LIA Project Proposal "Helpdesk Automation"

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1 Introduction

For the LIA project we would like to investigate helpdesk automation for internal IT support in organizations. In the light of developments on automated incident analyzes tools [1] [2] we would like to investigate their possible improvement on incident management processes. In the outcome of this project, we will describe the different processes of incident management (ITIL), current technical and procedural setbacks and possible (automated) solutions for helpdesks. During the project, as a case study, we will interview a number of organizations on their current incident management process.

2 Research question

The main research question of this project will be:

What is the ideal combination of resources and tools on helpdesk automation for internal IT support?

During the research, the following (ITIL v2) incident management processes will be taken into account [3]:

- Incident registration (creation of incident records)
- Classification & initial support (type identification)
- Matching (relations, known errors)
- Analyzes & diagnosis (investigation of cause and solution)
- Closing (user feedback)

Other service management processes (problem management, change management) will not be part of the research.

3 Approach

During the project, we intend to follow the next approach.

- Collect past research on subject
- Define research subtopics
- Perform research on incident management processes
- Make arrangements on interviews for case studies
- Prepare & conduct interviews
- Make final report

4 Planning

In the coming four weeks, we intend to follow the next planning. All activities will be conducted by the two of us. Therefore, a workdivision will not be part of this proposal.

- Week 9: make project proposal, concrete working topics, plan interviews, research on incident registration.
- Week 10: prepare interview questionnaire, research on classification & initial support, matching.
- Week 11: conduct interviews, research on analyzes & diagnosis, closing.
- Week 12: finish report and give presentation.

References

- [1] Nils Einar Eide, Andreas N. Blaafadt, Baard H. Rehn Johansen and Frode Eika Sandnes Oslo University College
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 - http://www.usenix.org/events/lisa04/tech/full_papers/eide/eide.pdf
- [2] Christine W. Chan a, Lin-Li Chen b, Liqiang Geng Knowledge engineering for an intelligent case-based system for help desk operations, 2000

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[3] Lex Hendriks IT Servicemanagement, 3e editie, 2002 itSMF Nederland