

AN INTEGRATED MODEL FOR IMPLEMENTING A BUSINESS PERFORMANCE MANAGEMENT SYSTEM IN SMES IN AUSTRIA AND SLOVAKIA*

Rudolf Grünbichler¹
Jozef Klučka²

DOI: <https://doi.org/10.31410/EMAN.S.P.2019.159>

Abstract: Purpose – *The purpose of this paper is to propose an integrated model to implement a business performance management system in small and medium sized enterprises (SMEs) in Styria (Austria) and the region of Zilina (Slovakia) taking into account the implementation hurdles encountered in these regions.*

Design/Methodology/approach – *To answer the research question, a multi-stage research design was chosen: After a literature research on implementation hurdles, a **qualitative survey** among small enterprises in Styria was carried out to get the current status. On the basis of a literature review and the results of the qualitative survey a standardized questionnaire was developed and sent to randomly selected SMEs in Styria (Austria) and Žilina (Slovakia). The results serve to **develop an implementation and ongoing improvement model** that takes into account the characteristic implementation hurdles.*

Findings – *The empirical results from the qualitative and quantitative surveys show that many hurdles arise in the implementation process of a BPM system in Styria and Zilina. It turns out that especially companies without a BPM-system, which want to introduce one, underestimate certain problem areas.*

Research limitations – *The survey on the collection of implementation hurdles was limited to the regions of Styria in Austria and Zilina in Slovakia. Referring to the sample size required for the descriptive research design, the number of responses could have been higher (probability of error). The implementation model has to be tested in practice.*

Practical implications – *Almost half of the Austrian companies surveyed do not have a PM-system. That means that they will sooner or later have to reckon with the implementation. It turns out that some problem with the implementation is underestimated by these companies. The model takes these problems into account and can sensitize managers for them. A practical problem will be that the implementation requires a lot of knowhow in different management systems and resources.*

Keywords – *Business Performance Management, Implementation of a Management System in SME, Phase Model, Empirical survey, Austria, Slovakia.*

* This work was supported by the Slovak Research and Development Agency under the contract No. SK-AT-2017-0003. It is a research project funded by the OEAD (WTZ programme) in Austria.

¹ CAMPUS 02, University of Applied Sciences, Department Financial and Management Accounting, Körblergasse 126, 8010 Graz, Austria

² University of Žilina, Faculty of Security Engineering, Univerzitná 8215/1, 010 26 Žilina, Slovakia

1. INTRODUCTION

Business performance management in small and medium sized enterprises (SMEs) reflects queries of top management and owners and also financial constraints and limits in know-how, which is linked also with the lack of qualified employees. The reason for implementation is also requirement to know performance of enterprises key processes and also to maintain long term sustainability and competitive position of an enterprise.

When characterizing SMEs, it is often cited its orientation to technical and technological aspects of production and a product and to suppression of other managerial aspects - financial and marketing [1]. Despite the fact that managerial activities in SMEs are extremely differentiated it can be stated that also because of objective reasons, the business performance management system - agenda is underestimated in many SMEs and it is not paid attention on (mainly due to lack of personnel capacities or for financial reasons).

At the same time, however, under Slovak conditions (and confirmed by our statistical survey), there are many SMEs that apply business performance system in their managerial activities [2].

In this paper will be applied the terms business performance management as complex to business measurement. Business measurement deals with quantification of identified process – key process. Key process is a process that is in relation to enterprise strategy. Business measurement is associated with key performance indicators (KPI). These indicators, therefore, refer to the achievement of the processes, objectives and thus to the achievement of the corporate objectives set out in the company strategy. In addition to the KPI issue, the performance evaluation also addresses the issue of responsibility for the business objectives achieved as well as the competencies and responsibilities of the relevant staff accountable for taking measures and implementing them. Business measurement is thus a condition for the application of business management system in an enterprise. The measures resulting from the analysis of the achieved indicators represent a quantitative basis for applied managerial measures.

2. RESEARCH APPROACH

The aim is to develop an implementation model for small and medium sized companies in Austria and Slovakia, based on the implementation hurdles occurring in these countries. The model also serves the continuous improvement of the Business Performance Management System. For the definition of SME, the recommendation of the European Commission is followed [3]. To answer the research question, a multistage approach was conducted.

