

## **Implementing Strategic Orientations in SMEs: The role of CEO's Market Orientation**

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*The purpose of this study is to explore the influence of a CEO's market orientation on the strategic orientations of Small and Medium Enterprises (SMEs). A survey was conducted and data were collected from a sample of 175 Senegalese SMEs. The data were analyzed using structural equation modeling in STATA. The results show that some dimensions of a CEO's market orientation positively influence SMEs' strategic orientations. The findings imply that CEOs must individually exhibit market-oriented behaviors to encourage the development of strategic orientations in their SME. This study contributes to the development of the literature on individual market orientation by revealing that the CEO's market orientation constitutes a key factor for the strategic orientation in SMEs.*

Keywords: strategic orientations, individual market orientation, SMEs, upper echelon theory, Chief Executive Officer (CEO)

### **Introduction**

*“A firm's strategic orientation reflects the strategic directions implemented by a firm to create the proper behaviors for the continuous superior performance of the business” (Gatignon & Xuereb, 1997; p.78). The marketing literature presents several strategic orientations: customer, competitor, technology, entrepreneurial, innovation, etc. The first two orientations represent the concept of market orientation (Narver & Slater, 1990). The concept of market orientation is undoubtedly one of the strategic orientations on which marketing research has focused the most over the past four decades. The interest shown by researchers in this concept is mainly explained by its positive effect on the performance of the company. It is therefore not surprising that most research has focused on the relationship between market orientation and organizational performance since the works of Kohli and Jaworski (1990) and Narver and Slater (1990). Market orientation is presented as the implementation of the concept of marketing (Kohli & Jaworski, 1990).*

The concept of marketing involves companies identifying and satisfying customer needs more effectively than competitors do (Brower & Nath, 2018). Market orientation is defined as an

organizational culture that induces behaviors that are necessary for creating superior value for customers (Narver & Slater, 1990). These behaviors are related to the activities of gathering market information, disseminating information in the company, and reacting to this information (Kohli & Jaworski, 1990). The components of the market affected by these activities are mainly customers and competitors. Therefore, the main dimensions of market orientation that can be identified in the literature are customer orientation and competitor orientation. Customer orientation is about understanding target customers to continually deliver superior value to them, whereas competitor orientation refers to understanding and integrating the strengths, weaknesses, and strategies of current and potential competitors into marketing processes (Narver & Slater, 1990).

Despite the importance of market orientation, some authors argue that it must be combined with other complementary strategic orientations. Market orientation and technology orientation are considered complementary strategic orientations (Gatignon & Xuereb, 1997), which could occur simultaneously to some degree (Gotteland, Shock, & Sarin, 2020). Technology orientation also appears to be a distinct strategic orientation that fosters a firm's competitive advantage and performance (Adams, Freitas & Fontana, 2019; Jeong, Pae, & Zhou, 2006; Masa'deh, Al-Henzab, Tarhini, & Obeidat, 2018). However, some authors consider it a dimension of market orientation (e.g., Gatignon & Xuereb, 1997; Voss & Voss, 2000). Technology orientation refers to the ability and determination of a company to obtain technological know-how to offer new products or meet new customer needs (Gatignon & Xuereb, 1997).

Research on strategic orientations has focused more on their consequences, especially organizational performance. In this regard, the positive influence of market orientation on performance has largely been established by studies in the field, particularly meta-analyses (e.g., Ellis, 2006; Kirca, Jayachandran, & Bearden, 2005; Cano, Carrillat, & Jaramillo, 2004). Faced with such evidence, CEOs concerned with improving the performance of their company would be tempted to ask how to become more market oriented. If we trust the literature, the answer is: the ball is in their court! Indeed, top managers play an essential role in the creation and development of market orientation (Narver, Slater, & Tietje, 1998; Jaworski & Kohli, 1993; Harris, 2001). This decisive role is manifested through the importance they attach to market orientation. Thus, the emphasis placed by top managers on market orientation is strongly related to a company's market orientation (Kirca et al., 2005). CEOs' attention is also essential to initiating and framing the process of organizational change that leads to market orientation (Gebhardt, Carpenter, & Sherry, 2006). Martin, Martin, and Minnillo (2009) specified that the implementation and management of market orientation in a company is a top-down process.

Overall, there are very few studies on the antecedents of market orientation compared to its consequences, which has aroused more enthusiasm among researchers (Gebhardt et al., 2006). In this context, researchers have called for more research on this issue (Kirca et al., 2005; Wang, Su, & Guo, 2019). The antecedents of market orientation identified in the literature can be classified into two categories: organizational antecedents and managerial antecedents. Organizational antecedents are constituted by centralization, formalization, connectivity, and interdepartmental conflicts (Jaworski & Kohli, 1993). Managerial antecedents mainly boil down to the importance that top management places on market orientation (Kirca et al., 2005). This importance manifests itself in raising awareness and encouraging employees to be market oriented (Jaworski & Kohli, 1993). Although managerial antecedents are important for the implementation of market orientation, the number of studies on them remains small. In fact,

little research has focused on the role played by CEOs in the development of market orientation (Brower & Nath, 2018). By way of illustration, the meta-analysis by Kirca et al. (2005), which covers 114 studies, identifies 63 effects of antecedents, including only 13 for the emphasis placed on market orientation by top managers, whereas the number of effects concerning the consequences of market orientation stands at 355. Making the same observation, Brower and Nath (2018) updated this figure and found two studies that highlighted a positive effect of management focus on market orientation. This lack of research explaining how managers can implement strategic orientations in their companies is therefore widely acknowledged (Gupta, Sahi, & Chahal, 2013; Lam, Kraus, & Ahearne, 2010). Consequently, the general research question of this article is: How can a leader's attitude promote the implementation of strategic orientations in a company?

Furthermore, Billore and Billore (2019) highlighted the need to study market orientation in SMEs and believed that this can help identify antecedents that can help or hinder market-oriented actions. Similarly, the literature on technology orientation is more extensive for large firms than for SMEs, and the effect of technology orientation on SME performance has been established (Rezazadeh, Karami, & Karami, 2016). Given the specificities of SMEs and the preponderant role played by their CEOs, it is necessary to study the extent to which the CEO's market orientation contributes to the diffusion of market orientation and technology orientation in SMEs. Thus, the objective of this research is to fill this gap by studying the influence of CEOs' market orientation on firm's strategic orientations. To this end, we use the conceptualization and measurement of individual market orientation proposed by Lam et al. (2010). We then rely on Hambrick and Mason's (1984) upper echelon theory (UET) to test a diffusion model that links CEO's market orientation to the strategic orientations of the SME.

This article is structured around five points. First, we provide the literature review. Second, we expose the theoretical foundation and develop the hypotheses. The research methodology is described in the third section. Fourth, the results of the hypothesis test are presented. Lastly, we discuss the results in the last section.

## **Literature review**

### **Market orientation at the SME level**

Market orientation is considered to be a culture that guides the way an organization acquires and uses market information (Kohli & Jaworski, 1990; Narver & Slater, 1990). The renewed interest in the concept of market orientation is not surprising, since the concept represents the foundation of high-quality marketing practice (Kohli, Jaworski, & Kumar, 1993). Many studies have made market orientation one of the key determinants of performance (Kirca et al., 2005). Market orientation is one of the most important concepts in the field of marketing (Kara, Spillan, & DeShields, 2005). It is strongly influenced by the concept of marketing (Cano et al., 2004), the objective of which is to develop a customer relationship in which the sale is only the beginning (Webster, 1988).

