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EMPIRICAL EVIDENCE FOR THE IMPACT OF ORGANIZATIONAL CULTURE ON PROCESS QUALITY

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EMPIRICAL EVIDENCE FOR THE IMPACT OF ORGANIZATIONAL CULTURE ON PROCESS QUALITY

Completed Research

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Abstract

Organizational Culture (OC) plays an increasingly important role in both literature and practice of BPM. Hence, companies and other organizations should be aware of their culture and the underlying values and perceptions which might influence the success of BPM initiatives. This paper addresses these issues and presents empirical evidence for the impact of OC on the quality of business processes. For this purpose a questionnaire survey has been conducted combining the assessment of OC and perceived process quality. Based on a sample of 145 employees of a financial services company, the results give clear empirical evidence that there is a strong positive influence of OC on the perceived quality of processes in an organization. Regression analyses show high explanatory significance for three of four organizational culture dimensions. The highest explanatory impact on process quality is given by the strategic orientation of an organization, followed by the structural conditions and the general management and leadership in an organization.

Keywords: Organizational Culture, BPM, Process quality.

1 Introduction

Business process management is a multidisciplinary field which developed over time from a rather IT-driven approach to a broader managerial topic. Nowadays the concept of BPM is to be understood as a holistic and distinct research topic and management approach (Armistead et al., 1999; Lederer and Goeke, 2011). Thus, it includes manifold aspects such as legal, economic, and especially human and organizational facets (Rosemann and vom Brocke, 2010). In this vein, the aspect of Organizational Culture (OC) plays an increasingly important role within the research on holistic BPM (vom Brocke and Sinnl, 2011). OC is seen as a key factor to support the achievement and maintenance of effectiveness and efficiency of business processes (Schmiedel et al., 2013). A major reason why many process-related projects failed and still fail is the insensitivity concerning cultural values guiding the attitude and behavior of the employees involved (Cao et al., 2001; Lee and Dale, 1998). The performance of an organization is driven by the co-action of people and processes, which is characterized by the company's culture. Therefore a holistic BPM approach in terms of a strong process orientation in an organization resulting in effective and efficient business processes has to fit in the corresponding OC (Armistead and Machin, 1997).

Baisch (2010) evaluates the process orientation in organizations via a BPM maturity model. According to him, an organization with a mature process orientation possesses a level of fully developed and mature process excellence. This means a high level of process skills of the employees and a personal responsibility for the management of processes as part of the company's culture. Such organizations are expected to be faster in the production and delivery of their goods and services, more flexible to respond to customer needs and market changes and do better in meeting service and quality standards (Hammer and Champy, 1993; Braganza and Bytheway, 1997). In other words, such organizations feature a high process quality in terms of effective and efficient business processes with a strong customer and service orientation. High process quality can only evolve in companies with an appropriate OC serving as an orientation and action framework for the employees of the organization (Picot, 2002). Consequently, understanding the OC and its relation to BPM and business processes with a high degree of effectiveness and efficiency contributes to the success of a company.

Despite the awareness of its importance, the aspect of OC and its dimensions is still under-researched in BPM literature. In a comprehensive literature review we analyzed and determined the status quo of scientific literature concerning the interrelation of business process management and OC (Grau and Moormann, 2014). Even though the results of this review give clear evidence that the interrelation between BPM and OC exists, we found considerable differences in the perception of the direction and underlying mechanisms of this interrelation: There are several authors supporting the opinion that OC influences BPM, whereas others state that BPM influences OC. Some authors even suggest the existence of a distinct BPM culture in organizations. These differences reveal that the interrelation is still under-researched, as neither the direction of influence nor the empirical evidence for the interrelation has been clarified (Grau and Moormann, 2014). Additionally, the review shows that almost all studies addressing this interrelation are based on qualitative interviews of few selected managers of the analyzed firms or even on simple assumptions and missing empirical evidence. Thus, the exact mechanisms of the interrelation between OC and BPM based on empirical data are currently unexplored, as previous research has to the best of our knowledge not focused on this issue.

