

Initial Plan: Strategic analysis of the Internet of Things in German Organisations

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Module Name: One Semester Individual Project – 40

Project Description

Development of new technology often disrupts business' traditional ways of operating, and forces businesses to adapt their strategy and tactics. The main aim of this project is to examine threats presented by the Internet of Things (IoT) in German organisations, analyse how this innovative technology disrupts the way businesses operate, and explore how the resulting business risks can be mitigated. As one of the top high-tech countries in the world, Germany has a lot to offer, especially with Internet of Things and the German way of using IoT in manufacturing – Industry 4.0. Various German organisations will be analysed. The project will focus on automotive companies, so a large amount of data should be collected about BMW Group, VAG Group and Daimler Group as global market-leading companies. An analysis of the technologies that are being used to support Internet of Things in German companies will also be included in the report.

The project will provide a strategic analysis of IoT technologies. It will help in understanding the advantages and disadvantages of these technologies. The Internet of Things will most likely have a significant impact on the IT industry in the near future so it is very important to understand this network of technologies and how companies can take advantage of it. The IoT technology can bring many changes to the way businesses operate and it can also bring risks. They will be examined and possibilities to mitigate the risks will be discussed. Analysis of future perspectives for IoT technologies will also be included as well as an analysis of how this kind of technology impacts German and world economy.

Project Aims and Objectives

The main aim of the project is to carry out a strategic analysis of German organisations that use the Internet of Things. To accomplish this, various smaller objectives should be completed.

1. Research

- Research Internet of Things in Germany – find out how it is used and are there things that make the use of it in Germany different to how it is used in the rest of the world (e.g. Industry 4.0).
- Research German organisations that use or are planning to use Internet of Things – find out what companies use or plan to use Internet of Things in the near future.
- Collect data and information – find relative sources of information (documents, books, etc.) that will be used as basis for the analysis. A sufficient amount of data and information should be collected before starting the analysis. All the data and information used will be open source or available to me through my university credentials and it will be referenced.

2. Analysis of the findings

- Choose and justify the methodologies that will be used to analyse data and to carry out the strategic analysis
- Analyse and understand the impact of Internet of Things and Industry 4.0 on German companies – to produce a strategic analysis, a good understanding of the companies, their goals and how they operate is required. There are some companies that are already using these technologies so their impact can be analysed.
- Analyse and understand the advantages of the Internet of Things and Industry 4.0 – these innovative technologies can bring many benefits for companies that utilize them. They can bring benefits in terms of improving production rate, decreasing costs, minimizing errors in production or it can almost fully eliminate human error.
- Analyse and understand the disadvantages of the Internet of Things and Industry 4.0
- Analyse and understand the impact of the Internet of Things and Industry 4.0 on German and world economy
- Analyse future perspectives for the Internet of Things and Industry 4.0
- Create models representing IoT in Germany

3. Final report

- Weekly reflection on my work, which will help in building up the final report
- Explanation and justification of what has been done and why certain methodologies and techniques have been used
- Check if all referenced materials are listed.
- Review the entire project to check if there is no irrelevant information, missing information or if any corrections are needed.
- Finalize and submit the project

Work Plan

To successfully complete the project, I will follow a work plan. This way I will have a structure to follow and it will help in focusing on the project goal.

1. Submit initial report – this is done on 05 February 5, 2018 (week 2). Although changes can be made, it gives the project some structure and direction.

2. Collection of data and information – this activity has started before the beginning of the second semester and it will continue until enough data is gathered but the official start of this activity is week 2 of the second semester. Most of the data should be collected by week 4 but there could be relevant documents that are discovered later which can also be used.
3. Select methodologies and techniques that will be used – they should be known by the beginning of week 4. Based on the data and information I find until then, I will check with my supervisor and decide what methodologies and techniques would be best to use.
4. Supervisor meetings – as advised by the module leader, there will be weekly meetings with my supervisor but depending on the tasks I will be doing and other factors, there might be some weeks without a meeting with my supervisor. There will be at least two major project review meetings, one around week 5 and another one around week 8, depending on when my supervisor is available and how the project is going.
5. Produce the strategic analysis – this is the main objective of the project. It begins in week 2 with collecting data and analyzing it. This objective should be finalized around week 10 or 11, so that there is some time for final review and corrections if needed.
6. Easter period – during this period any work left from previous weeks should be finished.
7. Submit final report – this should be done by the end of week 12.
8. Attend VIVA