

THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES



Business Administration Doctoral School

PhD THESIS

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Title of PhD-Thesis:

**APPLICATION POSSIBLE OF PROJECT MANAGEMENT
METHODS IN BUSINESS PROCESSES
IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT**

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a) **Table of contents:**

<u>SUMMARY</u>	5
<u>THANKSGIVING</u>	7
<u>LIST OF ABBREVIATIONS</u>	
<u>TABLE OF FIGURES</u>	
<u>LIST OF TABLES</u>	20
<u>INTRODUCTION</u>	22
<u>PART I: CURRENT STATUS IN THE RESEARCH AREA</u> Fehler! Textmarke nicht definiert.	
<u>1. NEW TRENDS IN PROJECT MANAGEMENT IN THE CONTEXT OF GLOBAL BUSINESS PROCESSES</u>	
<u>1.1 Basics of project management</u>	
1.1.1 <u>Project Management Terms</u>	
1.1.2 <u>Guidelines, standards and process models in project management</u>	
1.1.3 <u>Project Management 4.0 – Process Management, Sustainability, Complexity and Agility in Project Management</u>	
<u>1.2 Process Lifecycle and PDCA Cycle in Project Management</u> Fehler! Textmarke nicht definiert.	
<u>2 METHODS FOR MEASURING THE SUCCESS OF PROJECTS</u>	60
<u>2.1 Necessity of measuring the success of projects and requirements for the design methods</u>	60
<u>2.2 Das Impact Detection & Assessment Konzept</u>	63
<u>2.3 Strategic Project Portfolio Management and Project Excellence Model</u>	66
<u>2.4 Application of the DuPont KPI system in project management</u>	72
<u>2.5 Project Scorecard and Project Performance Measurement Models</u>	74
<u>3 BUSINESS MODEL INNOVATION IN THE CONTEXT OF SUSTAINABLE AND LONG-TERM DEVELOPMENT</u>	
<u>3.1 New trends in business model innovation</u>	82
3.1.1 <u>Basics of business model concepts</u>	82
3.1.2 <u>Differentiation between business model and strategy</u>	83
3.1.3 <u>External influences on business models</u>	84
<u>3.2 New technologies in business model innovation</u>	89
3.2.1 <u>"Crossing-the-Chasm model" for innovation transfer</u>	89
3.2.2 <u>Lean Management</u>	90
3.2.3 <u>Business Model Innovation Canvas</u>	93
<u>3.3 Tools for long-term and agile business model development</u>	94
3.3.1 <u>Factors influencing business model development</u>	94

3.3.2	<u>Changing existing business models and project management through the trends and instruments</u>	98
4	<u>APPLICATION OF PROJECT MANAGEMENT METHODS IN BUSINESS PROCESSES</u>	102
4.1	<u>Basics of Project Management in Processes</u>	102
4.1.1	<u>Basics of project management and control</u>	102
4.1.2	<u>Elements of Good Modeling</u>	104
4.1.3	<u>Modeling Languages</u>	109
4.1.4	<u>The ARIS concept</u>	110
4.1.5	<u>Possibilities of process representation</u>	112
4.1.6	<u>Organization of projects</u>	113
4.1.7	<u>Project resilience</u>	116
4.2	<u>The Technique of Process Performance System Planning</u>	119
4.2.1	<u>Basic elements of process performance system planning based on the process map</u>	
4.2.2	<u>The Process Map</u>	121
4.2.3	<u>The distributed process map</u>	123
4.2.4	<u>Measurement of process performance</u>	123
4.2.5	<u>Recognizing the potential for change – the potential analysis</u>	125
4.2.6	<u>Planning of process performance systems</u>	126
4.2.7	<u>Review of the planned process performance systems</u>	127
	<u>PART II: PERSONAL CONTRIBUTIONS AND STUDIES</u>	128
5	<u>ANALYSIS OF CURRENT APPROACHES TO BUSINESS MODEL INNOVATION IN RELATION TO SUSTAINABLE DEVELOPMENT</u>	128
5.1	<u>Study to measure innovation and predict business performance</u>	128
5.1.1	<u>Context of the analysis and research framework</u>	129
5.1.2	<u>Research Objectives and Research Method</u>	133
5.1.3	<u>Results of the study to develop a metric to predict business performance</u>	138
5.1.4	<u>Results of the study to measure innovation and predict business performance</u>	144
5.2	<u>Analysis of the performance of companies using a market data software</u>	153
5.2.1	<u>Context of the analysis and research framework</u>	154
5.2.2	<u>Research Objectives and Research Method</u>	155
5.2.3	<u>Results of analyzing the performance of companies using market data software</u> ..	156
5.3	<u>Study on Measuring Sustainable Employability - A Concept for Academic Education</u>	169
5.3.1	<u>Context of the analysis and research framework</u>	170
5.3.2	<u>Research Objectives and Research Method</u>	170
5.3.3	<u>Results of the Measurement of Sustainable Employability - A Concept for Higher Education</u>	171

