ORGANIZATION AND MANAGEMENT SERIES NO. 147

STRATEGIC ORIENTATION IN E-ADMINISTRATION

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Purpose: The aim of this article is the identification of strategic orientation in e-administration using the Miles and Snow framework. This framework takes into account that strategy is a way of matching the organization and its environment, while internal structures and processes must, in turn, follow the strategy in order to successfully adapt to the environment and the organization. We are particularly interested in the way e-administration interacts with its environment. By adoption of archetypes of a defender, prospector, analyzer or reactor? Or perhaps strategic orientation in e-administration is a mix of various strategies at the same time?

Design/methodology/approach: Data collection was conducted with the use of the CAWI method, in the period from November 2017 to January 2018. 226 Polish organizations took part in the research.

Findings: During our empirical investigation we identified, that the hybrid strategic stances within organizations are the most common. E-administration, in particular, is likely to pursue a mix of strategies at the same time, because it is expected to satisfy a range of conflicting and competing goals, which are judged by an array of diverse stakeholders.

Originality/value: Strategic management in public administration in recent years has become more and more important. In the Web of Science, we identified around 2708 articles dedicated to strategic management in the Public Administration section, but only a few examine Miles and Snow strategies.

Keywords: strategic orientation, Miles and Snow, e-administration.

Category of the paper: Research paper.

1. Introduction

Strategic management is an area of academic inquiry and organizational practice that examines the relationships between strategic aims, processes and content, typically using a contingency framework, which states that successful organizations adapt to their environment in the pursuit of higher performance (Walker, 2013). In the public sector, strategy is conceptualized as a mean, by which organizations can improve their performance and provide better services. Public administration is expected to provide services that meet the expectations

of citizens and are efficient, effective and equitable (Boyne, and Walker, 2004). The digitization of civil services can easily improve the quality of administration: replacing analogue procedures, ensuring more efficient means for accessing information, changing organizational structure via decentralization, thus improving information access and decision making for civil servants, improving the public administration culture (Veszprémi, 2018). For many years, the idea of e-administration was identified only with informatization (Grönlund, and Horan, 2005). This way of understanding e-administration has led to postponing the necessity of implementing structural, organizational and cultural changes. An investment in IT infrastructure does not require redesigning the organization. OECD report titled "Rethinking e-Government Services: User-Centered Approaches" stresses that the perspective taken in implementing e-administration focused on the implementing entity (government, office) rather than citizens' needs and expectations (OECD, 2009). That is why the concept of E-administration 2.0 has appeared. In the light of this concept, e-administration becomes the driving force for transformation of the entire public sector and the government as an arbitrator inviting social partners to jointly search for the best solutions (Lips, 2013). From the perspective of analyzing the issue, also on the strategic level, it is important to try, at the very beginning, to emphasize these elements, which can be indicated when determining conditions necessary and conducive to development of E-administration 2.0. While in the informatization of administration the basis for introduced changes was the technical base and appropriate procedures, also those relating to security and identity verification issues, currently, we are dealing with a change in the way we think about administration. Infrastructure and procedures that meet the conditions for the first stage, conventionally called E-administration 1.0, are fully adaptable to type 2 processes, where administration is becoming more open and fit. One of the key concepts in strategic management and organizational theory is the concept of fit, seen as the corner stone of the organization's strategic development (Aleksić et al., 2017). The fit between two elements is defined as the degree to which the needs, requirements, objectives, purpose and/or structure of one element is in accordance with those of another element (Nadler, and Tushman, 1980). The concept itself emphasizes the importance of harmonization between complex organizational elements in order for them to reinforce one another (Aleksić et al., 2017). Many theorists emphasize that organizations need to have interdependent and mutually supportive strategy, structure and processes in order to be successful (Aagaard, 2016).

The literature does not devote much space to the organizational strategies in public-service entities. Moreover, most of the literature is concerned with strategy processes in public organizations. This emphasis may reflect an assumption that processes of strategy formulation and implementation count, rather than actual content of strategies (Boyne, and Walker, 2004).

Existing classifications of public organizations strategies only consider strategic actions or stance, confusing goals, processes and strategy content (i.a. Stevens, and McGowan, 1983; Wechsler, and Backoff, 1986; Nutt, and Backoff, 2018).