First, occurring problems that arose during the implementation of a performance management systems were identified on the basis of a literature review. Literature contains a couple of number of articles in which implementation hurdles are described. De Waal and Counet have identified 31 problem categories on the basis of a literature review [4]. An essential aspect for a successful implementation is the human element and his behavioral factors. De Waal has identified 18 behavioral factors that seem to be important to the successful implementation and use of a performance management system [5].

The identified problems from the literature review were prepared in a qualitative questionnaire with which 15 small entrepreneurs in Styria were asked about the application of a performance

management system. Not surprisingly, none of the companies uses a formalized performance management system. The optimization of the business areas is done intuitively. As key figures used to measure this are sales, profit and customer and employee satisfaction. The latter is not surveyed but subjectively assessed by the entrepreneur himself.

The findings of the qualitative survey and the literature review is the basis for a standardized questionnaire. The questionnaire has a filter so that companies with and without PM can answer the questions.

Austria. At the time of examination 3.785 companies fulfill the criteria of SME in Styria. The required sample for a descriptive study, taking into account the confidence interval of 90%, a sampling error of 5% and an assumed distribution of 50%, is 253. The questionnaire was sent out to 2.519 companies in several replies. Due to the low response rate, telephone calls were subsequently made. The response amounts 107 answered and usable questionnaires. Of these, 62 companies already have a performance management system. 42 have none, where 18 companies plan to introduce a PM-system in the near future and 24 don't.

Slovakia: There were 567 131 SMEs in Slovakia in 2017 [6]. Very similar to Austria the situation was in Slovakia concerning the research data. Due to very limited first round respond rate we applied the second round. In this phase more entrepreneurs were consulted. Filling in the questionnaires were mainly based on personal contacts. The total amount of answers were 179 to 20 questions dealing with various aspects of business performance and its implementation in an enterprise. Because of the fact that not all the questions were answered by entrepreneurs, there is a gap in some questions expecting that total amount of replies will be 179.

3. RESULTS: PROBLEMS IN PRACTICE IN AUSTRIA AND SLOVAKIA

The implementation of a Business Performance System can be described as a process. Many problems occur in the individual process phases.

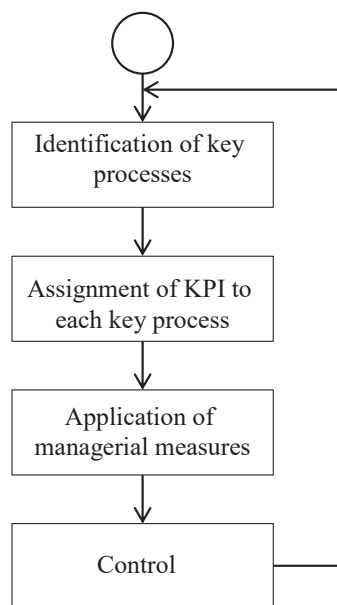


Figure 1. Implementation and running processes within business performance system

The issues in the process can be represented as follows:

- creating a system of indicators for key business processes - performance measurement; performance measurement can be performed with IT support (specialized software) as well as non-computing - without IT support; both approaches are supposed to secure data sources and their processing,
- establishing a business performance system that incorporates achieved results, measuring into an enterprise's management system; to enter tasks and monitor their performance, an internal system (project, agenda) is expected - with or without IT support,

Identification of key processes means clearly define processes associated to core business and also to strategic objectives of an enterprise. In SMEs practice it is often reflected complete misconception on the part of managers. In some applications there were as the key processes identified those that were in relations to responsible field (-s) in managerial activities; there was no clear link to the strategic objectives. At the same time, consideration should be given to the availability of data and the need for the transfer of these data to the responsible employee for the agenda. Application of managerial measures is in fact about KPIs transformation and their interpretation to specific steps assign to responsible employees within an enterprise. The objective of a control is to verify validity of measures and at the same time the correctness of the company's direction with regard to sustainability and competitive position.

Based on the results of the statistical survey [2] and the personal communication of authors with entrepreneurs it can be stated that:

- in a vast majority of SMEs, it is not elaborated the strategy plan/business plan; entrepreneurs/responsible persons were not able to formulate key processes in an enterprise,
- business performance management is mainly focused on measurement of some performance parameters; these ones reflects owners'/CEO' professional preferences,
- decision to business performance system implementation (often associated with the purchase of specialized software) is isolated decision of a member of top management; no managerial framework is developed that would integrate measured results into managerial activities and communication within an enterprise; in practice it means that business measurement is limited – there can be hardly proved results, positive benefits to balance costs derived in business performance system,
- the performance measurement is reduced to selected employees, the information flow in the enterprise is not modified, and the competencies and tasks resulting from the performance measurement are not explicitly defined; in connection with a steady increase in the agenda for a limited number of staff, puts pressure on the rejection of the importance of this agenda; in enterprises dealing with quality management, however, the business performance agenda is up to date.

