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A research agenda of "EFQM recognized for excellence" recipients in the Czech Republic: The case study of application of business excellence model

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Abstract

The aim of the paper is to provide an overview of the BEMs approach in the Czech Republic and establish the relevance with the issues resulting from the implementation of the EFQM model and selected performance indicators. Using a qualitative methodology, based on case studies, we conducted a detailed analysis of key performance indicators before and after the adoption of the EFQM Excellence Model, as well the company's current state of maturity. As samples for the case study, this research used Czech companies awarded in NQAs in the area of excellence between 2010 and 2016. This study is based on information gathered through an extensive literature review using print media, research databases, and we also employed the available reporting for awarded companies. We systemized the variables of business excellence with the higher impact on organizational performance. In accordance with other studies carried out across Europe, this research found out that internal motivations are the key factors for the implementation of the EFQM Excellence Model. On the basis of selected performance indicators, the positive development of the companies were demonstrated. This study contributes to the management literature on best practices, by highlighting a consistent trend in the use of the EFQM Excellence model, and is expected to help in the development and broadening of the excellence approach in the business environment.

Keywords: Business Excellence Model; environment; EFQM Model Excellence; National Quality Awards; Performance Indicators

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1. Introduction

Organizations everywhere, of all types and sizes, are under constant pressure to improve their business performance using business excellence models (Baris,2019; Yavas & Celik, 2020). These models can be used to assess and improve any aspect of an organization, including leadership, strategy and planning, human resource, information and knowledge management among others. The business excellence models can be used as a business-wide framework in a holistic, focused and practical way (Baykan & Uzunboylu, 2018). Business excellence models are frameworks that when applied within an organization can help to focus thoughts and actions in a more systematic and structured way that should lead to increased performance. The models are holistic in that they focus on all areas and dimensions of an organization, and factors that drive performance. These models are internationally recognized as both providing a framework to assist the adoption of business excellence principles, and an efficient way of measuring how thoroughly this adoption has been incorporated. One of the fundamental questions in the field of business performance is how companies achieve and sustain competitive advantages and pursue business excellence (Zahaf, 2019). The company chooses markets and strategies that maximize its core competencies. It makes choices between competing opportunities based on knowledge of the market and the business environment in which it operates, now and into the future.

In general, the Czech Republic lags in the implementation and use of excellence elements, although these approaches were available to them years ago. The official partners among the EFQM database are as low as ten organizations or companies. The interest in joining the national awards in the NQA system, based on TQM elements and using the European EFQM awarding framework, is growing and the number of award-winning companies is fluctuating. However, the positive experience of the world has so far only convinced Czech entrepreneurs. The EFQM excellence model has not expanded much in the Czech Republic, compared to other developed countries. This is because of low level of knowledge of the EFQM among managers and distrust of the systems. Companies with foreign capital owners mainly use the model, with a significant knowledge base linked to the benefits from TQM and excellence approach issues. However, the Czech entrepreneurs are making their way to the model much easier and cheaper in comparison with their international competitors. The Ministry of Industry and Trade supports the National Quality Award Program. Therefore introduction of the model and participation is widely open to all organizations. The feedback and verification of the company´s excellence level is at a minimum cost.

This paper provides a general approach to explore the appropriateness of business excellence models (BEMs) in Czech environment and investigates whether there is a specific approach to the adoption of best management practices in organizations embedded in the EFQM Excellence Model as a part of national quality awards (NQAs) and to evaluate its impact on their key performance indicators. The aim of the paper is to provide an overview of the BEMs approach in the Czech Republic and find its relevance with the issues resulting from the implementation of the EFQM model and selected performance indicators. Another objective of the current research is to extend the debate in the literature on the financial impact of TQM in the Czech Republic, and to present our own empirical evidence that sheds light on this phenomenon.

Specifically, the objectives considered are:

(1) To identify linkage between excellence approach of organizations and using Business Excellence Models to achieve excellence based on literature review.
(2) To determine the state of the art on Czech EFQM Excellence model scheme.
(3) To identify the relevance of the EFQM with selected key performance indicators.
(4) To develop a case studies based on awarded companies in NQAs and their interconnection to

KPI.

The paper is structured as follows: following this introductory section, the literature review in the area of TQM, excellence issues and improved organizational performance are included in the second section; in the following – third – section, the state of the art on Czech EFQM Excellence model scheme is characterized; in the fourth, the research methodology and its corresponding issues are formulated; the fifth section contains the results of the research, thereafter, in the sixth the discussion and the conclusions with their practical implications and limitations are presented.

2. Literature review

Genuinely excellent organizations are those organizations that strive to satisfy their owners by what they achieve, the way they achieve it, as well as by what they can reach, and by the certainty that the obtained results will be maintained in the future. To achieve business excellence, equal importance should be attributed both to the non-financial and financial measuring of success, instead of focusing on the financial perspective only. Excellence means that what we are doing well today should be done even better and more wisely tomorrow, especially compared to the competition, to fully satisfy all interest groups.

Business excellence frameworks can be described as an integrated sets of proven business practices, designed to increase business performance across a broad range of organizations (Gloet and Samson, 2017). The concepts of business excellence has, for at least three decades, been at the center stage of management theory and practices. Business Excellence is defined as a high level of maturity of a company/organization regarding management and result achievement (Zdrilić and Dulčić, 2016). Business excellence is about developing and strengthening the management systems and processes of an organization to improve performance and create value for stakeholders. Business Excellence is much more than having a quality system in place. It is about achieving excellence in everything that an organization does (including leadership, strategy, customer focus, information management, people, and processes) and most importantly achieving superior business results. Business Excellence is often described as leading practices in managing the organization and achieving results, all based on a set of fundamental concepts or values.

