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Unlocking Market Information Use in Small Firms: Exploring the Nexus of Market Orientation, Ownership and Small Firm Market Performance

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Abstract

Purpose- This paper investigates the intricate dynamics of market information use (MIU) in small firms. First, the influence of market orientation (MO) on MIU is examined. Then, the mediating roles of instrumental and symbolic uses of market information and the moderating role of firm ownership are scrutinized to connect small firms' MO to small firm market performance (SFMP).

Design/methodology/approach- This study adopts the resource-based view (RBV) of the firm, follows a community-engaged action research approach, and draws on primary and secondary data from a population of 150 small food and drink producers, of which 79 were usable, in the United Kingdom.

Findings- This research dissects the contrasting impacts of instrumental and symbolic uses of market information on SFMP. Importantly, this study reveals that only instrumental MIU mediates the positive linkage between MO and SFMP, and that link is strengthened when firms are family-owned.

Originality/value- This study contributes to a deeper understanding of the internal factors influencing market information dynamics in small firms and their subsequent impact on SFMP. It also extends theoretical understanding of how small firms' unique resources, i.e., MIU, conditioned by ownership structure, drive performance in resource-constrained contexts.

Keywords

Market Information Use; Market Orientation; Ownership; Small Firm; Community-engaged Research

Introduction

Small firms, the backbone of many contemporary economies (Mallett & Wapshott, 2017; Yoshino & Taghizadeh-Hesary, 2019), face significant challenges in accessing and effectively using relevant market information in today's data-driven landscape (Perdana *et al.*, 2022). They typically operate in hypercompetitive markets, where competitive advantages can swiftly erode (Khan *et al*., 2022a), and the importance of accessing and using market information is accelerating (Citrin *et al.*, 2007; Low & Mohr, 2001; Mikalef *et al.*, 2019; Sinkula, 1994; Souchon *et al.*, 2004). Thus, they must leverage market information (e.g., customer needs and competition characteristics) to make informed strategic decisions, such as selecting market locations and developing products that meet customer needs (Zaefarian *et al.*, 2023). Furthermore, while gathering market information is essential, its effective use, particularly in small firms, is critical to achieving better performance (Mikalef *et al.*, 2019). The processes by which market information is collected and utilized can vary, with formal and informal approaches having different impacts on new venture success (Parry & Song, 2010).

However, despite early discussions on the fundamental role of market information use (MIU) in marketing and firm growth (Kohli & Jaworski, 1990; Menon & Varadarajan, 1992), there has been limited development in studies exploring the relationship between market orientation (MO) and MIU. The theoretical perspective of MO as an evolving concept from market information discussions (Keszey & Biemans, 2017) may contribute to this underdevelopment. If market intelligence is generated and disseminated to the various departments and managers from a market-oriented perspective (Kohli & Jaworski, 1990), then how managers use this information is critical for market-oriented firms to succeed. Effective MIU may justify managers' attention independently of managers' rational or cognitive style (Kryeziu *et al*., 2024). Based on this rationale, this study proposes that MIU can be a mechanism through which MO translates into small firm market performance (SFMP). The influence of

MO on SFMP has been extensively tested and supported (Didonet *et al.*, 2020; Länsiluoto *et al.*, 2019; Verhees & Meulenberg, 2004). However, the mechanisms through which MO translates into performance outcomes, particularly through MIU, remain under-explored, especially in the context of varying ownership structures. As such, the authors are interested in how it is conveyed through MIU vis-à-vis firm ownership. Similarly, the literature has largely overlooked the role that firm ownership, especially family vs. non-family ownership, plays in shaping the role of MIU in SFMP. Nonetheless, firm ownership, particularly in small firms, may influence MIU, as these firms often benefit from high commitment and deep tacit knowledge but may suffer from idiosyncratic management and nepotism (Alrubaishi *et al.*, 2021; Ljungkvist *et al*., 2023). As such, this oversight hides a pressing issue on the role of ownership structures in MIU and SFMP. Understanding the impact of ownership on the link between MIU and SFMP is crucial for advancing knowledge of how internal organizational factors influence small firms' market-oriented behavior and performance. From a managerial standpoint, examining the role of MIU in the context of firm ownership is vital. Because small firms often operate with limited resources and managerial capacity in a world of data-driven decision-making, making the effective use of market information a critical determinant of their survival and growth (Citrin *et al.*, 2007; Mikalef *et al.*, 2019).

