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DIFFERENCES IN UNDERSTANDING DYNAMIC CAPABILITIES IN DIRECT RESEARCH

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Purpose: The aim of the research was to identify views regarding the capability of enterprises as expressed by members of their managerial staff. The research paid particular attention to the issue of "dynamism" of capabilities, that is, the capability itself and how to distinguish dynamic capabilities from non-dynamic capabilities.

Design/methodology/approach: The research was carried out using the qualitative method, by collecting and analysing the written statements of management representatives from twenty-seven companies of various sizes and industries.

Findings: The ability to distinguish oneself from the competition is a basic issue in the formation of the company's strategy. However, as demonstrated in the literature review, the newer theory of enterprise capability, which is dynamic capabilities, is not only constantly changing, but the background is still not clear enough to be a useful tool for management practitioners. These findings have led to the formulation of questions as to what extent and how management practitioners use theories about organisational capabilities? How do they understand this issue and how do they put it into practice? Thanks to empirical research, it is possible to answer these questions. Seven clear differences were identified between dynamic and non-dynamic capability portfolios that are closer in character to distinctive capabilities or core competence. These differences are the main components of two different ways of understanding the logic of an organisation's operation.

Practical implications: Empirical research has identified the beliefs that limit the ability to perceive the role or capabilities of dynamic capabilities in practice. The research also suggests a possible scenario for the dynamisation of the capacity portfolio.

Social implications: The results of the study highlight the role of the linguistic representation of knowledge in the field of management and its impact on the pro-innovation ("prodynamics") of managerial thinking. In this way, they refer to educational strategies aimed at the professionalisation of managerial staff.

Originality/value: This study presents real ways of understanding the issue of the organisational capabilities of management practitioners. The results may be useful for practicing managers, specialists in the field of managerial education, as well as researchers exploring the issues of dynamic capabilities and organisational competences.

Keywords: dynamic capabilities, distinctive capabilities, metaphors, qualitative research.

Category of the paper: Research paper.

1. Introduction

The concept of dynamic capabilities (DC) offers a coherent explanation of the actions that organisations take to stay competitive in a turbulent environment. Contrary to "normal" organisational capabilities, dynamic capabilities are strategic in nature - they correspond to the organisation's capability to reconfigure strategic resources to generate the best possible response to dynamic changes in the environment. Their idiosyncratic (Tallot, Hillard, 2014, p. 34) nature is the result of the dynamic integration of a wide range of routines, and creativity and learning outcomes (Teece, 2012, pp. 1396-1399), and their use in generating innovation (Alves, Cherubini, 2017, p. 242) and making market-oriented decisions. The concept of dynamic capabilities offers the possibility of a flexible and comprehensive description and analysis of organisational processes, which allow the organisation to dynamically adjust its activities to the variability and uncertainty of the environment. These processes are crucial to the existence of an organisation, but they are extremely complex (Miles et al., 1978, p. 547). No wonder, then, that the founding article, considered to be the first systematic lecture on the concept of dynamic capabilities (Teece, Pisano, 1997), has received over 13,000 citations¹. However, the dynamic capabilities theory is not easy to put into practice. First of all, the concept has not yet been fully developed. This means the presence of gaps and difficulties in the application result arising from the inconsistency and ambiguity of the formulations, which leads to various interpretations of these concepts, their essence, purpose and meaning.

Peteraf and Tsoukas also draw attention to the significant change in the concept of DC expressed in the texts of its creator, David J. Teece. The explanation of DC as presented in 2012 is significantly different from that presented in the founding article in 1997. In addition to Teece's work, currents representing DC in yet other ways are being developed (Eisnehhartdt, Martin, 2000, p. 1106). Even the above short analysis clearly shows the axis of tension between management theory and practice in the area discussed. The developed theory corresponds to the needs of the practice, but the degree of its development does not yet facilitate the formulation of solutions that can be applied in practice, allowing the management of the dynamic capabilities of the enterprise. Despite this, thinking in terms of organisational capacity is present in management practice. The developed and specified theory of organisational abilities will be applied in an organisational reality which is already organised in a certain way of understanding and naming them. Therefore, the aim of this article is to examine the views and beliefs present in the minds of managers that define the structure and functions of the capabilities of the organisation they manage. An insight into the organisation's ability to learn from managerial experience can help identify the common ground between theory and practice and those issues where there are divergent views.

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¹ According to the Web of Science, as of September 2022.

