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# Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy

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# **Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy**

## **Abstract**

Digital technologies have dramatically changed the organisation and marketing environments. Whether this presents an opportunity or a challenge for small and medium organisations, depends on how these organisations approach it, strategically. Specifically, organisations that are guided by a combination of market, learning and entrepreneurial orientations are well positioned to take advantage of the opportunities presented by digital technologies because they adopt attitudes and behaviours that support the generation and use of market insight, proactive innovation, and openness to new ideas. We call this combination the digital orientation, and present a set of propositions that facilitate its development. This paper creates value both through the conceptualisation of the digital orientation and the outlining of the implications for strategic marketing management of understanding the strategic factors supporting or hindering the performance of SMEs in the digital economy.

**Keywords:** digitalisation, SMEs, strategic orientation, strategic marketing, digital orientation

## **Introduction**

Digital technologies transformed how organisations and consumers interact and exchange value (Yadav & Pavlou, 2014). For instance, web 2.0 transformed how people access information, communicate with each other, and experience products and services (Hamill, Tagg, Stevenson & Vescovi, 2010); 3D printing is changing how goods are produced and consumed (D'Aveni, 2013); and the internet of things will revolutionise how individuals interact with physical environments (Benady, 2014). Therefore, while digitalisation is not a new phenomenon, it keeps evolving and producing new effects on the organisation environment.

Small and medium enterprises (SMEs) could excel in the digitalised organisation environment because digital technology supports intelligence gathering, cost reduction and audience extension (Borges, Hoppen & Luce, 2009, Harrigan, Ramsey & Ibbotson, 2011). However, SMEs might struggle due to lack of technical or marketing expertise to adapt to changes (Nguyen, Newby & Macaulay, 2015; O'Toole, 2003). Given that SMEs play a key role in the economy (EG, 2013; Matthews, Hechavarria & Schenkel, 2012), particularly in periods of dramatic structural change (Carsrud & Cucculelli, 2014), it is necessary to understand the factors that support their performance in the digital organisation environment.

To succeed, organisations need to adopt behaviours that fit the characteristics of the market they are in (Theodosiou, Kehagias & Katsikea, 2012), such as acquiring certain assets or capabilities. In turn, these behaviours are directed by the organisations' strategic orientation (Ketchen Jr., Hult & Slater, 2007). Hence, the question of how SMEs can succeed in the digital environment requires understanding what strategic orientation best equips SMEs to

compete in that environment, and what conditions support the development of that orientation.

We address this question by building on the work of Lonial and Carter (2015), Olson, Slater, & Hult, (2005), and others, to present the concept of digital orientation, which extends the classical notion of market orientation with elements from the learning and entrepreneurial orientations. Furthermore, we identify five environmental, organisational and individual factors that support the uptake of this orientation in SMEs. Hence, we develop the understanding of strategic positioning in the ever-changing digital environment, as urged by Sandulli, Baker and Lopez-Sanchez (2013) and Thompson, Williams and Thomas (2013). Conceptual papers, such as this one, are critical to the development of a discipline because they allow researchers to move from a predominantly micro perspective to a fairly macro one, offering '*new ways of looking at the world*' (MacInnis, 2004, p. 1). The remaining of the paper proceeds as follows. Next, we elaborate on the strategic positioning required to succeed in the digital environment, and present the digital orientation. Subsequently, we identify external and internal factors that enhance the uptake of digital orientation in SMEs, and develop five research propositions. Finally, we discuss the implications of this conceptualisation for strategic marketing management research and practice.

### **Defining the Digital Orientation**

An organisation's strategic orientation reflects its beliefs about conducting business, and guides its activities (Noble, Sinha & Kumar, 2002; Zhou, Li, Zhou & Su, 2008). For instance, organisations that have a market orientation focus on creating and delivering customer value (Lonial & Carter, 2015), pursuing activities that support the '*generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence*

*across departments, and organisation-wide responsiveness to it'* (Kohli & Jaworski, 1990, p. 6).

