# **Culture and Dynamics of an Enterprise**

#### Jernej Belak, Mojca Duh, Borut Milfelner

Faculty of Economics and Business Maribor Razlagova 14, 2000 Maribor, Slovenia jernej.belak@uni-mb.si; mojca.duh@uni-mb.si; borut.milfelner@uni-mb.si

Abstract: The main goal of our research is to explore the role of culture for improving the dynamics of an enterprise. Our basic proposition is that the culture of an enterprise importantly impact enterprise's propensity toward dynamics. The presented research cognitions show that enterprises with the prevailing adhocracy culture seems to be the most dynamic ones, followed by the enterprises with the prevailing market and clan culture. According to the results of this study enterprises with the prevailing hierarchical culture have the least potential for the development of dynamic capabilities.

Keywords: culture, dynamic enterprise, dynamic capabilities, life cycle of an enterprise

## 1 Introduction

Recent research [18] shows that the average period for which enterprises are able to sustain competitive advantage has decreased over time. This phenomenon is not limited to certain industries (e.g., high-technology industries) but is seen across broad range of industries. Therefore, sustained competitive advantage is increasingly a matter not of a single advantage maintained over time but more a matter of concatenating over time a sequence of advantages (see also [6]). The dynamic capabilities concept/approach has been introduced as an extension of the resource based view (RBV) as one of the most promising approaches in dealing with the question on how enterprises can sustain superior enterprise performance in changing environments. Teece and co-authors [17] introduced the concept and published it in the article thus evoking the research community (see also [12]). Finding answers to the question on how to sustain competitive advantage and long-term performance was also triggering Pümpin and Prange [11] who introduced the idea of a dynamic enterprise. According to Pümpin and Prange [11] a substantial attention of management of a dynamic enterprise should be devoted to the parallel development of two different cultures: the culture where creativity and innovativeness are stimulated as well as the culture which is oriented towards realization of defined goals and objectives. Also Teece [16] addresses the role of culture within the dynamic capability approach by giving an important role to top management whose task is that through action and communication garners loyalty

and commitment and achieves adherence to innovation and efficiency as important goals. However, the author does not discuss the issues of culture, commitment and loyalty any further. The main goal of our research is to explore the role of culture for improving the needed dynamics of an enterprise. Different types of culture (using typology and methodology of Cameron and Quinn [4]) will be examined in relation to the presence of dynamic enterprise's elements as proposed by Pümpin and Prange [11].

# 2 Literature Review

## 2.1 The Dynamic Capabilities Approach and the Dynamic Enterprise Concept

Teece and co-authors [17] define dynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments". In terms of its nature, dynamic capabilities have been defined [2] "... as abilities, capacities, processes, and routines.", whereas [1] view "dynamic capabilities" simply as "capabilities that are dynamic".

According to Teece [16] dynamic capabilities "include difficult-to-replicate enterprise capabilities to adapt to changing customer and technological opportunities." The essence of enterprise's competences and dynamic capabilities Teece and co-authors [17] see as being resident in the firm's organizational processes, which are in turn shaped by the firm's assets (positions) and its revolutionary path. For analytical purpose dynamic capabilities can be [16] "disaggregated into the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and when necessary, reconfiguring the business enterprise's intangible and tangible assets." Many other definitions and conceptualizations of dynamic capabilities have been introduced (for overview of different definitions see [2]); some authors even questioned the term term "dynamic capability" itself as being build on "two contradictory notions of logic at the same time: reliable replication and continuous change - two dimensions that hardly mix" [15]. Despite numerous researches done we can conclude that our understanding of dynamic capabilities and the way they generate competitive advantages is limited.

Pümpin and Prange [11] introduced the idea of a dynamic enterprise within their model of enterprise's development. They combine evolutionary theory and strategic management theory. They based their research on life cycle concept and develop their own developmental model of an enterprise where developmental stage are described by the four typical enterprise's configurations, entitled pioneer

