

Process Optimization by Modeling of Target and Actual Processes for the
Digitalization of an Association's Accounting

Bachelorarbeit

zur Erlangung des akademischen Grades „Bachelor of Science (B. Sc.)“ im
Studiengang Wirtschaftswissenschaft der Wirtschaftswissenschaftlichen
Fakultät der Leibniz Universität Hannover

Name: Burchardt



Vorname: Kira



Prüfer: Prof. Dr. Michael Breitner

Hannover, den 10.08.2018

Content

ABSTRACT	II
LIST OF FIGURES	V
LIST OF ABBREVIATIONS	VI
1. INTRODUCTION	1
1.1 PROCEDURE.....	2
2. THEORETICAL FOUNDATION	3
2.1 FRAMEWORK OF AN ASSOCIATIONS ACCOUNTING.....	3
2.1.1 <i>Financial accounting background</i>	3
2.1.2 <i>Law Restrictions of Accounting</i>	3
2.1.3 <i>General Accounting Tasks</i>	4
2.1.4 <i>Definition of the association in the four-sphere model of charitable status</i>	5
2.2 CHARACTERISTICS OF AN ASSOCIATION’S ANNUAL REPORT	6
2.2.1 <i>Accounting for equity</i>	6
2.2.2 <i>Accounting for borrowed capital</i>	7
2.2.3 <i>Income statement</i>	8
2.2.4 <i>Annex and Management Report as part of the Activity Report</i>	9
2.3 USAGE OF FUNDS AND ASSOCIATIONS GOVERNANCE STRUCTURES.....	9
2.3.1 <i>Use of funds by the association</i>	9
2.3.2 <i>Use of funds as evidence of legal and statutory use of funds</i>	10
2.3.3 <i>Definition of the purpose of the statutes as part of corporate governance</i>	11
3. METHODS	12
3.1 PROCESS MODELLING TOOLS.....	12
3.1.1 <i>Importance of Modeling in Process Management</i>	12
3.1.2 <i>Step-by-step modeling of process models</i>	12
3.1.3 <i>Strategic Process Models</i>	13
3.1.4 <i>Operational Process Models</i>	13
3.1.5 <i>The concept of the process in connection with the "end-to-end" understanding</i>	14
3.2 FOUNDATION OF THE BPMN MODELING.....	14
3.2.1 <i>Definition of Business Process Management</i>	14
3.2.2 <i>Definition of “Business Process Model and Notation”</i>	15
3.2.3 <i>Core Elements of the Business Process Model and Notation</i>	15
3.2.4 <i>Process logic of the Business Process Model and Notation</i>	16
3.2.5 <i>Outline the events used</i>	16
3.2.6 <i>Overview of the use of gateways</i>	16
3.2.7 <i>Activities as an integral part of the process model</i>	17
4. PROCESS OPTIMIZATION THROUGH DIGITALIZATION AND AUTOMATIZATION	19
4.2 ANALYSIS OF THE ACTUAL STATE.....	19
4.2.2 <i>The Outgoing Exchange Flow</i>	19
4.2.3 <i>The Incoming Exchange Flow</i>	23
4.2.4 <i>Reimbursement of expenses, donations and regular cash flows</i>	25
4.3 PROCESS OPTIMIZATION.....	27
4.3.2 <i>Creation of a chart of accounts to standardize the bookkeeping and simplified preparation of annual accounts</i>	27
4.3.3 <i>Automated merging and processing of the various databases</i>	28
4.3.4 <i>Digitization of Incoming and Outgoing Invoices</i>	30
4.4 CHANCES: ANALYSIS OF THE RETURN OF INVESTMENT	32

4.4.2	<i>Monetary Return of Investment</i>	32
4.4.3	<i>Improving labor productivity</i>	32
4.5	CHALLENGES AND RISKS	34
5.	FINDINGS, LIMITATIONS AND CONCLUSION	37
	LIST OF REFERENCES	39
	INTERNET REFERENCES	42
	APPENDIX	44
	PROCESSES	55
	DECLARATION OF AUTHORSHIP	66

1. Introduction

The digitization and automation of processes provides companies of all areas and all sizes with new possibilities for process optimization.

Especially in the finance department, the automation rate is considered particularly high. With 98% of potentially automated work steps, this business unit ranks 671 out of 702 of the least affected by automation.¹

The conversion of the processes brings in particular in enterprise areas, which are strongly determined by laws and regulations, like the finance area, large dangers and obstacles with itself. Thus, the principle of continuity² makes it difficult to fundamentally change core processes and structures over the year. (New chart of accounts, software solution)

Fault-free functionality and availability of the new systems must be guaranteed from the first day of implementation and usage, so extensive testing and customization phases before the go-live are essential.