Numerous studies have shown a positive relationship between market orientation and organisation performance, in various industries and countries (Cano, Carrillat & Jaramillo, 2004), for large companies as well as SMEs (Kirca, Jayachandran & Bearden, 2005; Reijonen & Komppula, 2010). This positive relationship occurs because market orientation predisposes organisations to be in tune with the market, and respond to customer needs (Raju, Lonial & Crum, 2011; Slater & Narver, 2000). Indeed customer orientation as an element of market orientation is often emphasized within SME behaviour (Reijonen & Komppula, 2010). Market orientation can be considered an organisational resource (O'Cass, Ngo & Siahtiri, 2012) and adopting a market orientation involves an intention to seek out and understand external information in order to identify new opportunities (Hulbert, Gilmore & Carson, 2015). SMEs that adopt market orientation do particularly well because their size and few layers of management facilitate the dissemination of market intelligence across the organisation (Verhees & Meulenbergh, 2004), while their flexibility facilitates quick responses to market information (Pelham, 2000).

However, adopting one specific strategic orientation can also have disadvantages. For instance, market oriented organisations may become reactive to consumers' expressed needs, and not innovate (Zhou, Yim & Tse, 2005). This trait is particularly treacherous in the presence of market turbulence, such as changes in the technological landscape (Grewal & Tansuhaj, 2001). Therefore, increasingly, authors defend that the market orientation be complemented with strategic orientations that foment the behaviours that it neglects

(Marinova, Ye & Singh, 2008), and that best fit the context and the characteristics of particular organisations (Theodosiou et al., 2012).

One such combination is the extension of market orientation with the learning orientation. Organisations that combine the two orientations are better equipped to engage in '*the type of generative learning that leads to innovations in products, procedures, and systems*' (Baker & Sinkula, 1999, p. 411). The learning orientation promotes open-mindedness, the questioning of long-held beliefs and ways of doing things, and acting on partial information (Baker & Sinkula, 1999; Day & Schoemaker, 2006). This attitude promotes practices such as adopting emerging technologies and developing new skills, encouraging employees to challenge current norms, or taking risks (Hurley & Hult, 1998; Olson, Slater & Hult, 2005). Organisations that embrace this orientation are quick to recognize emerging customer needs (Wang, 2008), and to design innovative products (Theodosiou et al., 2012). This is a major advantage when customer demand is unclear and rapidly evolving (Zhou et al., 2005), as is the case with digital innovation (Hagel, Brown & Davison, 2009).

In turn, Baker and Sinkula (2009) found that SMEs which embraced both the entrepreneurial and the market orientations performed particularly well. Entrepreneurial orientation is the strategic positioning that leads organisations to adopt attitudes and behaviours that enable them to be first to market (Miller, 1983; Verhees & Meulenbergh, 2004), for instance by undertaking risky ventures or by engaging in product innovation. By being able to quickly deliver radical innovations, organisations increase market share and outperform their competitors (Baker & Sinkula, 2009; Rauch, Wiklund, Lumpkin & Frese, 2009). Entrepreneurial orientation instills in market oriented managers the opportunistic behaviour necessary to succeed in dynamic environments (Baker & Sinkula, 2009), while market

orientation directs the attention of entrepreneurship oriented managers to those innovations more likely to succeed (Baker & Sinkula, 2009).

Wang (2008) found that combining entrepreneurial and learning orientations led to a more balanced approach to innovation. Entrepreneurship oriented organisations perform particularly well in environments with short product and business model life cycles (Hamel, 2000), which is the case with digital technology. However, they lack the commitment to learning that characterizes the learning orientation (Lonial & Carter, 2015). Moreover, the entrepreneurial orientation may lead organisations down a costly and time consuming path of experimentation (Pelham, 2000), and may result in sub-optimal allocation of limited resources (Lonial & Carter, 2015).