The purpose of this paper is to examine the influence of MO on MIU in small firms and the mediating role of instrumental and symbolic MIU in the relationship between small firms' MO and market performance, considering the boundary condition of firm ownership. In so doing, this research is grounded in the resource-based view (RBV) of the firm, follows a community-engaged action research approach, and draws on primary and secondary data from 79 small food and drink producers in the United Kingdom.

This research contributes to our understanding of the entrepreneurial behavior of small businesses, taking the marketing lens (e.g., Hernandez-Perlines *et al*., 2021; Khan *et al*., 2022a).

First, this study examines the relationship between MO and MIU, revealing that MO is positively associated with instrumental MIU but not with symbolic MIU. Second, it examines the distinction between the conflicting influences of instrumental and symbolic uses of market information on SFMP, as well as their mediating role in linking small firms' MO to market performance. The findings show that while instrumental MIU positively influences SFMP, symbolic MIU does not, and only instrumental MIU mediates the positive link between small firm MO and market performance. Instrumental and symbolic uses of market information are distinguished, and nuanced insights into their distinct impacts on SFMP are provided. This distinction is theoretically important because it refines our understanding of the role that MIU plays, both as a resource and a mechanism, within the RBV framework. As a capability, MIU aligns with the RBV's emphasis on intangible assets, as it embodies the firm's capacity to systematically gather, understand, and utilize market information to inform decision-making. At the same time, MIU also operates as a mechanism that translates the firm's MO into actionable practices that propel SFMP. This dual role of MIU emphasizes its importance in resource use, as it bridges the gap between MO and SFMP.

Furthermore, this research extends the RBV of small firms (Barney, 1991; Khan *et al*., 2022a). It uncovers the complex role of firm ownership in shaping the link between MIU and SFMP and shows that family ownership strengthens the link between instrumental MIU and SFMP, while it does not influence the link between symbolic MIU and SFMP. This offers a new perspective on the internal dynamics that drive market success in small firms, particularly under different ownership structures. As such, the findings of this study shed some light on how firm ownership influences MIU and how MIU conveys the influence of MO on SFMP in small firms.

Theoretical background and hypotheses

Resource-based view of small firms

This study is grounded in the RBV of the firm, which posits that a firm's resources and capabilities - such as market information and its strategic use - are central to achieving and sustaining competitive advantage (Barney, 1991). The core premise of the RBV is that valuable, rare, inimitable, and non-substitutable (VRIN) resources and capabilities, including tangible assets, intangible assets, and organizational processes, are central to a firm's strategy and performance (Barney, 1991). To this end, the RBV provides a robust framework to examine the nexus of relationships between MO, MIU, and SFMP by conceptualizing these constructs as critical organizational resources. The RBV is particularly relevant for this study because it allows us to examine how small firms, which often operate under resource constraints (Didonet *et al.*, 2020), mobilize intangible assets like MO and MIU to drive performance.

In the context of small firms, the RBV highlights how critical internal resources and capabilities can drive competitive advantage. Small firms, often characterized by limited financial and human resources, must strategically manage and leverage their unique assets to compete effectively (Khan *et al*., 2022a; Yoshino & Taghizadeh-Hesary, 2019). These resources can include specialized knowledge, innovative processes, and strong relationships with customers. MO and MIU are critical organizational capabilities within this framework that enable firms to respond effectively to external market conditions. MO involves the firm's ability to understand and meet customer needs through deep and continuous interaction with the market (Kohli & Jaworski, 1990). MIU is, in turn, instrumental in turning market insights into strategic actions that drive performance (Low & Mohr, 2001). Instrumental MIU, in particular, involves using information to make data-driven decisions that directly enhance performance (Low & Mohr, 2001), and it aligns with the RBV's focus on leveraging VRIN resources for competitive advantage. In contrast, symbolic MIU, where information is used merely to justify pre-existing decisions (Koksal, 2008), may not contribute to sustained competitive advantage and could even detract from it.