2. Capabilities, dynamic capabilities and competences of the organisation

The concept of strategic capabilities is one of the trends in the resource school of strategic management. Ansoff (1965) treated capabilities as a category of resources, along with the infrastructure, equipment and skills of their personnel, that enable enterprises to perform their functions. Andrews (1971) distinguished among the company's capabilities a group in whose implementation the company is particularly skilled. He called them "distinctive capabilites", pointing to their strategic potential. This ability can become an important resource for building a competitive advantage. A competency-based strategy is therefore an emergent strategy, because it emerges from actions and behaviours at various levels within an organisation (Mintzberg, Waters, 1985, pp. 260-261). These types of strategies, as opposed to the repetition of the sequence of planning and control of deliberate strategies, rely on learning-based flexible responses to changes in the market environment (Mintzberg et al., 1998, p. 208). For obvious reasons, these types of strategies are better suited to the current situation, which is characterised by high complexity, volatility, unpredictability, and thus also by the uncertainty of the environment. The concept that combines the organisation's capabilities with the ability to create an effective competitive response, and one which has gained enormous popularity, is the core competence concept. As in the case of distinctive capabilities, the concept of core competence assumes the existence of competences of a special character among the enterprise's many competences, constituting a competence core generating a strategic response to the challenges of the environment. Three criteria are used to identify these competences. The key competence, i.e. the strategically important: (1) allows access to various markets, (2) has the ability to create value significant for customers, and (3) is difficult to copy by competitors (Hamel and Prahalad, 1990). The identification of key competences made it possible to subject them to management, directing and thus dynamising the processes of organisational learning (Teece, Al-Aali, p. 508) and, if used, knowledge management practices (Teece, Al-Aali, p. 506). Core Competence is a unique combination of technology and knowledge (Petts, 1997, p. 552) that shapes the way a company operates and its ability to achieve strategic goals. They are complex in nature, as they are the result of the cooperation between many resources and processes, but they do not constitute a new quality in relation to the capabilities of Ansoff's work. These are "ordinary" capabilities, or "knowledge, experience and skills" (Richardson, 1972, p. 888).

The dynamic approach, as Teece and Pisano wrote in 1994, looks at competition in Schumpeterian terms. This view goes beyond the conditions of competing on the basis of resources, including competences, and also covers the processes of the active creation of new resources, or a new combination of them, inspired by fast and unpredictable changes in the market situation (Teece, Pisano, 1994, p. 552). Therefore, they define dynamic abilities as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al., 1997, p. 516). At the same time,

this ability is a subset of the company's abilities or competences (Teece, Pisano, 1994, p. 541)². Their dynamics results from taking into account the highly variable nature of the environment, that is, the increasing pace of the implemented innovations and the difficulties in defining the future conditions of competition (Teece, Pisano, 1994, p. 538).

However, this is not the only way to understand dynamic abilities. Peteraf and Tsoukas (2016, pp. 170-171) point to Teece's change of views in this regard. While in 1997 dynamic capabilities were defined as "the firm's ability to integrate, build (...)", by 2012 it had already become "higher level competences that determine the firm's ability to integrate, build (...)" (Teece, 2012, p. 1395). In a more recent approach, dynamic capabilities mean enriching the company's ability base with a meta-level, i.e. the ability or competence to create abilities or competences that ensure the best strategic response in a complex and dynamically changing environment. In another definition, Teece states that dynamic abilities "enable the firm to integrate, build, and reconfigure internal and external resources" (Teece, 2014, p. 329) by granting them the role of an enabler of dynamic abilities as was understood in the 1990s.

Teece's views on the role of organisational routines in dynamic abilities have also changed. In 1997, the role of non-transferable resources, such as values, culture or organisational experience, was recognised, as a result of which distinctive competences and capabilities generally cannot be acquired; they must be built (Teece et al., 1997, p. 528). However, the source of competitive advantage is indicated by high-performance routines operating 'inside the firm,' shaped by processes and positions (Teece et al., 1997, p. 528). In later works, however, he distances himself from this view. Routine actions are expected to be more common for ordinary capabilities than dynamic capabilities (Teece, 2012, p. 1396).