== *Insert Figure 1 Here* ==

In summary, the market orientation, learning orientation and entrepreneurial orientations have complementary characteristics which help SMEs succeed in the digital economy (Figure 1). Together, these orientations create an intangible resource that allows organisations to be uniquely competitive (Hult & Ketchen Jr., 2001). Lonial and Carter (2015) confirmed this assertion in the context of SMEs, noting that *‘market, entrepreneurial, and learning orientations jointly give rise to positional advantage, which, in turn, is positively related to the performance of the organisation’* (p. 94). This paper goes further, echoing Harrigan et al., (2011) and Prasad, Ramamurthy and Naidu (2001), proposing that the combination of these three orientations is necessary for SMEs to achieve the enhanced responsiveness, insight and innovation required to succeed in the digital environment. We call this combined strategic positioning the organisation’s digital orientation, and define it as thus:



*Digital orientation is the deliberate strategic positioning of an SME to take advantage of the opportunities presented by digital technologies. This positioning includes the attitudes and behaviours that support the generation and use of market insight, proactive innovation, and openness to new ideas.*

This definition emphasises that, in adapting to the ever changing formats of digital technology, SMEs need to look beyond individual initiatives, and consider organisational practices as well as the broader environment (Bharadwaj, El Sawy, Pavlou & Venkatraman, 2013). Technology and organisation strategy form a unified fabric (El Sawy, 2003; Bharadwaj et al., 2013), so that the use of technology neither happens by chance nor occurs in isolation, within the organisation.

The following section discusses the antecedents of the digital orientation.

### **1. The antecedents of the Digital Orientation (DO)**

Strategic orientations arise from a process of cultural and behavioural transformation that reflects external factors such as competitive dynamics (Theodosiou et al., 2012), as well as internal factors such as top management focus, interdepartmental cooperation and reward systems (Gebhardt, Carpenter & Sherry, 2006).

The review of the extant literature has led to the identification of one underpinning foundation stone (the external environmental factors) and four main pillars (the internal evaluation of digital technology's value, the level of cross functional integration, organisational capabilities, and individuals' characteristics and skills) that support the development of a digital orientation, and make up the five propositions of our proposed conceptual model (Figure 2). A brief discussion of these now follows.

### **1.1. External environmental pressures**

The organisation's external environment shapes its structure and actions (Scott & Christensen, 1995), including intentions to adopt digital technologies (Kim & Pae, 2007). The literature on the role of external factors on the adoption of digital technology (e.g., Orlikowski & Barley, 2001; Chatterjee, Grewal & Sambamurphy, 2002; Teo, Wei & Benbasat, 2003; Hsu, Kraemer & Dunkle, 2006; Liu, Ke, Wei, Gu & Chen, 2010), identifies three types of external pressures.

The first type, coercive pressure, may take the form of political influence or lack of legitimacy (DiMaggio & Powell, 1983). It may originate from customers, suppliers or trading partners, and refer to formal and informal influences that lead an organisation to adopt a technological solution. The second type, mimetic pressure, refers to standard responses to uncertainty by the organisation's competitors. The organisation feels pressured to imitate the technological behaviour of other organisations, as opposed to creating a set of behaviours of its own. The third type, normative pressure, refers to the expectations associated with professionalisation. It includes the rules and conditions that an organisation has to comply with, to continue trading or for social legitimisation. These rules can be driven by trade associations, or the wider regulatory environment (Hsu et al., 2006).

Thus, our first proposition is that:

*P1. Digital Orientation in SMES is driven by coercive, mimetic and normative pressures.*

## **1.2. The organisation's internal evaluation of the relative value of digital technology**

Following Grönroos (2007), we define the value of digital technology as the use of technology to create an outcome valued by the organisation. SMEs adopt digital technologies to enhance customer communication and information processing (Kendall, Tung, Chua, Ng, & Tan, 2001; Harrigan et al., 2011; Tse & Soufani, 2003), increase operating efficiency (Borges et al., 2009) and for organisation growth (Bhaskaran, 2013). In addition, technology can enable SMEs to obtain new organisation, and improve organisation both between and within organisations (Tan et al., 2009; Pena, Frías Jamilena & Rodriguez Molina, 2011).

