

Social Software for Requirements Elicitation and Negotiation

Assignment 4

Group 3

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Agenda

WinWin methodology

easyWinWin

WinBook & RE Activities Supported by WinBook

Help of Social Networks

Benefits and Limitations



Our focus

Discussion on usage of social software for requirement engineering instead of how to adapt requirement engineering process for social computing system.



WinWin methodology

*“A set of principles, practices,
and tools, which enable a set of independent
stakeholders to work out a mutually
satisfactory set of shared commitments.”*

<<Boehm, Grünbacher, Briggs>>

- Builds trust and managed expectations
 - Helps stakeholders to adapt their changes
 - Helps to build institutional memory
- 

WinWin methodology

1. Refine and expand negotiation topics
2. Collect Stakeholder win conditions
3. Converge on win conditions
4. Define a Glossary of key terms
5. Prioritize win conditions
6. Reveal issues and constraints
7. Identify issues and options
8. Negotiate agreement

WinWin: agreements cover all of the win conditions and there are no outstanding issues.



EasyWinWin

A requirement definition approach based on group support system.

A methodology built on WinWin approach



EasyWinWin

defines a set of activities guiding stakeholders through a process of gathering, elaborating, prioritizing, and negotiating requirements.

- + better understanding of the problem
- + cooperative learning about other viewpoints
- + faster, more productive

⇒ built on Group support system

Tools: Electronic brainstorming tools, group outline tools, voting tools for idea evaluation.



EasyWinWin

GroupSystems - Online Bookstore Site and Ad Management - [Converge on Win Conditions (Categorizer)]

File Folders Edit Categorizer Group Options Window Help

Agenda People Whiteboard Handouts Opinion Reports Briefcase Log Find Folder List

0/0	1. Site management adds bookstore layout information (floor, location, type of material).
0/0	2. The banner will provide a link to the university bookstore
0/0	3. Interface for advertisers to select their schedule
2/0	4. Default banner of bookstore if no other events available
0/0	5. The site management must have a website which displays banners
0/0	6. Different kinds of advertising, including sales, 'now hiring,' book signings, etc.

Project & Process

Capabilities

Interfaces

Level of Service

Evolution

<TBD>

WinBook

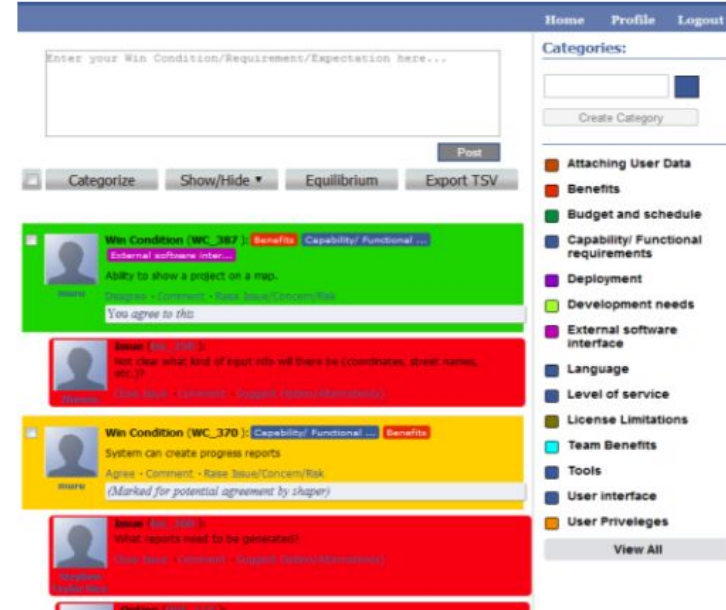
Definition: realization of a WinWin negotiation framework

- similar to Facebook
- virtual wall, posts, comments, prioritization, likes, unlike,

