From Bureaucratic to Quasi-market Environments: On the Co-evolution of Public Sector Business Process Management

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Abstract. Business Process Management (BPM) can be viewed as a set of techniques to integrate, build, and reconfigure an organization's business processes for the purpose achieving a fit with the market environment. While business processes are rather stable in low-dynamic markets, the frequency, quality, and importance of process change amplifies with an increase in environmental dynamics. We show that existing designs of public sector BPM might not be able to cope with the mounting frequency and quality of business process change. Our qualitative in-depth case study of a local government suggests that a major cause for such misfit lies in ineffective organizational learning. We contribute to the literature by applying the Dynamic Capability framework to public sector BPM in order to better understand shifts in market dynamics and their consequences for BPM effectiveness. Practitioners find a proposal for identifying, understanding, and reacting to a BPM-misfit and for developing effective BPM strategies.

Keywords: Public Sector, Business Process Management, Dynamic Capabilities, Resource-Based View, Qualitative Study.

1 Introduction

In the last decades, the environment of public sector organizations has shifted towards being quasi-market. In the 1980s a plethora of reform approaches, especially New Public Management (NPM), was geared towards putting the public sector in a market-like state. NPM constitutes a policy to create and to enhance the cost efficiency of governmental organizations as well as to create competition between public bodies. Numerous other drivers have amplified this development: the financial crisis puts high stress on local governments and forces them to compete with other municipalities for tax-payers and job-creating companies. Even the "death" of organizations is possible, mainly in terms of full depopulation or annexation. As a result, the environment of local governments has become increasingly dynamic and has undergone the major shift from "bureaucratic stability" to an, at least, medium dynamic quasi-market environment [7, 9, 27].

Business process change is a key concept in E-Government and public sector reform [36, 20, 25, 31, 2, 32, 24], yet initiatives regularly remain less successful than

predicted. It appears to have established as common sense that municipalities need to reevaluate their business processes: cost-cutting, especially in times of the financial crisis, citizen and service quality-orientation, electronic government [25, 2], transformational government [15], and other reform concepts have called for a program of business process change in public organizations [31]. Most recently, for the case of European governments, the EU Service Directive requires the establishment of a single point of contact for all administrative services and provides yet another major impulse for business process change [38]. Despite repeated large efforts in practice and back-up from academia, ad hoc business process change initiatives show little sustainability and long-term success often lacks behind the grand expectations. Instead, "Neo-Weberian bureaucracies" [27] have established and the reform pendulum appears to swing back [3]. Against this background, we need theories which could be utilized to guide the development of BPM strategies in a shifting and increasingly dynamic market environment, such as the public sector?

Dynamic capabilities theory would view this problem as a mismatch between environmental requirements (based on markets dynamics) and an organization's institutionalized capability to change. Long-term competitive advantage is assumed not to lie in the stable resource configurations of an organization, but in its capacity to change [35]. Here, Dynamic Capabilities represent an organization's specialized set of resources and the firm's ability to integrate, build, and reconfigure operational capabilities for the purpose achieving a fit with the market environment. Business Process Management (BPM), understood as a Dynamic Capability, is especially concerned with integrating, building, and reconfiguring an organization's business processes for this purpose.

The advantageousness of BPM as a Dynamic Capabilities depends on the market environment. In a relatively static environment, business process change could be accomplished through the tacit accumulation of experience and sporadic acts of creativity: Ad hoc change. In such situation, investing resources into a large BPM apparatus appears to be unnecessary and far too costly [43]. While we observe a major shift of market dynamics from bureaucratic stability to a more dynamic quasi-market environment in the public sector, we start our investigation based on the assumption that public administrations did not cope with that environment change, that ad hoc business process change efforts are (still) the standard practice and that effective Dynamic Capabilities, BPM, are not yet successfully established. We assume further that 2nd order learning capabilities ('Do we manage our business processes effectively?', in contrast to 1st order learning capabilities: 'Are our business processes effective?') have not been developed and that, as a result, decisions on the establishment of BPM are not well informed, are lagged, and render many business process change efforts insufficient in terms of a market misfit.

Our paper is structured as follows: First, we will build a theoretical foundation, especially drawing from the Resource-Based View, and conceptualize BPM as a Dynamic Capability. The presentation of our research questions and hypotheses is followed by a discussion of the research methodology applied. Case study insights will be laid out and discussed in the light of implications for theory and practice. The last sections are concerned with limitations, future research, and conclusions.

