

ENVIRONMENTAL SUSTAINABILITY ORIENTATION FROM A DYNAMIC CAPABILITIES PERSPECTIVE – A CONCEPTUAL APPROACH

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Purpose: The environmental problems which have been deepening in recent decades, i.e. climate change or the degradation of the biosphere, are creating a new reality of pursuing business activity. On the one hand, firms – by their nature – seek to maintain the efficiency and to gain a competitive advantage, on the other hand – they are more and more often obliged to balance environmental goals with economic goals. Although there are opinions that these goals are competitive in themselves, it is possible for firms to reconcile them effectively by adopting Environmental Sustainability Orientation. Since this orientation is analysed in the literature from various research perspectives, this paper attempts to conceptualise it from a Dynamic Capabilities perspective.

Design/methodology/approach: The paper is theoretical and based on an in-depth review of the literature. The developed conceptual model includes the direct and indirect relations among dynamic capabilities formulated in multidimensional terms, Environmental Sustainability Orientation and organisational outcomes. Embedding considerations in resource-based theories, three key processes (organisational learning, integration and reconfiguration of resources) have also been analysed, which, as necessary for building dynamic capabilities, make it easier for firms to adopt strategic Environmental Sustainability Orientation.

Findings: The considerations included in the paper complement the literature in the area of strategic management and make it easier to understand Environmental Sustainability Orientation at the organisational level. They also point to a need to undertake further scientific work, the authors of which can use the research propositions elaborated in the paper and thus empirically verify the proposed conceptual model.

Originality/value: The key scientific contribution of the paper is the development of a research framework formulating Environmental Sustainability Orientation from a Dynamic Capabilities perspective, i.e., respectively: (1) the capability to identify opportunities and/or threats (sensing), (2) the capability to use these opportunities and/or cope with threats (seizing) and (3) the capability to reconfigure the firm's resources and competences (reconfiguring). The logic of this approach results from the fact that the three fundamental processes underlying the building of dynamic capabilities – organisational learning, integration and reconfiguration of resources – supported by the conscious action of CEO, make it easier for firms to adopt strategic Environmental Sustainability Orientation.

Keywords: Environmental Sustainability Orientation, dynamic capabilities, theoretical framework.

Category of the paper: Research paper.

1. Introduction

Just like any new concept, Environmental Sustainability Orientation (ESO) is based on solid research foundations rooted in management sciences. In the literature regarding strategic choices, the best known is Market Orientation, to which thousands of studies, both theoretical and practical, have been dedicated (Gupta et al., 2019). Similarly, researchers are highly interested in Entrepreneurial Orientation, i.e. a strategic attitude of an organisation which combines the aspects of proactiveness, risk-taking, and innovativeness (Covin and Slevin, 1989) and allows firms to gain a competitive advantage in an uncertain environment (Simpson and Sariol, 2022). In view of the key role of the environment, including its characteristic set of features (variability, complexity and hostility), researchers focused on Innovation Orientation, including interrelations and interactions between innovations and the above-mentioned strategic orientations (Ejdys, 2014). The capability of enterprises to generate, adapt and implement innovations (Subramanian and Nilakanta, 1996), embedded in their organisational culture, structure and strategy (Siguaw et al., 2006), has been considered the most important determinant of maintaining a relatively sustainable competitive advantage.

The growing popularity of Environmental Sustainability Orientation points to a paradigm shift in management sciences (Khizar et al., 2022). Researchers identify many benefits associated with implementing an environmentally friendly strategy by firms (Hart, 1995; Aragón-Correa and Sharma, 2003; Roxas et al., 2017; Danso et al., 2019), and the results of these studies may dispel the doubt which still bothers practitioners – does it pay to be sustainable? However, such a strategy is not always a firm's own choice, because – increasingly – it results from the need to meet the requirements of, e.g., customers, suppliers or business partners (Claudy et al., 2016; Cheng, 2020). In addition, regulatory (environmental legislation) and market (taxes, subsidies) instruments implemented in many countries (Idoko et al., 2013) make firms include environmental issues in their business activity (Amankwah-Amoah et al., 2019; Khizar et al., 2022). In this way, reconciling business goals with taking environmental activities becomes – more and more often – simply a necessity rather than a choice, which explains the growing popularity of the Environmental Sustainability Orientation in the literature on strategic management (Khizar et al., 2022).