The application of market orientation in SMEs is subject to many controversies. For some authors (e.g., Blankson & Cheng, 2005; Jaworski & Kohli, 1993), it is difficult to implement market orientation in SMEs because of the specificities of their management system. Indeed, the organizational configuration of these companies does not favor the implementation of market orientation (Kohli & Jaworski, 1990) in the sense that it hinders the exchange of information and ideas (Zahra, Hayton, & Salvato, 2004; Beck, Janssens, Debruyne, & Lommelen, 2011) and inhibits the sharing and use of information in the company (Matsuno,

Mentzer, & Özsoyner, 2002). However, the sharing of information is not relevant in small companies, given that all major decisions come from a single decision-maker (Verhees & Meulenbergh, 2004). Overall, a lack of resources and skills inhibits the responsiveness of small businesses (Verhees & Meulenbergh, 2004), thus making it difficult to apply the basic principles and techniques of marketing (Carson, 1990).

However, the adaptation of the marketing concept seems to provide similar benefits for all SMEs, regardless of their size. Indeed, SMEs are characterized by personalization of their management, centralized management, a short decision-making circuit, low internal specialization, an intuitive or not very formalized strategy, and an information system that is not very complex, not very organized, and based essentially on direct contacts (Dangereux, Chapellier, & Villesèque-Dubus, 2017). As a result, some empirical work has shown that market orientation is as relevant for small businesses as for large companies (Perry, 2014). Moreover, it seems that SMEs can either display the same level of market orientation as large companies or at a lower level (Becherer, Halstead, & Haynes, 2001; Liu, 1995; Pelham, 2000). According to Raju, Lonial, and Crum (2011), culture and structural antecedents suggest that SMEs have a higher degree of market orientation than large companies.

Ultimately, although the literature on strategic orientations has placed too much emphasis on market orientation (Franczak, Weinzimmer, & Michel, 2009), the authors affirmed that having a market orientation is not the only viable strategic orientation (Masa'deh et al., 2018). Furthermore, scholars argue that firms combining market orientation with other orientations are considered more competitive and efficient (Menghuc & Auh, 2006; Hakala & Kohtamäki, 2011; Doucouré & Diagne, 2022). Thus, it is important to bundle market orientation and technology orientation in the sense that market orientation deals with customers and competitors, whereas technology orientation deals with the product, service, or technology that companies provide (Hakala & Kohtamäki, 2011).

### **Technology orientation at the SME level**

There is rarely a single strategic orientation in companies. For instance, a firm can simultaneously consider complementary orientations such as market orientation and technology orientation in order to increase the value for customers. Thus, it can recognize and satisfy new needs using its technical knowledge to develop new solutions (Gotteland et al., 2020). This firm's openness to new ideas and its propensity to adopt new technology during product development refer to technology orientation, according to the perspective of Hurley and Hult (1998). Technology orientation is present when firms implement new ideas, products, and processes (Masa'deh et al., 2018). It is a philosophy reflecting a technological emphasis that allows firms to better meet the needs of customers preferring technologically superior products and services (Tsou, Chen, & Liao, 2014). This technological focus translates into the use of technology as a means of connecting firms with customers. Firms use technology to increase their ability to gather market information (Tsou et al., 2014) and continuously deliver superior value to the market (Gatignon & Xuereb, 1997; Gotteland et al., 2020). Technology-oriented firms are, therefore, those that can adopt their technical knowledge to develop new technical solutions and, consequently, provide new services and products to address customer needs.

Furthermore, a firm's technology orientation should lead to the development of more innovative, technologically superior products compared to those offered by competitors (Tsou et al., 2014). To achieve this, a company must have technical skills, R&D resources, and a technological base (Jeong et al., 2006) and be proactive in acquiring new technologies and applying the latest technologies (Gatignon & Xuereb, 1997).

### **Individual market orientation**

In the recent decade, there has been a shift in the interest of researchers toward the theme of the implementation of market orientation (Lai, 2016). This thematic shift also concerns, to a lesser extent, the level of analysis retained by research in the field. In fact, to date, most studies have studied market orientation at the company level (Schlosser & McNaughton, 2007), whether to identify its antecedents or its consequences. As a result, only a few studies have analyzed market orientation at the individual level (Hamzah, Othman, & Hassan, 2020; Sendaro & Baharun, 2020). Only during the last decade has research begun to focus on the individual market orientation, especially those relating to the theme of implementation.

Schlosser and McNaughton (2007) appear to be the first to propose a conceptualization of individual market orientation based on that of Kohli and Jaworski (1990). These authors defined individual market orientation as the attitudes and behaviors of employees relating to the acquisition, dissemination, and reaction to information from the market. Schlosser and McNaughton (2009) proposed the I-MARKOR scale for measuring individual market orientation, which has since been used by several researchers studying individual market orientation (e.g., Barber, Kaurav, & Paul, 2018; Hamzah et al., 2020; Sendaro & Baharun, 2020). Following Schlosser and McNaughton (2007), other researchers have attempted to overcome the shortcomings of research on individual market orientation by studying the market orientation of individuals located at different hierarchical levels, such as salespeople, employees, or managers (e.g., Chen, Rivas, & Wu, 2017; Lam et al., 2010; Sendaro & Baharun, 2020). Lam et al. (2010, p. 62) defined individual market orientation as “*the practice by a member of an organization of incorporating customer preferences, competitor information, and product knowledge into the process of creating and delivering ‘higher value to customers.’*” They distinguished three dimensions of individual market orientation: customer orientation, competitor orientation, and product orientation. The last component refers to knowledge of the product itself and of the services. Furthermore, Lam et al. (2010) discussed product orientation rather than technology orientation. However, if we refer to its measurement, product orientation is equivalent to technology orientation (Voss & Voss, 2000), because it translates the desire to continuously improve the offer of products and services and the search for new products and services.

Research addressing individual market orientation is scarce, although scholars have examined both its antecedents and consequences (see Table 1 for a summary of key studies). A stream of research examining the effects of individual market orientation has identified several operational-level factors, such as customer orientation (Baber et al., 2018), job performance (Hamzah, Othman, Hassan, Musa, & Abdullah, 2018), and team innovation (Rao, 2021), as consequences of individual market orientation. The other stream of research examining the antecedents to individual market orientation has identified learning orientation, behavioral controls (Chen et al., 2017), and frequency of contact with customers and distributors (Schlosser & McNaughton, 2007) as key drivers.

