Social-Networking Based Requirements Engineering Improves Diverse Stakeholder Convergence — Better Understanding Faster

Solution Approach
Social Networking for Requirements Engineering...based on the WinWin Negotiation Model:

1. Refine and expand negotiation topics (project scoping)
2. Collect stakeholders’ win conditions (for all to view)
3. Converge on win conditions (disambiguation and de-duplication)
4. Define glossary of key terms (domain vocabulary)
5. Prioritize win conditions on: Business Value vs. Ease of Realization
6. Reveal/discuss issues and constraints (as result of prioritization)
7. Record issues and options (uncertainties/risks and resolution tactics)
8. Negotiate agreements (on win conditions and issue-options)

Above steps accelerated by a “Shaper” (i.e. facilitator)

WinWin Equilibrium
Every Win Condition and Issue closed by agreement

WinWin Negotiations Primer
1. Win Condition
2. Covers
3. Involves
4. Addresses
5. Agreement
6. Option
7. Option
8. Option

Risk/concern associated with Win Condition

Winbook
- Tool for Social Networking based Requirements Engineering
- Based on WinWin Methodology
- Social Networking paradigm similar to Facebook
- Color coded content labeling similar to Gmail

Winbook - ATool for Social Networking based Requirements Engineering

WinWin Equilibrium

Problem
Lack of stakeholder involvement and convergence viewed as leading causes of project failure

*Standish Chaos 2001 Report*

Experimental Setup
- 14 teams from Software Engineering course at USC
- Initial sessions conducted in a co-located setting
- Teams use Winbook independently thereafter

Initial Evaluation
- Up-to-date rationale capture of stakeholders’ needs
- Sustained renegotiation within Winbook itself
- Better understanding of clients’ expectations and value propositions
- Win Conditions trivially exportable as User Stories! Eliminating need for detailed requirements!

Industry Applications
- LADOT* expressed interest in deploying Winbook for internal use for brainstorming and organizing ideas
- Adopted as part of project for major US Govt. organization to bridge gaps between requirements and architecture

Next Steps
- Integrated support for planning poker to estimate/prioritize win conditions
- Recording and linking Win Conditions to end benefits
- End-to-end tool for Value Based Requirements Prioritization (VBRP)
- Ability to capture “Acceptance Tests” for each win condition

WikiWinWin* — Previous incarnation of the WinWin Negotiation Framework based on Twiki (twiki.org)

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