CAPSTONE PUBLIC PROJECT SUMMARY

By

Edvin Freud

Submitted to

Central European University

Department of Economics and Business

In partial fulfillment of the requirements for the degree of MSc in

Technology Management and Innovation

Supervisor: Achilles Georgiu

Budapest, Hungary

2021

Table of contents

Introduction	2
Work Done	2
Benefits	4
Key Outcomes	4
Learning experience	4

Introduction

During my Capstone project, I focused on auditing the value streams and IT processes of my client who provides different IT solutions for the public transportation industry. Throughout the project I participated on several meetings and discussion with the new Chief-Technology-Officer (CTO) who tried to review the current development processes and discover the ideal options. The regular weekly meetings included the Development Managers (2) and the Chief (Business) Development Officer. The weekly meetings had three roles: an opportunity for the new CTO to understand the current development flow(a) and prepare a well-defined documentation about the shared understandings (b) and also room for improvement (b).

We talked through the product development phases from the Concept and Initiation stage (1) to the Planning (2) and Execution (3) phases. We did not include Control (4) and Closing (5) into the discussion during the Capstone timeframe.

Work Done

After the regular weekly meetings, I had two major tasks: one is to make notes and summarize what happened during the meetings, highlight for contradictory opinions and key take-aways (a) furthermore to consolidate and draw conclusions (b) based on my university lectures as IT Service Management, Agile Project Management, Scrum Project Management.

As an outcome I provided structured meeting outputs with conclusions and swimlane diagram to visualize the current and ideal processes.

I summarized my output around some of the current IT Infrastructure Library (ITIL v4) main components, such as: Service Value Chain, management practices and four dimensions.

Four Dimensions

Due to the company's sudden growth in the past 5 years the organization could not manage the increased expectations therefor roles and competencies are still missing which results overworked employees. Some departments still work in silos and the employees do not have time to update their skills and competencies. Furthermore, some people have more than one functional hat which should be separated.

Missing human resource has to be replaced by Partners and Suppliers, however even coordinating these service relationships requires expertise, therefor the client's supplier strategy is run by resource scarcity.

From Information and Technology dimension's perspective, the client uses up-to-date technology solutions and tools, however information documentation was not focus at its early years. The client would also like to implement new tools to support some processes automation needs.

During the meetings we mainly talked about the client's current value streams and processes. They consider opportunity and demand generation as one of the main strengths.

Management Practices

We started with the planning phase or Service Design practice, where we discussed all the current activities which related to preparation of the active development. We focused on clarifying the roles and responsibilities during this process and also to create a common understating of different design documentations.

Project Management was mainly focused on Waterfall methodology until some Scrum elements got implemented which resulted a more Agile atmosphere in the organization, however neither Agile as a methodology nor Scrum as a framework has been fully implemented. Due to the incomplete implementation some main roles and events are not welldefined and people in the roles are not well educated.

Currently Release Management is not a documented process, therefor activities and the role of Release Manager have to be defined. We addressed the need of a Release plan and more frequent release schedules which are optimized on sprints. We assumed that more frequent releases will result smaller release packages which can support efficient testing and deployment.

Similar to Release Management, Service Validation and Testing is also not a well-documented and defined process. We discussed the flow and clarified who should be responsible for which testing at which stage. Moreover, we declared business and technical review checkpoints during this process. Despite the fact that the Incident Management is a more matured process with documentation, tools and defined escalation chain, it is difficult to oversee how one resolved issue effects other customers due to legacy systems.

Last, but not least the client would like to focus on a more automated Deployment management practice. Currently the deployment takes too much manual effort and senior expertise, the goal is to create a deployment flow and environment where the developers' presence is not needed for this process.

Benefits

Based on the ITIL Maturity levels the client's current processes are between 2 and 3 which means that some of the processes are repeatable and follow a regular pattern (2), even few of them are standardized and defined (3) with documentation. In order to level up, there are detailed and agreed propositions in the Capstone project presentation.

Key Outcomes

I outlined five possible next steps and priorities for the whole company in order to start a transformation process and address their main organizational issues: Create shared vision about IT Service Management (1), Clarify and implement Project Management improvements (2), Initiate organizational changes (3), Fix integration errors (4) and Finalize Release and Deployment processes (5).

Learning experience

After the lectures I gained hands-on experience from this project / The project brought me a hands-on experience on the lectures and deepened my knowledge about ITIL, Project Management methodologies and frameworks.

I experienced an interesting duality from my two sponsors: The new Chief Technology Officer – who has a deeper understanding of ITIL – was usually open to my approach and suggestions, on the other hand the Chief Development Officer pointed out other – mainly organizational – issues which he believes are the root causes of most of the difficulties they have to face and are at most importance. In my project presentations I involved the opposite and complementary point of views in order to recommend short and long-term solutions.