enterprise, growing enterprise, mature enterprise and an enterprise in turnover. According to Pümpin and Prange [11], the implemented business opportunities define the enterprise's development. Because business opportunities follow their own life cycle which leads to the decline stage, it is essential for an enterprise to search for and discover new business opportunities. Pümpin and Prange [11] expose the dangerous of tendencies of an enterprises toward the mature stage (i.e., mature enterprise) and argue the need of revitalization and dynamics of an enterprise [11]. Pümpin and Prange [11] points specially to the following weaknesses of a mature enterprise: lack of flexibility needed for adjusting to environmental changes, numerous obstacles to innovations, increasing resistance towards risk and short-term management orientation with the focus on quantity, entrepreneurial oriented employees are undesirable, top management is losing insight into markets, struggles among managers for leading positions within the enterprise, bureaucracy, lack of entrepreneurial spirit and absence of culture that supports and promotes innovations. Similarly, some other authors call attention to such weaknesses which are specially recognized within the dynamic capabilities framework. For example, Schreyögg and Kliesch-Eberl [15] argue that in environments characterized by rapid changes organizational capabilities may easily invert from a strategic asset into a strategic burden due to path-dependency (i.e., "history matters") and lock-in, structure inertia and resources commitment. Therefore, enterprises are confronted with a dilemma: on one hand, they have to develop reliable patterns of selecting and linking resources in order to attain superior performance and competitive advantages, on the other hand, this endeavor represents a considerable risk of becoming lock into exactly these capabilities.

According to Pümpin and Prange [11] an enterprise should be managed in such a way that it never "reaches" the mature stage. The authors introduce the fifth type of enterprise's configuration, labeled as "a dynamic enterprise". The main particularities of such an enterprise are: seeking and gaining new and attractive business opportunities, multiplication of systems and processes, development of different cultures, flexible legal regulations, development of dynamics promoters, development of strategic origins of success, flexible adaptation of structural and process organization, limiting the leadership system to reasonable optimum, orientation toward individual and time orientation.

Comparison of Teece's concept of dynamic capabilities and Pümpin and Prange's concept of a dynamic enterprise shows many similarities in explaining the required efforts of an enterprise toward achieving/improving its dynamics. An important role for achieving/improving the dynamics of an enterprise is in the Pümpin and Prange's [11] concept of a dynamic enterprise attached to the organizational culture, which is not explicitly addressed in the Teece's [16] dynamic capabilities approach. We discuss the role of organizational culture in the next chapter.

# 2.2 The Role of Culture in Achieving/Improving the Dynamics of an Enterprise

The organizational culture is a multifaceted construct and has been defined as encompassing the assumptions, beliefs, goals, knowledge, and values shared by organizational members [5, 12, 13, 14]. Many researchers (e.g., [7]) argue that organizational culture is a major determinant of any company's success in terms of performance, especially through improvements in employee morale. Many authors point to the importance of mutual compatibility of strategy and organizational culture for long-term survival and development of an enterprise (e.g.: [3, 8]).

Among characteristics of a dynamic enterprise special role is attached to the organizational culture. According to Pümpin and Prange [11] the main attention of a dynamic enterprise should be devoted to the parallel development of two different cultures. First, seeking and searching for new business opportunities demands culture where creativity and innovativeness are stimulated. The main characteristics of such culture are individualism and entrepreneurship (i.e., intrapreneurship). Second, multiplicative exploitation of attractive business opportunities demand a culture which is oriented towards realization of defined goals and objectives. Since the time is important factor (for taking over the strong market position before the competitors), there is little room for individual innovations. Therefore, those human resources should be activated who have no creative ambitions - the only ambition should be the successful realization of already started problem solving. These two cultures are very different, and it is difficult to avoid conflict while implementing both. The management of a dynamic enterprise should therefore make a constant effort to explain these two different necessities [11]. Also Teece [16] addresses the role of culture within the dynamic capability approach by giving an important role top management who "... through its action and its communication has a critical role to play in garnering loyalty and commitment and achieving adherence to innovation and efficiency as important goals". However, the author does not discuss the issues of culture, commitment and loyalty any further. He leaves their full integration to other researchers. However, we find important within the culture context [16] discussion on the problem of different "nature" of two fundamental capabilities (i.e., sensing and seizing) by quoting March [9, 10] observations of exploitation and exploration. Namely, March [9] finds exploration and exploitation as being both necessary for adaptation, but he also recognizes that the adaptation is continuously threatened by the tendency of each to extinguish the other. Therefore, specifying the optimal mix of exploitation and exploration is difficult or impossible. According to March [10] exploitation without exploration leads to stagnation and failure to discover new, useful directions. Exploration without exploitation leads to experiments without the development of competence in any of them or discrimination among them. Exploration almost always involves variability in possible outcomes; it means that a bias against risk is actually a bias against

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exploration. Whereas the mechanisms of exploitation involve connecting organizational behavior to revealed reality and shared understanding, the recommended mechanisms of exploration involve deliberately weakening those connections. According to Teece [16] incompatibilities flow from the fact that exploration and exploitation compete for resources and that the mindsets and organizational routines needed are different. Therefore, making simultaneous pursuit is difficult. Teece [16] argues that with respect to competition for resources, sensing does not necessarily involve larger commitments of resources than seizing; with respect to different mindsets and routines, these can be according to Teece [16] relieved by having different organization units or different parts of organizational unit specializing to some degree on sensing as compared to seizing.