Risk perceptions have been shown to significantly hinder the adoption of digital technology (Czuchry & Yasin, 2003, Grant, Edgar, Sukumar & Meyer, 2014), so these should be included in the assessment of the value created by or through the use of digital technology. For instance, technical risk may be a threat to SMEs owing to their limited resources and higher opportunity costs (Sukumar & Edgar, 2009). Other perceived risks include cost (Levy, Powell & Worrall, 2005), security and management, and lack of understanding of the effective application of technology (Oni & Papazafeiropoulou, 2014).

Consequently, our second proposition is that:

*P2: Digital Orientation in SMEs is driven by a positive appraisal of the value created, internally, by the adoption of digital technologies, given the perceived risks.*

### **3.3. Cross functional integration**

In the digital environment, adding value is a complex and interrelated process that cuts across various organisational functions (Gebhardt et al., 2006). As one of the aims of technology adoption, and indeed for strategic marketing, is to promote competitive advantage, especially through organisation resource efficiency and customer satisfaction, such integration is essential (Bengtsson, Boter & Vanyushyn, 2007) in the digital orientation.

The marketing function may be best placed to analyze customer demands and interact with the producing organisation (Hill, 2005). However, computer and digitally enabled communication have increased significantly and altered the tools and communication strategies organisations now use (Michaelidou, Siamagka & Christodoulides, 2011). For example, the use of social media by organisations to communicate their brand and products (Mangold & Faulds, 2009) also assists in reaching brand objectives (Van Den Bulte & Wuyts, 2007). Hence, there needs to be an integration between the marketing and IT functions. In turn, technology adoption promotes organisational innovation (Sandulli et al., 2013), efficiencies in human resource management, and an extension of the span of control for managers (Garicano & Rossi-Hansberg, 2006). Thus, there is also a link with the human resources function. Moreover, a further interdependency exists with the operational area which delivers on the insight or promises generated by the marketing department (Fitzsimmons, Kouvelis & Mallick, 1991; Hausman, Montgomery & Roth, 2002).

Therefore, our third proposition is that:

*P3: Digital Orientation in SMEs depends on the effective integration of marketing and non-marketing functions in the organisation.*

### **3.4. Organisational capabilities**

The accelerating velocity of digital technology changes in the market demands new organisational capabilities (Day, 2011). First, organisations have to cultivate vigilance, to ‘see’ opportunities sooner, and to ‘hear’ the weak signals originating from consumers and competitors. This state is achieved through a general creative culture in the organisation (Day, 2011), and by promoting readiness to respond to customers’ ever changing needs (Yoon & George, 2013).

Second, organisations need to foster adaptive market experimentation (Day, 2011). This is manifested through investment in small experiments that can generate new insights in a low risk and safe manner. Such a ‘trial and error’ approach requires organisations to have a flexible, yet controlled, approach to experimentation (Liu et al., 2010).

Third, organisations need to adopt open marketing (Day, 2011), which enables access to complimentary resources beyond the organisation boundaries, and rewards organisations that develop external relational capabilities (Dyer & Singh, 1998). According to Bharadwaj et al., (2013) a key requirement of digital organisation strategy is the capability to design, structure, and manage networks that provide complementary capabilities to the organisations. Imagination and necessity will encourage initiatives to leverage networks and open up the organisation (Day, 2011).

Hence, our fourth proposition is that:

*P4: Digital Orientation in SMEs requires the presence of the organisational capabilities of vigilance, adaptive experimentation and open marketing.*

### **3.5. Individual characteristics**

Senior management is one of the main factors influencing technology adoption (Alshamaila, Papagiannidis, & Li, 2013; Chatterjee et al., 2002; Del Aguila-Obra & Padilla-Melendez, 2006). In the context of SMEs, senior management is generally dominated by the owner-manager, whose attitudes and behaviours have a domino effect on others in the organisation.