**Table 1: Studies on individual market orientation (IMO)**

References	Research purpose	Empirical method	Key findings
Baber et al. (2018)	Examines the impact of individual market orientation (IMO) on sales orientation and customer orientation	Regression analysis	IMO increases sales orientation and customer orientation among commercial insurance agents in India.
Chen et al. (2017)	Explores the antecedents of salesperson market orientation behavior (SMOB) and the process underlying its influence on sales performance	PLS structural equation model	Learning orientation and behavioral controls of salespeople positively influence SMOB; SMOB improve sales performance (sales planning and adaptive selling)
Donavan et al. (2004)	Examines the effect of service workers' customer orientation on several job responses.	Structural equations model	Service workers' customer orientation positively influences their job satisfaction, commitment, and organizational citizenship behaviors.
Hamzah et al. (2020)	Investigates whether IMO facilitates the development of learning orientation before influencing the performance of (B2B) salespeople within the banking industry.	PLS structural equation modelling	Salespeople who adopt positive learning values are well positioned to disseminate and respond to new market information; these behaviors have helped them to reach higher levels of work performance
Hamzah et al. (2018)	Examines the role of IMO in determining the job performance of B2B salespeople, and the interaction effects of group culture on this relationship.	PLS structural equation modelling	Information acquisition and coordination of strategic response positively influence job performance. Group culture moderates the effects of information acquisition on job performance
Ho et al. (2011)	Investigates the significant role of IMO on employees' performance and future intentions	Multiple regression analysis	individual market orientation has positive effects on employees' performance and intention to stay as remisers
Judson et al. (2014)	Investigates the relationship between CEOs' functional experiences and the firms' customer equity as captured by American Customer Satisfaction Index (ACSI) scores	ANOVA	Companies led by market-oriented CEOs has a higher average ACSI value than companies with non-market-oriented CEOs. The difference between the ACSI mean values is significant.
Lam et al. (2010)	Examines the diffusion of market orientation (MO) as a social learning process to	Regression model	Sales directors' IMO has a positive effect on sales managers' IMO; sales managers' IMO positively influences sales representatives' IMO and expert peers' IMO. Sales directors'

	acquire and transfer individual-level MO.		IMO indirectly influences sales representatives' IMO through sales managers and expert peers.
Li & Ko (2021)	Examines how internal marketing mechanism (IMM) operates with knowledge integration (KI), relationship quality (RQ), relational bonding (RB), and organizational citizenship behavior (OCB) to influence market orientation behavior (MOB) of employees	Hierarchical Linear Model	IMM, KI, RQ, RB, and OCB have significant and positive direct effects on employees' MOB. IMM exerts a significant moderating effect when it interacts with OCB and RB but not RQ and KI.
Rao (2021)	Examines the IMO of managers (cognitive and behavioral market orientations) and its relationship to the performance and innovation of global teams	Regression analysis	Managers who display higher levels of cognitive and behavioral market orientation report higher levels of performance and innovation in their global teams. Behavioral market orientation partially mediated the effect of cognitive market orientation on team innovation
Sendaro & Baharun (2020)	Analyzes the mediating effect of the IMO in the relationship between emotional intelligence and employees job performance	PLS structural equation modelling	IMO plays a mediating role in the relationship between emotional intelligence and individual performance
Schlosser & McNaughton (2007)	Identifies individual-level antecedent to individual market-oriented behaviors.	Structural equation modelling	A low-quality matched psychological contract significantly and negatively affects employee's market-oriented behaviors. Employees' learning orientations exert a significant and positive effect on their market-oriented behaviors. The frequency of contact with customers and distributors is the most important antecedent of market-oriented behaviors.
Schlosser & McNaughton (2009)	Reports the development of a multidimensional scale of individual market-oriented behavior	Churchill's (1979) measure development process	The IMO scale (I-MARKOR) is a latent construct with three dimensions: information acquisition, information sharing and strategic response, measured by 20 items.
Winston & Dadzie (2002)	Examines the incidence of market orientation of Nigerian and Kenyan firms by focusing on the role of top manager	Regression analysis	Top managers' emphasis on market orientation (i.e., executives market orientation) has the strongest impact on the development of market orientation after the influence of international and private firms.

## **From CEO's market orientation to SME strategic orientations**

If research on the market orientation of individuals is scarce (Schlosser & McNaughton, 2009; Sendaro & Baharun, 2020), it is even more so for executives and senior managers. Indeed, an overview of structuring the research on the individual market orientation calls for some observations (see Table 1). First, research has focused more on individual outcomes than on organizational outcomes. Thus, it is more about the effects of individual market orientation on employees in general (e.g., Ho, Niden, & Johneny, 2011; Schlosser & McNaughton, 2007) and salespeople in particular (e.g., Chen et al., 2017; Hamzah et al., 2020).

Second, most of the work has focused more on members of the organization who evolve at lower hierarchical levels, and rarely on senior managers or CEOs. This may seem surprising when one considers that the implementation of a market-oriented strategy is the responsibility of managers (Lam et al., 2010). Only Lam et al. (2010) and Rao (2021) studied manager-level individual market orientation. However, the market orientation of managers is a necessary condition for a market-oriented company (Kohli & Jaworski, 1990). This is even more true in SMEs, where owners and managers of the firm play a more important role than employees (Anwar, Clauss, & Issah, 2022). Market orientation is defined as a culture—that is, a set of values and beliefs—but also as a behavior. Therefore, the market-oriented culture of CEOs makes them realize that the long-term performance of their company depends on its ability to satisfy consumer needs, face threats from competitors, and seize opportunities offered by technology. Driven by this market-oriented culture, the CEO will collect and disseminate information about the market (customers, competitors) and technology, but more importantly, respond to this information.

Based on the assumption that managers shape the organizational culture (Moorman & Day, 2016), employees can be expected to implement a level of market orientation that reflects the market orientation of leaders. Lam et al. (2010) empirically demonstrated that the diffusion of market orientation in a firm is a hierarchical process. They showed that the individual level of market orientation of sales managers positively influences that of middle managers, who in turn positively influence that of salespeople. This top-down mechanism of the transmission of market orientation is also observed in the context of intra-organizational and inter-organizational relationships. For example, Kirca, Bearden, and Roth (2011) established that the market orientation of headquarters is positively related to the implementation of market orientation in subsidiaries of global firms. In channel relationships, Siguaw, Simpson, and Baker (1998) found that the supplier's market orientation positively and significantly affects the distributor's market orientation. Based on the above considerations, we can expect that the individual level of market orientation of the CEO affects market orientation (customer orientation and competitor orientation) and technology orientation at the SME level.

## **Theoretical foundation and hypotheses**

### **Upper echelon theory**

This study is based on Hambrick and Mason's (1984) UET but incorporates some of its criticisms. UET is one of the most influential theories in management research. UET deals with how the characteristics of the management team are reflected in the actions and results of the company. According to UET, a company's strategic choices reflect the characteristics of its top managers (Hambrick & Mason, 1984). Thus, the knowledge (the cognitive system), the values,



and the perceptions of the leaders influence the strategic orientations and, consequently, the results of the company. To address the difficulty of measuring the knowledge, values, and perceptions of managers, Hambrick and Mason (1984) recommended understanding them through sociodemographic variables, such as age, experience, and level of education. Hence, most research that mobilizes UET uses these indicators as an approximation of the characteristics of senior executives to explain the actions or results of an organization. This approach has yielded convincing empirical results in several areas of management science, as many studies have established direct links between sociodemographic indicators and a company's strategic actions (Wang et al., 2019). For example, a study by Davis, Babakus, Englis, and Pett (2010) indicate that enterprises run by women are more market oriented than those run by men.

Despite its predictive power, UET has been the subject of several conceptual and methodological criticisms that have paved the way for proposals for its evolution. Conceptually, UET research has been criticized for its inability to unravel the mystery of the "black box," that is, the mediating mechanisms and processes of the relationships between the sociodemographic characteristics of top managers and the strategic choices or results of the company (Neely Jr., Lovelace, Cowen, & Hiller, 2020). In fact, UET stipulates that a company's strategic decisions reflect the cognitive systems and values of top managers, which depend on their sociodemographic profiles. Consequently, the use of sociodemographic variables does not make it possible to understand the psychological and cognitive processes that determine the behavior of senior executives (Hambrick, 2007). These variables are therefore used for methodological convenience, given the difficulty of obtaining psychometric data from managers (Hambrick, 2007). As a result, researchers are invited to show why and how the sociodemographic traits of top managers correspond to their state of mind and behavior (Carpenter, Geletkanycz, & Sanders, 2004). To respond to these criticisms, some researchers have attempted to unravel the mystery of the "black box" by analyzing the mediating mechanisms of the links and the sociodemographic characteristics of top managers and their behaviors (Hambrick, 2007). Research by Diao, Gotteland, and Boulé (2017) fits somewhat into this perspective by showing the mediating role of cross-functional coordination in the relationship between certain demographic indicators—in this case, the age and experience of the CEO—and the level of market orientation of Senegalese SMEs.