According to Bandyopadhyay and Nair (2015), organizations that successfully implement business excellence develop the ability to respond to change, a capability that was becoming more critical as the pace of change increases. This capability leads to benefits for many of the organization's stakeholders (Tasar et al. 2020). For an organization, excellence should mean evident dedication of leaders and managers to continuous improvement of all critical processes, creativity and innovation, work conditions, teamwork, motivation level and general organizational culture (Zdrilić and Dulčić, 2016). At the employee level, excellence starts with their commitment to achieving results without re-work, readiness to take on responsibility, continuous learning, improvement, and simplicity in everything they do (Carmen, 2018). The fundamental thought, underlying business excellence is the idea that quality should not be focused only on products and services produced by the organization (Evans, 2008). It should be embedded in the practice of organization management, or, in other words, quality should be the fundamental value of the organization's management. If sound management principles are designed and implemented, the consequences should be good results. This idea leads us to the term of performance excellence that can be considered a synonym for business excellence. Performance excellence is associated with the integrated approach to management of organizational performances resulting in the delivery of continuously improved values to customers and stakeholders, thus

contributing to organizational sustainability, increase in the overall organizational efficiency and capacity, as well as organizational and personal learning.

One of the ways to achieve excellence is by using Business Excellence Models (Dahlgaard-Park and Dahlgaard, 2007; Mohammad et al., 2009, 2012). The EFQM Excellence Model is one of the most used Business Excellence Model across European Organizations and presents itself as a practical tool to help organizations on the path to excellence. According to Araújo and Sampaio (2013), the practice of self-assessment is the strategy recommended by the EFQM Excellence Model for organizations aiming for an improvement in organizational performance. Organizations must adopt this assessment cycle and act on a cyclical basis to achieve a genuine and sustainable improvement (EFQM, 2011). The EFQM Excellence Model is the most widely used in Europe and can be considered a holistic and integrative approach, in which strategic, managerial and operational control processes are integrated into the model (Dahlgaard-Park and Dahlgaard, 2007). It covers all the most essential organizational areas and defines exactly what requirements should be fulfilled in these areas. Thus, the model serves as a complex tool of self-assessment and simultaneously an approach to excellence. Self-assessment highlights for the organization the strengths and areas of improvement. The EFQM Excellence Model was updated in 2012 and is structured according to nine different criteria that are grouped under Enablers and Results. Five of those criteria are Enablers, and four of them are Results. The model represents a continuous improvement cycle which affects the entire organization management system. The elements of the EFQM Model create a reasonably clear path that the company must follow to improve its results. Additionally, the EFQM Model is offered as a tool that could be used by managers in the self-assessment process of their organizations (Samuelsson and Nilsson, 2002; Van der Wiele et al., 2000). Self-assessment, using the EFQM Model, helps management to identify strengths and opportunities for improvement which everyone in the organization can address to achieve realistic goals.

There are different views on how to measure organizational performance. According to Kanji (2007) understanding that excellence refers to organizational outcomes and achievements, whereas TQM is a set of principles and practices that guide the organization. The EFQM Model is considered a TQM synonymous by many researchers (Adams et al., 1999; Forza and Filippini, 1998; Hendricks and Singhal, 1996) and a step forward after ISO 9001 certification. TQM has attracted more in-depth attention from researchers over the past two decades according to Duh et al. (2012) based on the studies developed by several other researchers (Cheng, 2009; Eklof and Westlund, 1998; Greising, 1994; Sohal et al., 1993; Wayhan and Balderson, 2007). About this subject, Van Looy et al. (2011) consider that TQM could be defined as something that is both complex and ambiguous. Nevertheless, some essential elements or principles are common to all TQM Models (Gómez et al., 2011; Reed et al. 2000; Sousa and Voss, 2002): customer satisfaction, continuous improvement, top management commitment and leadership, employee's involvement, teamwork, Key Performance Indicators (KPI) measurement and monitoring. Mohammad et al. (2012) defend that organizations use the TQM initiatives to assess and improve their work practices and performance.

Viewed through this lens, quality enables or drives organizational excellence and organizational excellence results – at least in part – from quality. Excellence comes from habit, not singular events or activities. The key is defining the habits that support continued growth and development instead of a set of performance metrics. These habits include (and you may have others to add): strategy, structure, processes, people, recognized, results, customer loyalty, and leadership. Successful organizations can make judgments about the 'balance' of outcomes to be achieved across their key stakeholder groups and reflect that balance in developing and monitoring the value delivered by their corporate strategies. Company performance refers to the metrics relating to how a request is handled, or the act of

performing; of doing something successfully; using knowledge as distinguished from merely possessing it. It is the outcome of all the company´s operations and strategies (Aaltonen and Ikåvalko, 2002).

The success of a business depends on a performance measurement system to improve management decisions and operations (Kertu et al., 2011). According to Kasie and Belay (2013), traditional performance measurements have limits especially concerning the degree of improvement achieved in a company's actual business performance. Company leaders need to develop and implement diverse performance measurement systems, as well as evaluate the limits of traditional assessments. The identification of the cause and effects of a company's excellent or poor performance by utilizing appropriate performance measurement models is essential to organizations (Finley and Buntzman, 1994; Hasanov & Akbulaev 2020). According to Dover Harris and Burchel (2017), a manager´ s desire for performance improvement of employees is often the primary use for a performance measurement system. Whether performance indicators are employed to view a procedure or improve how a company performs, their assessments should connect to a concise strategic goal (Franceschini et al., 2013). Success in the management of performance measurement exists, and performance indicators allow company leaders to determine if they are achieving their desired goals (Tsai and Cheng, 2012). Typically, managers create KPIs based on what has happened in the past (Janes and Faganel, 2013). Four concepts intertwine with developing key performance indicators: (a) customer, (b) financials, (c) internal methods including a company's operation procedures, and (d) learning and growth potential (Tsai and Cheng, 2012; Tandogan 2018). A precise estimate of performance indicators can be employed to forecast the effects of future strategic decisions (Morard et al., 2013). Additionally, the choice of ineffective performance indicator metrics may lower the success and effectiveness of the overall performance measurement system (Gabcanová, 2012).