The level of IT knowledge of the owner-manager is a strong determinant in the adoption of behaviours that support a digital orientation (Michaelidou et al., 2011; Peltier, Schibrowsky & Zhao, 2009). Also important is the owner-manager's belief that adoption of digital technology will deliver benefits to the organisation (Jones, Simmons, Packham, Beynon-Davies & Pickernell, 2014).

In addition, a positive attitude towards change in general (Peltier, Zhao & Schibrowsky, 2012), and risk taking in particular (Grant et al., 2014; Jones, Souranta, & Rowley, 2013) are strong drivers of a digital orientation. Jones & Rowley (2011) and Jones et al., (2013) suggest that pro-activeness, willingness to challenge existing beliefs, and preparation to innovate, impact positively on successful technology adoption. Moreover, personal curiosity and open-mindedness are key individual capabilities in the digital environment (Day, 2011). It is also possible that the owner-manager's age and education will influence the organisation's willingness to embrace digital technology and the challenges that it brings (Peltier, Schibrowsky & Zhao, 2009; Peltier et al., 2012).

Thus, our final proposition is that:

*P5: Digital Orientation in SMEs depends on individual characteristics of the owner-manager in terms of IT knowledge, perceived benefits, and attitudes.*

In summary, there is a set of contextual, organisational and individual factors that create a supporting structure for the development of a digital orientation in SMEs, as illustrated in Figure 2. The next section discusses the implications of this model for strategic marketing theory and practice.

*== Insert Figure 2 Here ==*

## **Discussion**

After defining the digital orientation, we proposed a set of supporting structures. The first structure concerned the environmental factors which impact upon all organisations and their marketing strategy. These are push factors. Though generic, they cannot be ignored, as organisations need to respond and learn from the external environment. Proposition 1 (P1) encapsulates the external pressures as a foundation layer of the model. For instance, normative pressures will apply equally to all organisations in a particular industry or region. In turn, coercive pressures will only apply to organisations conducting business with the supplier or customer in question. Likewise, while all competitors may face mimetic pressures, different organisations may emulate particular components of the leader's strategy.

The remaining four structures in the model, (propositions 2 to 5) are internal to the organisation. They are pull factors that facilitate knowledge generation, and adaptation to the environment. Proposition 2 (P2) concerns the assessment by the SME of the relative value of digital technology, offset by the perceived risks. This value is assessed formally or informally, and should be measured against the goals of the organisation and the characteristics of the operating context. There are dramatic variations between SMEs, such as size and turnover, which impact on the company's ability to benefit from economies of scale. In addition, some SMEs may compete on an international stage, against much larger

organisations, while others operate at a very local scale. All of these factors will weigh on the company's assessment of the relative value of digital technology use and adoption.

Proposition 3 (P3) considers the integration across organisation functions. Digitally oriented organisations move away from a view of technology as subordinate to organisation strategy (Bhardwaj et al., 2013) to one that sees technology and organisation strategy as a unified fabric (El Sawy, 2003). This strategic position encompasses the connection, immersion and fusion phases of IT within a organisation. The *connection* phase is where the web is perceived only as an additional channel for traditional media offerings (O'Reilly, 2005). The *immersion* phase is where social computing features are embraced as a means of stimulating consumption of traditional content and prolonging users' length of stay on their websites (El Sawy, 2003). Finally, the *fusion* phase occurs when IT is not only immersed but actually fused with the organisation's environment.

Proposition 4 (P4) focuses on the organisation's capabilities that allow it to optimise the opportunities presented by the digital era. The velocity and volume of change in the market require organisations to be vigilant in order to maximise the opportunities that appear (Day, 2011). Thus the organisation's internal culture should reflect the flexibility and openness necessary to grasp those opportunities. Adaptive trialling of innovations to test market reactions is important and the fostering of a 'preparedness to try' internal culture (Liu et al., 2010) as well as developing networks will enable an adaptive response.

