

## Terminology:

- Mentor: Jeroen Vermunt
- Test group: Procurement, Logistics, Finance
- The project: This research project, named below.

## The Project

**Title:** Current state of and methods to improve BI adoption for a test group at ASML

**Project Justification:** ASML currently has BI tools in place to help with reporting and analysis of company data generated from various departments. It's suspected that these tools are not always used by the end users and software like Excel is still used for data visualization, calculations and analysis. This project will try to grasp the extent of BI tool usage for a selected test group and will suggest some methods to improve the adaption rate of BI for said test group.

**Project Scope:** The project will start at the 5<sup>th</sup> of March and end on the 1<sup>st</sup> of June. This time frame will be divided in three major parts.

Part one will consist of writing the project scope and determining the research and measurement methods. The first phase will take two weeks to complete.

At the end of the first week a document with a high level planning has to be ready. At the end of the second week the methods used to discover the adoption rate will be presented in a new document combined with any aids to help in the discovery phase (e.g. questionnaire,...)

Phase two will consist of measuring the BI adoption rate for a test group and summarizing the results. These results will be used in the last phase of the project. This part of the research will take three weeks.

The first week will consist of measuring the adoption rate based on hard data (e.g. database usage, software uptime,...) and making the first preliminary observations. The second week will consist of sending out a survey to the various test audiences and interviewing some key users from the test group. During the last week all data will be processed and results will be published by means of a dashboard and written text.

The last phase will consist of proposing methods to improve BI adoption and try these methods on the same test group. The end goal is to increase the BI adoption rate for the given test group. This phase will take five weeks to complete.

During the first two weeks, best practices will be researched in literature after which some will be selected for testing. The proceedings of this research will be summarized in a research document. This document will also contain a justification of the used methods and a bibliography that contains all used sources.

During the third week the deployment method and test procedures will be constructed based on the research from the first two weeks of this phase. The next week the built model will be implemented and tested. The results and findings of the test will be summarized in a test report.

During the last week of this phase, the adoption rate will again be measured based on data and software usage. If possible feedback of the end users will also be gathered in order to evaluate the proposed improvement methods.

The last three weeks of this project will be spent working on the end report. This report will have a summarized version of all previous documents. Also will it hold an answer to the original research questions

The test group is not known yet and will be selected by the mentor.

**Deliverables:**

1. Project Scope

*Will consist of:*

- Project title
- Project justification
- Project scope
- List of deliverables

2. Usage discovery methods document

*Will consist of:*

- Overview of possible discovery methods
- Selection of discovery methods for this research
- Justification for this selection
- Tools to aid the discovery method selected (e.g. questionnaire, methodology)

3. BI adoption measurement and interview results before improvement methods

*Will consist of:*

- Summarized data of 'hard data' measurement
- Summarized data of interviews
- Preliminary conclusions based on gathered data

4. Research document with improvement methods to be used based on literature

*Will consist of:*

- Overview of considered methods to increase adoption
- Selection of methods to be used
- Justification for the selection
- Bibliography

5. Test methodology of improvement measures and procedures for Implementation

*Will consist of:*

- Methods for improving BI adoption
- Scenario for implementing improvement methods
- Expected result after implementation of improvement methods

6. Implementation report and findings

*Will consist of:*

- Feedback on implementation proceedings
- Findings on implementation proceedings

7. BI adoption measurement results after improvement methods

*Will consist of:*

- Summarized measurement data
- Summarized Questionnaires
- Preliminary conclusions based on measurement data

6. End report

*Will consist of:*

- Scope of the project
- Methodology used to gather information
- BI adoption measurement before improvements
- Improvement methods literature study
- Test methodology of improvements methods
- Improvement report and findings
- BI adoption measurement after improvements
- Answer to research questions
- Bibliography