# Title

"Increasing the automation potential of enhancing IT-Security for Better Protection against Cyber Threats"

A = author

C = conductor

Subtitle#1(a): Development[[1]](#footnote-1) of an online? / offline?[[2]](#footnote-2) expert system[[3]](#footnote-3)

🡨alternative or even parallel goal🡪 (parallel goals are preferred!)Subtitle#2 or subtitle#1b: Development an aggregated risk/security index-definition for estimation of the level of arbitrary IT-security constellations[[4]](#footnote-4)

Abstract

* Problems: The increasing usage of technology has made organizations vulnerable[[5]](#footnote-5) to cyber threats. The IT-security measures (like …) put in place are not always adequate to protect against these threats.
* Goals: The main goal of this thesis is to investigate ways (like …) to enhance IT-security measures in organizations to better (c.f. subtitle#2) protect against cyber threats.
* Tasks: This will involve conducting a thorough review[[6]](#footnote-6) of existing IT-security measures and identifying areas (like …) for improvement (c.f. subtitle#2). The study/documentation and the application will also involve conducting interviews (c.f. footnote#1) with experts[[7]](#footnote-7) in the field to gather their insights.
* Targeted groups/customers[[8]](#footnote-8): This study is aimed at organizations of all sizes, from small businesses to large corporations.
* Utilities: The results of this study will be useful for organizations to improve their IT-security measures and better protect against cyber threats[[9]](#footnote-9).
* Characteristics of the solution: The solution proposed in this thesis will be based on the latest best practices (like …) and technologies (like …) in the field of IT-security.
* Results: The results of this study will provide organizations with a roadmap (as output of the expert system) for enhancing their IT-security measures and protecting against cyber threats with quasi exact estimation about the reduction of the aggregated risk-index concerning each roadmap-item. Parallel, the costs of each each roadmap-item should also be estimated/derived.
* Discussions: The findings of this study + application will be discussed in detail, including the advantages and disadvantages of different approaches (see each potential roadmap-items in the generalized combinatorial space of the potential customers). The thesis will also provide recommendations (see optimized set of roadmap-items) for organizations to improve their IT-security measures (incl. quasi exact estimation of the reduced risk-potential).
* Future: The results of this study will have implications (like …) for the future of IT-security and provide a foundation for further research (like …) in this field.

Remark: In case of each “like …”-sign, it is necessary to complete the set of the potential items/examples concerning the particular phenomenon…

To-do:

1. Completing the “like-…”-positions
2. Making decisions in case of each decision point

Deadline: ASAP (c.f. general deadline for closing the negotiation phase about title and abstract)

1. It is obligatory to develop an application. It is not enough to collect interview and to analyse their content. [↑](#footnote-ref-1)
2. This is a decision point for the author… [↑](#footnote-ref-2)
3. This is a decision point for the author… [↑](#footnote-ref-3)
4. This is a decision point for the author… [↑](#footnote-ref-4)
5. This statement should be proven and/or it should be given at least one URL about the appropriate backgrounds. [↑](#footnote-ref-5)
6. In case of an expert system and/or in case of the risk-index, it is necessary to define a set of questions (attributes) being capable of involving log-data and/or human estimations about the reality in an enterprise… [↑](#footnote-ref-6)
7. Number of involved experts? Domains of them? Who can be evaluated as an expert at all? [↑](#footnote-ref-7)
8. Which decision situations can be supported? Which questions can be answered through the planned application? [↑](#footnote-ref-8)
9. How can be derived/estimated the quasi exact volume of the benefits of the examined decision alternatives? [↑](#footnote-ref-9)