2.1 The state of the art on Czech EFQM Excellence model scheme

By its Resolution, the Government of the Czech Republic has adopted a program of the National Quality Policy in the run-up to EU accession in 2000. In this Government Resolution, the National Quality Policy is defined as a summary of targets, objectives, methods, and tools to influence the quality of products, services and activities within the national economy and public administration. The Excellence Model of the National Quality Award of the Czech Republic is fully compatible with EFQM Excellence Model (European Foundation for Quality management). This model is a recognized, proven and effective tool for achieving success and international competitiveness both in Europe and elsewhere in the world (Cernohorska & Kubicova 2018). It is based on principles of continuous improvement. Its application implies thorough and objective verification of effectiveness and quality of all activities of an organization and their evaluation not only in terms of meeting customers' requirements but also that of employees and all stakeholders mainly to achieve customer satisfaction and business results. One can assume that application of the Excellence Model of the National Quality Award of the Czech Republic will bring similar results as in the case of holders of EFQM Excellence Award. This is a management tool that serves as a systematic and continuous review of organization's quality as from management to strategic decision making, care for employees and other interested parties ending with key results.

Business Excellence Models are used by organizations to assess and improve their work practices and performance. The National Policy Strategy and the Quality Council of the Czech Republic, which has a very wide professional scope were implemented for these reasons. With regards to all models, the Quality Council of the Czech Republic is the guarantor and initiator of Awards Schemes. The Czech Society for Quality (hereinafter referred to as CSQ) - the national partner of EFQM is a professional guarantor. CSQ is involved in creating the Awards Schemes; it reviews all documentation and manages

the working body's Steering committee that decides upon levels of individual candidates and recommends granting an award. The NQA scheme of each model wit point rating and EFQM Award is shown in the following Table 1.

Table 1. An overview of the Excellence programs in NQA (Source: National Quality Award, 2017)

Programs of NQA	Point rating	National Award	EFQM Award (including number of star)
START	-	Perspective	-
START PLUS	175-299	Perspective	-
	300-1000	Successful	-
START EUROPE	(out of rating)	Perspective	C2E 1*
CAF	29-39	Perspective	-
	40-49	Successful	-
	50-more	Excellent	-
EXCELLENCE	200-299	Perspective	-
	300-399	Successful	R4E 3***
	400-more	Excellent	R4E 4**** / R4E 5****

The first business excellence model is called the Start Model which is designed not only for organizations that have decided to start with systematic improvement of all their activities but also for organizations that have experience with ISO 9001 standard application and are looking for more efficient and effective methods of fulfilling the requirements for efficiency gains, reducing costs and promoting innovation. If this evaluation is positive an organization receives a certificate *Perspective Company* (organization) valid for three years. Subsequently, it can apply to other programs of the National Quality Award – Start Plus and Excellence.

The second business excellence model is Start Plus Model. To obtain information on the company level, the self-assessment is used, and thereafter, both enablers and results are assessed. However, this model requires both separate assessment of a self-evaluation report and subsequent on-site assessment by trained assessors. If this evaluation is positive an organization receives a certificate *Successful Company* (organization) valid for three years. Subsequently, it can apply to Excellence Program, which is the third business excellence model.

In 2014 was launched another program Start Europe which is intended for both public administration organizations and business entities, was included in the program of the National Quality Award of the Czech Republic. Organizations can subscribe to this program at any time during the year. It is based on successful self-assessment and project implementation. Under this program, candidates learn to perform systematic self-assessment using simple tools used in the EFQM Excellence Model and identify strengths and areas for improvement. Candidates who successfully implement improvement of the three projects receive national and international EFQM *Committed to Excellence* Awards.

In Europe, the period after the year "2000" has been characterized by efforts to address the issues of improving the quality in public administration (and the public sector in general) of organizations . The European Institute of Public Administration (EIPA) has issued a *Common Assessment Framework* (CAF) publication in 2002. This model utilizes principles of nine criteria EFQM model. The Quality Council had

this material translated in the same year and realized the first pilot evaluation of two organizations according to this model. It decided that the National Award will be granted also for this model. The National Award of the Czech Republic for the CAF model fully complies with the requirements of EIPA. Next part of the paper introduced research methodology including the formulation of the problem, identification and sample selection, and performance measures.

3. **Research methodology, sample and data**

For the research, filtration and selection of the research, and for analysis of the data, this study used a qualitative methodology (Araújo and Sampaio, 2013) based on the case study. According to the literature review of organizational excellence in European organizations shows that there is a significant variety of studies that are supported in qualitative methodology (Tarı´ & Juana-Espinosa, 2007). We implement the case study methodology, because of its strong ability to capture the dynamics of the phenomenon studied (Eisenhardt, 1989). The stages are the following: (1) Formulation of the problem to be solved with EFQM and linkage of KPI; (2) identification of awarded companies; and (3) evaluation of the selected KPI.

3.1 Formulation of the problem to solve

This first stage attempt to clearly establish the question that is attempted to be answered, as well as to define the linkage of EFQM framework and KPI. No studies are being conducted in the Czech Republic to directly investigate the implications of the implementation of the EFQM management model, so it is significant to focus on NQA-awarded companies and to find out if there are some consequences in financial outcomes. From the formulation of the question arise the objectives to be reached. Due to a lack of studies or research to systemize and demonstrate a positive implementation of the EFQM model, the aim of the research is to carry out an evaluation within the established indicators for the awarded companies in the NQA in the Czech Republic and to identify the main impacts.