Figure 2 shows the results of the companies that have a PM-system (n = 62) and those that have none and want to implement (n = 18). It is evident that companies that have not yet dealt with the implementation underestimate certain problems (difficulties in delimiting what is to be evaluated, selection of responsible employees and lack of global thinking in the departments). Certain problems are overestimated, which were not so confirmed by the companies with a PM-System.

Figure 3 shows reasons why a BPM has no yet been or will not be introduced. Companies that do not want to introduce a performance management system have indicated as the most common reasons (multiple answers, total number of mentions = 57): lack of time resources, lack of expertise, no qualified personnel in the company and unclear strategic direction of the company.

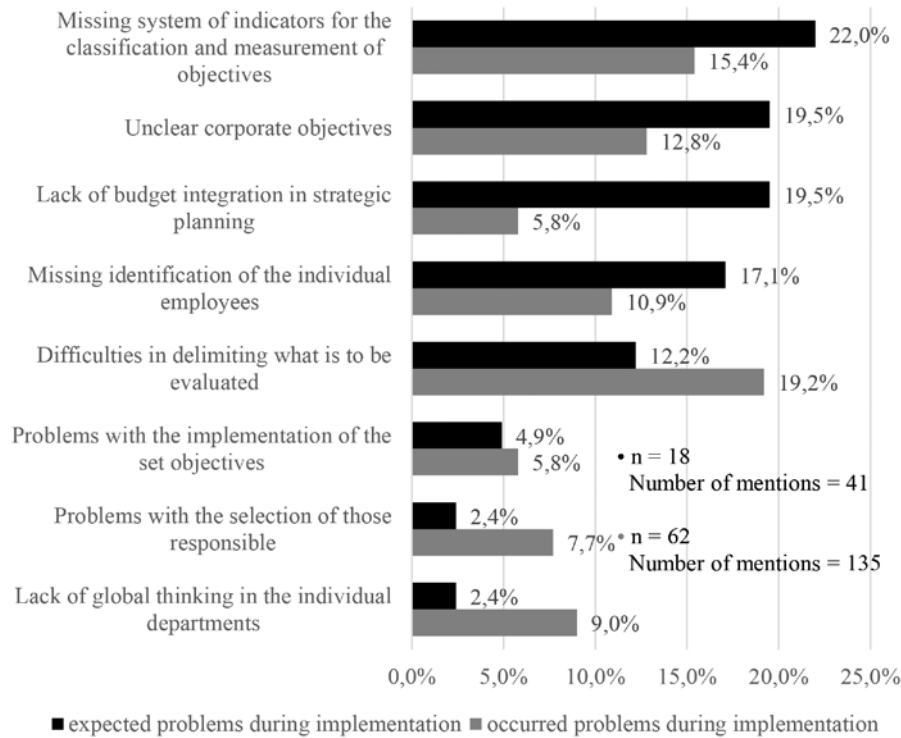


Figure 2. Comparison of problems encountered and expected during implementation

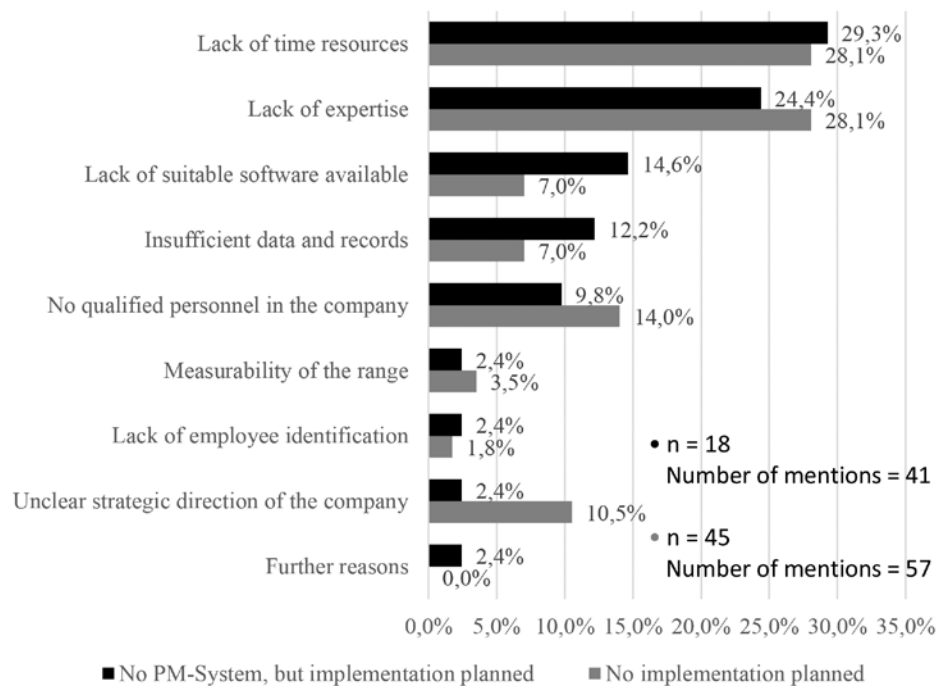


Figure 3. Reasons why BPM has not yet been or will not be introduced

In Slovakia to the question: “We deal with performance management in an enterprise” was replied – regularly (49%), irregularly (25%), not at all (24%).

In implementation were found as the biggest problems following: in assignment of binding tasks related to performance results (49%), in determining the content of the performance - what will be the subject of evaluation (32%) and in determining competencies (19%).

For companies that plan to implement BP in an enterprise they plan to focus on financial measures (40%), measures dealing with satisfaction of customers (8%), measuring of quality of human resources (22%), strategy evaluation (5%), the rest (25%) do not have any ideas.

Surprisingly in 64% of questioning entrepreneurs have an appointed responsible person for the agenda.

4. THE FRAMEWORK OF IMPLEMENTATION

Based on the results of the statistical survey [2], [7], as well as personal interviews with entrepreneurs, the following problems were identified:

- lack of qualified employees,
- lack of managerial communication systems within the results and objectives communicated,
- lack of time and doubts about the benefits of measuring and evaluating performance,
- the content of the agenda is facultative; therefore, a lot of executive employees consider this agenda to be irrelevant / insignificant (in contrast to binding agendas, usually associated with legal standards),
- Unclear corporate objectives,
- Missing identification of the employees,
- Difficulties in delaminating what is to be evaluated,
