

QUESTIONS FOR THE OPEN INNOVATION AND REQUIREMENTS MANAGEMENT STUDY:

PART I OF THE STUDY:

In the first part of the study, each of the 19 participants were interviewed. Interview questions categorized into topics (the topics related to the study reported in this paper are highlighted).

| |
|---|
| 1. Background |
| 1.1 What is your role? |
| 1.2 How long have you been working with this role? |
| 1.3 How much experience do you have working with requirements? |
| 1.4 How much experience do you have working with scoping and scoping processes? |
| 2. The business goal of the current requirements management process |
| 2.1 What is according to you the goal of the business goal of the current requirements management process? |
| 2.2 How the part of the process you are mostly involved in can contribute to this overall business goal? |
| 2.3 How do we know that the overall business goal of the requirements management process is achieved? |
| 3. Current metrics of the requirements management process |
| 3.1 Do you have any metrics to measure the performance of the process? |
| 3.2 Can the existing metrics be traced to the business goal of the process? |
| 3.3 How much time do you spend on the metrics right now? |
| 3.4 How do you collect the metrics? Manually or automatically? |
| 3.5 How do you analyze and interpret the metrics? Do you have any issues with analysis and interpretation? |
| 4. Desired metrics of the requirements management process |
| 4.1 What metrics would you like to have to better measure the process? |
| 4.2 How much time would you spend on collecting and analyzing these metrics? |
| 5. Visualization of the requirements management process |
| 5.1 Do you see the need to visualize the requirements management and especially the scoping process? |
| 6. Requirements management and open innovation |
| 6.1 Do you think that the current requirements management process is designed to facilitate open innovation? |
| 6.2 What actions you suggest to improve the current requirements management process to better benefit from open innovation? |

PART II OF THE STUDY:

The 4 respondents were presented with a list of 12 statements derived from the 19 interviews and were asked to agree or disagree with the statements and to provide comments if they were so inclined. The respondents were also asked to classify their company using Vanhaverbeke's structure [6] – both as it currently operates and how the

respondent would like their company to operate. Finally, the respondents were asked to assess whether open innovation impacts requirements engineering challenges and, if so, in what way.

The list of statements:

Contributions to the OSS community

- (S1) Unclear content and contribution strategy
- (S2) Contribution timeline unclear.
- (S3) Minimize modifications to the open source code.
- (S4) Unclear relationship between the benefits from contributions in terms of strategy and business goals
- (S5) Be strategic when adopting innovative features.

Relation between process and innovation

- (S6) Augmenting the requirements management process.
- (S7) Manage innovative features in a separate process
- (S8) Top-down or bottom-up open innovation

Release planning and prioritization

- (S9) Prioritization process needs modification
- (S10) Challenging acceptance criteria kills innovative features
- (S11) Need for special flow for innovative features to evolve to meet acceptance criteria
- (S12) Release planning even more challenging

Challenges in requirements engineering.

Please assess whether open innovation impacts the following requirements engineering challenges and, if so, in what way.

1. Identify stakeholders needs
2. Requirements traceability
3. Changing requirements
4. Quality requirements
5. Communication
6. Release planning
7. Requirements prioritization
8. Requirements overload

Types of innovative companies

Please classify to classify the company using the following classification:

Closed innovator – generating technology internally and exploiting that technology in products and services

Absorbing innovator – acquiring technology externally and exploiting that technology in products and services

Open innovator – acquiring technologies for use in products and services while also actively pursuing further technology commercialization such as licensing

Balanced innovator – illustrating no significant bias in any direction