Research questions to answer: Does the implementation of the EFQM model have a positive impact on business outputs in the monitored indicators?

3.2 Identification of awarded companies (sample selection)

As in the study conducted by Hendricks and Singhal (1997, 2001) in order to identify firms that have implemented TQM successfully, the analysis is focused on firms that have been recognized for their TQM efforts by quality awards. The system of quality awards is well established within Europe as is evidenced by the EFQM Excellence Model based awards that are awarded at European nations such as the in the Czech Republic. To maintain credibility and the value of the awards, award-giving organizations give awards only to those companies that have implemented the TQM approach in an effective manner. Award-giving organizations typically decide on winners after conducting an independent evaluation and assessment of a company's practices and performance. Thus, winning a quality award is generally an indication that a company has effectively implemented the principles of the TQM (Boulter, Bendel and Dahlgaard, 2013).

For our purpose, we relied on award-winning organizations within the NQA - only companies were selected for mandatory disclosure (annual reports). Period has been set from 2010 to 2016, for comparison, a year before the award was received, up until 2016. Based on this selection, eight

companies that received awards in the EFQM Award were selected from. Category R4E 3 ***, R4E 4 ****, and R4E 5 ****. The companies - AHOLD CR, KERMIs, and Hyundai Motor Manufacturing Czech (HMMC) received more awards during the period under study and are therefore included once. In particular, we included the following: 2010 award (ARAMARK), awards in 2011 (AHOLD Czech Republic, Bosch Diesel, Hyundai Motor Manufacturing Czech, KERMI, the 2013 award (Donghee Czech), the 2014 award (Hyundai Motor Manufacturing Czech, and AHOLD Czech Republic), and in the 2015 was awarded AHOLD Czech Republic, and KERMI).

3.3 Evaluation of the selected KPI (performance measures)

To establish the link between TQM and organizational performance, it is important to consider financial measures (Boulter, Bendel and Dahlgaard, 2013). The financial performance of an organization will be among its most important Key Performance "Outcomes" (Haouam, 2020). Within Kaplan and Norton's Balanced Scorecard four perspectives, the financial perspective has emphasis on measures such as Revenue Growth, Asset Utilization, Growth and Operating Costs, also Non-Financial Outcomes such as "Volume of Products Produced", "Market Share" and "Frequency of Services Delivered" (EFQM, 2011). However, based on the selection of the companies and the availability of annual reports, five indicators were selected to be used for portability before and after the implementation of the EFQM model in award-winning companies. We mainly focus on "business outcomes" of the EFQM with the ratios: EBIT, EAT, ROA, ROS, and Sales (Revenue). ROA, ROS are displayed as a percentage, the others are listed in thousands of Czech crowns. Due to the impossibility of extending non-financial indicators (companies do not publish this information and these data are not involved in the annual reports or other reporting issues within the years and types of organizations monitored – such a complexity database does not exist in the Czech Republic). We gathered the relevant annual reports (with the start of monitoring in 2010, subsequently each year before the award, and then the following years until 2016). Then we used the data in profit and loss accounts and balance sheets for calculating the four selected indicators.

Firstly, we calculated Earnings Before Interest and Taxes (EBIT), which measures the profit a company generates from its operations, making it synonymous with "operating profit." By ignoring tax and interest expenses, it focused solely on a company's ability to generate earnings from operations.

$$EBIT = NetIncome + Interes + Taxes \tag{1}$$

We followed by the indicator earning after tax (EAT), that measure of a company's net profitability. It is calculated by subtracting all expenses and income taxes from the revenues the business has earned. For this reason, EAT is often referred to as "the bottom line."

$$EAT = Total\,\mathrm{Re}venues - TotalCosts \tag{2}$$

Thirdly, the ratio of Return on Assets (ROA) established how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's EBIT by its total assets.

$$ROA = \frac{EBIT}{TotalAssets} \tag{3}$$

The fourth ratio involved in calculation was ROS (Return on Sales) used to evaluate a company's operational efficiency, ROS is used to compare current period calculations with calculations from previous periods. This allows to conduct trend analysis and compare internal efficiency performance over time.

$$ROS = \frac{EBIT}{Sales} \tag{5}$$

The above indicators are based on "profitable" factors and ratability issues. Subsequent research will consider several factors and ratios, including the collection of non-financial indicators. We have calculated the significant financial ratios under which companies are rated in period with business outputs. The following section already presents the results.

4. Empirical results and Discussion

The presented results are based on the calculated values of the selected indicators and are gradually evaluated. Table 2 defines the value of sales (revenue) growth in terms of percentage changes relative to the base year (NQA award, value 100%). This depiction was shown for tracking revenue growth before earnings, up to 2016.

Table 2. An overview of the percentage changes of Sales relative to the awarded year

Company	2009	2010	2011	2012	2013	2014	2015	2016
ARAMARK	90,21%	100,00%	106,12%	105,85%	95,74%	87,83%	16,28%	*
AHOLD CR		97,38%	100,00%	99,05%	97,25%	*	246,77%	*
Bosh Diesel		99,36%	100,00%	101,21%	111,67%	125,87%	132,98%	132,19%
HMMC		71,21%	100,00%	132,53%	139,96%	152,80%	180,57%	205,16%
KERMI		81,17%	100,00%	106,98%	109,21%	109,27%	112,92%	118,90%
Grundfos			91,36%	100,00%	99,72%	107,53%	113,39%	111,23%
Sejong Czech			77,82%	100,00%	103,17%	108,68%	142,73%	163,99%
Donghee Czech				117,37%	100,00%	90,78%	158,55%	210,96%

(Source: own research; * data are not available)

Based on revenue growth, it is evident that companies have grown, only AHOLD CR in 2012 and 2013 stagnating (although they received additional awards). In 2015, the results (when the SPAR was taken over by AHOLD) were already projected, therefore this marked increase revenue of 246% compared to 2011, which was negatively affected by other EAT indicators, to the loss of 1.2 billion Czech crowns. Due to the acquisition, the AHOLD CR for 2014 did not published annual report. The results for 2016 (except for ARMARK, which has dropped significantly from 2015 in just 20 percent in 2015) show that companies have grown and increased their sales, with Sejong Czech, HMMC and Dongee Czech (all from automotive industry). From the point of view of revenue growth, positive trends can be observed (except for ARAMARK, which increased the indicator after the company's award in 2011).

