaluation of other suitable SNS
  - Evaluation in real-world projects
  - Exploring the motivation of end users



Comment and Suggestion

- PROS :
  - Applied this approach to selected groups
  - Applied research in new chanllenging area
- CONS:
  - Unknown risks
  - Not support in real-world situation

Thank You !

Any questions?