2 Theory Background

2.1 Resource-Based View and Dynamic Capability Framework

The Resource-Based View of the firm describes organizations as collections of distinct resources and procedures. The term Resource-Based View of the firm (RBV) was coined by [39] and is widely and increasingly used in the IS domain to explain how information systems relate to the strategy and performance of an organization [37]. An organization is viewed as a collection of resources, while these are understood as "anything which could be thought of as a strength or weakness of a given firm." [39, p. 172] Resources consist of both capabilities and assets while capabilities can be regarded as repeatable patterns of actions [37] or coordinated set of tasks [13] – both: processes – that utilize assets as input [1, 13]. However, the RBV has been criticized for under-emphasizing market dynamics. For instance, Eisenhardt & Martin (2000) make the argument that long-term competitive advantage does not lie in stable resource configurations, but in the ability of a firm to adapt these to changing market environments. This argument applies best to dynamic market environments where there is "rapid change in technology and market forces, and feedback effects on firms" [35, p. 512].

Dynamic Capabilities aim at aligning resources with a changing market environment. While the dynamic capability framework is becoming increasingly important to E-Government [19] as well as public sector research [12], scholars have originally differentiated two types of capabilities from one another: (1) Operational Capabilities are geared toward the operational functioning of the organization [43]. In this paper, we will understand Operational Capabilities as the ability of an organization to perform a coordinated set of tasks, utilizing organizational assets, for the purpose of the operational functioning of the firm (cf. [43, 40, 13]). (2) Dynamic Capabilities, on the other hand, have been conceptualized by Teece et al. [35, p. 516] as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments." Other conceptualizations emphasize the nature of these capabilities, "a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness." [43, p. 340] Some authors stress the hierarchical relationship between the two types of capabilities: "Dynamic capabilities build, integrate, or reconfigure operational capabilities." [13, p. 999] In this paper, we will thus understand Dynamic Capabilities as the firm's ability to integrate, build, and reconfigure operational capabilities for the purpose achieving a fit with the market environment.

The advantageousness of Dynamic Capabilities depends on the market environment. Dynamic Capabilities typically require long-term investments and commitments of specialized resources [40, p. 993], they create costs. Helfat & Peteraf [13, p. 1002] find: "Improvements in the functioning of a capability derive from a complex set of factors that include learning-by-doing of individual team members and of the team as a whole, deliberate attempts at process improvement and problem solving, as well as investment over time." However, in a relatively static environment change of operational capabilities could be accomplished through the tacit accumulation of experience and sporadic acts of creativity: ad hoc change. Here, Dynamic Capabilities

appear to be unnecessary, and if developed may prove too costly to maintain [43, p. 340]. "Learning, change, and adaptation do not necessarily require the intervention of 'dynamic' capabilities as intermediaries." [13, p. 998] The alternative of change in Operational Capabilities through institutionalized Dynamic Capabilities is thus non-institutionalized ad hoc change (1st order learning mechanisms; see Figure 1; BPM-relevant concepts are already included (in brackets) while being referred to later).

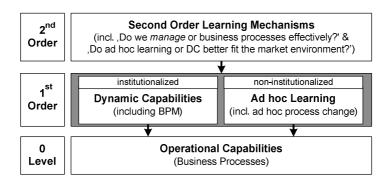


Fig. 1. Dynamic Capabilities and Learning (adapted from [43])

2.2 Business Process Management as Dynamic Capability

BPM is a key concept in E-Government Research. The approach has its roots in Business Process Reengineering (BPR) and Total Quality Management (TQM). On the one hand, the concept of BPR emerged within a Massachusetts Institute of Technology's management research program that examined the role that IT would play in organizations in the 1990s [26]. While both BPR and TQM have in common the focus on improving organizational processes, TQM on the other hand is considered a rather incremental, evolutionary approach aiming at continuous improvement [14]. However, most literature in business process research recognizes that both concepts have to be viewed as complementary integral parts of a process-oriented strategic management system [4, 5, 6, 11, 14]. Against this background, BPM can be viewed as a management approach that applies concepts of both punctuated and incremental change. BPM can be seen as a set of recurring projects that aim at the continuous change of organizational procedures (for focus on change aspects see, for instance, [18], [21], [30]). The focus of BPM projects can range from purely organizational to more technical perspectives [28, 33], the latter especially in the course of information systems (IS) implementations (for an overview on the relationship between IS and process innovation see [34]). Against this background, business process management became a key concept in E-Government research [31, 2] and has been intensively discussed, for instance, at the international conferences on Electronic Government (EGOV, for instance, [36, 20, 25, 32, 24].

