

Invitation Procedure

This procedure intends to assist national teams in the replication of InsighTD regarding the invitation of participants to answer the questionnaire. We suggest three possible invitation scenarios: personal contact, software mailing lists, and social media (LinkedIn). This document also presents the invitation texts (the invitation and the reminder) we have used in InsighTD Brazil Replication.

Invitation Scenarios

We have considered three strategies to invite professionals to answer the InsighTD questionnaire:

1. Personal contacts from software industry;
2. Industry-affiliated member groups, mailing lists;
3. Social media (LinkedIn).

For the items 1 and 2, we have just sent the invitation message directly for the personal contact of the mailing list. For the social media, we have used LinkedIn.

LinkedIn gives us direct access to a large number of professionals with whom we did not have previous contact. Specifically, LinkedIn allows the use of keywords to search for professionals with specific expertise. In InsighTD, we search for professionals of a specific country by type of debt. For example: to find professionals that could provide insightful answers about test debt, we used keywords like tester, test analyst, and test manager. The same applies to the other types of debt (see Table 1). Thus, the following keywords were considered: configuration analyst, configuration manager, developer, process analyst, product owner, programmer, project manager, requirements analyst, requirements engineer, software architect, software engineer, system analyst, test analyst, test manager, and tester.

Table 1. Keywords considered to search for participants in LinkedIn

TD Type	Keyword
Architecture debt	Software architect
Automation test, test, and defect debt	Test analyst, test manager, tester
Build, code, and design debt	Developer, programmer, project manager, software engineer
Documentation debt	All other keywords
Infrastructure debt	Configuration analyst, configuration manager, developer, programmer, software engineer, project manager
Process debt	Process analyst
Requirements debt	Requirements analyst, requirements engineer, product owner, project manager
Service debt	Software architect, developer, programmer, software engineer
Usability debt	Developer, programmer, software engineer
Versioning debt	Configuration analyst, configuration manager

In LinkedIn, we had two options:

1. for those professionals we already have as a LinkedIn contact, we send the InsighTD invitation message using the chat;
2. for new contacts, first we use the LinkedIn search tool to look for practitioners with current or previous experience in a specific area (for example, requirements engineering) according to Table 1. Then, we add the returned professionals and, for those who accept the LinkedIn invitation, we send the InsighTD invitation message using the chat.

All the invitation process is manual and a little time consuming.

Invitation Texts

Following, we present the texts we have used to make the initial contact with participants of InsighTD and remind them to answer the questionnaire. Please, feel free to make any adjustments.

Initial contact

Subject: Technical Debt Causes and Effects – Survey Response Invitation

Message:

Hi <<contact name>>, how are you?

We would like to invite you to participate of an important international research on Technical Debt (TD). Our goal is to help professionals to better understand the possible causes and effects of TD presence in software projects (more information about the research can be found at www.td-survey.com).

The target audience of this research is formed by professionals involved in software development activities (from project managers to programmers). If you would like to forward this invitation to more people who can contribute, we will be glad with your help in the distribution of this call for participation too.

To answer the survey, please access the questionnaire at <<link to the questionnaire>>. We request that, once you start answer the survey, please answer it in full. Only full answers will be considered. The overall process takes around 10-20 minutes.

Thanks in advance for your valuable contribution!

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>

Reminder

Subject: [reminder] Technical Debt Causes and Effects – Survey Response Invitation

Message:

Hi <<contact name>>, good morning/afternoon/evening!

How are you doing? We hope this message finds you well!

We would like to remind you about our invitation to contribute to our research on causes and effects of technical debt in software projects. Your participation is very important for the success of the project!

Please, if you have availability and interest in contributing with the research, answer the questionnaire available at <<link to the questionnaire>>.

Thank you!

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>

<<Researcher name>> (<<current affiliation>>) - <<e-mail address>>