Finally, Proposition 5 (P5) recognises that SMEs' actions reflect the priorities and capabilities of the owner-manager and core team. Knowledge of IT (Michaelidou et al., 2011; Peltier et al., 2009) and, equally importantly, a propensity to take considered risks (Grant et



al., 2014; Jones et al., 2013) are key characteristics of SMEs' owner-managers that lend themselves to the adoption of a digital orientation.

Digital orientation is the deliberate adoption of a strategic position, evolved from a positive attitude, and manifested through actions and behaviours within the organisation that encourage proactive innovation. Orientations provide value to SMEs as they illustrate broad guiding principles and a general direction in which SMEs can either locate themselves, or move towards, without rigid and inflexible boundaries, which are often viewed as barriers for smaller organisations. The digital orientation offers a new perspective for both SMEs and researchers interested in the adoption and diffusion of digital technologies as a way to approach strategic marketing and create organisation growth.

### **Implications for strategic marketing theory and management**

This paper contributes to theory development, and provides implications for strategic marketing management. First, we extend the recent work of Lonial and Carter in significant ways. Whilst Lonial & Carter (2015) explained the relative contribution of different orientations to positional advantage for small organisations, our paper identifies the antecedents and supporting structures which create the environment through which digital orientation can be established. Furthermore, Lonial and Carter's paper takes a broad stance and does not focus on the specificities of digital technologies and its adoption for organisation development.

Second, the proposed model of digital orientation mirrors the activity and practice of SMEs which require an integrated approach, without specialist silos and as such, provides a realistic contribution for SME strategy development. Our model moves beyond atomised aspects and

creates an overarching position fundamental to successful strategy as espoused by Vargo and Lusch (2004).

Third, we offer the unique contribution of a conceptual model specific to the context of digitalisation, and provide a base which other researchers may validate and extend through empirical research. Thus we have answered calls for further research (Sandulli et al., 2013; Thompson et al., 2013) not only in SME research but also in the development of new knowledge within the digital domain.

Our model will also provide a useful instrument for managers to audit their preparedness for competing in complex and dynamic organisation environments, and assist learning for SMEs, which is essential for their development and growth (Day, 1994, 2011; Slater & Narver, 1995; Sandulli et al., 2013).

The implications for strategic marketing management that arise from this paper are multiple. Our model identifies both the push and the pull drivers of digitalisation, and explains why organisations faced with similar situations react and behave differently. The environmental 'push' drivers are outside the control of owner-managers. Therefore, owner-managers can direct their attention to the 'pull' drivers, which they can affect. By evaluating current practice against the model, managers can determine which key strategic areas they need to develop, and where they lack resources or skills, or alternatively have core strengths. This analysis can inform the development of competitive advantage. Additionally, this model recognises the world beyond the small organisation and encourages owner-managers to be outward focused in the development of differentiation through their strategic decision making. It is not sufficient to improve internal capabilities and collect market insight to

inform strategy. Insight needs to be generated and implemented across the organisation in order to maintain the proactive stance necessary to deliver competitive advantage and customer value. Having said that, our model can also act as a partial diagnostic tool to identify how current organisational systems support or hinder the delivery of a digital orientation. Through understanding the factors that make up a digital orientation, SMEs will be able to develop a relevant strategic positioning with which to compete in the digital environment.

Whilst the proposed model makes a novel contribution, its limitations should be acknowledged. The umbrella term SME is deceptively broad and we have used the term to describe a diverse range of organisations. SMEs are highly varied in terms of industry sectors, length of establishment and even size, all of which create significant challenges for generalisation. Further research could explore the variations between types of SMEs and even between countries as to the existence of and extent of a digital orientation.

Moreover, there exists an obvious need to operationalize our conceptualization through empirical research. One avenue for this should comprise an evaluation of the relationship between the five propositions of the digital orientation. Investigation of these relationships might also include whether certain propositions hold greater influence than others in the development of a digital orientation, and its links with strategic marketing planning and implementation.