BPM can be viewed as a Dynamic Capability. On the one hand, literature discusses a plethora of concrete Dynamic Capabilities, such as product development [8, p. 1106], alliancing [43, p. 347], acquisition [8, p. 1109], and research & development [43, p. 340]. Moreover, a bundle of Dynamic Capability examples relate closely to

BPM, for instance developing manufacturing processes [8, p. 1110], "restructuring" [43, p. 340], "re-engineering" [43, p. 347], quality improvement [43, p. 347], and the ability to adapt "operating processes through a stable activity dedicated to process improvements" [43, p. 340]. On the other hand, process-oriented literature views BPM as "a structured approach to analyze and continually improve fundamental activities such as manufacturing, marketing, communications and other major elements of a company's operation" (for example, [42, p. 64]). Further, a business process is "converting inputs into outputs. It is the way in which all the resources of an organization are used in a reliable, repeatable and consistent way to achieve its goals" (for example, [42, p. 64]). Against the background of these noticeable commonalities, we review BPM from a Dynamic Capability perspective, including a re-understanding of operational capabilities as business processes: we define Business Process Management as a set of techniques to integrate, build, and reconfigure an organization's business processes for the purpose of achieving a fit with the market environment. Here, a business process refers to the performing of a coordinated set of tasks, utilizing organizational assets, for the purpose of the operational functioning of the firm. BPM is thus not identical with the concept of Dynamic Capabilities, but it is, among others, one Dynamic Capability. The argument is that there are several other functions (Dynamic Capabilities), such as R&D or alliancing, which are (traditionally) not covered by BPM. As a result of reviewing BPM in the light of this theoretical perspective, we are able to build upon and embrace the vocabulary, rich theory, and comprehensive findings of the Dynamic Capability framework for studying and explaining the discussed public sector BPM issues.

3 Research Question and Hypotheses

This paper seeks to address the following research questions while building on the Resource-Based View and Dynamic Capability framework:

- (1) How developed is BPM as a dynamic capability in local governments? Here, we aim to explore whether BPM is more or less effective with regard to the purpose of achieving a fit with the market environment and how well the set of techniques to integrate, build, and reconfigure an organization's business processes is established.
- (2) Does the existing BPM (or does it not) fit the market environment? We study if a match between BPM as a Dynamic Capability and the quasi-market environments of the public sector exist. The results of the first research question are reflected against (shifting) dynamics in the environment of local administrations. We assume that there will be a market-BPM-misfit due to a dynamic capability adaption lag.
- (3) In case of a market-BPM-misfit in local governments, why does it exist? We assume a misfit between environmental dynamics and public sector BPM as a result of 1) organizational culture, 2) deficient organizational learning, especially 2nd order learning (see again figure one), and 3) financial and regulatory restrictions. Our first hypothesis is based on an expected lag in the perception of decision makers: on the basis of a history characterized by bureaucratic stability, decision makers might expect only little change or dynamics in the future. Zollo & Winter [43, p. 346] argue, decision makers might put "different bets [...] on the strategic importance of change in the future", based on their past experiences in a then stable bureaucratic environment.

The second hypothesis proposes that local government organizations feature deficient learning mechanisms that prevent the creation of dynamic capabilities. Business processes are still changed in an ad hoc manner (1st order learning). As a result of only little organizational skills in establishing dynamic capabilities, 2nd order learning capabilities ('Do we manage our business processes effectively?' or 'Do ad hoc learning or Dynamic Capabilities better fit the market environment?') have not been developed and that, as a result, decisions on the establishment of BPM are not well informed which leads to suboptimal results. Our third hypothesis is based on the idea that local governments might find that building BPM as a Dynamic Capability was not affordable. This may be due to the financial situation (especially in the recent financial crisis) and/or due to public sector regulations resulting from the financial situations: budget consolidation plans, for instance, often allow only material investments (such as bridges, buildings etc.) and not in IT, human resources, or organizational/process improvement.