The presented paper addresses this research gap by analyzing this relation in a large scale empirical study. In this way the paper aims at serving as a valuable source for deeper insights and further discussions in this field of research.

The paper is organized as follows: Chapter 2 examines the theoretical background of the concept of OC. Based on this concept we develop the research hypotheses in chapter 3. Chapter 4 describes the research method. The results of the study are presented in chapter 5. In chapter 6 we discuss our findings, the contributions to theory and practice and the limitations of our study. The paper concludes with a short summary and avenues for future research in chapter 7.

2 The concept of organizational culture

In the following the foundation of OC is briefly described as the theoretical background serves as a basis for a thorough understanding of our research. OC may be described as a pattern of basic assumptions discovered and developed in an organization while this organization is about to learn how to validly deal with internal and external challenges (Schein, 1990). Denison (1996) defines OC in a similar way as a fundamental structure in organizations which is based on the common values, beliefs and assumptions of its employees. Thus, OC is organization-specific and can be seen as a rather constant, though not unchangeable factor, influencing the behavior of the employees within an organization (Beugelsdijk et al., 2006).

Schein (1995) explains how and why cultures develop within organizations by describing the need for integration and sense in the actions of an organization's members. This essential need for integration leads to the evolution of shared elements such as shared values, beliefs and procedures which prove

successful and therefore are asserted over time. Such shared elements are transferred to new organization members as part of the socialization process. Schein (1995) developed a model of interdependent cultural levels based on this explanation which is a fundamental model in organizational psychology. OC in the present study is to be understood according to Schein's model and definition of OC.

According to this model, OC can be analyzed on three levels: The first level of visible artifacts contains cultural phenomena on the surface level such as symbols, language or architectural elements within an organization. In order to interpret the cultural meaning of such artifacts it is indispensable to know and understand the other levels of OC. The second cultural level consists of shared values and norms, strategies and philosophies and is based on moral and ethical ideals transmitting a feeling of what is right or wrong. These values serve as an orientation framework that influences attitudes and behavior of the organization's members. The third level includes unconscious assumptions and taken-for-granted conceptions of the whole society which can be seen as a starting point on which all values and actions are based. Organizations within the same society do not differ strongly with regard to these basic assumptions (Schein, 1995). This is why most instruments for the assessment of OC focus on the first and second level of OC.

Thus, OC can be seen as a construct shared by the members of the organization consisting of the common prevailing conventions, representing the organization's identity and transporting unexpressed standing orders as to how the organization's members act and work together. Except for the cultural level of visible artifacts, OC is described as a rather latent construct which means that it is not directly observable (Schein, 1995).

3 Hypotheses

As shown in chapter 1, there is a broad consensus in the literature, that cultural aspects are a key factor for the success or failure of BPM projects (Lee and Dale, 1998; Al-Mashari and Zairi, 1999; Zucchi, and Edwards, 1999; Llewellyn and Armistead, 2000; Sidorova and Isik, 2010; Kohlbacher and Gruenwald, 2011). Thus, the successful implementation of process management in an organization assuring a high level of process quality has to match with an appropriate OC (Armistead and Machin, 1997; Baisch 2010). Based on this background the following hypothesis is derived:

H1: OC impacts business process management in a way that there are certain OC characteristics being supportive for a high level of process quality.

Therefore, we assume process quality to be the dependent variable influenced by OC as the independent variable (see Figure 1).

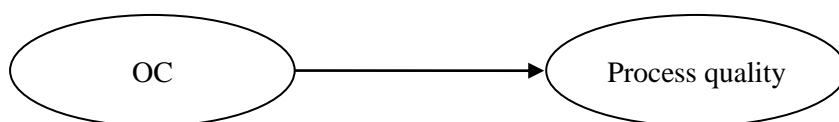


Figure 1: The impact of organizational culture on process quality

To analyze the impact of OC, which is defined as a latent construct consisting of not directly observable values and norms guiding the actions of the organization's members (Schein, 1990; Schein, 1995; Denison, 1996), OC has to be operationalized. Despite the long lasting dispute in academic research how to operationalize, assess and deeply understand the culture of an organization (Denison and Spreitzer, 1991; O'Reilly et al., 1991), there are more similarities than differences amongst the manifold research approaches addressing this topic (Rousseau, 1990).