On the methodological level, research on UET has been widely criticized for the measurement instruments used, mainly the sociodemographic indicators, which are supposed to represent the underlying attributes of leaders. In proposing the theory, the authors recognized the imprecise and partial nature of variables, such as age, experience, or level of education (Hambrick, 2007; Hambrick & Mason, 1984). To this day, criticism of the lack of reliability and precision of these indicators persists, and several researchers have called for their abandonment in favor of more complete measurements that are in line with the concepts they represent (Carpenter et al., 2004; Neely Jr. et al., 2020).

As part of this study, we consider the conceptual and methodological criticisms of UET by dispensing with the use of sociodemographic variables to understand the latent characteristics of the CEOs studied, namely, their individual levels of market orientation. This should influence the strategic orientations of SMEs.

## **Hypothesis development**

According to UET, a firm partially reflects the beliefs, values, and behaviors of its CEOs. Consequently, the strategic orientations of the company would reflect the culture- and market- and technology-oriented behaviors of its leaders, especially since we are in the context of an SME. Indeed, the UET finds a favorable echo in the SME because of its size, but especially because of the preeminent role exercised by the CEO, who is often the sole owner. On the one hand, he serves as a model for his employees through the management actions he takes, and, on the other hand, he instills the corporate culture that must be adopted by them. Moreover, the mode of management of the SME is a specificity that is analyzed from the angle of proximity induced by size. The CEO of the SME is physically close to his collaborators, which can promote the adoption of his culture and his market- and technology-oriented behaviors by his collaborators if he is market-oriented on an individual basis. Therefore, to influence the degree of market orientation, the manager must be driven by a strong culture of market orientation (Gotteland, 2019). This culture should not only translate into speeches but also into market orientation activities. In this regard, Day (1994) affirmed that the commitment of CEOs must be manifested by actions and the time invested, and not only by words, even though they are important. Moorman and Day (2016) agreed, emphasizing that CEOs must walk the talk and align market talk with market action.

Overall, managers are at the forefront of implementing market orientation in a company (Gebhardt et al., 2006; Jaworski & Kohli, 1993; Kirca et al., 2005; Naver & Slater, 1998). Several theoretical and empirical considerations indicate that CEOs' behaviors are the centerpiece of the process of implementing market orientation in a company (Harris, 2001). The creation of market orientation originates in the management of the company and spreads throughout the organization (Martin et al., 2009; Siguaw et al., 1998). In view of these arguments, and given that the company reflects its manager (Eriksson, Robertson, & Näppä, 2020), the manager's market orientation should influence the company's market orientation.

### ***SME's customer orientation as a reflection of CEO's market orientation***

A company's market orientation is demonstrated by its customer-oriented activities and competitor-oriented actions. The importance of customer orientation is widely recognized (Feng, Wang, Lawton, & Luo, 2019). Research in the field of market orientation first focused on customer orientation before extending it to other factors, such as competitors. The established effect of customer orientation on performance has led some authors to focus on the question of its implementation in the company. Senior managers play a catalytic role in creating customer orientation in a company (Jaworski & Kohli, 1993; Kennedy, Goolsby, & Arnould, 2006). According to scholars, this role is manifested in the attention they give to this strategy and the process they put in place to diffuse it in the company. This diffusion of customer orientation is more effective if managers are themselves market-oriented as individuals. Thus, they will serve as role models for other members of the organization. In this respect, Nwankwo (1995) stated that the transformation of the company toward customer orientation requires, above all, a customer-oriented attitude of its managers. Thus, we can expect the CEO's market orientation to favor the SME's customer orientation. Since we distinguish three dimensions of a CEO's market orientation, we propose that:

*H1: The higher the CEO's market orientation, the higher the SME's customer orientation.*

### ***SME's competitor orientation as a consequence of CEO's market orientation***

Small business owners recognize the importance of customers and customer information generally, and competitors to a lesser extent (Perry, 2014; Reijonan & Komppula, 2010). However, customer orientation is not a sufficient condition for achieving organizational performance, even if it is necessary. Thus, O'Dwyer and Gilmore (2019) posited that SMEs should not only develop customer orientation but should combine it with a competitor orientation. Indeed, the fact that SMEs develop a strong customer orientation and display a relatively weak competitor orientation is often the cause of an imbalance in the implementation of market orientation (Blankson, Motwani, & Levenburg, 2006; Verhees & Meulenberg, 2004). Several studies have therefore been carried out to address this issue by elucidating the link between competitor orientation and performance (Slater & Narver, 1994; Jaworski & Kohli, 1993; Kumar, Subramanian, & Yauger, 1998; Marjanova, Sofijanov, Davcev, & temjanovski, 2015; Al-Hakimi et al., 2022). For instance, O'Dwyer and Ledwith (2010) established that competitor orientation influences the performance of small firms. Ledwith and O'Dwyer's (2009) research indicated that this is the only dimension of small firm market orientation that significantly explains new product performance. Based on this finding, O'Dwyer and Gilmore (2019) urged SME managers to be aware of the positive impact of competitor orientation on performance. Thus, although it has been established that competitor orientation promotes performance, the problem of its implementation within the company remains fragmented. However, a higher level of implementation of competitor orientation directly and positively affects business performance (Marjanova et al., 2015). As competitor orientation highlights the significance of competitors and their actions (Narver & Slater, 1990) and is one of the more important things in strategic planning (Kai & Fan, 2010), we believe CEOs should be appropriately focused on competitors. Thus, SME managers will be even more aware of the importance of competitor orientation if they themselves are market oriented. Therefore, we postulate that:

*H2: The higher the CEO's market orientation, the higher the SME's competitor orientation.*

### ***SME's technology orientation as a result of CEO's market orientation***

Given that it is rare for a company to implement a single strategic orientation (Gotteland et al., 2020), it must combine market orientation and technology orientation in order to outperform. Technology orientation is not an end in itself. The purpose of technology orientation is to offer customers new products and services that satisfy their needs better than their competitors. Thus, technology orientation may lead firms to focus on creating or improving products or services (Chen, Tang, Jin, Xie, & Li, 2014). Therefore, the implementation of the firm's technology orientation should depend on the CEO's market orientation, that is, its customer, competitor, and product orientations. According to Gatignon and Xuereb (1993), technology orientation is a consequence of product-oriented management. A company's technology orientation requires the support and commitment of its leaders (Jeong et al., 2006). Managers will be able to foster technology orientation if they themselves are individually market oriented. Therefore, we believe that the CEO's market orientation should promote technology orientation at the corporate level. Based on the above considerations, we hypothesize the following:

*H3: The higher the CEO's market orientation, the higher the SME's technology orientation.*