4 Research Methodology

Method Selection and Case Setting. In order to test our research model, we chose to conduct an in-depth case study and to tie in with the rich tradition of qualitative IS research (for instance, [17, 22]). The organization studied is a local government in the western part of Germany. With more than 6,000 employees working in about 50 departments, the organization is one of the larger public bodies in Germany. The organization department is formally responsible for BPM activities which are typically associated with re-engineering and/or IT implementation. With a budget deficit of more than 100 Million Euros, the financial situation of that local government is severe. On the one hand, top management expects BPM to contribute to consolidating this deficit, to cut costs and to improve efficiency. On the other hand, the organization faces other challenges, such as E-Government or the EU service directive [38] which require BPM to contribute to achieving major structural changes and increased effectiveness.

Data Collection. The period of intensive data collection lasted from October 2009 to December 2009, with a prior wave serving the purpose of selecting adequate cases studies with regard to the research question (June 2009 to September 2009). We employed multiple data collection methods in order to exploit the synergetic effects of combining them via triangulation [16, 41]. Three sources of evidence are included in our analysis: focused individual interviews (primary method), direct observations, and documentary information.

• Focused Individual Interviews. The primary sources of evidence are interviews with the key actors in the organization's BPM efforts. Ranks of interview partners included, for instance, head BPM unit, head IT department, head organization department, as well as members of quality management, accounting and others. When contacting our case study organization, we were directed to a contact person, habitually the one formally responsible for BPM. Being the first experts interviewed, they connected us with other significant actors in each setting. Regarding the interviewee selection, we thus followed a purpose-driven snowball sampling approach [29]. As a result, twelve interviews were conducted leading to a total of

- 1,250 minutes of interview time, and more than 94,000 words of transcript. An interview thus lasted more than 1 hour in average.
- Documentary Information. Several materials produced by or about the organization were incorporated as supplementary source of evidence. For instance, business process documentation, organization charts, press articles, internet sources, research reports, project documentations, minutes of project meetings, or other reports helped us to reconstruct the case study setting in great detail.
- Direct Observations. We were able to directly observe the settings and relevant events throughout a total of 16 site visits. This included, for instance, observing the working procedures and analyses of BPM tools applied. These direct observations yielded additional understanding of the case study setting.

Data Analysis. A total of more than 20 hours of interviews, equating to 94,430 words of transcript, were included in the analysis. As initial step, the first two authors coded the data individually for any relation to the variables of our hypotheses, while all interview data was reviewed in the light of available documentary information and of direct case observations. Afterwards, the resulting coded data were contrasted among the first two authors' perspectives. In case of unresolved differences, the third author was consulted. Then, the codes were interpreted and structured with the help of the theoretical framework. Here again, if no consensus was achieved among the first and the second author, the third party was involved for conciliation. The interpretation of data and refinement of theory elements were highly recursive and formed a continuous interplay [23]. Such approach yielded the advantage that, both, the authors' understanding of the case findings as well as the refinement of theory gradually improved. A set of questions was presented to the interviewees and was then followed by a comprehensive open discussion.

5 Findings

The study yielded the following major findings: (1) Shift of Market Dynamics: Our study suggests an increase of environmental dynamics. In the past, local governments faced a rather stable bureaucratic environment in which competition between administrations was uncommon. Therefore, there was no need for changing the government's resource configuration. However, since the advent of NPM the environment became increasingly dynamic and developed towards a "quasi-market" [7, 9]. Especially the EU services directive has been a main driver for competition and dynamics. This directive is one reason why "we should not forget that local administrations are competitors", as a middle manager in our case put it. Subsuming, the politically desired shift towards higher dynamics was realized and is recognized by a large share of the organization's middle management.

(2) Market-BPM-Misfit: Local governments did not react on the shift in market dynamics and did not adapt their BPM adequately. From a theory point of view, a sustained increase in market dynamics should lead to the introduction of Dynamic Capabilities, here BPM. More dynamic markets demand for more frequent business process change, and such change is of greater strategic relevance. However, our case shows that only a small part of the organization posses the necessary knowledge to adequately react on the dynamic shift. BPM initiatives are either still in the very early

phases or have already failed. Until now, our case organization shows only a very few adapted business processes and no institutionalized BPM capabilities. One department (independently) started a BPM project and purchased a BPM tool while the formally responsible department is still planning to kick-off "their" BPM project. Only through our study, BPM managers got to know that the BPM suite they are planning to purchase is the very same already introduced in the other department. Moreover, the majority of departments and divisions yet ignore the topic of process change. As a result, we could not find an integrated BPM strategy, although the reform pressure is very high for our case organization. A middle manager (organization department) stated that "We are still at the very beginning; so far, we did neither touch our processes nor change our organizational structure."