Among the numerous studies attempting to conceptualise ESO, we can identify two different research perspectives. On the one hand, researchers analyse the Environmental Sustainability Orientation at the individual level, referring it to the intentions, values, aims,

attitudes, and beliefs of individuals (Kuckertz and Wagner, 2010; Sung and Park, 2018; Abdulaziz-al-Humaidan et al., 2021). A different view suggests that ESO should be expressed at the organisational level (Roxas and Coetzer, 2012; Roxas et al., 2017). In this perspective, it is seen as *the overall proactive strategic stance of firms towards the integration of environmental concerns and practices into their strategic, tactical and operational activities* (Roxas and Coetzer, 2012, p. 464; Amankwah-Amoah et al., 2019; Cheng, 2020). In addition, researchers argue that adopting Environmental Sustainability Orientation requires a significant involvement of resources (Adomako et al., 2019) and the development of specific capabilities and leads to gaining a competitive advantage and higher efficiency (Claudy et al., 2016). Taking both assumptions into account at the same time embeds the concept of ESO not only in the Resource-Based View (RBV), but also in the theory of Dynamic Capabilities.

The objective of the paper is an attempt to conceptualise Environmental Sustainability Orientation from a Dynamic Capabilities perspective. Starting with a comparison of two different formulations of ESO and a synthetic presentation of resource-based theories, the paper raises the issue of a conceptual connection between Environmental Sustainability Orientation and dynamic capabilities formulated in multidimensional terms. This orientation of the conducted considerations allows to avoid criticism related to limiting the analysis only to the classical resource-based concept, understood as a static and balance-based model (Easterby-Smith et al., 2009). Although the dynamic nature of Environmental Sustainability Orientation has already been highlighted in the literature (Claudy et al., 2016; Criado-Gomis et al., 2017), still there are no research works that would explain even not the consequences but the processes facilitating the adoption of ESO at the organisational level. The considerations presented in this paper are aimed at filling this research gap.

The analysis carried out – based on an in-depth review of the literature – indicates that dynamic capabilities support the adoption of ESO, which leads to achieving better organisational outcomes. The logic of this approach results from the fact that the three fundamental processes underlying the building of dynamic capabilities – organisational learning, integration and reconfiguration of resources – supported by the conscious action of CEO, make it easier for firms to adopt strategic Environmental Sustainability Orientation. In other words, it is the potential of dynamic capabilities that makes a firm more sensitive to environmental problems, which is conducive to pursuing business activity for the environment, while allowing to improve the efficiency and/or to gain a competitive advantage.

2. Theoretical Background

Among researchers analysing environmental sustainable orientation, two different research perspectives dominate (individual level vs organisational level). In the first perspective, researchers define ESO as the underlying attitudes and convictions (Kuckertz & Wagner, 2010), that refer to the level of concern about the environmental protection and social responsibility of individuals (Sung & Park, 2018), regardless of the business's circumstances, issues, profits and so on (Abdulaziz-al-Humaidan et al., 2021). As a theoretical framework, the authors mainly use the Upper Echelon Theory (UET), justifying the need to study ESO from the perspective of actions taken by the top management.

In the second perspective, researchers argue that Environmental Sustainability Orientation is a strategic concept at the organisational level, illustrating the firm's commitment to sustainability activities, programmes and practices (Roxas and Coetzer, 2012; Roxas et al., 2017). The logic of this approach points to the fact that firms should take environmental issues into account in their business activity, and thus pursue business goals in an environmentally and socially responsible manner (Claudy et al., 2016; Danso et al., 2019). Research in this area refers directly to resource-based theories popular in the literature, i.e.: the Resource-Based View of the Firm (RBV), Natural Resource-Based View of the Firm (NRBV) and Dynamic Capabilities Theory (DCT).

