



Interview guideline TD

1. Introduction

- Greeting
- Thanks for time
- explain goal of interview (analysis for areas of improvement, quantifying challenges and make suggestions for improvements)

2. Questions on participant background

- What is your role in the company/project?
- Which work group are you associated with?
- Which disciplines do you cooperate with?
- How many years of work experience do you have
 - In production systems engineering?
 - 0-2
 - 3-5
 - 5-10
 - more than 10
 - o In your current position?





3. Experience of participant (in scope of data exchange in PSE)

- Think of a typical project you were involved in, name the project, give details
 - Name
 - Duration, state, size of the project.
 - o Number of disciplines involved, names of the most important disciplines.
 - O What is your role in this typical project?
 - What are the tasks of your role? (clarify of depth for survey)
 - o In which phase of the project are you involved?
 - What is the output (e. g. models, attributes) of your work to data consumers?
 - What is the input (e. g. models, attributes) to your work from data providers and when do you get it?
 - What are possible issues with data you receive?
 - What are possible risks of low-quality (e. g. incomplete, contradictory) input data to your work?
 - What are options (e. g. attribute state) for improvement?





4. Technical Debt

Have you heard about technical debt (TD) before?

At this point, introduce the concept of Technical debt to the domain experts, to get a common understanding of the concept and clarify the terminology.

Example:

You have a piece of functionality that you need to add to your system. You see two ways to do it, one is quick to do but is messy – you are sure that it will make further changes harder in the future. The other results in a cleaner design, but will take longer to put in place. -Martin Fowler

Definition:

"Technical debt is a concept adapted from SE to communicate the additional future work, for shortcuts or non-standard solutions that are chosen in the present, and which seem to save cost and time for the moment.

It is an analogy to financial debt, similarly if TD is not repaid or managed, it adds up according to its "interest rate", which can make it significantly harder to repay it."

[Discussion about TD in context of effects, causes and items]