- (3) Organizational Culture: Although there was basic agreement on the increase in market dynamics, we could not observe large commitment. Many employees regard change as "not my business", as it was said by one interviewee. Moreover, our data suggests that the culture of the organization is locking the organization in the statusquo or even striving for the status-quo ante. Although the need for change is well recognized, little change has effectively happened. As for the case of the EU service directive, the organization was aware of it since 2004. The final implementation was due by end of 2009, but the case organization is still struggling with the implications: Necessary changes of business processes are not fully implemented or lived.
- (4) Organizational Learning: Organizational learning would be a key issue in implementing BPM that fits the changing environment. Parts of the administration studied acknowledged the importance of training and learning-before-doing. However, there is no comprehensive BPM-related training or program established yet. Still, multiple employees are trained in rather obsolete techniques while maintaining outdated qualification schemata. Hence, the administration is yet in the beginning. However, some middle managers already acknowledge the problem of missing know-how. Moreover, they anticipate that this problem is growing due to the demographic change in the workforce of the organization. In the past, several reforms, e. g. in the local government reform 1967-1978 where municipalities were incorporated by others, led to an increase of dynamics as well. However, the case organization anticipated that the phase of increased dynamics would only be short-term. Thus, they changed their processes, i.e. their operational capabilities, in an ad-hoc manner, often with the help of external consultancies. Hence, neither 1st nor 2nd order learning capabilities exist: The local government studied does not employ adequate measures to learn new methodologies and capabilities to face the rising dynamics in its environment.
- (5) Financial and Regulatory Restrictions: Several financial issues prevent the case organization to build up BPM for institutionalizing process change. Due to the financial crisis and the structural change of the economy, the local government faces severe financial problems. So far, it has to follow a strict budget consolidation plan which impedes new investments in IT or in human resources. Hence, managers and employees acknowledge that the financial situation is a great barrier to adopting BPM and to adapting both the Operational and the Dynamic Capabilities to the changed environment: "We should do more, but this is impossible due to our budget situation" and "Our financial situation is a huge constraint for introducing BPM" were statements by two of the middle managers. The financial situation is a significant problem

for building Dynamic Capability for business process change. A structural problem results: Immediate investments would be advantageous, but are not possible today.

6 Discussion

Implications for theory. Our findings both answer the research questions and confirm – at least partially – the hypotheses stated above. Both literature and our study reveal that the dynamic of the environment of local government has shifted in the near past. Local administrations nowadays face a more and more market-like setting - a quasi-market. Hence, theory suggests that investing in dynamic capabilities (here: BPM) is necessary to constantly adapt the operational capabilities to the environment. However, we can observe that, at least for the case of BPM as a dynamic capability, this investment has not been accomplished so far: The case study data suggests that the administration studied has not implemented BPM as a dynamic capability yet. These results give answers to the research questions 1 and 2: First, we found that BPM is not developed to a great extent. In fact, the organization is still at the very beginning. Second, our assumption of a misfit between BPM and the environment has been confirmed. However, our study also reveals that adaption to environmental changes has happened in the past. Then, several occasions led to peaks in market dynamics. The environment of local public sector organizations stayed comparably low-dynamic, but, e. g. through the above mentioned annexation reform, a peak of dynamic occurred. The organization had to react on a peak with process changes. These process changes occurred, though with a small lag of time, with the help of ad-hoc 1st order learning mechanisms or the use of consultancy services. Both options are valid reactions on the change of market dynamics. However, in today's situation of a persistent market dynamic shift, we observe both a lagged and a less intense reaction in form of process change. Although theory suggests that institutionalization of dynamic capabilities in terms of BPM is a necessary reaction to a sustained market dynamic shift, the case organization stays in the old pattern and tries to adapt business processes using ad-hoc measures (see Figure 2). These findings help to answer the third research question (Why does a BPM-market-misfit exist?) where we posed three hypotheses. First, the usage of old behavioral patterns is well documented in the literature on BPM in public sector organizations [10]. The culture of the organization is not ready for change and hinders the institutionalization of Dynamic Capabilities as decision makers put wrong bets on the importance of change [43]. Second, the organization neglected the necessity to install learning-before-doing for BPM. New methodologies are not incorporated which hinders the development of BPM: Business processes are still changed in an ad hoc manner (1st order learning). Third, the organization faces financial stress. As BPM is not regarded as high priority there is a tendency to cut down necessary change projects. Also, an organization-wide BPM strategy is considered too costly. Thus, the organization's only measure to change processes is to stay with ad-hoc learning mechanisms as even external consultants are not affordable. To sum up, all three reasons play together and result in a misfit of market dynamics and BPM as Dynamic Capability.