Several researchers prefer a qualitative approach to assess OC via single in-depth analysis strongly dependent from the perception of the respective researcher (Sackmann, 1991; Xenikou and Furnham, 1996). However, striving for a more accessible and comparable assessment of OC with generalizable results (Marcoulides and Heck, 1993), quantitative methods seem to be more suitable. Such assessments (e.g. questionnaires) follow the argumentation that OC is reflected in several core elements defined in a similar or even identical way amongst different researchers (Poehch, 2002). These core elements can be assigned to the first and second level of the organizational culture model of Schein (1995). They serve as a basis for a comprehensive and comparable assessment of OC and can be differentiated into different cultural dimensions (Rousseau, 1990; Xenikou and Furnham, 1996). Poehch (2002) states, that corresponding to the great similarities amongst the cultural dimensions of different approaches, it seems sufficient to rely on the intersection of these dimensions. Following this argumentation, Jöns et al. (2006) developed a 'short scale' to assess OC. This *Corporate Culture Scale* serves as an instrument based on the shared core dimensions of several prominent culture assessments and is based on the theoretical understanding of OC according to Schein (1995). It assesses the shared values and norms of an organization as well as the structures and processes on the first level (Schmickl and Jöns, 2004) from the viewpoint of the employees involved.

The development of this scale is based on a comprehensive literature analysis to identify the central cultural dimensions of different diagnostic methods (e.g. the questionnaires of Ashkenasy et al. (2000), Kobi and Wüthrich (1986) and O'Reilly et al. (1991)), which have been selected as representative for many other instruments (Jöns et al., 2006). The resulting cultural dimensions, which have been validated in several case studies and surveys (see for example Jöns et al. (2004)), are as follows:

- *Strategic orientation* comprising aspects of customer orientation as well as performance and quality orientation of an organization.
- *Structural conditions* including the amount of bureaucracy and rules or the number of hierarchical levels within an organization.
- *Cooperation and teamwork* as one out of two interaction dimensions, representing team-related horizontal interaction characteristics.
- *General management and leadership* as the second interaction dimension reflecting the vertical interaction characteristics across hierarchies.

Against this background the basic hypothesis has been specified with regard to these four cultural dimensions. For detailed information about the test quality criteria of the Corporate Culture Scale, see Jöns et al. (2006).

The first OC dimension is strategic orientation, which targets on the extent of customer orientation, performance orientation and quality orientation as well as openness to innovation. The starting point of a typical BPM life cycle (Davenport and Short, 1990; Houy et al., 2010) comprises the development of processes based on the strategy of an organization. According to this, we assume that a strong strategic orientation leads to a higher process quality in terms of effective and efficient processes with a strong customer and service orientation. Thus, the first sub-hypothesis is formulated:

H1.1: The stronger the strategic orientation of an organization, the higher is its process quality.

The second dimension, the structural conditions, describes organizational facets such as the amount of bureaucracy and rules or the number of hierarchical levels within an organization. Thus, an organization has flexible structural conditions if it is less bureaucratic and hierarchically organized. A high level of process quality, in terms of effective and efficient processes, needs a strong and mature process orientation (Baisch, 2010) which affords speed and flexibility to respond to the customer

needs (Braganza and Bytheway, 1997). Therefore we assume the second sub-hypothesis formulated as follows:

H1.2: The more flexible the structural conditions of an organization, the higher is its process quality.

The broad field of interaction has been split into the two dimensions *cooperation and teamwork* and *general management and leadership*. The dimension of cooperation and teamwork deals with the team-related horizontal interaction characteristics in an organization. The dimension of general management and leadership is concerned with the vertical interaction characteristics across hierarchies. Following Armistead and Machin (1997) the performance of an organization is driven by the co-action of people and processes. Thus, we suppose that a high level of cooperation and interaction is essential for a high process quality resulting in the corresponding third and fourth sub-hypotheses:

H1.3: The better the cooperation and teamwork in an organization, the higher is its process quality.