The typologies pose false contradictions, are categorical and unidimensional, paying insufficient attention to the specific characteristics of public organizations. In particular, they neglect the importance of imposition and regulation of strategies (Boyne, and Walker, 2004). Miles and Snow developed the analysis of public organizations strategy that is not only exclusively concerned with content, but also distinguishes between strategic stance and strategic actions. This is one of the most accepted strategic management frameworks (Miles et al., 1978). This framework takes into account that strategy is a way of matching the organization and its environment, while internal structures and processes must, in turn, follow the strategy to successfully adapt the environment and the organization. Miles and Snow typology allows us to understand organizational performance with respect to specific relationships between the four strategic types and the environment. Each of those types should be characterized by specific internal organizational settings that need to support the chosen strategy and its implementation, in order for organization to accomplish its strategic goals in a certain environment (Aleksić et al., 2017). The strategic types of a defender, prospector, analyzer and reactor are perhaps the best-known aspects of Miles and Snow framework (Walker, 2013). These types of strategies are a summary or shorthand of the ways, in which organizations connect with their environments and respond to three major problems and solutions related to the adaptation cycle: entrepreneurship, engineering and administration. Solutions to the entrepreneurial problems (on the field of services), as well as processes meant to solve engineering, technological and entrepreneurial problems, are the content of the organization's strategy, i.e. the ways, in which the organization strives to achieve selected goals. The solutions to administrative problems (organizational structure, policy and process) are complex and require managers to establish structures and processes rationalizing strategic decisions that have already been made (lagging), while considering how such processes and structures may affect the future capacity to adapt to changing circumstances (leading) (Walker, 2013). That is why we are particularly interested in the way e-administration interacts with its environment. By adoption of archetypes of a defender, prospector, analyzer or reactor, or by adopting a mix of various strategies at the same time? The aim of the article is the identification of a key strategic orientation in e-administration. This article is organized in the following manner: the next sections include a review of the subject literature, especially the one concerning strategic orientation. The literature review constitutes a basis for formulation of the research hypothesis. The next section, titled "Materials and Methods", includes a description of the sample and the analysis. Empirical results, along with a discussion and conclusions, are presented in the last sections of this paper.

2. Strategic orientation

Strategic management in public administration in recent years has become more and more important (Poister, Pitts and Edwards, 2010; Walker, 2013). That is why we expected that literature search on the topic would identify a lot of articles. Indeed, a Web of Science search of article titles and abstracts using the phrase "strategic management", undertaken in March 2020, identified around 2708 articles in the Public Administration section. However, relatively few examine Miles and Snow (Meier et al., 2008, 2010; Andrews et al., 2009a, 2009b, 2011; Boyne, and Walker, 2010; Walker, Boyne, and Brewer, 2013; Ravenhorst, Meerman, and Huyser, 2014; Flink, 2015; Staples, and Dalrymple, 2016; Wronka-Pośpiech, and Frączkiewicz-Wronka, 2016; Cheon, and An, 2017; Pasha, Poister, and Edwards, 2018; Kim, and Berry, 2018; Lim, Chalmers, and Hanlon, 2018). The strategic archetypes of prospector, defender, analyzer and reactor are the best- known aspects of the Miles and Snow framework (Walker, 2013).

Prospectors are the organizations that are continuously looking for market opportunities and regularly experiment with potential responses to emerging environmental trends (Miles et al., 1978). Prospector spreads power much more widely between parts of the organization, because it encourages flexible and innovative behavior, that will allow it to locate and exploit opportunities for new ventures (Andrews et al., 2009a). In the public sector, prospectors often try to increase budgets and pioneer in the development of new products and services (Andrews et al., 2011). Prospectors prefer strategy process that comprises hunch, intuition and reliance on the push-pull aspect of organizational politics (Walker, 2013). Prospectors are defined as organizations that embrace changes using innovative ideas and are capable of responding rapidly to contingencies. However, due to the existence of "technical flexibility", prospectors cannot obtain the highest efficiency, but they are ideal for dealing with changing and unstable environments (Kim, and Berry, 2018).

The prospector's administrative system is created in such a way to be able to deploy and coordinate resources among many decentralized units and projects, rather than to plan and control operations of the entire organization centrally (Andrews et al., 2009a). Prospectors are poised to expand or contract their activities, depending on the opportunities or threats they face, so the planning cycle is seldom systematic or complete (Andrews et al., 2011). The power is devolved to middle managers and front-line staff, so that they can apply their expertise in many areas without being unduly constrained by management control, jobs are broadly defined in order to permit maximum autonomy (Andrews et al., 2009a). Considering the aforementioned prospector's strategy features and the direction of reforms initiated many years ago, in particular regarding e-administration, we believe that this is the most common attitude among public administration units.

H1: The prospector strategy occurs in e-administration most often.