- Problems with the implementation of the set objectives,
- Problems with the selection of responsible employees,
- Lack of global thinking in the departments.

The problems largely coincide with those described in the literature. De Waal and Counet [4] identified on the basis of a literature review 31 problem categories related to performance management systems implementation:

- (1) Management puts low priority on the implementation,
- (2) The implementation requires more time and effort than expected,
- (3) There are insufficient resources and capacity available for implementation,
- (4) The organization is in an unstable phase,
- (5) The PMS implementation does not have a clear goal,
- (6) Lack of management commitment,
- (7) Period of attention from management for the implementation of the PMS is not long enough,
- (8) Organizational members lack a positive attitude towards the PMS,
- (9) Insufficient commitment from middle management and staff for PMS implementation and use,
- (10) The current ICT system does not support the PMS adequately,
- (11) Organizational members are not adopting the right management style,
- (12) The organization does not have a clear and understandable strategy,
- (13) It is difficult to define relevant CSFs,
- (14) There is not enough focus on internal management and control,

- (15) It is too difficult to decompose goals for lower levels in the organization,
- (16) There is lack of knowledge and skills in regard to the PMS,
- (17) The KPIs are not linked to departmental, team and individual responsibilities,
- (18) It is difficult to define relevant KPIs,
- (19) There are too many KPIs defined,
- (20) The organization measures the wrong KPIs,
- (21) There is too much focus on the results of the implementation, while the change process of the organization is ignored,
- (22) There is resistance from organizational members towards the new PMS,
- (23) There is an insufficient link between the PMS and the reward system,
- (24) The PMS lacks cause and effect relations or is over-complex due to too many causal relations,
- (25) The organization does not have a performance management culture,
- (26) The PMS is not used for daily management of the organization,
- (27) The PMS is not regularly updated and maintained after implementation,
- (28) There is no organizational member appointed to take ownership of the PMS,
- (29) There are difficulties in getting the data to calculate the performance indicators,
- (30) The PMS gets a low priority or its use is abandoned after a change of management,
- (31) The organization does not see (enough) benefit from the PMS.