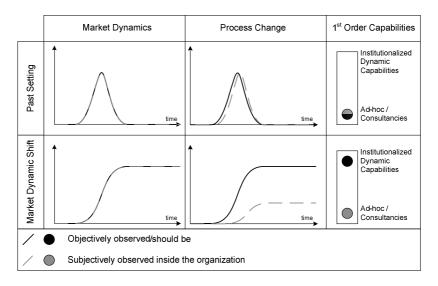


Fig. 2. Reaction on different Variations in Market Dynamics

Further contributions to theory result from our conceptual work. BPM can be understood as a Dynamic Capability in terms of an extended RBV while business processes can be seen as Operational Capabilities applied by an organization to "make a daily living". A business process is a coordinated set of tasks, utilizing organizational assets, for the purpose of the operational functioning of the organization. BPM is an institutionalized first order capability: A set of techniques to integrate, build, and reconfigure the organization's business processes for the purpose of achieving a fit with the environment. Thus, BPM consists of the resources held in stock in order to be able to change the organization. The way BPM is established in an organization depends, as costs come into play, heavily on the dynamics in the environment. A high-velocity market demands a different BPM organization than, e. g., a medium-dynamic market. We showed that this perception is valid by employing it in the public sector. Moreover, with this contribution we elaborate on market dynamics shifts. In our setting, the environment of the organization studied became more dynamic and this resulted in a need for changes of the dynamic capability.

Implications for practice. Local administrations should assess and evaluate their BPM with the background of the corresponding market environment. So far, reform policies seem to be not successfully implemented. Apparently, local governments did not react on the persistently changed dynamics in their market environment. However, as theory suggests they should build up the Dynamic Capability of BPM in order to adapt their business processes to fit the setting. As a first step, a reflection on BPM activities of local administrations seems to be considerable as this would shed some light on the status-quo (2nd order learning). A BPM maturity assessment [28], extended to understanding of market environments, could help to show potential paths towards a more market-adequate BPM.

Limitations. Our results are limited by certain factors. First, we studied only one local administration. Thus, it could be difficult to generalize from this setting to other organizations in other sectors or regions. However, we believe that the organization studied is typical for many western local governments and that its situation can, therefore, be transferred rather well. While we acknowledge that other countries and cultural communities will face different problems, the consideration of the issues mentioned in this study provides a first valuable starting point.

Future research. Both our limitations and contributions show potentially fruitful areas for future research. First, future research could strive for comparing our results with other public sector organizations and, thus, help to make the results generalizable. Second, future studies could transfer our results into other sectors: Viewing BPM as a Dynamic Capability helps to understand, explain, and address the misfit of organizational BPM and the environment. Third, studies could enhance the understanding of BPM as a Dynamic Capability. One example is to study related concepts as workflow management or enterprise content management in the DC framework.

7 Conclusion

We set out to understand BPM as a Dynamic Capability (in the notion of the RBV) as means to adapt an organization's business processes to its environment. We especially focused on the influence of market dynamics on BPM and, moreover, on shifting market dynamics. We posed hypotheses why public sector BPM does not fit the corresponding environmental demands. In order to evaluate our hypotheses, we conducted an in-depth qualitative case study in a local administration. This case study suggested a market dynamic shift. Moreover, we could show that a misfit between BPM as a Dynamic Capability and a dynamic environment exists: The organization studied did not institutionalize BPM to a sufficient extent. We could confirm all three hypotheses: Apparently the organization neglects a long-term market dynamic shift, has not built adequate 1st and 2nd order learning capabilities, and is financially stressed so that projects to build BPM are cut down. Our results might potentially be generalized to local administrations in western countries.

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