Table 3. EAT indicator of the selected companies (2010-2016) in thousands of Czech crownst

Company	2009	2010	2011	2012	2013	2014	2015	2016
ARAMARK	7 319	8 851	10 948	13 006	14 696	18 126	26 122	*
AHOLD CR		-116 122	5 766	156 225	311 641	*	-1 238 363	*
Bosh Diesel		698 640	205 459	545 832	86 933	396 661	596 219	534 769
HMMC		2 042 632	2 913 630	7 010 019	7 332 731	8 973 365	5 501 276	8 473 229
KERMI		81 855	-18 696	30 882	59 167	33 211	46 160	52 047
Grundfos			25 366	17 644	22 170	15 680	20 810	5 137
Sejong Czech			12 252	28 666	8 994	32 411	62 526	23 699
Donghee Czech				88 145	20 333	35 986	58 052	-15 836

(Source: own research; * data are not available)

Table 3 shows one of the key performance indicators of the EAT monitored by companies. The values stated are presented a year before the award and subsequent periods until 2016. Great fluctuations can be found with AHOLD CR, which is due in 2015 to the already mentioned acquisition with SPAR. If, but we are focusing on results from 2011, in 2012 and 2013, the company was in positive numbers and achieved a significant increase in net profit compared with 2011 (this increase was over 5400 percentage points in 2013). Positive developments are also observed in other companies, except for Grundfos - the decrease in the net sales of CZK 12.5 million compared to 2012. The development of Donghee Czech was also negative, but this was due to significant investments in the company. Overall, the values are positive and companies achieve higher EAT values relative to the values of the initial valuation year.

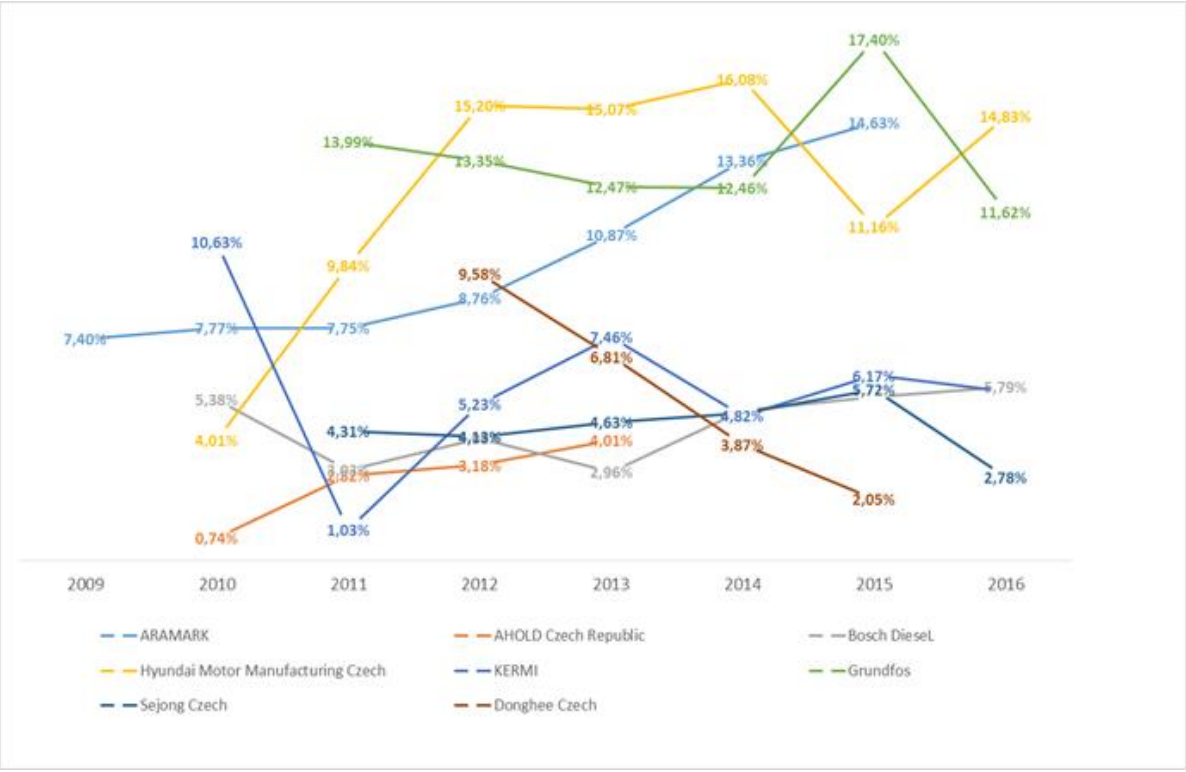

Fig. 1. Development of the ROA ratio in selected companies (in percentage, period 2010 – 2016)

ROA ratio were not counted when negative EBIT occurred (only in two companies: Donghee – in the year 2016, and AHOLD CR – in 2015). Overall, it can be stated (see Figure 1) that the values up to the two monitored periods are positive, that the companies achieve positive results, the profitability of the assets is heterogeneous, values are significantly higher in the company Grundfos (11.62%) in 2016, ARAMARK (14.63%) and HMMC (14.83%). At HMMC, there is a noticeable increase and in 2016 it has reached almost 15%.