If the problems are assigned to the phases of the model (Figure 4), it becomes clear in which phases the most problems are.

Phase	Figure of Problem	Cumulative Nr. of Problems
1) initiation and planning	(4), (6), (8), (12), (13),	5
1) & 2)	(15), (17), (18), (19), (30), (31)	6
2) implementation	(1), (2), (3), (5), (7), (9), (22), (28), (29),	9
1) & 3)	(10), (11), (20), (21), (23), (25), (26), (27),	8
3) control	(14), (24),	2
1) & 2) & 3)	(16)	1

Table 1: Problems and their assignment to BP implementation phases

The Table 1 proves that the highest problem related to agenda PM in an organization is the phase implementation. The cumulative number of problems related to phases A) and B) proves the importance and also difficulties in organizations in planning and implementation. Both are related to corporate culture and willingness of top management and employees to improve effectiveness and efficiency in an organization.

In order to compare the situation in Slovakia with findings cited above there were created questionnaires with ambition to:

- a) identify reasons why an organization has not BPM implemented, but it plans do so in the short term,
- b) identify reasons why an organization has not BPM implemented yet,
- c) identify reasons and results in an organization that has implemented and operates BPM,
- d) identify reasons why an organization that implemented BPM has cancelled it.

With the objective to minimize assumptions of failure in implementation of business performance system in SMEs it is further in the paper proposed the procedure that can help SMEs in successful implementation and operation of business performance system in an enterprise. Hence the concept of project management will be applied in implementation and operation of business performance system in SMEs in the Slovak republic.

In this part, besides the general characteristics of the project management phases, the specificities that are relevant to the implementation and operation of the business performance system in the enterprise will be given.

The list of risks faced by enterprises in implementation of projects is as follows [7]:

- lack of support by top management and incompetent work of the project leader,
- missing justification of the project,
- changing conditions of the project,
- lack of resources for development, implementation and routine operation (human, financial, information, etc.).

On the basis of the statistical survey and discussions with SME managers, the most common risks to entrepreneurs in implementing and routine operations were the following identified:

- lack of support for top management and responsible staff,
- unclear and changing expectations,
- due to the project's readiness, implementation and routine operation have not been associated with expected benefits,
- negative enterprise culture and attitude of employees during implementation and operation of business performance management,
- results were not communicated to top-management and the results did not draw conclusions about the practical activities of the company, its employees,
- there was not formally appointed project manager (due to the size of an enterprise it is also possible to talk about informal delegation); it was rather a voluntary initiative of an employee (member of top management) of an enterprise,
- lacking communication relationships necessary for the implementation and operation of the business performance management system; the responsible employee may have not data, competencies or know-how.

As the most important factor was the fact that the company implements the quality management system (usually required by customers). These enterprises have a greater affinity for project management (in general) and have understood the link between quality management and business performance. Therefore, they position to implementation and business performance operation was stated as an unnecessary and burdensome - non-contributory additional benefit for the enterprise.

Based on the implementation problems and the existing implementation models/frameworks (1) three-phases-model for implementing a value-orientated management system [8], (2) phases in developing a performance measurement system [9], (3) framework to assess performance measurement systems in SMEs [10], (4) Reference Model for integrated Performance Management Systems [11], (5) factors and measures for the implementation of a performance management system [12], (6) four-phase process concept for the implementation of a performance management system [13] and (7) St. Galler Management Modell [14] an extended implementation model was developed.

The integrated model consists of three phases (see Figure 4):