Defenders are organizations that conservatively look at the development of new products. They more often compete in terms of price and quality than new products or markets, as well as focus on improving the efficiency of their existing operations. Public sector defenders are likely to focus on low-risk strategies, designed to increase the efficiency of their existing services (Andrews et al., 2011). Defenders adopt a centralized structure to maintain control over efficient services that focus on core business or service goals. Defenders undertake a lot of formal planning, collect and analyze large amounts of data on service needs, evaluate options to meet those needs and use advanced techniques to balance the costs and benefits of each option (Walker, 2013). A defender attempts to maximize the efficiency of internal procedures (Andrews et al., 2009a). They plan intensively and in detail, carefully evaluating any proposed changes in technology and procedures before taking action (Andrews et al., 2011). A defender's approach resembles a classic bureaucracy, in which "only top-level executives have the necessary information and proper vantage point to control operations that span several organizational subunits" (Andrews et al., 2009a). Defenders seek to maintain the status-quo, pursuing efficiency and stability in coping with problems, and the defender's stance is suitable for operating in a stable environment (Kim and Berry, 2018). Considering the aforementioned defender's strategy features and historically conditioned bureaucracy in public administration, we believe that this is the second most common attitude among public administration units.

H2: A defender strategy is the second most commonly chosen in e-administration

Analyzers are a midway category, between prospector and defender. Analyzers adopt intermediate structures and processes that depend on emphasis on proactive or conservative strategy (Walker, 2013).

Reactors are characterized by the absence of strategy, along with inconsistent structures and processes. Reactors in the public sector do not have their own strategy, but are waiting for the urge or coercion of external forces, such as interventions of regulators (Andrews et al., 2011). Reactors "do not possess a set of mechanisms which allows them to respond consistently to their environment" (Andrews et al., 2009a). Researchers argue that such reluctance to centralize or decentralize decision making could be more prevalent in public organizations, because they are subject to a wider range of competing external pressures than private companies, but given the direction of reforms initiated many years ago, in particular regarding e-administration, we believe that this is not a common attitude among public administration units.

H3: An analyzer and rector strategy occurs in e-administration less often

Some researchers criticize placing organizations in mutually exclusive boxes and assume that each organization has only a single strategic stance, which can easily be observed (Conant, Mokwa, and Varadarajan, 1990; Boyne and Walker, 2004). Researchers emphasize that strategic choice is messy and complex, rather than neat and simple (Desarbo et al., 2005). That is why it is suggested that organizations use a hybrid strategic stance instead (Boyne, 2003). Public administration, in particular, is likely to pursue a mix of strategies at the same

time, because they are expected to satisfy a range of conflicting and competing goals, which are judged by an array of diverse groups (including citizens, service users, the media, regulators and politicians) (Boyne, and Walker, 2004). Taking into account this suggestions, we assume that a prospector-defender strategy will be the most prominent hybrid. Because, as some researcher argue, all organizations are both prospectors and defenders, to some extent (although the balance will vary with the priority attached to these stances, and that attached to a reactor strategy) (Boyne, and Walker, 2004).

H4: Prospector and defender strategy is the most prominent hybrid among strategic orientations. Some researchers also suggest that, when analyzing strategic orientation, the size of an organization should be taken into account (Smith, Guthrie, and Chen, 1986). However, because we deal with the provision of services using IT, we believe that the size of an organization should not affect the adopted strategic orientation.

3. Materials and methods

The proper study focused on public entities that provide electronic administrative services. The research sample was determined based on the Act of July 24, 1998, which introduced the three-level territorial division of the state. According to the act, the units of the primary threelevel territorial division in Poland include municipalities, poviats and voivodeships. According to the data available as of September 30, 2017, Poland features 2,803 entities, most of which employ less than 9 people. However, the study only featured organizations that hired more than 10 employees. This method of narrowing the population aimed at identifying the capabilities that are intentionally embedded in the processes and not an effect of spontaneous multidirectional interaction taking place in micro-organizations. In such organizations, the problem of loss of conveyed information (especially along hierarchic levels) in principle does not occur, therefore organizations do not have to develop management notification mechanisms and procedures. After such narrowing, the study sample consisted of 634 entities. The request for consent for participation in the study was sent via a cover letter to persons holding the highest position in each of these organizations. 288 out of 634 entities took part in the study. With a fraction of 0.5 and max. error of 5%, the obtained study sample meets the minimum sample condition. Due to the lack of responses or their inconsistency, the sample ultimately featured 226 public administration organizations. Data collection was conducted with the use of the CAWI method, in the period from November 2017 to January 2018.

All scales for measuring particular constructs are seven-point Likert scales, from 1 - "I strongly disagree" to 7 - "I completely agree". Such a scale requires structural modelling used in the study to analyze dependencies between the studied phenomena postulated in the theory.