The creators of RBV (Wernerfelt, 1984; Barney, 1991) formulate a firm as a set of various resources distinguishing it from its competitors, which – according to the logic of the resource-based concept – should be valuable, rare and/or firm-specific, as well as difficult to replace and imitate (Wernerfelt's VRIN framework, 1984). In addition, it is assumed that organisations differ from each other in a fundamental way not only in terms of their resources, but also in the context of their effective use (Barney's VRIO framework, 1991). Therefore, the conceptualisation of Environmental Sustainability Orientation from the RBV perspective indicates that it is a unique organisational resource determining gaining a competitive advantage (Cheng, 2020).

The positive relation between Environmental Sustainability Orientation and firm outcomes has been theoretically described by Hart (1995), who made gaining a competitive advantage conditional upon meeting the challenges posed by the natural or biophysical environment. This approach – known in the literature as NRBV – stresses the importance of strategic capabilities aimed at prevention of pollution, product management and sustainability, treating them as a key condition for gaining a long-term competitive advantage (Hart, 1995).

An important issue that escapes the resource-based perspective is the need to dynamically adjust resources in a firm to the changing conditions of the environment. This assumption made researchers (Teece et al., 1997; Teece, 2007) complement the RBV concept with the dynamics of introducing organisational changes (Easterby-Smith et al., 2009). The DCT, developed on

the basis of the pioneering study by Teece et al. (1997), points to the need to build specific capabilities – also formulated as higher-order capabilities (Winter, 2003) or meta-capabilities (Collis, 1994) – which lead to the continuous creation, expansion, updating and protection of the resource base, in order to gain a relatively sustainable (in the context of generating values) competitive advantage.

Although the literature has shown empirically that firms with greater dynamic capabilities are characterised by the higher efficiency (Wilden et al., 2013; Wang et al., 2015; Pichlak, 2021) and a significant competitive advantage (Fainshmidt and Frazier, 2017), we cannot a priori reject an assumption that this relationship is specific, contextual and situational. This is consistent with the statements by Bowman and Ambrosini (2003), Zahra et al., (2006), and Shamsie et al. (2009). Researchers point to an indirect relation between dynamic capabilities and efficiency, while highlighting the key role of the organisational context in which these capabilities are developed. When being guided by the arguments of Barreto (2010), the study of dynamic capabilities should be focused, first of all, on analysing the directions of using their potential. Therefore, the conceptual framework developed in this paper is based on the assumption that dynamic capabilities facilitate the adoption of Environmental Sustainability Orientation, which leads to achieving better organisational outcomes.

Referring to the most popular literature formulation of dynamic capabilities by Teece (2007), the model takes into account three components (dimensions) of them: sensing, seizing and reconfiguring. Sensing is about identifying opportunities and/or threats; seizing – about mobilising organisational resources and competences in order to use these opportunities and/or cope with threats; reconfiguring boils down to reorganisation, as well as – if necessary – to reconfiguring resources and competences in order to achieve organisational renewal.

In addition, the multidimensional formulation of dynamic capabilities indicates that they are interrelated. This is consistent with the arguments by Danneels (2016), who points out that abilities to detect and use opportunities determine the reconfiguration of resources and with the studies by Wilden and Gudergan (2015) and Fainshmidt and Frazier (2017), who confirm this empirically. Sensing generates the emergence of new streams of knowledge and information, which may result in recombining existing and/or developing new resources and competences. Similarly, seizing may change the base of resources held in a firm, and thus extend the scope of their reconfiguration and – if necessary – protect against path dependency.

3. Conceptual framework and research propositions

Despite many discrepancies in relation to the conceptualisation of dynamic capabilities – cf. literature reviews by Wang and Ahmed (2007); Ambrosini et al. (2009) and Barreto (2010) – most researchers agree with two fundamental issues related to the nature of these capabilities.