# 3 Research

### 3.1 Research Goal

The main goal of our research is to explore the role of culture for improving the dynamics of an enterprise. Our basic proposition is that the culture of an enterprise importantly impact enterprise's propensity toward dynamics. This impact can be positive or negative depending on the type of culture that prevails in certain enterprise. Therefore, different types of culture using typology and methodology of Cameron and Quinn [4] will be examined in relation to the presence of dynamic enterprise's elements as proposed by Pümpin and Prange [11].

In order to achieve the research goal we developed two research constructs:

C1: Examination of type of culture of an enterprise

C3: Examintion of dynamics of an enterprise

#### 3.2 Research Methodology

For the exploration of the role of culture for improving the dynamics of an enterprise, we decide on a mixed methods approach which proves to be a useful approach. The use of case studies is suggested in combination with quantitative methods since undertaking of case studies adds qualitative evidence in order to better understand the research results. Therefore, we combine a multiple case study approach, with quantitative methods. In order to test differences in dynamic behavior between enterprises with four various cultures, ANOVA was used.

The assessment of the enterprise's dynamics was based on ten characteristics of a dynamic enterprise developed by Pümpin and Prange [11] and discussed in the Literature review chapter.

For determining the type of enterprise culture we follow the methodology Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn's [4]. Cameron and Quinn [4] proposed four types of culture, which are distinguished for audit and comparison purposes: the clan culture (family-type organizations, commitment to employees, participation and teamwork), the adhocracy culture (dynamic and entrepreneur organizations, cutting-edge output, innovation), the market culture (competitive organizations, increasing market share, productivity) and the hierarchical culture (formalized and structured organizations, smooth functioning, stability). Theoretically, these four cultural typologies exist simultaneously in all organizations. In determining the type of organizational culture, the methodology considers six key dimensions of organizational culture: dominant characteristics, organizational leadership, and management of employees, organizational glue, strategic emphasis, and criteria for success. Following the (OCAI) methodology each dimension was analyzed by four close-ended questions - alternatives, among which the respondent had to divide 10 points (the higher number of points to the alternative that is most similar to the respondent's organization). The highest summary results under a certain culture type defined the prevailing culture type in the examined enterprise.

#### 3.3 Sampling and Data Collection

For the purpose of this study, judgmental sampling was used, in which population elements were selected based on the expertise of the researchers. We believe that, by using such a procedure, the representative enterprises of the population were included. Data were collected through in-depth case studies, including face-to-face structured interviews with 57 managers of Slovenian enterprises.

#### 3.4 Research Results and Discussion

57 companies were first classified in four groups according to their culture. Then they were tested for differences in their dynamic capabilities. Single dynamics indicators were measured on five point continuous scale from -2 to +2 (where -2 means strongly disagree and +2 means strongly agree). Dynamic capabilities score is a sum of ten indicators/elements (seeking and gaining new and attractive business opportunities, multiplication of systems and processes, development of different cultures, flexible legal regulations, development of dynamics promoters, development of strategic origins of success, flexible adaptation of structural and process organization, limiting the leadership system to reasonable optimum, orientation toward individual and time orientation).