<u>6. ANALYSIS OF THE CHALLENGES AND OPPORTUNITIES FOR PROJECT MANAGEMENT IN TIMES OF SUSTAINABILITY</u>	177
<u>6.1 Study on Measuring the Contribution of Project Management to Business Success: Applying the New Project Scorecard</u>	177
6.1.1 Context of the analysis and research framework.....	177
6.1.2 Research Objectives and Research Method	178
6.1.3 Results of the study on measuring the contribution of project management to the company's success: The new project scorecard	179
<u>6.2 Study on the controlling of key figures and the management of project prioritization</u>	189
6.2.1 Context of the analysis and research framework	190
6.2.2 Research Objectives and Research Method	191
6.2.3 Results of the study on the controlling of key figures and the management of project prioritization.....	191
<u>6.3 A utility analysis to evaluate and select methods to measure the success of projects in companies</u>	199
6.3.1 Context of the analysis and research framework.....	199
6.3.2 Research Objectives and Research Method	199
6.3.3 Results of the utility analysis for the selection of methods for measuring the success of projects in companies.....	200
<u>7. PROPOSAL FOR A MODEL APPROACH FOR THE CONSIDERATION OF SUSTAINABILITY IN THE STRATEGIC PROJECT PORTFOLIO MANAGEMENT PROCESS</u>	206
<u>7.1 Research framework</u>	206
<u>7.2 Concept of the project fingerprint in the context of one's own research</u>	208
<u>7.3 Individual project evaluation by evaluation group experts as part of project portfolio management</u>	210
<u>7.4 Profitability analysis with the help of the ROI determination based on the core processes affected by the projects to be prioritized</u>	217
<u>7.5 Evaluation system for the PM Quickcheck as part of your own research</u> . Fehler! Textmarke nicht definiert.	220
<u>CONCLUSION</u>	226
<u>BIBLIOGRAPHY</u>	234
<u>APPENDICES</u>	259
<u>APPENDIX 1: Table Symbols for Process Modeling</u>	259
<u>APPENDIX 2: Performance of the four beta indices in detail</u>	261
<u>APPENDIX 3: Elements of the Fingerprints project</u>	262
<u>APPENDIX 4: Elements of the Quickcheck project. Summary of the analysis</u>	263
<u>APPENDIX 5: List of Publications</u>	272

b) Keywords:

Project Management, Project Management Methodologies, Business Processes, Business Model Innovation, Project Portfolio Management, Project Scorecard, Sustainable Development, Small and Medium Enterprises.

c) Summary:

For many companies, the evolution of the global economy into a multi-layered world of complexity means a profound change in their business environment. These changes affect not only social and technical changes, but also the economy, which is in the midst of a transformation process from an industrial to a knowledge world, dominated by the requirements of sustainable development. Today, companies operate in an environment that is strongly characterized by interdependencies and dynamic relationships.

The aim of this thesis is to gain practical insights for the process of strategic project portfolio management, which is essential for the long-term success of the company, taking into account the framework conditions in the macro and micro context of companies against the background of sustainability in the field of process/project management, in particular its value contribution to the organization with the help of new methods. The aim is to enable the management of companies to better cope with future challenges, taking into account the increased dynamics and complexity of projects.

Chapters 1 and 2 provide a summary overview of the terminology of project and process management in a scientific context. To this end, the developments, important methods and instruments, internationally valid standards and regulations are presented.

The project management approaches are an answer to the question of how companies can develop further in an economic system subject to constant change by integrating economic, technological, social and organizational elements and keeping an eye on a goal of measuring the success of projects and processes. The chapter also deals discursively with the various possibilities for evaluating projects in the various stages along the higher-level process models.

Chapter 3 dealt with the strategic design level and dimension of the subject area. The results developed and presented in this chapter in the form of the various interpretations of the business model approach offer a perspective on the diverse aspects of strategy for companies. The approaches of technology adaptation and lean management show that the prevailing view of the KEF of the business model understanding must be expanded by supplementing the quality management dimension. This is confirmed by the more comprehensive approach of

the Business Model Innovation Canvas and its acceptance in practice, which also represents a relatively balanced balance between social, economic and ecological model perspectives.

Chapter 4 of the doctoral thesis presents the basic principles of project management in business processes and the technical and organizational determinants in two of the three levels of business process architecture to the conclusion that the adaptability of business models and organizational structures in accordance with clear continuity parameters is considered milestone targets by introducing digital approaches of the ICT industry together with socio-psychological human-related factors and is demonstrably an approach to the transformation of companies against the background of economic viability.

The second part of the thesis in the form of personal contributions and studies ties in precisely with this necessity with the analysis of the current approaches regarding business model innovation in the context of sustainable development and significance for the relationship between process, structural organization and input/out elements of the organizational system. Here, the analysis of the three-stage corporate model level (strategic/tactical/operational) is set against the background of rapidly changing market conditions. Changing economic and ecological influences as well as complex structures of stakeholder behaviour in the form of the data generated in three different industries, each with different metrics or initial parameters for an important core business process as a reference point for the analysis of the value contribution, represent a significant increase in knowledge and knowledge for the conclusions for answering the research questions.