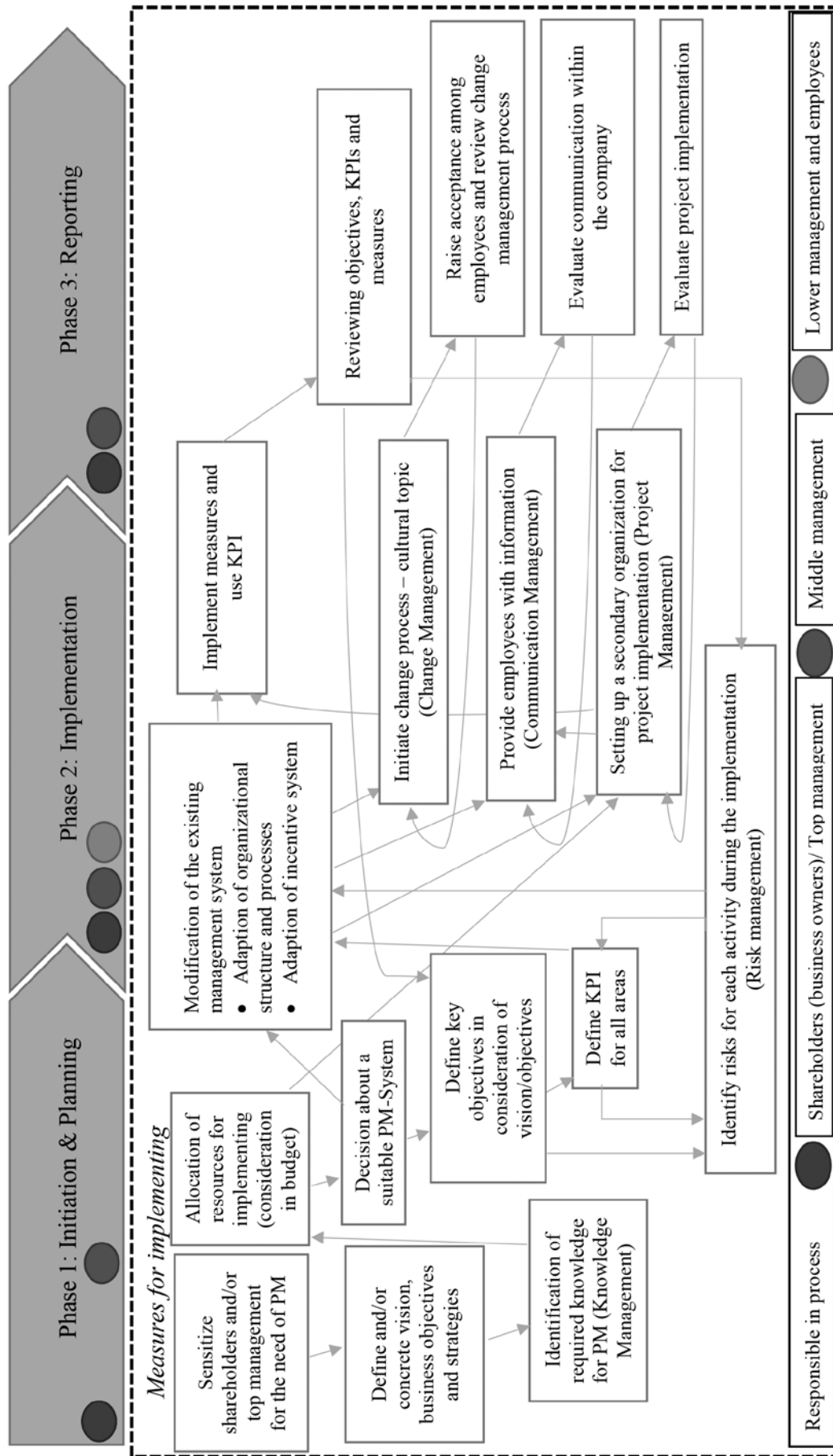


Figure 4. Integrated model for implementation of a performance management system

Phase 1: Initial phase of the project and project planning

The results show that almost a third of the companies with PM were experiencing problems with implementation because of unclear corporate objectives. Independent of PM first step is to formulate clear vision, objectives and strategies. In addition, the most important decision-makers (Top management) must be made aware of this topic.

Before BPM can be introduced, knowledge of the various models, procedures etc. must be acquired. Furthermore, in this phase are defined responsibilities of team members, their objectives, proposed time table for tasks. Allocation of financial resources depends on the size of the team and the explicit goals related to the project.

One of the most important aspect for this phase is the attitude of top management. Positive attitude means that they believe that the implementation of BPM will increase competitive position and makes a company more sustainable.

Phase 2: Implementation

In this phase the performance indicators must be defined. Process owners here are the Top and Middle Management. In this phase it is essential that the performance component is added to the existing management system. This means that changes can also occur in the organizational structure, the incentive system and the existing processes.

Phase 3: Reporting

In the last phase, the implementation of the measures has to be checked. In this context it is of particular interest whether the key figures are suitable, whether the communication works and whether the topic has been accepted by the employees. The results flow back as feedback, which in turn leads to an adjustment of the management system. Important management instruments here are change management and communication management. Referring to the summary drawn from the literature of [15] especially the barriers to change are corporate culture, internal capabilities, technology, availability of necessary resources and capabilities and motivation for change.