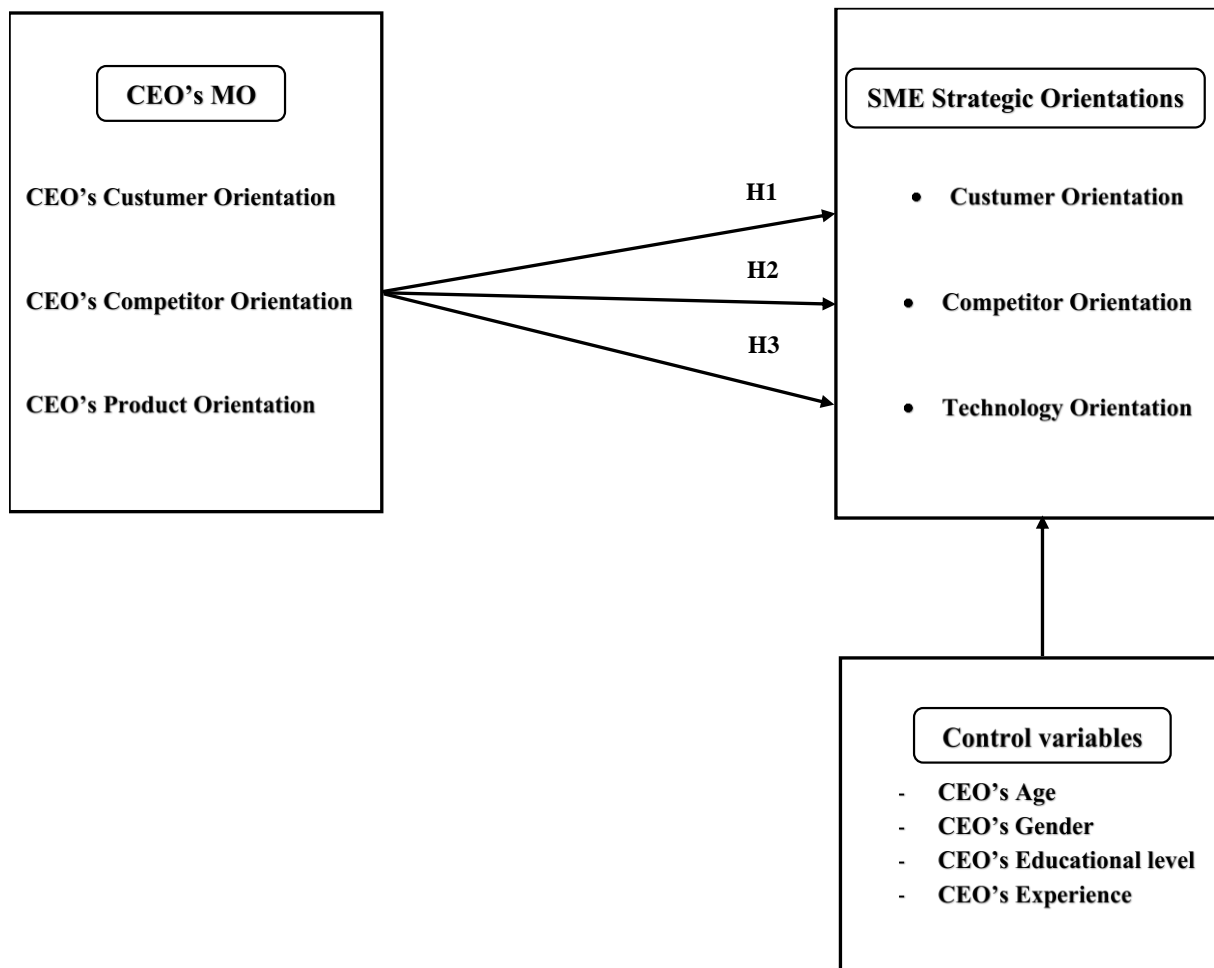


Figure 1. The proposed research model

## Methodology

### Context

The research context provides a relevant framework for a better understanding of strategic orientations. Indeed, research on strategic orientations carried out in developing countries, such as Senegal, is rather limited (Andotra & Gupta, 2016; Shah, El-Gohary, & Hussain, 2015). The Senegalese business fabric is largely dominated by SMEs, which represent 99.8%<sup>1</sup> and 35% of the gross domestic product (GDP). As the Senegalese economy is extroverted, and therefore open to international competition, these SMEs need more than ever to be market-oriented to survive. Moreover, research on strategic orientations carried out in the context of SMEs is small compared to that carried out in large companies (Didonet et al., 2016; Reza zadeh et al., 2016). As a result, the literature reports a need for further study of strategic orientations in SMEs (Hernández-Linares, Kellermannna, & López-Fernández, 2021), especially in developing economies (Billore & Billore, 2019).

<sup>1</sup> Global Report of the General Business Census published in January 2017 by the National Agency for Statistics and Demography of Senegal.

The reference population of our study consisted of SMEs. These are companies with fewer than 250 employees, according to the Senegalese legal framework<sup>2</sup>. The survey base, obtained from the National Agency for Statistics and Demography (NASD), includes 7,945 companies belonging to various sectors of activity corresponding to the strata that we have selected, such as industry, transport, and communication, trade, services, buildings, and public works. A questionnaire survey was carried out to collect data on the CEOs of SMEs located in Dakar, the capital of Senegal. This choice is justified by the fact that more than a third (39.5%) of companies are concentrated in this area (General Survey for Companies, 2017). The selection of our sample was based on the principle of randomization. We thus used the method of random drawing by strata to select 200 CEOs of SMEs from the survey base. The questionnaire included the variables of the hypotheses as well as questions describing the profile of the CEO and the characteristics of the SME.

### **Measures**

The main variables were measured with 7-point Likert scales, ranging from “Totally disagree” to “Totally agree.” The items for all scales are presented in the Appendix. Respondents are made up of CEOs of SMEs, who are often the sole owners. Generally, researchers approach the market orientation of SMEs from the point of view of CEOs (Didonet et al., 2016).

#### ***CEO’s market orientation***

Although research on market orientation began to develop in the 1990s, individual market orientation has been studied since 2007. Schlosser and McNaughton (2009) developed the I-MARKOR scale to measure individual market orientation behavior, that is, information acquisition, information sharing and strategic response. Following these authors, Lam et al. (2010) proposed a measure that, in addition to assessing market-oriented activities, distinguishes the aspects to which they apply. Thus, their scale includes 15 items organized on three dimensions: product orientation (3 items), competitor orientation (3 items), and customer orientation (9 items). This scale was used to evaluate the individual level of market orientation of top and middle managers. So, we use Lam et al.’s (2010) scale to measure the CEO’s market orientation. This scale was notably used by Chen et al. (2017).

#### ***SME’s strategic orientations***

They refer to how a firm adapts to its external environment (Avci, Madanoglu, & Okumus, 2011). Strategic orientations are a set of strategic management principles that shape the company's behavior to improve its competitiveness in any market segment (Tahmasebinia, Jokar, Mohebi, Fardmehregan, Beigi, & Tahmasebinia, 2022). According to these authors, one of most repeatedly cited strategic orientations directing various companies' behaviors is market orientation. A review of the prior literature revealed that scale for market orientation had already been developed and tested in multiple research settings (Narver & Slater, 1990; Ellis, 2006). In addition, the market orientation measurement (MKTOR) proposed by Narver and Slater (1990) is by far the most widespread in empirical studies, for reasons of good construct validity (Gauzente, 1999). Therefore, the customer orientation and the competitor orientation of the SME were evaluated using the scales developed by Narver and Slater (1990). Customer orientation is formed by 6 items, and competitor orientation is measured by 4 items. The other strategic orientation that we have chosen to study is technology. Gatignon and Xuereb’s (1997) defined it as the capacity and the will of company to obtain an important technological

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<sup>2</sup> Law n°2008 – 29 of July 28, 2008 relating to the promotion and development of SMEs.

background and to use it in the development of new products. This research uses an approach that is based on the research of Gatignon and Xuereb (1997) to measure technology orientation. Hence, the technology orientation of the SME was examined through the scale created by these authors, which includes 4 items. Finally, the statistical and psychometric characteristics of all scales are verified (see Tables 3, 4, 5 and 6).