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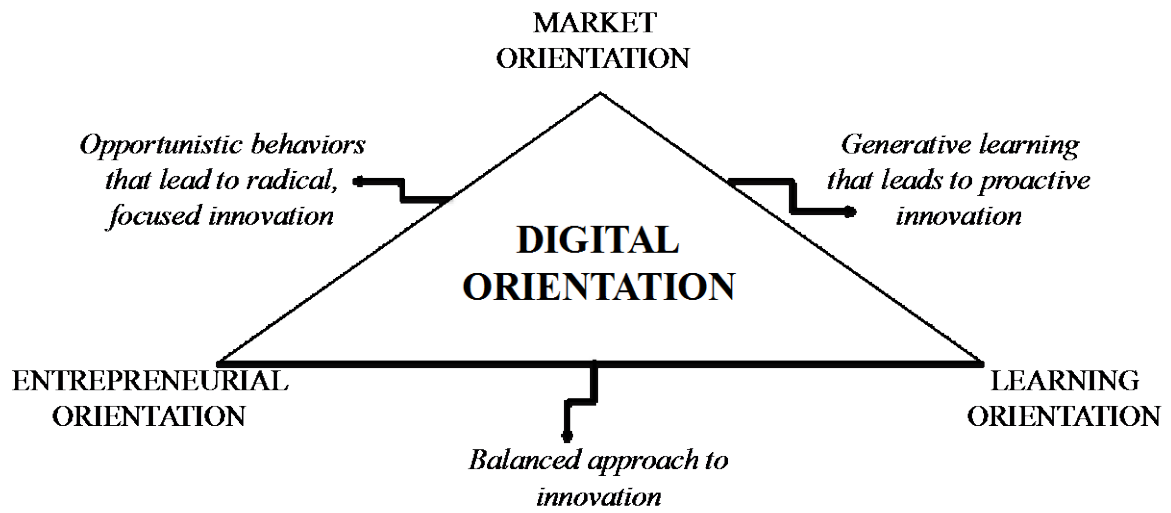
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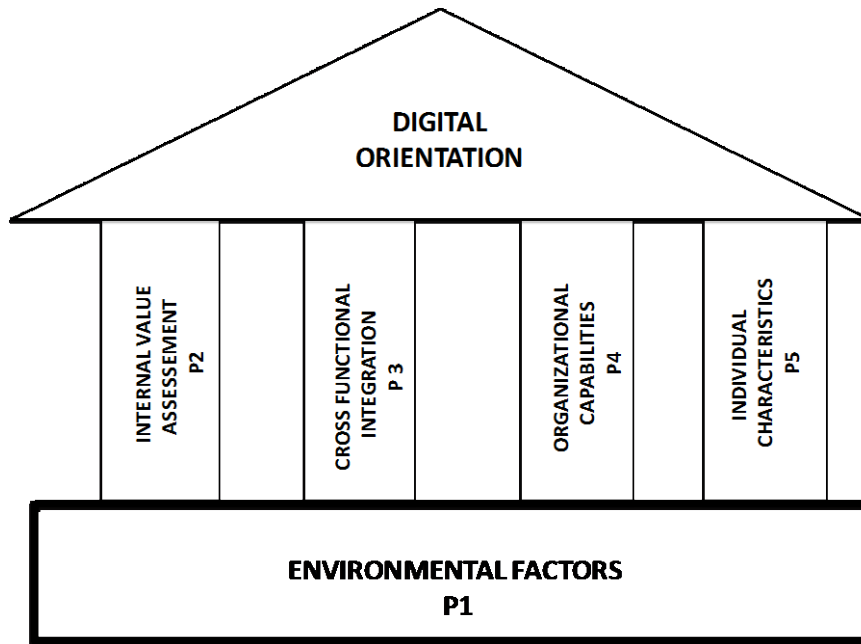
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**Figure 1: The components of the Digital Orientation** (source authors' own)



**Figure 2: The factors supporting the development of the Digital Orientation in SMEs**  
(source authors' own)