

# DATA DRIVEN BUSINESS DEVELOPMENT - LOAN DATA

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# EXECUTIVE SUMMARY

*Executive summary - A brief summary (1-2 pages) of the key findings in the report.*

-----*Introduction Paragraph*-----

-----*problem statement Paragraph*-----

-----*overview of the work performed Paragraph*-----

-----*Overview of the key findings and recommendations*-----

## ABBREVIATIONS

Eg.

ML – Machine Learning

# LIST OF FIGURES

Figure 1 system architecture.....**Error! Bookmark not defined.**

## LIST OF TABLES

Table 1 eksempel på tabell .....**Error! Bookmark not defined.**

## CONTENT

Introduction .....	7
Background .....	7
Problem statement .....	8
Goals and Objectives.....	8
Limitations.....	8
Theory and key concepts .....	9
Data driven business development.....	9
Machine learning .....	9
Loan Application process .....	9
State-of-the-art analysis - Technical review.....	9
Summary .....	9
Deveelopment.....	10
Design description.....	10
Concept Overview .....	10
System architecture .....	10
Summary .....	10
Evaluation and results.....	11
Testplan.....	<b>Error! Bookmark not defined.</b>
Simulation .....	<b>Error! Bookmark not defined.</b>
Experimental .....	<b>Error! Bookmark not defined.</b>
Results .....	<b>Error! Bookmark not defined.</b>
Conclusion and Recommendations.....	12
Further work .....	12
references .....	13
Attachments.....	14
Source code.....	14

## INTRODUCTION

## BACKGROUND

Smooth transition to problems statement...

## PROBLEM STATEMENT

Applying for a loan is a tedious process that demands that the applicants are interviewed by a loan officer. This takes up unnecessary time and resources of both the customers and the bank. Is applied machine learning a way for the applicants to get instant response on their loan applications, without having to physically interact with the bank? Will this yield a positive result for the bank, freeing resources and doing as good of a job as the loan officers?

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## GOALS AND OBJECTIVES

The overall goal of this report is to explore the possibility of automating the approval process of loan applications using machine learning.

The following objectives has been set to achieve this:

- Research
  - Evaluate key concepts to be included in the theoretical framework of this paper.
  - Identify state-of-art solutions in relevance with this project. Analyse their evaluations to find elements of interest for this project.
  - Explore similar data sets to the one used in this project to consider further implementation of the model.
  - Investigate the business value of the development of similar systems.
- Development
  - Explore the data set.
  - Structure the system.
  - Pre-process data.
  - Create model.
  - Create app for automatic processing of new loan data.
  - Deploy app.
- Evaluation
  - Evaluate data used for training and testing. Evaluate the similarity to other loan data.
  - Evaluate the model for predicting approval.
  - Evaluate the app and its implementations.
  - Evaluate the business value of this system.
  - Compare machine learning vs programming.
- Recommendations and further work

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## LIMITATIONS

This paper is limited by the data used and the short project scope. The principal of garbage in, garbage out takes full effect in every machine learning project. A model can only be as good as the quality of the data it uses to train. The project spans over three weeks and this will also impact decisions regarding improving the model, and the paper in general.



## THEORY AND KEY CONCEPTS

Present the chapter..... usually the main objective is to present key concepts or underlying

## DATA DRIVEN BUSINESS DEVELOPMENT

## MACHINE LEARNING

## LOAN APPLICATION PROCESS

## STATE-OF-THE-ART ANALYSIS - TECHNICAL REVIEW

## SUMMARY

Present the key results from this chapter

## DEVELOPMENT

Present the chapter.....

in the first hand-in the goal is that you structure the following sub-sections in this report

some examples

## DESIGN DESCRIPTION

### CONCEPT OVERVIEW

Overall description of concept

### SYSTEM ARCHITECTURE

<https://www.lucidchart.com/pages/examples/flowchart-maker>

<https://app.diagrams.net/>

## SUMMARY

## EVALUATION AND RESULTS

Present the chapter.....

in the first hand-in the goal is that you structure the following sub-sections in this report

DATA

Example

MODEL

Example

IMPLEMENTATION

Example

BUSINESS VALUE

Example

## CONCLUSION AND RECOMMENDATIONS

Provide the reader with a reminder of project goal

What has the project group done

What is the key results?

What does the project group recommend based on the work done.

## FURTHER WORK

Imagine you are in charge of project hand-over to a new project group

Provide a section about further work

- Improvements
- Loose threads

## REFERENCES

**Det finnes ingen kilder i gjeldende dokument.**

## ATTACHMENTS

### SOURCE CODE

Key source code

[Link to github](#)