The latter, on the other hand, are to be original and unique, or become a source of new organisational routines (Teece, 2012, p. 1396). Apart from the changes in the views of the authors of the concept, the literature on the subject includes works arguing the need for significant changes and reformulations of the theory of dynamic capabilities. Eisenhard and Martin point to the role of best practices as a significant factor in the effectiveness of dynamic capabilities, which is not in line with Teece's views. And they understand dynamic capabilities as a strategic process consisting of typical organisational activities, enriched with not only slightly idiosyncratic elements, aimed at reconfiguration of resources. They suggest that the identification and analysis of dynamic capabilities and their transfer may be much easier than Teece's theory would suggest. Eisenhard and Martin also differentiate DC's efficiency depending on the dynamics of market changes, distinguishing, for this purpose, moderately dynamic markets and high-velocity markets (Eisenhard, Martin, 2000, p. 1115). As the market dynamics increases, so too do the requirements for the "dynamics" of dynamic capabilities. This requirement translates into the necessity to modify the methods of managing the

² Teece and Pisano treat these terms strictly synonymously, using the term "subset of the competences/capabilities" in their work.

experience accumulated by the company. In view of the diversity of opinions on dynamic abilities, the question arises about the opinions of dynamic and ordinary abilities/competences among managers. How do they perceive the competency structure that ensures the competitiveness of their companies? How dynamic are the competences they identify? These questions inspired the implementation of the research presented below.

3. Method

The aim of the research was to identify views on the capabilities of enterprises as expressed by members of their managerial staff. Practitioners were asked to provide in writing "the competences³, organisational skills⁴ and possibly dynamic abilities that allow the enterprises they manage to maintain a competitive advantage". The respondents were given complete freedom of form - the maximum or minimum number of skills was not specified, and the expected volume of responses was not determined. The only suggestion in this regard was a request to add an explanation of each of the indicated capabilities, also without any suggestions as to its volume or degree of detail. The only requirement made by the author (in the form of a sincere request) was to carry out the research independently, without the support of external sources. The aim behind such a composition of instructions was to obtain the research participants' honest, real, personal views on the competences and abilities constituting the basis for the competitive operation of the enterprises they manage. The entire study was conducted in Polish.

The dynamic capabilities test manual is an option. While the request to present the company's capabilities was clear to the respondents, the use of the term dynamic capabilities raised some doubts. During the interview, more than half of the potential study participants expressed doubts as to whether they understood the concept correctly and whether the capabilities they planned to indicate were in fact dynamic capabilities. The instructions were first delivered orally, and after obtaining consent to participate in the study, it was additionally sent by e-mail.

All respondents prepared their studies in an electronic version and sent them to the author of the study by e-mail. The preparation of the texts consisted of identifying the abilities that appear in the submitted texts. In the process of identifying and grouping

³ The concept of competence was used, defined as "the ability to perform certain activities, based on knowledge and experience" (wsjp.pl), often used in the organisational context, which is also synonymous with "skills" in Polish (synonyms.pl).

⁴ The use of the concept of abilities, apart from competences, aimed at encouraging the respondents to expand the scope of searching for competences for sources of competitive advantage when constructing responses. "Capability" in Polish is synonymous not only with "skills" (similarly to "competence"), but also with "potential" and "possibilities" (synonyms.pl). The same is true in English.

capabilities/competences, Kuuluvainen's (2012) proposal was used. This distinguishes three basic processes that are also meta-themes or classes of dynamic capabilities: opportunity search, resource acquisition and resource reconfiguration. The process of developing the texts was carried out using the Nvivo programme.

4. Research results

Responses in the form of written studies presenting the company's capabilities were received from 27 respondents, 18 women and 9 men, representing the middle management of enterprises, whose skills they described in their studies. The size distribution of these enterprises is as follows: large - 4; MSP - 14; micro - 9. The main activities of the surveyed enterprises are: banking - 1; logistics - 2; IT - 3; trade - 4; production - 6 and services - 11.

The studies ranged from 651 to 4,578 characters (including spaces). None of the responses contained information in a form other than text (drawings, diagrams, patterns, etc.). The arithmetic mean of the length of the studies was 2,011 characters, which is slightly more than a standard page of typescript. The detail of the statements was also assessed. The distribution of responses according to this criterion was as follows: full explanation of the abilities presented and their impact on the company's operations - 12; explanation of only some of the abilities listed - 1; brief explanation - 7; without explanations, or very brief explanations of individual capabilities - 7. The numbers of the enterprises' capabilities discussed in the statements ranged from 1 to 11, with the median being 5. There was no correlation between the number of distinguished abilities and the industry or company size.

The abilities mentioned or discussed also present a different degree of dynamics. According to the results of the literature research, the criterion for assessing the dynamics of abilities was, based on Teece and Pisano (1997), capabilities capable (in the sense of being able to) of integrating, building, and reconfiguring internal and external competences. The application of this criterion made it possible to distinguish three groups of answers (the number indicates the number of studies qualified for a given group): companies with standard (non-dynamic) capabilities - 14, companies with all dynamic capabilities - 3, and companies with some of the abilities dynamic, and some standard - 10. In the latter case, the fraction of dynamic capabilities in the company's capability portfolio is different. This parameter ranges from min = 1/8, i.e. 1 dynamic capacity of the 8 distinguished, to max = 7/9, calculated in the same way. As a result, it was possible to define three characteristics of the companies' capability portfolio - standard (non-dynamic), dynamic and mixed.