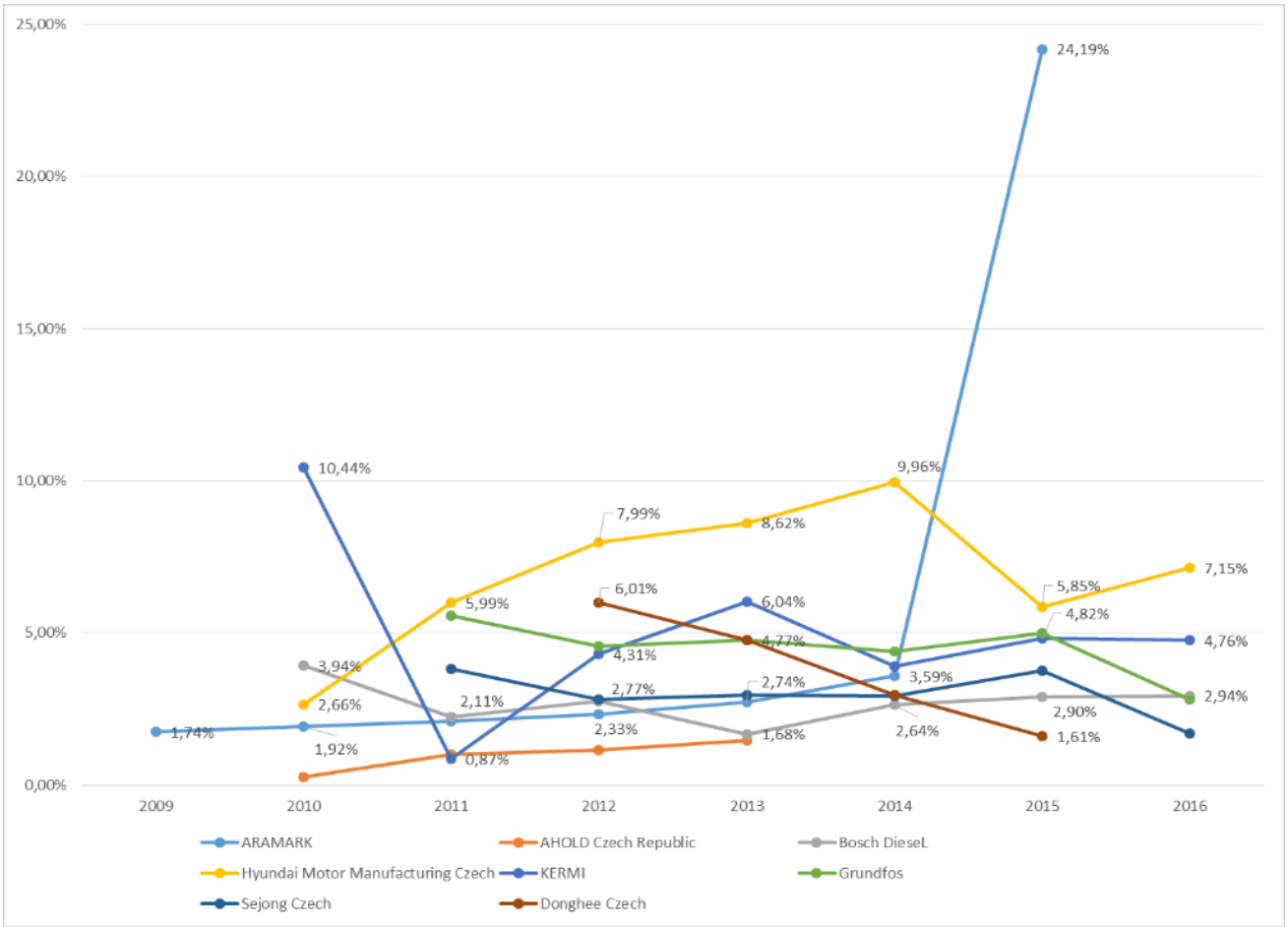

Fig. 2. Development of the ROS ratio in selected companies (in percentage, period 2010 - 2016).

Positive developments were found at Aramark, KERMI, AHOLD CR, Bosh Diesel, and Sejong Czech. In summary, the positive developments have been observed, with the development of Donghee Czech's asset profitability, even with the negative EBIT value in 2016.

At the monitored indicator of return on sales (ROS) there are positive results (see Fig. 2), even if they are not in the required amount, for us there is a significant positive trend, that the companies achieve positive and slightly rising values (the first calculated value is before the year of the valuation obtained). ROS in the monitored periods is positive and only moderate values have been found, only with Donghee, a negative, declining trend is observed. Due to the variables monitored, this indicator shows that the valuation gains obtained, companies either retained the same ROS or slightly increased, with the exception of ARAMARK, which reported profitability of 24.19% in 2015, while other companies have a lower score on the percentage score, with this trend being positive.

Based on monitored trends of selected indicators, we can summarily state that the positive trend in selected financial indicators is valid. From a deeper and more detailed analysis, it can be observed that negative EAT, and EBIT values are due to large investments in production (Donghee Czech), which was negatively reflected in other monitored indicators. For other companies, especially ROA and ROS, positive trends apply. Based on the research question, it can be traced from the results of the values that the positive trends prevail, that is, the companies have gained positive results in the following monitored periods since their received NQA. We identify the area of report availability, for example, the unavailability of reports with AHOLD CR, including the realization of its acquisition with SPAR, which was negatively reflected in the monitored EAT and EBIT indicators.