The first study conducts a database of 30 globally active corporations to consider the relationship between innovation and corporate performance as an empirical consideration in historical comparison over more than 2 decades of different key performance indicators, thus showing that there is a correlation between input investigation in core processes on a monetary basis and the allocation of key figures to output parameters. Selection characteristics for R&D projects at the beginning of the development process and interpolation to future market and sales potential and thus long-term profitability exist.

The second of the three studies shows the importance of looking at the perspective from inside the company to outside the organization with a focus on the shareholders as a subset of stakeholders as a result of prototype development in the form of a test of the return development between companies with smaller and higher market capitalizations with the help of different mathematical indices. This is also evidenced by the statement that beyond the limits of financial variables, the implementation of social, ecological and intra-organizational facets into the target/key figure system of hybrid process and project management is

expedient as an intermediate level between strategy and operations. In the third study, this is determined as a cross-organizational derivation of results in the form of a quality-based maturity level classification for the sustainable evaluability of organizational development.

The third study focuses on the education sector and, with the help of a triangulation of literature review, case study and combination of instruments, leads to a new model for the identification of methods and processes for the primary assurance of knowledge transfer between the actors in the higher education environment.

The results of the *sixth chapter* provide the importance of measuring the contribution of project management to the company's success by means of the process model defined for the company by means of the process model defined for the company. Result. It has been proven that project management is one of the key criteria for companies in terms of strategy implementation, environmental consideration, and reflection on goal achievement. It is essential that, based on the KEF of project management, the parameters maturity of process management for project management and the project selection factor are individualized as key factors in order to integrate the causalized quantitative clearly definable cost types of the company in relation to the financially ascertainable process results and the corresponding output results in accordance with the specific organizational input factors in the company's core processes and the associated output results. qualitative output results.

Chapter 7 is the last segment of the thesis and represents the logical consolidation of the knowledge and results gained so far in the form of a novel concept for the consideration of sustainability in strategic project portfolio management, which consists of three elements.

The important element is a comprehensive measurement procedure for determining a multidimensional evaluation for individual projects in the project portfolio management process with the decision factors project evaluation, complexity/risk, project class and project fingerprint. These decision factors are a cumulative result of the KEF's aggregation of project and process management, the objectives of the corporate strategy, the key figures of corporate controlling, the key elements of the business model and selective environmental aspects of the organization. In this way, the input and output factors of the process map and the project portfolio at the tactical level in the previous elaborations of the thesis are brought together at a decision point in order to bring the top-down decision-making process from the strategy and the bottom-up reporting process from the operational level with all currently available information to a maximum degree of coverage between target and actual for optimal project selection. This element answers in a novel way the research question of a system for the

comprehensive consideration of the essential influencing factors as well as the objectives of the company in the evaluation of individual projects.

The model approach for the consideration of sustainability in the strategic project portfolio management process of companies to present the relationship between strategic, operational project management tasks and process control instruments in the sense of sustainability is a core element of the work. In addition, a concept was developed for the assessment of the further development of project management in the company. The benefit of the two-stage concept is to provide SMEs with an instrument that is as simple and comprehensible as possible in order to be able to take into account all essential framework factors of the business model when prioritizing projects and to make the maturity development of project management measurable in the long term.

The doctoral thesis positions itself as an interdisciplinary work in the field of general management and business administration. The focus is not on researching the basics, but on creating practical recommendations for action on the basis of a holistic system approach for medium-sized businesses in the business model environment with sustainable effects on process/project management.

d) Curriculum Vitae



Europass CV

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Professional experience

Period	06/2008 to present
Profession or function	Consultant and Lecturer
Main activities and responsibilities	Management consultant for succession and start-ups, university lecturer
Name and address of the employer	self
Sector of activity or industry	Manufacturing and education sector
Period	02/2005 to 05/2008
Profession or function	Project and Process Manager
Main activities and responsibilities	Staff Unit for Organizational Development and Portfolio Management
Name and address of the employer	Schunk Group, Lauffen, Germany
Sector of activity or industry	Mechanical engineering
Period	09/2003 to 01/2005
Profession or function	Subproject Manager Software Development
Main activities and responsibilities	Coordination of software development projects
Name and address of the employer	Robert Bosc GmbH, Stuttgart, Germany
Sector of activity or industry	Automotive

Education and training

Period	10/2015 -09/2024
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Majors/Professional Skills	Business Administration/ Projectmanagement
Name and type of educational or training institution	Bucharest University of Economic Studies
Period	10/2004-07/2007
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Majors/Professional Skills	Controlling/BWL

Name and type of educational or training institution University of Bratislava

Period 10/1998-07/2003

Name of the qualification obtained Graduate Industrial Engineer

Majors/Professional Skills Business informatics

Name and type of educational or training institution Hochschule Merseburg

Personal skills and competencies

Mother tongue(s) **German**

Other language(s) **English**

Self-assessment

European Level of Competence ()*

Understand		Speak		To write
Hear B3	Read B3	Participate in conversations B1	Coherent Speaking B1	B1

Social skills and competencies Trainer training "DISC"

Organizational skills and competencies Certified Senior Project Manager (IPMA/Level B)
Certified ISO 27001 Auditor

Date: 16th July 2024

Signature *Mathias Scherhag*