The portfolio of non-dynamic skills (non-dynamic portfolio) is characterised by a particular focus on employee skills. Employees are treated as the most important and, in most studies in this group, the only repository of skills. This also applies to managers, because the performance

of management functions in the vast majority of cases is presented as the result of the capabilities of the managerial staff.

In half of the cases from the non-dynamic portfolio of employees, skills are treated as a permanent resource of an unchanging nature. In the other half, the training policy was identified in this portfolio as a separate ability. It is interesting to note that such a solution, i.e. the recognition of training as a separate enterprise ability, appears only in cases from the non-dynamic portfolio.

In the case of this portfolio, it is possible to identify a certain standard pattern of the perception of the structure and functioning of the company's portfolio of capabilities. It can be paraphrased as follows: employees, thanks to their competences, are able to provide customers with high-quality products. Influencing the market has the character of communication - again of a personal nature - and concern for the quality of the product/service, since a satisfied customer will become a returning customer. In addition, in 8 out of 14 cases, additional measures are taken to strengthen the customer's relationship with the company. This is thinking in terms of competences or distinctive abilities. Internal resources - knowledge or skills - are treated as generators of advantage or new resources in relation to their environment: product quality, customer relations or image.

The description of dynamic capabilities (dynamic portfolio) has a completely different character than that found in the portfolio of non-dynamic abilities. Individual abilities refer to various sources of knowledge in their actions, striving to integrate them and use them in the process of creating a solution for a specific task. Apart from the knowledge and experience of employees, non-organisational sources of knowledge and artificial intelligence applications are mentioned. The overriding goal of knowledge management, and this has been strongly emphasised in the studies, is to generate innovative solutions to organisational problems by searching for rich and diverse combinations and transformations of knowledge already possessed and acquired. The sanctioning of the heterogeneous nature of knowledge, competences and organisational skills goes hand in hand with a general change in the language of studies presenting a dynamic portfolio. This change results from the release of respondents from the belief - typical for non-dynamic portfolios - of the personalised nature of competences and knowledge.

The logic of a dynamic capabilities portfolio also encompasses the perception of the company's environment. In these cases, a much more intense cooperation with the environment, taking on various forms, is emphasised. The environment is treated as a source of knowledge and opportunities for cooperation in creating innovative solutions. As one of the respondents wrote: Cooperation allows for the acquisition of knowledge and experience, because cooperating companies share information that can be used in <company name>, the company also shares news in the industry (...). In this way, a strong, loyal relationship is created between the company and its partners [manager in a micro-company in the IT sector]. The company acquires knowledge both from companies with which it cooperates within value chains

(suppliers and recipients), and also from competitors, business environment institutions, etc. Knowledge acquisition is carried out at the level of both employees and teams, and the organisation as a whole.

There is a visible interpretation of changes in the environment as a specific rhythm with which the company must synchronise the rhythm of its own operations. This rhythm of the reconfiguration of the environment, expressed in the changes in operating conditions, and in particular in changes in customer expectations, to which the company must quickly and creatively adapt, is presented as an integral feature of the environment. Changes in the company and its environment are treated as a natural and almost continuous phenomenon.

The mixed capabilities portfolio was represented by 10 of the studies collected. In a portfolio of this type, only part of the capacity is dynamic. The fraction of such capabilities in mixed portfolios ranged from 0.13, i.e. 1 dynamic capability out of the 8 distinguished ones, to 0.78 (7/9). Thus, it became possible to make observations about the process of the dynamisation of capabilities. The first processes that dynamised the portfolio of capabilities were the designing of new products and the establishment of cooperation with the environment in order to acquire knowledge that is to make the process of designing new products more effective. The solutions typical of a non-dynamic portfolio that remained last in mixed baskets are training and customer relationship care, distinguished as separate capabilities.

Table 1. presents the ten most common terms in each of the three sets of studies. As can be seen, in a non-dynamic portfolio the most common concepts are those of the logic of this approach: client - company - employee, while there are no concepts referring to the company's environment. On the list of popular words in the descriptions of dynamic portfolios, two such terms can be found: "market" and "industry". The term "system" is also often used, due to the higher recognition of the role of the management system than other portfolios. Table 2 summarizes the characteristic differences between the extreme portfolios - dynamic and non-dynamic, which are clearly visible in the descriptions collected.