5. **Conclusions**

This paper pointed out results related to the gaps identified during the literature review and contributed to one of the maturity state (category Excellence in Czech NQA program) research of the Czech companies recognized by the EFQM Excellence Model. The model is a practical tool that aims to position the company on the path to excellence, identifying their strengths and helping them to understand their present and future improvement areas, encouraging the identification of solutions towards continuous improvement. The positive developments and tendencies can be confirmed, especially for ROS and ROA. The values of the EBIT and EAT indicators may be somewhat distorted, such as high investment costs, reinvested free funds, or the impact of the type of industry on the target B2B or B2C markets, static outputs in monitored periods, including pre-acquisition, then until 2016.

It has also been confirmed that only selected indicators cannot be examined as a complex approach, which is a limitation of the research carried out. These backgrounds will be further developed to identify other EFQM output categories. From the perspective of availability of information, we refer to publicly available information from the report. Subsequent research will be focused on the projection of the partial examining characteristics and the search for connections in terms of customer, employee, and other KPIs.

Another conclusion that we would like to point out is that the approach to quality management can influence the complexity of the KPI indicators. In summary, we found the positive relation in selected financial indicators after receiving awards. In terms of the Czech Republic, although the NQA system is in place, Czech companies are not so interested, even though they can get feedback and work on their approach within the set criteria of the EFQM model in NQA. In conclusion, excellence is not a theoretical concept, but is made of organizational culture, values and people, which cannot be defined by a standard. The sample of Czech awarded organizations were characterized by a positive trend, especially in ROS and ROA, which can be linked to the research that has already been carried out in the possibilities of expanding the monitored indicators and co-operation with the awarding subjects on the creation of the best practices.

6. Recommendations

From the results of the research, this study found out that most of the companies that used the quality management systems improved their finances the years after they received their awards. Most Czech companies, however, are not interested in the use of NQA systems in the running of their businesses. The results of this research can be presented in in a form of a presentation during award ceremonies, to encourage other companies in the Czech Republic to pay attention to quality management procedures. It can also be taught to students in preparation for the work world, as suggested by Pogonyshev et al. (2018) in their research on how to train students with European standard procedures in employment.

This research measured the performance of a business based on their financial returns. Although business performance is mostly measured by the financial returns, there are other factors that can be used to analyze the improvement in business operations, such as improvement in internal methods, employee's improvement, among others. This research therefore recommend that future researchers make analyze the improvement in business performance of companies that use the quality management systems, basing their judgements on other aspects of the business, other than the finances. This would help to have an unbiased judgement, based on a broader benchmark of success.

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References

Aaltonen, P., Ikåvalko, H., 2002. Implementing Strategies Successfully. Integrated Manufacturing Systems 13, 415-18.

Adams, G., Mcqueen, G., Seawright, K., 1999. Revisiting the price impact of quality awards. Omega 27. 595–604.

Araújo M., Sampaio P., 2013. The path to excellence of the Portuguese organisations recognised by the EFQM model. Total Quality Management & Business Excellence 25, 427-438.

Bandyopadhyay, P. K., Nair, S., 2015. Impact of Business Excellence Model on Firm's Business Results (Findings from Literature Survey and Research Agenda). International Journal of Economy, Management and Social Sciences 4, 233-236.

Baris, S. (2019). Innovation and institutional quality: Evidence from OECD countries. Global Journal of Business, Economics and Management: Current Issues, 9(3), 165-176. https://doi.org/10.18844/gjbem.v9i3.4364

Baykan, H., & Uzunboylu, H. (2018). Administrator's Management Preferences and Management Theories. IIOAB Journal: A Journal of Multidisciplinary Science and Technology, 9(3), 21-29.

Boulter, L., Bendell, T., Dahlgaard, J., 2013. Total quality beyond North America. International Journal of Operations & Production Management 33, 197 – 215.

Carmen, V. (2018). Training and Employability: What are the LSPs looking for and what can the graduates offer? International Journal of Innovative Research in Education, 5(1), 1-10. https://doi.org/10.18844/ijire.v5i1.3461

Cernohorska, L., & Kubicova, D. (2018). M3 as an economic indicator in the Eurozone. New Trends and Issues Proceedings on Humanities and Social Sciences, 5(2), 57-66. https://doi.org/10.18844/prosoc.v5i2.3654

Cheng, J., 2009. Six sigma and TQM in Taiwan: An empirical study of discriminate analysis. Total Quality Management & Business Excellence 20, 311–326.

Dahlgaard-Park, S.M., Dahlgaard, J.J., 2007. Excellence – 25 years evolution. Journal of Management History 13, 371–393.

Dover-Harris, S. Burchel, J. M., 2017. Performance evaluation: An analysis of performance review measures using the European Foundation for Quality Management Model. Management 7, 118-125.

Duh, R.R., Hsu, A.W. H., Huang, P.W., 2012. Determinants and performance effect of TQM practices: An integrated model approach. Total Quality Management & Business Excellence 23, 689–701.

Eisenhardt, K.M., 1989. Building theories from case-study research. Academy of Management Review, 14, 532–550.

Eklof, J.A., Westlund, A., 1998. Customer satisfaction index and its role in quality management. Total Quality Management 9, 80–85.

Evans, J. R., 2008. Quality & Performance Excellence: Management, Organization and Strategy. In: Mason (5th Ed), Thomson South Western.

Finley, L., Buntzman, G. F., 1994. What does affect company performance? Arkansas Business and Economic Review 27 Retrieved from http://www.arkansasbusiness.com/.

Forza, C., Filippini, R., 1998. TQM impact on quality conformance and customer satisfaction: A causal model. International Journal of Production Economics 55, 1–20.

Franceschini, F., Galetto, M., & Turina, E., 2013. Techniques for impact evaluation of performance measurement systems. International Journal of Quality & Reliability Management 30, 197-220.