4. CONCLUSION AND OUTLOOK

The paper deals with implementation of business performance system in SMEs. Statistical surveys and discussions with SME management in Slovakia show that there are a number of reasons why SMEs do not implement business performance or why they consider it as a non-prospective or relatively in short period of time they cancelled the project due to not delivering the benefits.

It is fundamental that the project meets the objectives of the owners and the executive management. Focusing on key processes and therefore business objectives is essential. Also, the implementation approach is significant - if the implementation decision is isolated by the top management decisions without a competent dialogue, this fact may cause aversion to the implementation of the system; the consensus of all concerned is therefore inevitable - whether in the position of top management or employees to whom the agenda will be assigned.

Therefore, the position of the Project Leader is recommended, and he (she) is guided by the leadership and competence of the whole process in communicating with other responsible persons. Performance ratings may not be reduced to performance measurement; KPIs represent a quantitative expression of the observed key processes indicators. Performance measurement is a subset of the performance management - performance appraisal is focused on applying management measures to strengthen the competitive position and sustainability of the business.

REFERENCES

- [1] Ates, A., Garengo, P., Cocca, P., Bititci, U. (2013) *The development of SME managerial practice for effective performance management*, Journal of Small Business and Enterprise Development 20(1) · DOI: 10.1108/14626001311298402.
- [2] Strelcová, S., Janasová D. (2018) *Hodnotenie výkonnosti podniku*. 23. Scientific conference, FBI, UNIZA Žilina, ISBN 978-80-554-1439-3
- [3] European Commission Recommendation concerning the definition of micro, small and medium-sized enterprises, 6 May 2003 (2003/361/EC).
- [4] de Waal, A. A., Counet, H. (2008) *Lessons learned from performance management systems implementations*, International Journal of Productivity and Performance Management, Vol. 58, Issue 4, pp. 367-390.
- [5] de Waal, A. A. (2003) *Behavioral factors important for the successful implementation and use of performance management systems*, Management Decision, Vol. 41, Issue 8, pp. 688-697.
- [6] *Malé a stredné podnikanie v číslach roku 2017*, (2018) Bratislava, Slovak Business Agency available at: www.sbagency.sk
- [7] Klučka, J., Kelišek A. (2018): *Performance management – discussion to key performance*, In: Production Management and Business Development, Ed. Mihalčová et al., CRC Press, Taylor and Francis Group, London, UK, ISBN 978-1-138-60415-5
- [8] Weber J., Bramsemann U., Heineke C., Hirsch B. (2017) *Wertorientierte Unternehmenssteuerung: Konzepte – Implementierung – Praxis-Statement*, 2nd edition, Springer Gabler, ISBN 978-3-658-15215-4.
- [9] Bourne M., Mills J., Wilcox M., Neely A., Platts K. (2000) *Designing, implementing and updating performance measurement systems*, International Journal of Operations & Production Management, Vol. 20, Issue 7, pp. 754-771
- [10] Cocca, P., Alberti, M. (2009) *A framework to assess performance measurement systems in SMEs*, International Journal of Productivity and Performance Management, Vol. 59, Issue 2, pp 186-200.
- [11] Bititci U./Carrie, A./McDevitt, L. (1997) *Integrated performance measurement systems: An audit and development guide*, The TQM Magazine, Vol. 9, February 1997, pp 46-53, Research Gate, 10.05.2019.
- [12] Bodmer C./Völker R. (2000) *Erfolgsfaktoren bei der Implementierung einer Balanced Scorecard*, Controlling, Jahrgang 2012, Heft 10, pp 477-484.
- [13] Kleindienst B. (2016) *Performance Measurement und Management Partizipative Entwicklung eines Systems zur Steuerung, Analyse und Kontrolle von Unternehmen*, Dissertation, Lehrstuhl Wirtschafts- und Betriebswissenschaften der Montanuniversität Leoben, Leoben, 2016.
- [14] Möller K./Wirnsperger F./Gackstatter T. [2015]: *Performance Management – Konzept, Erfahrungen und Ausgestaltung einer neuen Disziplin*, Controlling, Jahrgang 2015, Heft 2, pp 74-80.
- [15] Kennerley, M., Neely, A. (2002) *A framework of the factors affecting the evolution of performance management systems*, International Journal of Operations & Production Management, Vol. 22, Issue 11, pp. 1222-1245.

