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Analysis of a Communication Platform and Design of New Solution on the Example of Fourth-Party Logistics

Master's thesis summary

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Kommunikatsiooni platvormi analüüs ja uue lahenduse kavandamine neljanda osapoole logistika näitel

Magistritöö lühikokkuvõte

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Goal

The master's thesis aims is to work out future solution for handling business communication in a logistics company. The new solution must contribute to the achievement of organizational goals as well as meet users' needs and expectations.

Inside thesis will be identified existing business communication solution's poor and/or missing capabilities and functionalities, which do not support raising stakeholders' and users' demands. To ensure the future solution will contribute to the achievement of company goals, an overview will be given of organizational strategy and initiatives planned to fulfill those goals.

The analysis will be performed to identify the most critical application functions for business, which today are not supported by architectural and functional solution. Next, functional, and non-functional requirements will be identified in collaboration with stakeholders and users. Based on collected requirements will get created personas, user journey maps, use case diagrams, and updated future models of business processes, business information model, architectural vision, and dataflows.

In final chapter will get analysed the profitability of the project, identified possible risks and grounding measures, analysed, and compared alternative solutions, and in the end final solution proposals will be made to the major stakeholders.

Used methodology

To reach the master's thesis goal author used the following methodologies:

- The ArchiMate modeling standard to map and model organizations' strategy; its main value stream; to visualize business processes and application functions they are supported by; applications' architecture (component) diagrams.
- The SWOT analysis to describe organizations' strengths, weaknesses, and coming from outside world opportunities with threats.
- Stakeholders' matrix analysis to identify and map involved stakeholders as well as their importance and interest in the project.
- The OKR methodology to describe organizational goals and desired outcomes.
- The Personas' description and user journey maps to understand better user requirements, tasks, struggles, needs, and working environment.
- The FURPS+ method to classify requirements towards new information system solutioning.
- The MoSCoW method to identify the importance of each requirement and setup priority for each.
- Business glossary, business rules, and Business Information Model (BIM) to visualize business data that will be moving across information systems and will disclose dependencies across those.
- The BPMN notation to describe business processes workflows.
- The Use Case method to visualize how in future solution users (actors) will interact with applications.
- The DFD on context level and 0-level diagrams to show how data flows between different counterparts.

Conclusion

Master's thesis author prepared an overview of the existing AS-IS communication solution, its goals and usage, and mapped users' and stakeholders' requirements towards the desired solution. Based on performed analysis author concluded that the most important requirements for the new solution are the capability to communicate using various communication channels, the capability to view all communication threads in one place in a logically consolidated manner, and a better user experience while using the application. The author analysed existing solution from the angle of users' and stakeholders' requirements and has prepared five final proposals concerning new communication platform solutioning.

The author concludes that the goals established for the current master thesis got solved – critical business requirements and user expectations got mapped, initial architectural vision for the TO-BE communication platform got prepared in collaboration with the department IT architect and major business stakeholders.