Gabcanová, I., 2012. Human resources key performance indicators. Journal of Competitiveness 4, 117-128.

Geraedts, H., Montenarie, R., Van Rijk, P.P., 2001. The benefits of total quality management. Computerized Medical Imaging and Graphics 25, 217–222.

Gloet, M., Samson, D., 2017. Linking Knowledge Management, Business Excellence, and Innovation Performance. Proceedings of the 50th Hawaii International Conference on System Sciences. Hawaii, Waikoloa: University of Hawaii at Manoa, 4536-4545.

Gómez, J.G., Costa, M.M., Lorente, Á. R. M., 2011. A critical evaluation of the EFQM Model. International Journal of Quality & Reliability Management 28, 484–502.

Greising, D., 1994. Quality: How to make it pay. Business Week 3384, 54–59.

Haouam, D. (2020). IT governance impact on financial reporting quality using COBIT framework. Global Journal of Computer Sciences: Theory and Research, 10(1), 1-10. https://doi.org/10.18844/gjcs.v10i1.4143

Hasanov, N., & Akbulaev, N. (2020). Innovative development of key sectors of economy based on the creation of technological parks in the Republic of Azerbaijan. New Trends and Issues Proceedings on Advances in Pure and Applied Sciences, (12), 44-56. https://doi.org/10.18844/gjpaas.v0i12.4986.

Hendricks, K., Singhal, V., 1997. Does implementing an effective TQM program actually improve operating performance? Empirical evidence from firms that have won quality awards. Management Science 43, 1258-74.

Hendricks, K., Singhal, V., 2001. Firm characteristics, total quality management and financial performance. Journal of Operations Management 19, 269-85.

Hendricks, K.B., Singhal, V.R., 1996. Quality awards and the market value of the firm: An empirical investigation. Management Science 42, 415–436.

Introducing the EFQM excellence model: EFQM 2011. Retrieved from www.efqm.org

Janes, A., Faganel, A., 2013. Instruments and methods for the integration of company‟s strategic goals and key performance indicators. Kybernetes 42, 928-942.

Kasie, F. M., Belay, A. M., 2013. The impact of multi-criteria performance measurement on business performance improvement. Journal of Industrial Engineering and Management 6, 595-625.

Kertu, L., Haldma, T., Moeller, K., 2011. Performance measurement patterns in service companies. Baltic Journal of Management 6, 357-377.

Looy, A., Backer, M., Poels, G., 2011. Defining business process maturity. A journey towards excellence. Total Quality Management & Business Excellence 22, 1119–1137.

Mohammad, M., Mann, R., Grigg, N., & Wagner, J.P., 2012. Business excellence model: An overarching framework for managing and aligning multiple organizational improvement initiatives. Total Quality Management & Business Excellence 22, 1213–1236.

Mohammad, M., Mann, R., Grigg, N., Wagner, J.P., 2009. Selection of quality improvement initiatives: An initial conceptual model. Journal of quality measurement & analysis 5, 1–14.

Pogonyshev, D., Storchak, T., Nemchinova, N., & Pogonysheva, I. (2018). Applying best European practices of engaging employers in training future professionals in Russian higher educational institutions. Contemporary Educational Researches Journal, 8(4), 174-180. https://doi.org/10.18844/cerj.v8i3.3822

Reed, R., Lemak, D.J., Mero, N.P., 2000. Total quality management and sustainable competitive advantage. Journal of Quality Management 5, 5–26.

Samuelsson, P., Nilsson, L.E., 2002. Self-assessment practices in large organizations: Experiences from using the EFQM Excellence Model. International Journal of Quality and Reliability Management 19, 10–23.

Sohal, A.S., Ramsay, L., Samson, D., 1993. Quality management practices in Australian industry. Total Quality Management 3, 283–299.

Sousa, R., Voss, C.A., 2002. Quality management re-visited: A reflective review and agenda for future research. Journal of Operations Management 14, 91–109.

Tandogan, M. (2018). Career Planning and Management in Businesses. International Journal of New Trends in Social Sciences, 2(2), 58-65. https://doi.org/10.18844/ijntss.v2i2.3818

Tarı´, J.J., Juana-Espinosa, S., 2007. EFQM Model self-assessment using a questionnaire approach in university administrative services. The TQM Magazine 19, 604–616.

Tasar, A., Tengilimoglu, D., Ekiyor, A., & Guzel, A. (2020). The relationship between leadership styles and organisational citizenship behaviour of healthcare professionals: Case of Mus State Hospital. International Journal of Emerging Trends in Health Sciences, 4(1), 11-18. Retrieved from https://un-pub.eu/ojs/index.php/ijeths/article/view/4966

Tsai, Y., Cheng, Y., 2012. Analyzing key performance indicators (KPIs) for e-commerce and Internet marketing of elderly products: A review. Archives of Gerontology and Geriatrics 55, 126-132.

Wayhan, V.B., Balderson, E.L., 2007. TQM and financial performance: What have empirical research discovered? Total Quality Management & Business Excellence 18, 403–412.

Wiele, A., Williams, A. R. T., Dale, B.G., 2000. ISO 9000 series and excellence models: Fad to fashion to fit. Journal of General Management 25, 50–66.

Yavas, T., & Celik, V. (2020). Organisational learning: A scale development study. Cypriot Journal of Educational Sciences, 15(4), 820 - 833. https://doi.org/10.18844/cjes.v15i4.5062

Zahaf, A. (2019). The design process: A global vision versus a fragmentary vision. Global Journal of Arts Education, 9(1), 17-21. https://doi.org/10.18844/gjae.v9i2.3997

Zdrilić, Ž., Dulčić., 2016. Business Excellence as a Success Factor for the Performance of Large Croatian Enterprises. Management 21, 145-162.