



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Optimizing business intelligence extraction speed from an ERP-system's database

Project plan

Master Thesis in Computer Science

Preliminary dates: 20/1/2015 — 9/6/2015

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Introduction

PerfectIT BeX AB has three products distributed as SaaS-solutions. The three products are:

- BeX Online - a cloud based ERP-system specialized for retail and e-commerce businesses. BeX Online has features for finance, sales orders, purchase orders, inventory/warehousing, business intelligence-reporting and more.
- BeX Retail - a desktop retail application connected to BeX Online.
- BeX B2B - a cloud based system for order handling inbetween businesses.

BeX Online has a module for creating business intelligence reports (referred to as BI-reports) but generating what is considered as large reports is slow and puts a high demand on the system. The company believes that this process could be faster and more effective.

Goal

PerfectIT BeX AB wants the process behind generating these reports analyzed and optimised to improve the speed of the generation and lessen the demands it puts on the system.

Stakeholders

Stakeholder	Name	Mail
Thesis students	Max Åberg & Alexander Söderberg	see frontpage
University supervisor	Alma Orucevic Alagic	alma@cs.lth.se
Workplace supervisor	Lennart Söderberg	lennart@perfectit.se
Examiner	Per Andersson	per.andersson@cs.lth.se

Table 1: Thesis stakeholders

Overall objectives and issues/research questions

The current processes behind generation of the BI-reports must be identified and mapped. This mapping will be analyzed for bottle-necks and inefficiencies. Research will be performed to learn of approaches to solve the problems identified in the analysis. The research will consider as many options as possible to find a long-term solution. These approaches will be analyzed to decide which of them are a best fit and should be used to reach the goal. This will then be implemented in BeX Online and a final analysis should be performed to determine if the goal was met. It is important that the new solution does not affect the front-end interface of the system.

Result list

- Database Description
- Literature and Research
- Solutions
- Solution Software Requirements Specification
- Implementation
- Testing & Validation
- Result
- Discussion

Activity breakdown

#	Activities	Time	Dependent on
A1	Setting up environment	3 days	
A2	Database analysis and Benchmarking	7 days	A1
A3	Database description	7 days	A2
A4	Literature research	7 days	A3
A5	Literature summary	5 days	A4
A6	Possible solutions	14 days	A5
A7	Solution analysis	7 days	A6
A8	Solution SRS	5 days	A7
A9	Solution implementation	21 days	A8
A10	Testing and Validation	7 days	A9
A11	Result and Benchmarking	14 days	A10
A12	Discussion	14 days	A11
A13	Reviewing and improvements	7 days	A12

Table 2: Example of activities

Time schedule

Follow up