Table 1. *The ten terms most frequently used in the descriptions of individual portfolios*

No.	Non-dynamic portfolio	Mixed portfolio	Dynamic portfolio
1	client	competences	skill
2	company	company	company
3	employees	clients	client
4	competences	employees	system
5	new	skill	industry
6	products	range	possibility
7	skill	products	new
8	knowledge	sale	employees
9	job	services	production
10	activity	market	market

The terms are ordered in descending order, starting with the most frequent. During the analysis of the studies, synonyms were not taken into account. The results for the frequency of abutments have been deleted. Concepts are presented in the singular or plural.

Source: own research.

Table 2. *The characteristic differences between the dynamic and non-dynamic capacity portfolio*

Area	Non-dynamic portfolio	Dynamic portfolio
The source of	Competences and commitment of	The ability to dynamically reconfigure
competitive	employees and managers	resources at the rate and direction of
advantage		changes in the environment
Knowledge	Employees' and managers' skills	Written in various forms: culture,
localisation		technology, routines, employee skills,
		databases and knowledge, available in
		various forms in the environment of the
		organisation
Acquiring	Training, cooperation with clients, industry	A wide range of cooperation practices,
knowledge from	information	environmental observation and knowledge
the environment		acquisition at the level of individuals, teams
		and organisations
Employees	The only essential skill repository. Their	Holders of a specific type of knowledge
	knowledge is crucial and dominates all	(skills and experience), which is one of
	other types of knowledge and information	many types of knowledge used
	used in the company	
Staff	Training and practice. As a last resort,	Training, creating conditions for self-
improvement	hiring a new employee	development, searching for specialists with
		new types of knowledge and skills
Priorities in	Product quality, strengthening customer	Cooperation, learning, observation of
relations with	relations	changes
the environment		
Changes and	Improving the skills of employees and	Following the rhythm of changes in the
improvement	managers by solving successive instances	environment and looking for a creative
	of similar tasks and problems	response to the direction of these changes

Source: own research.

5. Conclusions

On the basis of the research presented, three vectors can be indicated that favour the dynamisation of the company's portfolio of capabilities:

- 1. Noticing the role of the management system in creating the company's success. The belief in the fundamental role of the skills of the employees and managers gives way as the ability becomes more dynamic to the understanding of the key role of the system in all its complexity.
- 2. Perceiving opportunities appearing in the environment. The interior of the company is dynamised thanks to syntony with the dynamics of the surroundings. Openness to the environment grows with the inclusion of further external resources in the practice in particular, participation in networks that cooperate with each other and co-create knowledge and innovation.
- 3. An important factor is also increasing the variety of sources of knowledge used by the company.

In the statements analysed, in the group of dynamic and non-dynamic portfolios, a completely different narrative is visible, which can be considered a manifestation of the adoption of various key metaphors organising the thinking of the participants in the research about their companies and their understanding of the nature of their operations (Grant, Oswick, 2008, p. 3). Descriptions of non-dynamic portfolios reflect the perception of the company as a mechanistic and hierarchical system, a situation in which the inner workings of the company and its surroundings are mutually confrontational. The studies describing dynamic portfolios suggest that their authors understand companies as networks of creative and intelligent processes. The scope and possibilities of cooperation - the richness, scope and attractiveness which the surroundings offer the company - means that there is no need to emphasise or strengthen the border between the company and the environment.

The studies, the results of which are presented in this paper, also have their limitations. Due to a relatively small research sample, only three studies presented a fully dynamic portfolio. Perhaps a larger number of studies would reveal patterns that govern the way managers identify the capabilities of the organisations they lead. However, the goal of the research, defined as the examination of the views and beliefs present in the minds of managers, and defining the structure and functions of the organisation's capabilities, was certainly achieved.

The author's particular attention was drawn to the aforementioned diametric difference in the language of the description of abilities between those studies presenting a dynamic and non-dynamic portfolio. The nature of these differences suggests that the factor that reduces the dynamics of organisational skills is the cultivation of traditional ideas about the activities of companies. The image of the organisation emerging from studies included in the group of non-dynamic portfolios is a static, hierarchical structure that strictly assigns tasks to competent and dedicated employees, and an environment consisting of customers who need to be attached to each other and competitors with whom it is necessary to fight. This observation highlights the importance of managerial education, and of a place in its structure of content devoted to resource-based views of the companies, the process approach, the network paradigm, and the contemporary theory of innovation, emphasising the role of open innovation. The ability to describe the functioning of an organisation in newer language can allow managers to see opportunities to make organisational processes more dynamic and innovative and which fully utilise the resources of the environment.

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