

STRATEGIC AND PROCESS MANAGEMENT

Miriam PEKARČÍKOVÁ Peter TREBUŇA Jaroslava KÁDÁROVÁ This monograph was prepared with financial support of the following grant projects

APVV-17-0258 Digital engineering elements application in innovation and optimization of production flows

APVV-19-0418 Intelligent solutions to enhance business innovation capability in the process of transforming them into smart businesses

VEGA 1/0438/20 Interaction of digital technologies to support software and hardware communication of the advanced production system platform

KEGA 001TUKE-4/2020 Modernizing Industrial Engineering education to Develop Existing Training Program Skills in a Specialized Laboratory

CONTENTS

LIST	OF SYMBOLS AND ABBREVIATIONS	7
GLOS	SSARY OF TERMS	8
INTR	ODUCTION	1
1. BA	ASICS OF STRATEGIC BUSINESS MANAGEMENT	2
1.1.	Strategic planning, organization, management	2
1.2.	Strategic cycle of business strategy creation	7
1.3.	Vision, mission and goals of the company	11
1.4.	Exploring the external environment	12
1.5.	Exploring the internal environment	18
1.6.	Overview of legal forms of enterprise and forms of association	24
1.	6.1. Choice of the legal form of enterprise	24
1.	6.2. Brief characteristics of basic legal forms of enterprise	28
1.	6.3 Stock exchange	30
1.7.	An overview of forms of association	36
1.8.	Franchising	36
1.9.	Sale of products and provision of services through the marketplace	39
1.10	. E-commerce	40
1.11	. Doing business in EU countries	42
2. FII	NANCING OF THE ENTERPRISE	44
2.1.	Business financing options	44
2.2.	Optimal capital structure	44
2.3.	Forms of financing an enterprise with foreign capital	47
2.4.	International tax planning - tax optimization	55
3. BA	ASIC AND SPECIFIC TYPES OF STRATEGIES	60
3.1.	Basic strategies	61
3.2.	Strategies to compete with competitors	62
3.3.	Innovation strategies	66
3.4.	Scientific and technological business strategies	69
3.5.	Operational strategies	70
3.6.	Marketing strategies	70
3.7.	Pricing strategies	72

3.8.	Distribution strategies	. 75
3.9.	People (HR) strategy	. 77
3.10	.Stabilization strategy	. 77
3.11	.Revitalization strategies	. 78
3.12	.Retrenchment strategy	. 78
4. S1	TRATEGY IMPLEMENTATION	. 80
4.1.	Balanced scorecard as a strategy implementation tool	. 81
4.	1.1. Balanced scorecard characteristics	. 81
5. PF	ROCESS APPROACH TO MANAGEMENT	. 86
5.1.	History and development of the process approach	. 86
5.2.	Functional vs. process management	. 88
5.3.	The importance of a process approach	. 93
5.4.	Process approach to management	. 95
5.5.	Definition and delineation of the term process	103
5.6.	Basic attributes of a process	106
5.7.	Classification of business processes	109
5.8.	Classification of commercial business processes	119
5.9.	General business process model	122
5.10	. Enterprise information architecture	127
5.11	. Corporate business process life cycle	131
5.12	.ERP systems	135
6. M	APPING, MODELLING AND OPTIMIZATION OF BUSINESS	
PF	ROCESSES	141
6.1.	Mapping of business processes	141
6.2.	Approaches to business process modelling	144
6.3.	Approaches to modelling business activities	147
6.4.	Modelling of production processes	158
6.5.	Process approaches to modelling corporate production activities	160
6.6.	Methods of modelling corporate production processes	167
6.7.	Business process improvement	173
6.8.	Business process optimization and performance	175
6.9.	Measurement and evaluation of process performance	176
6.10	. Business process performance measurement indicators	180
6.11	. Business process performance measurement methods	182

6.12. Continuous improvement of non-production processes
6.13. Modelling, simulation and optimization of non-production processes 193
7. MEASUREMENT AND EVALUATION OF BUSINESS PROCESS
PERFORMANCE
7.1. Measuring and managing business process performance
7.2. Balanced Scorecard - a balanced assessment of performancei
7.3. Model Balanced Scorecard
7.4. Basic perspectives of BSC
7.4.1. Business performance indicators and ratios
7.4.2. Strategy Map
7.4.3. Implementation of the BSC method
7.4.4. Establishing the organizational prerequisites for BSC creation 224
7.4.5. Clarification of the strategy
7.4.6. Creation of the BSC
7.4.7. BSC development
7.4.8. BSC in managing and evaluating the effectiveness of innovations 236
7.4.9. BSC model with attributes of crisis and innovation management in
conditions of small and medium-sized enterprises
8. CASE STUDIES IN THE FIELD OF STRATEGIC AND PROCESS
MANAGEMENT
8.1. Business idea
8.1.1. Choosing a business idea
8.1.2. Choice of legal form of the business
8.1.3. Information about the business
8.1.4. Analysis of the external and internal environment
8.1.5. Strategic Synthesis
8.1.6. Choice of strategies
8.2. Application of the Balanced scorecard to a hospitality business 272
8.2.1. Key performance indicators resulting from the analysis of the
enterprise under study277
8.2.2. Návrh ukazovateľov výkonnosti pre jednotlivé prespektívy BSC 278
8.2.3. Analysis and categorization of losses in the hotel value chain 280
Analysis of hotel value chain losses and application of lean principles 282