H1.4: The better the general management and leadership in an organization, the higher is its process quality.

This study addresses these hypotheses with regard to the following research questions: Does OC have an impact on process quality? And accordingly: Which OC characteristics are supportive for a high process quality?

4 Data and Method

4.1 Questionnaire design and method

In order to address the research questions, we conducted a paper-pencil questionnaire survey. The method of questioning is the aforementioned Corporate Culture Scale (KUK [German], short scale) (Jöns et al., 2006) and consists of a 7-point Likert-type scale. The participants were asked about the extent of their individual agreement with several bipolar statements referring to the four OC dimensions. All cultural items of the KUK are shown in Table 1.

Dimension	Item
Strategic orientation	Our organization has a strong – weak quality orientation.
	Our organization has a strong – weak performance orientation.
	Our organization has a strong – weak customer orientation.
	Our organization is open minded – is not open minded for innovation.
Structural conditions	Our organization is not organized – is organized very hierarchically.
	Status symbols do not play – do play an important role.
	Our organization has a not bureaucratic – bureaucratic style.
	The decision-making processes in our organization are short – long.
Cooperation and teamwork	The relationship between the employees is characterized by cooperation – competition.
	Conflicts are brought up openly – swept under the carpet.
	Our organization is characterized by team orientation – the lone warrior mentality.
	Our employees have a great – low confidence in our management.

General management and leadership	Our management has a great – low confidence in our employees.
	If failures occur we search for possible causes – for the guilty part.
	Employee information is of high – low importance.
	Employees participate – do not participate in decision-making.

Table 1. Organizational culture dimensions and items of the KUK

We extended the questionnaire by including the perceived level of process quality within the organization. According to the understanding of Schmiedel et al. (2013) we derived three aspects of process quality from literature (Rosemann and vom Brocke, 2010): the efficiency of the process, the clear structure of the process and the level of customer and service orientation of the process. Together with process experts of the investigated organization, we developed three bipolar statements addressing these three aspects appropriately (see Table 2). These statements have been checked in terms of understandability in a pretest with a sample of 20 employees of the investigated organization. To be consistent with the questions of the KUK, we used the same 7-point Likert-type scale to assess process quality.

The level of process quality refers to a core business process within the investigated organization. This business process had been improved, modified and newly implemented in an extensive BPM project one year before we conducted our survey.

Items have been coded from 0 – total agreement with the statement on the left hand side of the scale to 6 – total agreement with the contrary statement. For example, judging the statement “Our organization has a strong quality orientation” as being absolutely correct would be coded with 0 whereas judging the statement “Our organization is organized very hierarchically” as being absolutely correct would be coded with 6. Thus, a neutral judgment would be coded with 3.

Dimension	Item
Perceived process quality	The process of interest is – is not transparent and clearly structured.
	The process of interest is lean and efficient – complicated and inefficient.
	The process of interest is – is not customer- and service-oriented.

Table 2. Process quality items

Additionally, several questions regarding demographic details of the participants were included in the questionnaire asking for gender (male vs. female), extent of employment (full time vs. part time), number of years of work experience in the financial services industry (ranging from < 1 year, 1-5 years, 5-10 years, 10-20 years to > 20 years) and number of years of work experience in the analyzed organization (< 1 year, 1-5 years, 5-10 years, 10-20 years, > 20 years).

We tested our hypotheses by calculating a multiple OLS regression with process quality as the dependent variable and the four OC dimensions as independent variables.

4.2 Participants and procedure

In this investigation we gathered data from a German financial services company with a total number of almost 15.000 employees. The employees included in our survey are all working in the same process. Here, we chose the process of loan approval which is one of the most relevant processes of financial services companies. The loan approval process consists of subsequent major tasks: a formal check of completeness of the submitted loan application followed by a fast pre-check of the loan application in order to respond quickly to the customer request with a preliminary assessment. The

next step comprises the detailed inspection of the application followed by the final loan decision. In total, we asked 277 employees to participate in our study. The response rate was 52.4% which corresponds to 145 employees.