The automation of the processes also offers the opportunity to analyze and optimize the process steps and sequences of actions through process modeling.

2017 the student organization AIESEC started the project of digitization of financial processes with the aim of dispense the financial staff from the booking tasks and giving them the opportunity to conduct a more intensive controlling and smart investment culture.

Especially for non-profit organizations, a comprehensive controlling is of great importance to obtain tax relief or to be tax-exempt. On the one hand, they must try to obtain financial resources, but on the other hand, they must not make a profit³ in order to not lose their tax benefits.

Process modeling is an appropriate device of gaining a deep understanding of the current processes and thus providing the opportunity to make them more efficient and restructure them. Furthermore, optimized processes are the base for implementing a successful IT project.

The aim of this work is to present the actual processes and to define possible target processes.

¹ Cf. Frey, C., Osborne, M., (The future of employment), p. 71.

² In order to maintain the comparability of the tax rates and the valuation methods of the previous annual financial statements.

³ Cf. chapter below: profit is allowed under clearly defined circumstances.

5. Findings, Limitations and Conclusion

The selected case AIESEC is a special one compared to usual companies because the members do volunteer work, that means the result of this optimization process in the analysis of its costs is limited since the members don't get paid for the extra hours by postponing and stretching the project duration.

The prioritization of this project led to a high temporal postponement of connected projects e.g. the new budget tool which let high risks of system failure arise. Thus, a realistic and detailed planning of the project is necessary. A solution would be a defined risk manager, who could prevent dangers and risks. Technical and functional requirements are needed since the budget is tight or resources are rare, this could be a member of the already existing project team. Another Problem that needs to be tackled is the high security risk, which was significantly lower in physical processes and storage. Manipulation, hacking, spying and data theft is much easier online than it was offline. That means with the digital transformation there is always a need to invest in security management and prevention, e.g. googles verification code, that the entry of a simple password is no longer sufficient to get to the data. Additionally, the correct mobile phone must be available. What the last chapter though us is, even if companies invest as much as possible in security precautions, there is no universal solution found yet. This is a grand challenge that needs to be further researched and analyzed in the next years.

Since there is no comparability with similar projects, the results may not be general but need to be considered critically.

It needs to be considered, that the number of expert talks in the field of optimization is limited to only two, of which both of them had no previous experience with failed projects. An extension of expert interviews with different experiences might show different perspectives on the digitization and uprising risks. In this case, the number of experts having access to the relevant information is limited due to the small number of workers in this department. Furthermore, the results relate only to Germany and the financial sector of associations. Projects from different sectors could be compared with regard to different ways of implementing digitization. An intersectoral study could also explore structural influences on the effect of digitization.

The modeling of business processes in the planning phase of an optimization project offered the opportunity to understand the process holistically and to recognize possible potentials for improvement at an early stage. This was mainly due to the method of strategic process modeling, as it was less important to the correct semantics, but on the simple and comprehensive understanding of the participants was worth.

The modeling not only showed potential for optimization with the direct connection to the finance department but also raised fundamental questions in the processing of customer processes. For example, the modeling of the OGX and ICX flows showed that AIESEC does not have standardized methods for tracking customer interest. It depends on the individual employee whether and to what extent he cares for all his customers. Similarly, in the case of an employee's exit, it is usually impossible to reconstruct the status of a customer in the process without a detailed search in his mail account. In order to solve this problem, many possibilities for the automation of manual tasks in the sending and receiving of messages and for the documentation of the individual process steps could also be identified here.

The modeling of the target processes of the finance department itself clarified the objectives of the project. In addition, it facilitated the later creation of training materials for the potential users. Again, the strategic process modeling was the right choice to understand the partly very

complex processes for anyone without much prior knowledge. Also, the sketching of the combination of the databases increased once again the transparency and the associated understanding of the association members for the project. Although the optimizations still have to prove themselves in practice, it can already be assumed today that the further development of the position of the Chief Financial Officer was driven by optimizing the processes. Further possibilities, which will still arise through the reliable recording of the booking data, are primarily dependent on the ideas and feedback of the employees. The automation in everyday life should be able to provide you with the resources to deal with these topics. Thus, the project has created an additional benefit for the organization. Clearly this bottom-up corporate culture, in which every employee is to be involved in the further development of the association, distinguishes AIESEC for its members.