4. Results

The objective of the research was to identify the types of strategic orientation in public entities that provide electronic administrative services. According to the concept proposed by Miles and Snow, organizations might be characterized by four archetypes: prospector, defender, analyzer and reactor. The assessment of strategic orientation based on validated instrument comprising 12 questions (Desarbo et al., 2005). Each item included 3 answers. On this basis, in relation to the methodology adopted in this area, the occurrence of 4 strategic orientations was established: Prospector – P, Analyzer – A, Defender – D and Reactor – R. In case of an equal number of indications, appropriate types of mixed strategies were identified. The structure of particular types of strategic orientation is presented in Table 1.

Table 1. *Types of strategic orientation*

Type of strategic orientation	Total number of organizations	Percentage
P	8	4%
D	57	25%
R	3	1%
A	0	0%
PD	64	28%
PR	2	1%
PA	0	0%
DA	3	1%
DR	11	5%
RA	2	1%
PDA	3	1%
PRA	1	0%
PDR	12	5%
PDRA	60	27%
Sum	226	100%

Note. P – prospector, D – defender, R – reactor, A – analyzer.

In the studied sample, among the single strategic orientations, the dominating one is the defender type (57 organizations). Defenders have little or no involvement in the development of new products or markets, but they devote a lot of attention to improving performance and focus on tasks arising in this area. Such organizations rely on centralized decision making and usually have relatively simple controls. However, mixed strategies generally dominate in the studied sample. The most popular strategies were Prospector-Defender (PD) and Prospector-Defender-Reactor-Analyzer (PDRA) hybrids. The simultaneous occurrence of the Prospector-Defender (PD) strategy is equivalent of the Analyzer strategy. Analyzers are a midway category, between prospectors and defenders. Analyzers adopt intermediate structures and processes that depend on the emphasis on proactive or conservative strategy. This type of strategy was most often found in the largest organizations (above 500 workers). Strategic orientations identified in the studied sample differ from each other in some respect, however, these differences are not significant. Details are presented in Table 2

Table 2. *Types of strategic orientation depending on the organization size (number of employees)*

Type of strategic orientation	from 10 to 49	from 50 to 249	from 250 to 499	above 500
P	0%	4%	10%	0%
D	29%	28%	20%	8%
R	0%	1%	10%	0%
A	0%	0%	0%	0%
PD	29%	27%	10%	50%
PR	0%	1%	0%	0%
PA	0%	0%	0%	0%
DA	0%	1%	10%	0%
DR	0%	7%	0%	0%
RA	0%	1%	0%	0%
PDA	6%	1%	0%	0%
PRA	0%	1%	0%	0%
PDR	0%	5%	0%	17%
PDRA	35%	23%	40%	25%

Note. P – prospector, D – defender, R – reactor, A – analyzer.

5. Discussion

The last two decades have brought a number of changes in the functioning of e-administration. These changes were made to lead to the development of an open and transparent public administration, i.e. understandable and credible to citizens, open to democratic involvement and control. Public administration serving all, i.e. user-oriented, not excluding anyone in terms of the possibility of providing services and respecting everyone as an entity by providing personalized services. Productive public administration, i.e. one that provides optimal benefits in relation to the expenses incurred by taxpayers. It means that less time is wasted waiting in queues, there is a significant reduction of errors and the functions performed by officials can bring more satisfaction. Implementation of these changes has become possible, among others, through the use of information and communication technology, which must be associated with organizational changes, in particular focused on processes, people, culture and structure of the organization. Otherwise, it will not contribute to the fulfilment of citizens' needs and expectations. Contemporary organizations, operating in a turbulent environment, face the need to meet many complex requirements that call for constant adaptation to change. The current reality, expressed by marketisation of many public sector services, indicates the need to change the way public administration is managed (Wronka-Pośpiech and Fraczkiewicz-Wronka, 2016). This should, among other things, be manifested in a departure from the defender orientation, typical for centralized organizations, offering tight control over internal operations (Walker, 2013), towards the prospector orientation, which means deploying and coordinating resources among many decentralized units and projects (Andrews et al., 2009a). However, this change takes time. In the conducted

research, hybrid orientations were identified as dominant: Prospector-Defender (PD) and Prospector-Defender-Reactor-Analyzer (PDRA). The existence of such hybrids of strategic orientations means that changes in the way of thinking about e-administration have been initiated. However, as befits public sector organizations, they are slow, as evidenced by the incidence of the defender strategy. In the light of obtained results, it is necessary to repeat the research in order to be able to see the direction and speed of the evolution.

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