8.3. Design innovation and process optimization using the Teamcenter			
software solution	88		
8.3.1. Business process analysis methodology28	88		
8.3.2. Methodology of optimization	0		
8.3.3. Streamlining proposal	1		
8.3.4. Verification of functionality, benefits for the society	2		
8.4. Analysis, modelling, simulation of processes using Tx Plant Simulation			
software	7		
8.4.1. Model 1: A procurement simulation model for demand-driven			
consumption29	8		
8.4.2. Model 2: Simulation model of e-kanban	19		
8.4.3. Model 3: Simulation model of material flow optimization 30	1		
8.4.4. Model 5: Simulation model for verification of the production			
capability of a manufacturing plant and sizing of intermediate			
stocks)7		
8.4.5. Model 6: Simulation model of material flows, verification of			
production capability of the production plant	0		
CONCLUSION			
REFERENCES			

LIST OF SYMBOLS AND ABBREVIATIONS

BI Business Intelligence

BOM Bills of Materials

BPM Business Process Management

CAD Computer Aided Design

CRM Customer Relationship Management

ERP Enterprise Resource Planning

etc. et cetera

EU European Union NP natural person

ICT Information and Communications Technology

IoT Internet of Things

mil. million min. minimum

MPM Manufacturing Process Management

BR Business Register
CC The Commercial Code
PDCA Plan-Do-Check-Act

PDM Product Data Management
PLM Product Life cycle Management

LP legal person

PPM Project Portfolio Management

REA Resource, Event, Agent
SBU Slovak Business Agency
SCM Supply Chain Management
SME small and medium enterprise
SOA Service Oriented Architecture
SPC Statistical Process Control
EC Equity Capital (Equity)

TR Trade Register

GLOSSARY OF TERMS

- **Activity** description of an act/ activity that represents one atomic (indivisible) step in performing the process:
 - manual: human and machine resources,
 - automatic: excluding human resources.

Application - use.

Availability - usability.

Implementation - the process of putting a theoretically determined idea or project into effect for the purpose of its further use.

Activity instance - the representation of an **activity** within a (single) enactment of a process, i.e. within a process **instance**.

Process instance – a particular execution of a **process**.

Business process model is an abstract representation of a business process that allows its further processing in an automated way.

Modelling - reproduction of the characteristics of one object on another object, specially designed for their study.

Optimization - the process of selecting the best variant (candidate solution) from a finite set of alternatives (small phenomena).

Business process - an organized set of procedures, actions and activities that are jointly implemented towards a business resp. strategic goal, usually in the context of organizational structure, it defines functions and relationships between them.

Procedure - a sub-process that is part of a given process.

Process specification:

- formal: a technique allowing to unambiguously specify the process through the precisely defined syntax and semantics of the method used, i. e. models that can be created, stored, processed and used in ERP, respectively WFM systems,
- informal: use of natural language, resp. figures (images), tables and other tools to facilitate understanding the process being described.
- **Task -** a set of complementary skills, assigned to individual activities in order to enable their fulfillment within the execution of the process; a particular task is defined by the behaviour, competencies and responsibilities of individual persons, respectively group of people working in a team.
- **Workflow** automated business process; business process and workflow are interchangeable terms, as their meaning is identical, with the only difference being that workflow is managed and controlled by a customized software solution ERP, resp. WFM; therefore, it also makes high demands on the specification of the process and its accuracy and unambiguity.
- **Resource -** a means, resp. a group of means necessary to carry out activities, resources may be human (labour) resp. equipment (machines).

INTRODUCTION

The current competitive environment is influenced by the dynamics of the innovative or technological environment, as well as personalized demands by customers. This puts increasing emphasis on improving the quality in process management and optimization. Strategic management creates the necessary background for successful implementation of process management. Strategic management creates conditions for achieving the target behavior of the company as a whole, thus supporting a holistic approach within the management of the company. Through strategic management tools used in business practice, such as the Balanced Scorecard, it is possible to implement a particular strategy via the structure of balanced performance indicators used for managing and evaluating process performance.

The very implementation of goals, objectives and projects brought to a successful end and, last but not least, the achievement of desired results are among the basic factors helping a company stand out from competitors nowadays. It is therefore essential that businesses constantly improve their processes. Many companies are currently choosing the path of gradual process improvement, the so-called Kaizen. Such choice is conditioned by regular analysis of the existing processes as well as measurement and optimization of their performance. Industry 4.0 is a clear trend towards a new kind of business processes and e-commerce:

- Decentralized processes with greater decision-making autonomy.
- Electronic trading at every point being an activator of transactions.
- Real-time control of timeless organizational processes.
- Improving the performance and quality of logistics organizational processes integrated into the environment.

Business Process Management (BPM) is a systematic approach to identifying, mapping, documenting, designing, implementing, measuring and controlling business processes. It includes growing IT support aiming to improve, innovate and manage processes thoroughly, determine business results and create value for the customer, thus achieving business goals with greater flexibility. The moment this new industrial revolution digitizes all logistics, purchasing and sales processes, e-commerce will account for more than 90% of global business transactions. In other words, business processes and e-commerce can no longer be managed in isolation, and each service will include digitized processes integrated into the entire network of stakeholders (participants) in the business.

The aim of the monograph is to introduce readers to the issues of strategic and process management, to clarify the concepts related to the topic, as well as procedures in the analysis, modeling, optimization, implementation and performance measurement of production and non-production process environments.