The first one is the priority role of organisational learning processes in building and developing dynamic capabilities (Teece et al., 1997; Zollo and Winter, 2002; Teece, 2007; Lin et al., 2016; Fainshmidt and Frazier, 2017). Teece et al. (1997) also identify two other organisational and managerial processes, i.e.: coordination/integration of resources, as a result of which a new resource base is created, and reconfiguration (transformation and recombination) of resources, while Teece (2007), elaborating the above-mentioned concept, indicates that they constitute asset ‘orchestration’ processes and are necessary for building dynamic capabilities.

The second issue is the key role of management team members in creating and developing dynamic capabilities, and this role is stressed by many researchers (Eisenhardt and Martin, 2000; Helfat et al., 2007, Teece, 2007). The way management team members perceive the environment of an organisation (Ambrosini and Bowman, 2009), whether they notice its uncertainty and complexity (Aragon-Correa and Sharma, 2003) and finally, what their motivations, skills and experiences are (Zahra et al., 2006) determines not only the acquisition of new knowledge, but also its inclusion in organisational systems and procedures. Similarly, management team members must formulate a clear vision of the development of the organisation and an effective motivation system that will be conducive to integrating and reconfiguring resources and competences, both in an enterprise itself and in its relations with the environment.

According to the theoretical model presented in Figure 1, the three fundamental processes – organisational learning, integration and reconfiguration of resources – underlying the building of dynamic capabilities facilitate the adoption of strategic Environmental Sustainability Orientation.

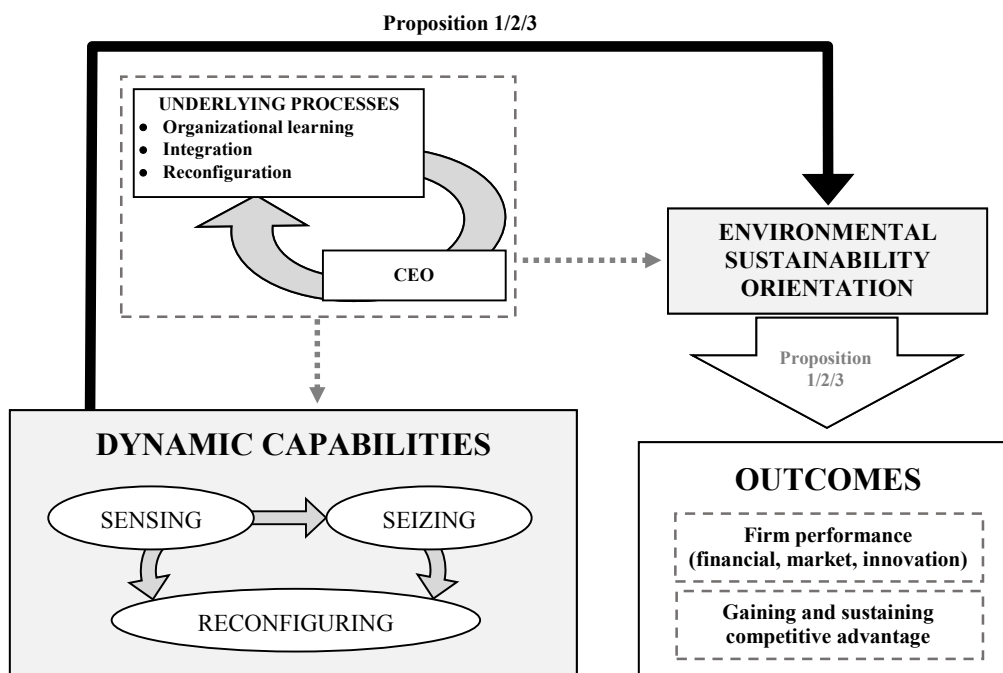


Figure 1. Theoretical framework.

It is obvious that meeting new (environmental) challenges requires firms not only to have significant resources, but also to develop new knowledge through organisational learning processes. These processes manifest themselves both in the form of individual skills of members of an organisation and in the form of organisational knowledge, which is embedded in routines, in new patterns of activity or in a new logic of organisational activities (Teece et al., 1997). Researchers stress primarily the social nature of these processes, pointing out that individual learning leads to organisational learning by modifying the attitudes, behaviour and beliefs of members of an organisation (Bloor, 1999).