### ***Control variables***

The initial approach to UET uses sociodemographic indicators to explain the strategic choices of the company. Therefore, it is useful to check certain sociodemographic indicators for which research has confirmed their effects on a company's market orientation. In this case, the company's market orientation depends on the gender of the manager (Davis et al., 2010), their age, their level of education, and their experience (Becherer et al., 2001; Diao et al., 2017). The CEO's level of education was measured by an eight-option scale: "no level," "primary level," "average level," "secondary level," "baccalaureate," "bachelor," "master" and "doctorate." The CEO's experience was measured by the number of years of activity in the company.

### **Sample characteristics**

The administration of the questionnaires was entrusted to professional interviewers experienced in face-to-face interviewing techniques. At the end of the survey, we obtained 175 questionnaires with complete answers to the model's variables. The sociodemographic characteristics of the CEOs surveyed are presented in Table 2.

**Table 2: Respondent characteristics**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender of CEOs</b>		
Women	35	20
Man	140	80
<b>Age of CEOs</b>		
21–33 years old	31	17.7
34–45 years old	58	33.2
46–55 years old	55	31.4
Over 55	31	17.7
<b>Level of education of CEOs</b>		
Without level	14	8
Primary school level	9	5.1
Secondary school level	61	34.9
Higher education level	91	52
<b>Training area</b>		
No training	23	13.14
Management training	86	49.14
Non-management training	66	37.72
<b>Terms of business creation</b>		
Founder	149	85.1
Heritage	15	8.6
Redemption	4	2.3
Franchise	7	4
<b>Business experience</b>		
Less than a year	13	7.4
1–10 years	91	52
11–20 years	50	28.6
Over 20 years	21	12

### **Reliability and validity assessment**

The psychometric quality of the scales was evaluated according to Churchill's (1979) procedure. We first performed principal component analyses using SPSS 21 software. This led us to remove items whose communalities were less than 0.5. The structures obtained were then verified with confirmatory factor analyses (CFA) carried out with STATA 14 software. The measurement models displayed adjustment indices that meet or approach the required standards:  $\chi^2/d.f.$ ; RMSEA < 0.08; SRMR < 0.08; CFI > 0.9; TLI > 0.9. These indices, as well as the evidence of the reliability and validity of the scale, which represents Cronbach's alpha (CA), composite reliability (CR), average variance extracted (AVE), and discriminant validity, are presented in Tables 3 and 4. CA coefficient is used to check the internal consistency of the measurement scales. In this study, this coefficient had values greater than 0.8, which is greater than the acceptability standard of 0.7 (Nunnally, 1967). Since the CA varies with the number of items, we also calculated the CR, as recommended by Fornell and Larcker (1981). All of the CR values were higher than 0.8. Therefore, the reliability of the measures was established. The AVE scores of the different measures were assessed by following the procedures suggested by Fornell and Larcker (1981). The AVE for all constructs is greater than the acceptable threshold of 0.5, which establishes the convergent validity of the constructs. Discriminant validity was

assessed using a two-step process. First, we examined whether the AVE for each construct was greater than its shared variance with other constructs (Fornell & Larker, 1981). The results showed that discriminant validity achieved a satisfactory level among all scales used in the study.

A second level of discriminant validity between the study measures was established using a procedure recommended by Anderson (1987) and Bagozzi and Phillips (1982), as two measurement models (one exogenous and the other endogenous) were used to assess the scale properties. In accordance with this procedure, a series of two-factor CFA models were carried out to assess the discriminant validity of the scales. We compared a free model in which the correlation between two constructs was left free with a constrained model in which this correlation was fixed at 1. The comparison consists of showing that the fit indices of the free model are better than those of the constrained model. Finally, a chi-square ( $\chi^2$ ) difference test was performed on the pairs of constructs to assess whether the chi-square value was significantly lower for the free model. The results of this second procedure are presented in Table 5. These results show the discriminant validity of the instruments used in the current study. Globally, all the scales retained in this research were viewed as reliable and valid.

**Table 3: CFA results for the SME’s strategic orientations scales**

	CA	CR	AVE	1	2	3
1. Customer orientation	0.827	0.838	0.512	1		
2. Competitor orientation	0.870	0.875	0.638	0.030	1	
3. Technology orientation	0.877	0.886	0.727	0.080	0.000	1
<b>Fit indices</b>	$\chi^2$ /d.f. = 2.38; RMSEA = 0.089; SRMR = 0.054; CFI = 0.933; TLI=0.914					

d.f.: degree of freedom

**Table 4: The CFA results for the CEO’s market orientation scale**

	CA	CR	AVE	1	2	3
1. Product orientation	0.805	0.809	0.586	1		
2. Competitor orientation	0.950	0.951	0.866	0.071	1	
3. Customer orientation	0.874	0.881	0.518	0.196	0.040	1
<b>Fit indices</b>	$\chi^2$ /d.f. = 2,25; RMSEA = 0.085; SRMR = 0.057; CFI = 0.942; TLI = 0.927					

**Table 5: Discriminant validity of the scales**

	Chi-square difference test (critical value: $\Delta\chi^2_1 > 3.84$ )					
	1	2	3	4	5	6
1. SME customer orientation	-					
2. SME competitor orientation	60.177	-				
3. SME technology orientation	72.398	25.483	-			
4. CEO’s product orientation	104.468	48.529	47.309	-		
5. CEO’s competitor orientation	64.410	34.175	21.026	27.247	-	
6. CEO’s customer orientation	95.201	43.061	43.328	57.897	23.156	-



### **Common method bias**

As we used a single respondent for the dependent and independent variables, the data were likely to be affected by the problem of common method bias. To control this, we followed the procedure recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). First, we performed Harman's single-factor test by performing an unrotated factor analysis that included all scales for a total of 25 items. The solution of the principal axis factorization revealed six factors with eigenvalues greater than 1, which explained 63.17% of the variance. Since several factors emerged, and the first factor accounted for 23.28% of the variance, we infer that there was no common variance bias with the data. We performed a confirmatory factor analysis in which all items were indicators of a latent variable corresponding to method effects (Malhotra, Kim, & Patil, 2006). The estimated measurement model did not fit the data:  $\chi^2(275) = 2086.25$ , RMSEA = 0.194, SRMR = 0.168, CFI = 0.292, TLI = 0.228. Therefore, no links between the independent and dependent variables were caused by common method bias.

### **Data analysis and hypothesis testing**

The data were analyzed with STATA 14 software. Table 6 presents the means, standard deviations, and correlations. The intercorrelations between the independent variables are almost nil, suggesting that this analysis is probably not affected by multicollinearity. Thus, an analysis of the data with respect to the variance inflation factor (VIF) was carried out. The values for all variables are clearly below the threshold of 2 (Neter, Wasserman, & Kutler, 1985), with the highest value being 1.273, which also indicates the robustness of the model against multicollinearity problems. The hypotheses presented below are tested using structural equation modeling (SEM).

