

Interview Script

Introduction

We are conducting a set of interviews with different stakeholders from the organization to elicit relevant use cases for these professionals in the context of a software analytics tool. Our objective in conducting this interview is to identify your main information needs regarding the use of data to understand aspects related to software development and support the decision-making process.

We appreciate your participation in this activity. This interview will be recorded and transcribed (with your consent), being used as an anonymous data collection instrument. At any time, you can ask to stop recording. All information provided by you will be treated as confidential and published only with the consent of the organization.

This interview should last no longer than 1 hour. If necessary, we will ask the participant for extra time (max. 30 minutes). We will ask participants to provide information related to their role/work as well as their key needs that could be met by a software analytics solution in the context of the organization.

Software analytics overview

At this point, we consider it important to provide an overview of software analytics to contextualize the participant with respect to what will be asked.

[After the overview] Any questions before we start?

Interview questions

A NOTE FOR INTERVIEWER:

The questions in this interview are divided into the following sections:

Initial questions: demographic questions aimed at gathering information about the responsibilities of the interviewee in the context of the organization and in the software industry in general. (5 min)

Stakeholders' information needs, indicators, and decision-making process: identification of the current state regarding the use of practices similar to software analytics, as well as the main information needs that could be met with the effective implementation of a software analytics solution in the organization; questions about indicators and the decision-making process. (45 min)

Final questions: closing the interview; interviewee's considerations on any missing topic deemed relevant to this research. (10 min)

1 Initial questions

Q1.1: Could you tell us about your experience?

- ✓ How long have you been working on projects in the organization?
- ✓ What is your current role/fellowship? How long have you been in this role?

- ✓ How long have you been working on software projects? What experiences in other organizations have you had? Same industry and domain?
- ✓ What were your previous roles/positions?

2 Stakeholders' information needs, indicators, and decision-making process

Q2.1: Considering the overview of software analytics we provided, can you identify any similar practices in the organization? If so, what problems do you seek to solve with this approach? How are these problems solved?

Q2.2: How reliable (or effective) do you consider the current approach being used in the organization? What limitations or bottlenecks could you identify?

Q2.3: When it comes to data-driven decision making, what are your main needs and what motivates them? In other words, what do you need to observe/monitor (what questions do you need answers to) and why?

Q2.4: Could you describe situations or scenarios in which a software analytics approach would be valuable for your work? Try to highlight what questions a software analytics approach could help answer, and what decisions such an approach could support.

Q2.5: For each scenario described in the previous question, what indicators (metrics) are needed to answer your questions or support your decisions? Why do you consider them necessary?

Q2.6: Is the data needed to obtain these indicators available (and in appropriate format) in the organization? If not, what are the main difficulties related to data availability and format? What should be done in your opinion to solve this problem?

Q2.7: Which factors do you consider important for decision making in the context of your role?

Q2.8: How does the data-driven decision-making process take place in the organization? How would you break it down into steps, main activities of each step, inputs, and outputs? You can exemplify narrating the events.

Q2.9: Do you consider that the decision-making process is basically the same (steps, inputs, outputs), or does it vary by project or another factor? Explain.

3 Final Questions

Q3.1: Considering a data-driven approach such as software analytics, which aspects of the organization do you think favor the implementation of this type of approach? Which aspects make such implementation difficult?

Q3.2: Is there anything related to the topic of the interview that we missed and you would like to comment on?

We would like to thank you for your willingness to participate in this activity. After the interview analysis, we will send you a summary of the findings so that you can identify any inconsistency. We hope you can get us feedback within one week. If you wish, we can also send you the full transcript of the interview.