		Ν	Mean	Std. Deviation	F	Significance
Dynamic capabilities	Adhocracy	7	12,571	7,277	0,436	
	Clan	33	8,818	10,719		
	Hierarchical	11	7,091	8,584		0.720
	Market	6	9,167	10,647		0,728
	Total	57	8,982	9,846		
Seeking and gaining new and attractive business opportunities	Adhocracy	7	1,857	0,378		
	Clan	33	1,424	1,173		
	Hierarchical	12	0,500	1,679	0.400	0,078
	Market	6	1,500	0,837	2,402	
	Total	58	1,293	1,257		
Multiplication	Adhocracy	7	1,571	0,535		
of systems	Clan	33	1,000	1,414		
and processes	Hierarchical	12	1,000	1,414		
and processes	Market	6	1,500	0,837	0,568	0,639
	Total	58	1,121	1,299		
Development of different cultures	Adhocracy	7	1,000	1,732	0,279	0,841
	Clan	33	0,515	1,752		
	Hierarchical	12	0,583	1,311		
	Market	6	0,167	1,835		
	Total	58	0,552	1,646		
Flexible legal regulations	Adhocracy	7	1,571	1,134		
	Clan	33	0,818	1,685		
	Hierarchical	12	0,417	1,165	0,992	0,404
	Market	6	0,333	1,862	0,992	0,404
	Total	58	0,776	1,556		
Development of dynamics promoters	Adhocracy	7	0,000	1,633		
	Clan	33	0,152	1,661		
	Hierarchical	12	0,083	1,730	0,070	0,976
	Market	6	-0,167	1,472	0,070	0,270
	Total	58	0,086	1,614		
Development of strategic origins of	Adhocracy	7	1,000	1,732		
	Clan	33	0,697	1,510		
	Hierarchical	12	0,083	1,676	0,709	0,551
success	Market	6	0,167	2,041		0,551
	Total	58	0,552	1,613		
Flexible adaptation of structural and	Adhocracy	7	1,286	1,113		
		33	1,152	1,302		
	Hierarchical	12	0,417	1,240	1,095	0.250
structural and process organization	Market	6	1,167	1,602	1,095	0,359

Table 1 shows the sample structure as well as means and standard deviations.

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Limiting the	Adhocracy	7	1,429	1,134		
leadership system to reasonable optimum	Clan	33	0,818	1,530	0,771	0,515
	Hierarchical	12	1,250	1,138		
	Market	6	1,500	1,225		
	Total	58	1,052	1,382		
Orientation toward individual	Adhocracy	7	1,429	1,512	0,418	0,741
	Clan	33	1,091	1,508		
	Hierarchical	12	1,000	1,348		
	Market	6	1,667	0,516		
	Total	58	1,172	1,391		
Time orientation	Adhocracy	7	1,429	1,512		
	Clan	33	1,152	1,326		
	Hierarchical	11	1,182	0,982	0,104	0,957
	Market	6	1,333	1,633	0,104	0,937
	Total	57	1,211	1,292		

Table 1

One way ANOVA for differences between dynamic capabilities regarding to organizational culture

The research results (in Table 1) show no statistically significant differences in dynamics of enterprises in relation to the prevailing culture type. Nevertheless, the enterprises with the prevailing adhocracy culture seems to be the most dynamic (mean scores) ones, followed by the enterprises with the prevailing market and clan culture. According to the results of this study enterprises with the prevailing hierarchical culture have the least potential for the development of dynamic capabilities. The detailed analysis of the single dynamic indicators shows only one statistically significant difference (at p<0,10) between the enterprises with four prevailing types of culture, namely for the element "seeking and gaining new and attractive business opportunities". Post-hoc test for this difference shows that enterprises with the prevailing adhocracy culture are more responsive to opportunities in their environment in comparison to enterprises where the hierarchical culture prevails.

#### Conclusions

Our research which aims to observe and to reveal differences in enterprise dynamics in relation to enterprise culture can be seen as partially successful.

On one side the research cognitions of our case study research showed that the culture of an enterprise impacts enterprise's propensity toward dynamics. Considering all ten elements (characteristics) of enterprises' dynamics as suggested by Pümpin and Prange [11] the most dynamic enterprises are enterprises where adhocracy culture prevailed. Such enterprises value creativity, willingness to experiment and take risk, personal autonomy, and responsiveness. Such enterprises are per se the one that are dynamic and entrepreneur oriented organizations, cutting-edge output is important as well as innovation.

Considering our research cognitions the less dynamic enterprises can be recognized those enterprises observed which showed hierarchical culture. In such enterprises focus on maintenance of internal system and strive for stability, clear task setting and enforcement of strict rules is important. Enterprises observed which showed hierarchical culture are rigid and therefore have less potential for development of dynamic capabilities.

The research was carried out as the preliminary research where only 57 enterprises were observed. However, our aim is to enlarge the number of enterprises included in the research to achieve the broader understanding of the role of culture for achieving the dynamics of enterprise.

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