The tested structural model displays fit indices that meet the required thresholds ( $\chi^2/d.f. = 1.636$ , RMSEA = 0.060, SRMR = 0.062, CFI = 0.915, TLI = 0.901). The results of the SEM are presented in Table 7. Thus, the three hypotheses are partially verified. SME customer orientation is positively and significantly influenced by the CEO's customer orientation ( $\gamma = 0.212$ ;  $p < 0.05$ ) and the CEO's product orientation ( $\gamma = 0.449$ ;  $p < 0.05$ ). Further, the CEO's competitor orientation positively and significantly influences the competitor orientation of the SME ( $\gamma = 0.463$ ;  $p < 0.01$ ). Lastly, the CEO's product orientation has a positive and significant effect on the technology orientation of the SME ( $\gamma = 0.288$ ;  $p < 0.01$ ). The CEO's education level is the only control variable that has a significant effect on one of the strategic orientations, in this case the SME's technology orientation ( $\gamma = 0.217$ ;  $p < 0.01$ ).

**Table 6: Descriptive statistics and correlations**

	VIF	Mean (S.D.)	Correlations coefficients					
			1	2	3	4	5	6
<b>1. SME customer O.</b>	1.273	6.451 (.13)	1					
<b>2. SME competitor O.</b>	1.230	4.811 (.23)	.000	1				
<b>3. SME technology O.</b>	1.046	5.690 (.19)	.000	.000	1			
<b>4. CEO's product O.</b>	1.212	6.288 (.04)	.366***	-.015	.089	1		
<b>5. CEO's competitor O.</b>	1.228	4.966 (.10)	-.016	.429***	.021	.000	1	
<b>6. CEO's customer O.</b>	1.108	6.332 (.12)	.269***	-.041	.163*	.000	.000	1

S.D.: Standard deviation; \*\*\*: P<0.01; \*: P<0.05

**Table 7: Results of hypothesis testing**

Hypothesis	Independent variables	Dependent variables	Path Coefficient	Result
<b>H1</b>	<b>CEO's customer O.</b>	<b>SME Customer Orientation</b>	<b>0.212*</b>	<b>Supported</b>
	<b>CEO's competitor O.</b>		<b>-0.020</b>	<b>Not supported</b>
	<b>CEO's product O.</b>		<b>0.449***</b>	<b>Supported</b>
Control variables	CEO's age		-0.003	Not significant
	CEO's gender		-0.050	Not significant
	CEO's educational level		-0.042	Not significant
	CEO's experience		-0.062	Not significant
<b>H2</b>	<b>CEO's customer O.</b>	<b>SME Competitor Orientation</b>	<b>-0.004</b>	<b>Not supported</b>
	<b>CEO's competitor O.</b>		<b>0.463***</b>	<b>Supported</b>
	<b>CEO's product O.</b>		<b>-0.054</b>	<b>Not supported</b>
Control variables	CEO's age		0.064	Not significant
	CEO's gender		-0.067	Not significant
	CEO's educational level		-0.082	Not significant
	CEO's experience		-0.068	Not significant
<b>H3</b>	<b>CEO's customer O.</b>	<b>SME Technology Orientation</b>	<b>0.061</b>	<b>Not supported</b>
	<b>CEO's competitor O.</b>		<b>-0.005</b>	<b>Not supported</b>
	<b>CEO's product O.</b>		<b>0.288***</b>	<b>Supported</b>
Control variables	CEO's age		0.160	Not significant
	CEO's gender		-0.103	Not significant
	CEO's educational level		0.217***	Significant
	CEO's experience		-0.081	Not significant

\*\*\*: P<0.01; \*: P<0.05

## **Discussion and conclusion**

The objective of this article was to show the effect of a CEO's market orientation on strategic orientations in an SME. Creating strategic orientations in a company is not an easy task (Harris, 2001). Research in the field very early underlined the importance of CEOs' involvement in the process of implementing strategic orientations (e.g., Gebhardt et al., 2006; Martin et al., 2009; Narver et al., 1998). However, little research has been conducted on this issue (Brower & Nath, 2018). To explore the influence of managers in the creation of strategic orientations, the researchers assessed this role through the top management focus on market orientation (e.g., Jaworski & Kohli, 1993; Winston & Dadzie, 2002), leadership styles (e.g., Harris, 2001), and sociodemographic indicators (e.g., Brower & Nath, 2018; Wang et al., 2016). In this article, we have relied on UET to assert that the strategic orientations of a company reflect its CEO's market orientation which is made up of three dimensions: customer, competitor, and product. Since the CEO is in the driving seat to implement strategic orientations in his SME, we present the following discussion of our findings.

### **CEO's product and customer orientation as determinants of the SME's customer orientation**

In Hypothesis 1, we assumed that the CEO's market orientation would influence the SME's customer orientation. Our results reveal that only the customer and product dimensions of the CEO's market orientation affect the SME's customer orientation. Moreover, the effect of the CEO's product orientation on the SME's customer orientation is greater than that of the CEO's customer orientation. This implies that the CEO's tendency to focus on the research and development of new products and services translates at the SME level into efforts to understand the customer's needs to be satisfied. This shows that the CEO's product orientation makes sense only to serve customers by improving products and services or by coming up with a new offering (Chen et al., 2014). The SME's customer orientation also depends on the CEO's customer orientation. Thus, the degree of customer orientation of an organization will differ according to the customer-oriented beliefs and behaviors of the leaders (Nwankwo, 1995).

### **CEO's competitor orientation as a driver of the SME's competitor orientation**

In Hypothesis 2, we supposed that the CEO's market orientation would influence the competitor orientation of the SME. This hypothesis is verified only for the competitor orientation component of the CEO's market orientation. The implementation of the competitor orientation by the SME is only dependent on the competitor orientation attitude of the CEO. This means that beyond his customer and product orientation, the CEO must send signals to the members of the company in terms of competitor-oriented actions in order for the competitor orientation to propagate throughout the SME. In other words, an SME whose manager is not interested in competitors' activities is likely to have a very low degree of competitor orientation. Given that SMEs are characterized by weak competitor-oriented practices (Perry, 2014; Reijonan & Komppula, 2010; Marjanova et al., 2015), SME managers should pay attention to competitor orientation to help the company enhance its level of competitor orientation (Al-Hakimi et al., 2022). To this end, this result supports UET, according to which the firm reflects the characteristics of its managers. Therefore, the competitor orientation of an SME is determined by the CEO's competitor-oriented behavior.

### **CEO's product orientation as a vector of the SME's technology orientation**

Lastly, Hypothesis 3 deals with the link between the CEO's market orientation and the SME's technology orientation. The hypothesis was also partially confirmed because the technology orientation of the SME is only influenced by the CEO's product orientation. This result is consistent with UET, as only the CEO's product orientation influences SMEs' technology orientation. This means that the practice of customer and competitor orientations at the CEO level is not sufficient to enable SMEs to become technology-oriented. The CEO must personally demonstrate an interest in innovation and the new product and service offering. In this way, this product orientation will promote the implementation of technology orientation at the scale of the SME. This finding is in accordance with the research of Jeong et al. (2006), who indicated that organizational support, measured in terms of the product orientation of managers, positively affects the technology orientation of the firm.