The questionnaires were available in German language and were distributed to the employees of the firm via the postal distribution service within the company and were returned the same way. The survey was conducted strictly anonymous and the employees were explicitly allowed to fill out the questionnaire within their working time. All subjects participated voluntarily without being extra paid.

The sample consists of 42.4% men (61) and 57.6% women (83) with one participant not providing gender information. 74.3% of the participants (107) work full-time, 25.7% of the participants (37) work part-time, again with one participant not providing information on the extent of employment. Professional experience in the financial services sector ranges from less than 1 year (1.4% of the participants), 1-5 years (13.2%), 5-10 years (7.6%), 10-20 years (18.8%) to more than 20 years (59.0% of the participants). Work experience in the investigated organization ranges from less than 1 year (4.9%), 1-5 years (22.2%), 5-10 years (6.3%), 10-20 years (15.3%) to 51.4% of the participants having already gained professional experience of more than 20 years in this company.

4.3 Factor structure and test criteria

We verified the factor structure of the cultural scales by conducting explorative as well as confirmative factor analysis. The results support the four dimensions of organizational culture with high and unambiguous loadings ($>.60$) of the items on their specific dimension except for the following three items: *our organization is open minded – is not open minded*, *status symbols do not play – do play an important role* and *our employees have a great – low confidence in our management*. These items showed ambiguous and smaller loadings ($<.50$). Therefore, they have been analyzed in more detail conducting tests for the appropriateness of single items and then they have been excluded from the following regression analyses.

Tests for reliability show sufficient standardized Cronbach's Alpha ($>.7$) with $\alpha = .740$ for the dimension of strategic orientation, $\alpha = .722$ for the dimension of structural conditions, $\alpha = .849$ for the dimension of cooperation and teamwork and $\alpha = .775$ for the dimension of general management and leadership. We checked for validity using the Fornell-Larcker criterion which requires the AVE (average variance extracted) values to be higher than the squared factor correlations. This criterion has been fulfilled for all dimensions with AVE values between 0.463 and 0.652 and squared factor correlations between 0.162 and 0.396.

5 Results

Mean values and standard deviations of the four OC dimensions and the aspect of process quality are presented in Table 3. As can be seen, strategic orientation has the lowest mean (2.31) of the four cultural dimensions. Since full agreement with a strong strategic orientation was coded with 0 and full agreement with weak strategic orientation was coded with 6, a neutral statement would be reflected by a value of 3. Thus, the mean of strategic orientation is slightly positive. Structural conditions have the highest mean (3.78) of the cultural dimensions which is negative to a small extent. Noticeable, the mean of process quality is negative to a quite large extent (4.02).

Dimension	N	Mean	SD
Strategic orientation	145	2.31	0.99
Structural conditions	145	3.78	1.04
Cooperation and teamwork	145	2.55	1.06
General management and teamwork	145	3.02	1.10
Process quality	145	4.02	1.24

Table 3. Means and standard deviations for the four organizational culture dimensions and the aspect of process quality

The regression analyses deliver interesting results on the research question and the hypotheses H1.1 to H1.4. H1.1, stating that the stronger the strategic orientation of an organization, the higher its process quality, can be confirmed on a significance level of 1% ($\beta = .377^{**}$). Also H1.2 can be confirmed on a significance level of 1% ($\beta = .304^{**}$), indicating that the more flexible the structural conditions of an organization, the higher its process quality. Furthermore, we observe a statistical explanatory significance on the 1%-level for the dimension of general management and leadership on process quality ($\beta = .236^{**}$). Thus, H1.4, stating that the better the general management and leadership of an organization the better its processes, can be confirmed. Contrary to our expectation, the horizontal interaction dimension, the dimension of teamwork and cooperation, has been excluded in the stepwise regression. Hence, we could not observe statistically significant support for the hypothesis H1.3, which proposes that the better the teamwork and cooperation in an organization the higher its process quality. In sum, there is a clear evidence for the general hypothesis H1, indicating that OC is related to process management in the way that certain OC characteristics are supportive for high process quality. Figure 2 displays the results.