The screenshot displays the WinBook web interface. At the top, a dark blue navigation bar contains the links 'Home', 'Profile', and 'Logout'. Below this, the main content area is divided into two sections. On the left, there is a large text input field with the placeholder text 'Enter your Win Condition/Requirement/Expectation here...'. To the right of this field is a 'Post' button. Below the input field, there are four buttons: 'Categorize', 'Show/Hide', 'Equilibrium', and 'Export TSV'. On the right side of the interface, there is a 'Categories:' section with a text input field and a 'Create Category' button. Below this, there is a list of categories with corresponding colored squares: 'Attaching User Data' (orange), 'Benefits' (red), 'Budget and schedule' (green), and 'Capability/ Functional requirements' (blue). At the bottom left, there is a post preview showing a user profile picture, the text 'Win Condition (WC_387):', and two category tags: 'Benefits' (orange) and 'Capability/ Functional ...' (blue). Below the preview, there is a link to 'External software inter...'. The bottom right corner of the slide features a decorative graphic with pink and purple geometric shapes.

RE activities supported by the WinBook

- Brainstorming / organize ideas
- General overview
- See agreement status (colours)
- Needs of stakeholders up-to-date
- Effectiveness of milestone reviews
- Understanding of the value propositions
- Easy understanding (no training)
- Manage expectation sooner (more explicit)
- Continually monitor
- Bridge gap between requirements and architecture
- Notification (since last login, email)



Implementation guidance for using social networks

- Set up an appropriate moderator (important role)
- Establish a high inner motivation → generates needs
- Establish friendship, personal relations and interests → increase participant rate
- Invite participants on a regular basis
- Friendly and funny posts → more discussions & creativity

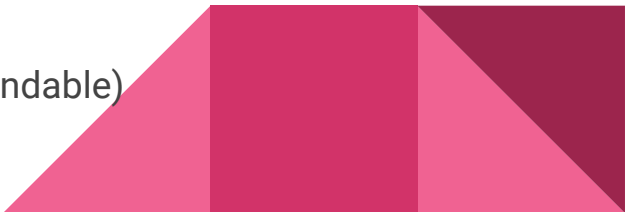


Benefits and limitations of Social Software

- Benefits:

- No prerequisites
- New stakeholders are involved (friends of friends)
- Platform independent
- Support tool for traditional RE

- Limitations

- Friendship and common interests
 - Not usable alone
 - Depending on moderators ability
 - Snowball effect is a challenge
 - Can't discuss certain degree of approval
 - Comment cannot be defined in more detail (post not understandable)
 - Invite participants on a regular basis
- 

Discussion

How would you behave if you should use this tool? What are your concerns?

For instance, you need to do an app for customers who are over 60 years old and less comfortable with the new technologies? Would you use the easyWinWin approach?

What kind of technology nowadays can also be applied for gathering RE activities?





First hand experiences

Use of social computing by the team members

None of the team members used consciously social computing approaches before . → A few commented something on the intranet of their company to share their problems with a software. (This could be a kind of social software approach).
→ This allows the software engineer to gather the feedback from different users on different “social software” when they are planning for the next release. (In a broader sense we can see intranet as a kind of social software)



Benefits

- Remote requirement gathering. (RE engineer don't need to be on site)
- Posting 24/7 (best ideas under the shower) → no time limitations ("I can't attend, I have a meeting at 2pm)
- Unstructured documents, such as comments, is automated noted down. (in future, it can be one of the resources for creating different document (SLA, Negotiation document, etc.)
- Shared to everyone in the group (information platform)
- m:m discussions



Limitations

- No face to face interaction (coffee break discussions)
- More open (positive and negative) → also more open to say bad things more or blame someone
- As we know it's more difficult to find agreements when people are writing each other than sitting together and discuss it.
- Asynchronous (user needs to wait for update → Internet connection)
- Focus on a system → dependency



Lack

Existing social software is not designed for requirement engineer, therefore, it has many drawbacks of supporting requirement engineering. It only enables instant communications between RE engineers and stakeholders. It lacks specific functionality designed for requirement engineer to cater the needs of requirement engineering process.

