

Interview-Guidelines

Interview Topic:

„Experiences and challenges of technical practitioners during the design and continuous development of collective intelligence systems as well as about solution strategies they follow to gather knowledge about involved stakeholders and their concerns with regard to adaptation management, rationales for adaptation design, and life-cycle aspects.“

Interviewer: _____

Interviewee: _____

Date: _____

Time and Duration: _____

Organization

Before the interview, check if the recording setup is working properly.

Interviewer 1 conducts the interview. Interviewer 2 takes notes, checks the discussed topics with the interview guidelines, and asks omitted questions.

1. Welcome and background information of the interview

„Thank you for spending time for this interview!“

„The topic of this interview is a survey of technical practitioners from industry to gain insights into experiences and challenges during the design and continuous development of collective intelligence systems in order to gather knowledge about concerns and processes with regard to adaptation management, rationales for adaptation design, and life-cycle aspects.“

Interview Modus

„The interview will take about 15-20 minutes. As a matter of course the data you provide will be handled confidentially and will not be shared with any third parties.“

„Would you allow us to record the interview (audio)?“

2. Demographical Information

Basic information about the interviewee and the company.

„As a start I would like to get an overview about your work and the context of the company.“

1. What are the purpose & domain of the software system (CIS) that you built?
2. What is the size of the company?
3. Is the software system a central source of revenue or just supporting other processes?
4. What is your role in the engineering of the software system?
5. Did you or another team member have previous knowledge and experience with engineering such kind of software systems?

3. Life-cycle phases of CIS

Information about different phases they have gone through since the beginning of their software platform and the faced challenges and difficulties in each phase and during design and engineering activities.

1. What phases did you go through from the start of planning, through engineering the system to launching/startup and evolving it (phases as time series of characteristic decision steps)?
2. When in these phases did you make important design decisions (decisions about features, the infrastructure, collect technologies, frameworks, etc.)?
3. What challenges did you face in which of these phases of your software system?
4. Have you applied well-known architecture methods like frameworks, description languages, architecture models, etc.?
5. Do the business goals influence your design decisions? How do you ensure that your decisions are aligned with the business goals?

4. Continuous Adaptation Management

Experiences with respect to platform evolution and adaptation, adaptation management challenges and practices as well as the decision-making process.

1. What are the features of your system that are required and fix along the system's life-cycle?
2. What are the features/elements that have changed over time (introduced alternatives, options) and thus are adaptive?
3. How have you decided about these features, fix features and adaptive features?

4. What are examples of your intention/rationales/motivations of these changes?
 5. Did you identify any new points of adaptation that were not an option before?
 6. How did features change?
 - a. Do you select options of features before deployment only?
 - b. Do you support changing of feature options during ramp up / runtime?
 - c. Do you support changing of feature options during evolvement?
 - d. Which stakeholders were responsible for changes and select options at runtime?
 - e. Can the system itself make any decisions about existing options at runtime?
 7. Did any decision about a feature option have an impact or lead to a dependency to another feature?
 8. What kinds of feature changes have been made during evolvement (crossing technological decisions, infrastructure, services, middleware, functionality etc.)?
 9. What are your lessons learned, what would you do in another way than you did?
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5. Thank you and Good-bye

„Thank you for the interview!“