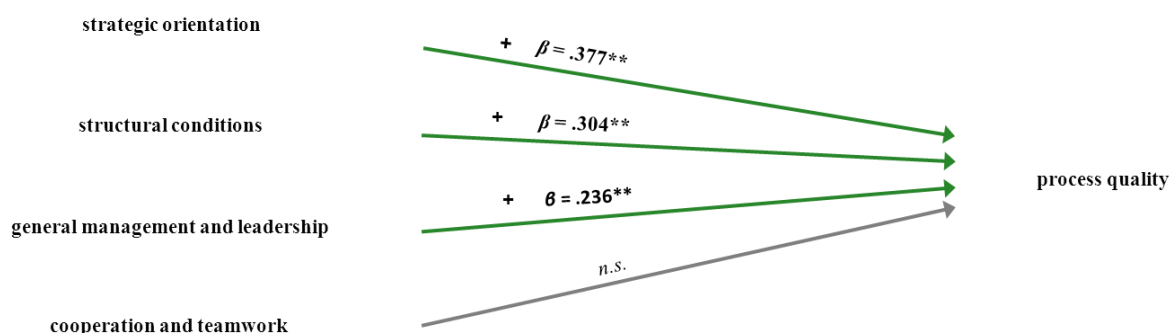


Figure 2. The influence of organizational culture on process quality

By comparing the standardized Beta-coefficients, it becomes obvious that the OC dimension of strategic orientation has the highest impact on process quality, followed by the dimension of structural conditions and the dimension of general management and leadership. The regression model with the three statistically significant dimensions in total has a high share of explained variance in process quality ($R^2 = .544$).

The tests to control for normal distribution of the residuals (Kolmogorov-Smirnov test), collinearity (tolerance and variance inflation factor (VIF)) and autocorrelations (Durbin-Watson test) have been applied. The results show that the residuals are normal distributed and that there is no problem of collinearity or autocorrelations. Thus, the performed multiple linear regression analyses deliver unbiased estimates of the size of the influences.

Additionally, we controlled for possible moderator effects of the biographical aspects gender, number of years of work experience in the financial services sector, number of years of work experience in the analyzed organization and extent of employment (full-time vs. part-time) on the influence of OC on perceived process quality. None of the biographical variables showed significant moderator effects.

6 Discussion and Implications

The purpose of our research was to empirically investigate how OC influences business processes respectively which OC characteristics are supportive for a high process quality. We could observe clear evidence for the relation between OC and business processes, in the hypothesized way that specific OC characteristics are supportive for high process quality.

It was found that the OC dimension strategic orientation, which targets on the extent of customer orientation, performance orientation and quality orientation as well as openness to innovation, has the highest impact on process quality. This result appears to be quite obvious as one aspect of process quality is the customer- and service orientation of business processes. Thus, strong strategic orientation of a company is a competitive advantage as it leads to higher process quality in terms of processes being transparent and clearly structured, lean and efficient as well as customer- and service-oriented. This finding supports the postulation to strictly derive a company's business processes from its strategy (Rosemann and vom Brocke, 2010) and accordingly confirms the starting phase of a typical BPM life cycle (Houy et al., 2010).

Similar to strategic orientation, we find that structural conditions have a positive influence on process quality. In particular, flexible organizational structures, such as a low level of bureaucracy and flat hierarchies within an organization, support high process quality. This finding is in line with Baisch's (2010) examination of different maturity models and the subsequent levels of maturity within an organization. A mature level of process orientation therefore seems to support a high level of flexibility and flat hierarchies in the respective organization.

Concerning the two interaction dimensions cooperation and teamwork as well as general management and leadership, we observe a positive impact of general management and leadership on process quality. In particular, involving employees in decision-making, providing employees with information as well as a high level of confidence in the employees, is decisive for high process quality. Thus, the role of managers seems to be crucial in striving for a high level of process quality in organizations. Contrary to our expectations, cooperation and teamwork do not influence process quality significantly. A reason for this finding might be that the employees participating in our survey implicitly distinguish between two aspects: (1) aspects they are able to influence directly and (2) aspects they perceive as not being influenceable by themselves. Therefore, they might perceive aspects of cooperation and teamwork as being directly affected by their own behavior whereas they might perceive process quality as not being directly influenceable by their own. This leads to the assumption that the involvement and participation of employees in the design and implementation of processes is crucial. This finding needs to be explored in detail in future research as it might deliver interesting insights in the perception of employees and their resulting behavior within the processes of an organization.