As noted by Roxas et al. (2017), firms having strong strategic Environmental Sustainability Orientation are characterised by the greater capability to learn constantly and to conduct innovative activities. Similarly, Hult et al. (2004) confirm empirically that learning orientation, as a cultural concept, is positively related to innovativeness. Thus, it can be assumed that considering ESO from the perspective of organisational learning processes associates it directly to organisational culture. It happens so because organisational learning processes are immanently embedded in organisational culture (Hurley and Hult, 1998), and in addition, organisational culture may both influence and be influenced by individual and organisational learning (Bloor, 1999). For example, Lin and Kunnathur (2019) point out that strategic orientations manifest themselves per se in organisational culture, Claudy et al. (2016) refer Environmental Sustainability Orientation directly to organisational culture, for Roxas and Coetzer (2012) the development of ESO takes place by including environmental issues primarily in corporate culture, and Jin et al. (2019) demonstrate empirically that innovation culture (as a key element of organisational culture) is positively related to adopting Environmental Sustainability Orientation in such a way that the stronger it is, the more likely it is that a firm will be environmentally oriented.

Another bundle of processes facilitating the adoption of strategic Environmental Sustainability Orientation is undoubtedly the integration of resources. The importance of these processes results from the existence of enormous pressure on the part of stakeholders who make firms include environmental issues in their activity (Khizar et al., 2022). One of the ways to cope with such pressure is to initiate, maintain, and use intra- and inter-organisational relations. By establishing these relations, a firm may intensify the exchange and integration of environmental knowledge within a firm (thanks to interdisciplinary cooperation of various organisational units) and acquire and integrate new environmental knowledge held by external entities. This perspective refers directly to the concept of absorptive capacity, defined in the literature as *an ability to recognize the value of new information, assimilate it, and apply it to commercial ends* (Cohen and Levinthal, 1990, p. 128). Dangelico et al. (2013) indicate that pursuing eco-innovative activity in an effective manner requires the implementation of organisational procedures facilitating the acquisition of new external knowledge, while using internal knowledge held in a firm. Establishing intra-organisational relationships is essential to integrate sustainability issues into a firm's strategic and operational activities (Dangelico et al.,

2017). Establishing inter-organisational relations enables – in turn – access to environmental knowledge held by customers and suppliers (Melander, 2018), competitors (Horbach, 2016) and R&D units, institutes and universities (Triguero et al., 2013). Researchers prove that building such relations improves the efficiency of pursued eco-innovative activity by adopting a Environmental Sustainability Orientation (Cheng, 2020).

The complexity of environmental problems and challenges faced by modern enterprises may be a reason for which, despite previously chosen strategic Environmental Sustainability Orientation, the continuation of pro-environmental activity will require recombination or reconfiguration of corporate resources and competences. As knowledge and resources can lose their value over time (Zhou et al., 2019), excessive attachment to their base can prevent a firm from overcoming the problem of inertia (Huang and Li, 2017) – understood even not as the lack of change, but rather as a too slow response to emerging opportunities and threats – as well as overcoming path dependency (Teece, 2007). Finally, the importance of reconfiguration processes for the adoption of Environmental Sustainability Orientation is also supported by the very nature of ESO, which (just like all other strategic orientations) is immanently embedded in the reconfiguration of the organisational system, structure and activities (Roxas et al., 2017).

Summing up, both organisational learning processes and processes of integration of knowledge (internal and external) result in the adoption of strategic Environmental Sustainability Orientation. These processes intensify the creation of new knowledge and its assimilation and application in an enterprise, which translates directly not only into the faster and more effective capture of opportunities (and/or threats) emerging in the environment, but also into the use of these opportunities and/or coping with these threats. In addition, the inclusion of environmental issues at the strategic level significantly increases the complexity of organisational change (Hart, 1995; Dangelico et al., 2017), and therefore must be supported not only by the acquisition and assimilation of new knowledge, but also by a periodic renewal of the corporate base of resources and competences. Finally, taking into account the fact that the growing awareness of environmental problems determines the decision of firms to reorient strategically towards taking activity for the benefit of the environment (Shahidi, 2020), it can be assumed that:

- **Proposition 1.** Sensing determines the sensitivity of a firm to environmental problems, facilitating the adoption of strategic Environmental Sustainability Orientation, which leads to achieving better organisational outcomes.
- **Proposition 2.** Seizing determines a firm's readiness to cope with environmental problems, facilitating the adoption of strategic Environmental Sustainability Orientation, which leads to achieving better organisational outcomes.
- **Proposition 3.** Reconfiguring determines a firm's capability to renew necessary resources and competences, facilitating the adoption of strategic Environmental Sustainability Orientation, which leads to achieving better organisational outcomes.

The research propositions suggested in this paper clearly indicate that the inclusion of environmental issues in pursued business activity translates into gaining a competitive advantage by firms and is reflected in a higher level of their efficiency. This assumption is consistent with the results of many empirical studies (Roxas et al., 2017; Amankwah-Amoah et al., 2019; Danso et al., 2019; Adomako et al., 2021) and points to the existence of real benefits (i.e., e.g., increased efficiency, cost savings or improved reputation) which can be brought to firms by adopting Environmental Sustainability Orientation.

4. Discussion and Conclusion

The validity and necessity of pursuing environmentally friendly activity, as stressed by many researchers, results in the growing importance of Environmental Sustainability Orientation and justifies taking scientific research in this area. On the one hand, the adoption of such orientation can contribute to solving environmental problems, among others, through the design and implementation of eco-innovations. On the other hand, the analysis carried out shows that this adoption requires the significant involvement of resources (including, first of all, knowledge resources) and the development of specific capabilities (formulated in the literature as dynamic capabilities).

The main objective of the paper was to develop a research framework that takes into account not only the consequences, but also processes and capabilities making it easier to adopt Environmental Sustainability Orientation at the organisational level. Based on the studies by Teece et al. (1997) and Teece (2007), dynamic capabilities have been defined in a multidimensional manner, taking into account, respectively: (1) the capability to identify opportunities and/or threats (sensing), (2) the capability to use these opportunities and/or cope with threats (seizing) and (3) the capability to reconfigure the firm's resources and competences (reconfiguring).

A developed conceptual framework (as well as research propositions) indicates that all three dimensions of dynamic capabilities can support the adoption of Environmental Sustainability Orientation, which leads to achieving better organisational outcomes. Such theoretical assumptions are supported by the results of empirical studies existing in the literature, indicating that: there is a positive relation between recognition of opportunities and Environmental Sustainability Orientation (Sung and Park, 2018); ability to conduct R&D activities (thus activities directly related to the use of opportunities) strengthens the impact of involvement of suppliers on the relation between Environmental Sustainability Orientation and organisational outcomes (Cheng, 2020) and that building and reconfiguring resources has a positive impact on an organisation's ability to integrate environmental issues into the development of new eco-products (Dangelico et al., 2017).

In addition, as it results from the presented considerations, the development of ESO is based on the same processes in which dynamic capabilities are embedded. Both organisational learning processes and integration processes facilitate pursuing environmentally friendly activity on the basis of previously developed procedures and intensify the acquisition of new knowledge, supporting the development of capabilities to detect and use new opportunities and/or cope with new environmental threats. In turn, recombination and reconfiguration of resources allows firms to continuously improve existing capabilities and introduce new ones and thus to respond to changing environmental challenges.

Summing up, although the considerations contained in this paper are limited by their nature (theoretical analysis) and – by definition – are not exhaustive, they may constitute the basis for conducting pioneering empirical studies (verifying the proposed conceptual model) in enterprises operating in the Polish economy. This would be valuable not only for the theory, but, above all, for the practice of management. The developed research framework indicates that ESO is strategic, and thus manifests itself at almost every level of an organisation's functioning. Therefore, its development requires having specific capabilities (higher-order capabilities), thanks to which organisations will be able to build and integrate their skills, resources and competences, adapt them to changes taking place in their environment and transform them into efficiency.

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