Overall, apart from product orientation, the dimensions of the CEO's market orientation only have an impact on the strategic orientations of the SME to which they correspond. More precisely, the company's customer orientation is a function of the individual level of product and customer orientation of the CEO, the competitor orientation of the company depends on the individual level of competitor orientation of the CEO, and the technology orientation of the company is linked to the individual product orientation of the CEO. Overall, the level of implementation of strategic orientations in a company depends, in part, on the personal market orientation of the CEO, in accordance with UET.

### **Theoretical implications**

Our research contributes to the literature on strategic orientations by filling the gap in the research on managerial antecedents. The results provide empirical evidence of CEOs' determining influence on the development of corporate strategic orientations. Research on the antecedents of market orientation repeatedly mentions the importance of CEOs' roles in reinforcing the degree of market orientation in a company (Harris, 2001). To understand this influence, researchers have used the concept of top management emphasis proposed by Kohli and Jaworski (1990). The latter consists of encouraging employees to adopt a market orientation. However, the discourse encouraging strategic orientations must be supplemented by actions reflecting the CEO's market orientation, which is likely to promote its adoption by other members of the organization. UET does not preclude focusing on individual CEOs, instead of focusing on the management team (Hambrick, 2007). Hence, we chose as the unit of analysis the CEOs through their market orientation, especially since the research applies to the context of SMEs. Indeed, it is very likely that the philosophy of the owner-manager is reflected in the daily functioning of the SME (Becherer et al., 2001).

Therefore, this study is also a contribution to research that analyses market orientation at the individual level by studying it among SME CEOs. In fact, most research investigates the individual market orientation of employees, and rarely that of managers. This research also contributes to the work on the implementation of strategic orientations by highlighting the key roles played by CEOs. Indeed, unlike previous work that analyzes the impact of market orientation on organizational members, such as employees or salespeople (e.g., Baber et al., 2018; Ho et al., 2011), our research examines its effects at the firm level. Thus, we show that a CEO's market orientation can promote the deployment of a firm's strategic orientations. In this respect, our research is also different from that of Lam et al. (2010), who focused on the cascading diffusion of individual market orientation between individuals located at different hierarchical levels (from senior managers to salespeople through middle managers).

### **Managerial implications**

Research on strategic orientations seems to be an exercise demonstrating their effect on business performance. Research has largely focused on the strategic orientations–performance link, almost forgetting to show the ways in which the strategic orientations of an organization are acquired and reinforced. In this respect, the results indicate that the strategic orientations of a company are partially influenced by the market orientation of its CEO, in line with upper echelon theory. More specifically, in SMEs, the leader is in charge of creating a market and technology-oriented culture and behaviors. Consequently, any strategic orientation implementation process must be piloted and supervised by the company's management. Similarly, the CEO is at the controls to regulate the level of application of the different strategic orientations studied, namely, customer orientation, competitor orientation, and technology orientation. Indeed, depending on market or industry conditions, a company's management may find it necessary to emphasize one or the other of these strategic orientations. However, managers need to find the optimal combination when implementing these strategic orientations, because companies that combine these strategic orientations perform better than those that implement only one orientation (Adams et al., 2019; Hakala & Kohtamäki, 2011).

For developing countries such as Senegal, the results highlight the need for SMEs to be led by personally market-oriented managers in order to develop strategic orientations, such as market orientation and technology orientation. Indeed, to remain profitable and ensure their sustainability, these SMEs have no choice other than to practice customer orientation, competitor orientation, and technology orientation. These strategies allow them to be competitive in the context of market opening, which intensifies competition and market turbulence.

### **Limitations and future research**

This study has some limitations that open avenues for future research. The tested model can be enriched by integrating all the factors, mediators, or moderators that can interfere in the relationship between the CEO's market orientation and the strategic orientations of the company. First, we believe that all SME CEOs do not have the same ability or predisposition to influence the strategic orientations of their companies. Thus, beyond the controlled sociodemographic characteristics, the effect exerted by the CEOs market orientation may depend on their field of training. Thus, a priori, a CEO with marketing training acquired in the market orientation culture may be more willing to influence the level of strategic orientations of his company. In this regard, Brower and Nath (2018) indicated that the appointment of a CEO with marketing training has a direct correlation with the improvement of the degree of the company's market orientation, while the presence in the management team of a marketing director only affects market orientation if the rest of the team capitalizes on significant marketing experience. From the same perspective, future research could detect the possible moderating effect of the field of training of the CEOs on the relationship between their individual market orientation and the market orientation of the company.

We also believe that the ability of the CEO to affect the strategic orientations of his company through his individual market orientation also depends on his style of management and the quality of his relations with his collaborators, which determine the adherence of the latter to the strategic orientations of the company. Thus, it would be interesting to study the mediating mechanisms that explain the effect of a CEO's market orientation on a company's strategic orientations. In this regard, future research could study the mediating effects of leadership style,

which may be the basis for the implementation of a firm's strategic orientations from a CEO's market orientation. Finally, the success of the diffusion of strategic orientations in a company depends on the level of organizational commitment of the employees (Sivaramakrishnan, Zhang, Delbaere, & Bruning, 2008). Thus, it is necessary to analyze the moderating role of the organizational commitment of employees in the study of the influence of the CEO's market orientation on the strategic orientations of the company.

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**Appendix: Measurement scales**

<b>SME Strategic Orientations scales</b>	<b>Standardized coefficients</b>
<b>Customer Orientation</b>	
1. Our business objectives are driven primarily by customer satisfaction	0.67
2. We constantly check our level of commitment and our focus on the satisfaction of customer needs	0.79
3. Our strategy for competitive advantage is based on our understanding of customer needs	0.75
4. The strategy of our company is determined by its capacity to create greater value for customers	0.74
5. We measure customer satisfaction systematically and frequently	0.61
6. We pay close attention to after-sales service *	
<b>Competitor Orientation</b>	
1. Our salespeople regularly share the information they have on competitors' strategies	0.74
2. We respond quickly to competitor actions that threaten us	0.88
3. Top management regularly discusses competitors' strategies and strengths	0.81
4. We target customers when we have an opportunity for competitive advantage	0.75
<b>Technology Orientation</b>	
1. Our company tries to develop products that use the latest technologies	0.90
2. The products developed by our company are always at the forefront of technology	0.94
3. Our company tries to modify its products according to the new technologies available	0.70
4. Our company attaches great importance to research and development *	
<b>CEO's Market Orientation scale</b>	
<b>CEO's Product Orientation</b>	
1. I am always looking for new products and services	0.76
2. I always reconsider and develop the product and service offering of our company	0.77
3. I consider innovative new products and services as a key component of success	0.77
<b>CEO's Competitor Orientation</b>	
1. I pay close attention to competitors' activities	0.92
2. I keep a close eye on our competitors' customer retention tactics	0.96
3. I monitor exactly what special actions our competitors are doing	0.91
<b>CEO's customer Orientation</b>	
1. I think customer preferences are a key factor to the success of my company *	
2. I frequently survey customers to find out the products and services they would like to see in the future.	0.66
3. The goals I set for my subordinates are mainly aiming at customer satisfaction *	
4. I try to figure out what a customer's needs are	0.67
5. I have the customer's best interests in mind	0.75

6. I try to help customers achieve their goals	0.78
7. I take a problem-solving approach in selling products or services to customers	0.69
8. I offer the product of mine that is best suited to the customer's problem.	0.75
9. I try to find out which kinds of products or services would be most helpful to customers	0.74

\* These items were suppressed during the purification of scales

All scales use seven terms, ranging from 1 strongly disagree to 7 strongly agree.