For practitioners, the findings of our study are particularly suggestive with regard to management initiatives that should be executed and the leadership behavior that should be demonstrated. Up to now there is little attention on OC in regard to BPM (Grau and Moormann, 2014, vom Brocke and Schmiedel, 2011). Even if an organizational unit exists which is concerned with process management, mostly there is no link to OC aspects. Our study raises awareness of this issue and allows for conclusions being drawn by the respective management. In particular, the study shows that there are several starting-points for managers to positively influence the culture of their organization in their pursuit of higher process quality. For example, the results indicate that, by attaching more importance

to employee information and participation and revealing high confidence in the employees, managers can exert positive influence on the quality of their business processes.

The scientific value of our study lies in the insights on the influence of OC on business processes which has to our knowledge not been empirically investigated regarding the cultural characteristics so far. Thus, our large-scale empirical study is a valuable source for further discussions in this field. The findings of our research assert that there is a significant influence of OC on process quality. The study also sheds light on the question which specific cultural characteristics are influential in terms of strategic, structural and management-related aspects. Furthermore, the study contributes to the dispute in academic research on how to assess OC. The paper demonstrates that the assessment based on a quantitative questionnaire instrument provides valuable results.

Although our work contributes to academia and practice alike, it comes along with some limitations. First, process quality is measured via several questions, individually rated by the employees participating in the survey. Further studies are needed, adding manifest process data measured with defined key performance indicators in order to verify whether perceived process quality can serve as a good proxy for process quality. Such data could contain information on time, quality and costs, measured with objectively defined KPIs. Second, we conducted our study analyzing a business process of one financial services company. Since a single-case study might defect the external validity of the results, it might be appropriate to conduct a multi-case replication study. However, several aspects should be taken into consideration:

- An investigation of the impact of OC on process quality needs data from both fields. In our (single) case we had access to a comprehensive and actual OC survey. This might be very difficult to obtain when trying to run a multi-case study.
- The results presented in this paper are part of a larger research project. In a next step, we will analyze effects of subcultures in this company on process quality. To do so we need to concentrate on one company. Although we would appreciate a multi-case study this endeavor would raise huge obstacles.

In any way, a replication of our study would be interesting and extending the scope of our research on other industries and other business processes in order to enlarge the generalization of our work.

7 Outlook

This study was conducted to confirm the interrelation of OC and business process management and to discover the mechanisms underlying this interrelation. Therefore, we investigated the influence of OC characteristics in terms of strategic orientation, structural conditions and interaction dimensions on process quality. The findings of our research show significant impact of these characteristics on process quality, delivering a number of suggestions of how to take this influence into consideration.

For future research it might be interesting to compare the effects of different management initiatives that can be derived from our findings. For example, by comparing different initiatives under various controlled conditions in a field experiment, one could provide specific suggestions for managers in different situations of BPM practice. Furthermore, it would be interesting to enlarge the exploration of OC with respect to process management by other aspects related to human issues, such as employee satisfaction, commitment to the organization or the degree of involvement of the employees involved in business process management initiatives. Such research might provide insights into the concrete mechanisms of underlying variables influencing the success or failure of BPM initiatives, thus, serving as valuable aspects of competitive advantage for companies.

Research of this kind is challenging as it is settled on the interface of different research areas, in this case BPM and OC. Such research has the potential to add new value by combining the scientific

knowledge of these interrelated fields in order to gain further insights from an interdisciplinary point of view.

In addition, it might be interesting to refer to the concept of dynamic capabilities (Teece et al., 1997). In this vein, research discussing the interrelation between process quality and dynamic capabilities in the context of organizational culture would be interesting in the way that a high process quality might serve as a dynamic capability for an organization.

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