Existing research has focused less on how these unique capabilities (MO and MIU) function in small firms, particularly in the context of different ownership structures. Drawing on the RBV (Barney, 1991), ownership can be seen as not merely a governance mechanism but a contextual factor that shapes the resource management process. In the food and beverage industry, particularly within the UK market, small firms face unique challenges and opportunities (Didonet *et al.*, 2020; Malagueño *et al.*, 2019) that underscore the importance of effectively leveraging their resources and capabilities. For family-owned small firms, which are prevalent in this sector (Malagueño *et al.*, 2019), the integration of family values and business practices can further enhance or constrain their ability to utilize MO and MIU as strategic capabilities. Family firms often possess strong, trust-based relationships with customers and a deep understanding of the local market, which can serve as valuable resources within the RBV framework. However, the influence of family ownership on decision-making processes can also affect how these firms implement MO and MIU strategies, potentially differentiating them from non-family-owned firms in the same sector. Building on the work of Hunt and Morgan (1995) and Cadogan *et al*. (2009), this study contributes to the RBV by conceptualizing how MO and MIU function as organizational capabilities in small firms vis-à-vis ownership structure.

Small firms' market orientation

Small firms are for-profit businesses with fewer than 50 employees and an annual turnover of less than £ 6 million (BEIS, 2020). It has long been highlighted that despite the lack of sufficient attention on small firms, they play a fundamental role in a country's overall employment and constitute the backbone of much of the world economy (Mallett & Wapshott, 2017; Yoshino & Taghizadeh-Hesary, 2019). They undertake unique value creation and delivery roles in society and fill gaps often overlooked by larger firms in the contemporary marketplace.

Small firms are not just scaled-down versions of their larger counterparts. They exhibit distinct characteristics. The extant literature is replete with how small and large firms differ

(e.g., Chen & Hambrick, 1995; Khan *et al*., 2022a). Small firms are typically seen as more proactive in initiating competitive challenges, speedier but low-key, and less likely and slower to respond when faced with competitive attacks (Chen & Hambrick, 1995). Likewise, small firms are less likely to be able to attain resources, capital, patents, or a foothold in the market than their larger counterparts (Yoshino & Taghizadeh-Hesary, 2019).

As one of the strategic orientations with a powerful place in marketing (Jaworski & Kohli, 1993; Schweiger *et al.*, 2019), MO is defined as an organizational culture that facilitates the needed behaviors to produce greater value for customers and better performance for the organization (Narver & Slater, 1990). This definition aligns with the RBV's emphasis on intangible capabilities as sources of competitive advantage. Thus, information acquisition and use constitute fundamental pillars of the effective adoption of MO in firms (Keszey & Biemans, 2017; Kohli & Jaworski, 1990). Through effective MO, small firms can achieve growth and responsiveness (Golann, 2006) and service performance (Hodgkinson *et al*., 2023).

The intricate entwinement between MO and market information is a resource-intensive endeavor and may, thus, involve challenging processes for small firms (Slater & Narver, 1994). It is argued that small firms typically pay less attention to competition and externalities and are less attuned and alert to external influences (Smith *et al.*, 1996). The lack of attention to the signals stemming from the marketplace and resources dedicated to scanning and obtaining market information in small firms means that key pillars of market-driven knowledge management may be undermined, and the path to competitive advantage may be compromised.

Moreover, the family business literature highlights the importance of the owner-manager in shaping the culture and strategy of small businesses (Hult *et al.*, 2003; Mazzarol *et al.,* 2009; Zontanos and Anderson, 2004). Owner-managers prefer informal, non-sequential, and unstructured decision-making (Ljungkvist *et al*., 2023) and tend to be more intuitive and

impulsive (Koksal, 2008). These characteristics may inhibit the development of MO within small family firms.

Nonetheless, despite the relative lack of attention to, and challenges associated with, implementing MO in small firms (Malagueño *et al.*, 2019; Verhees & Meulenberg, 2004), MO is not simply a concern of the marketing function in small firms, it is a fundamental factor that needs to be adopted across the whole organization (Horng & Chen, 1998). Thus, MIU is a critical issue in small firms that warrants further attention. Yet, the theoretical mechanisms underlying the translation of MO into performance via MIU remain underdeveloped, particularly concerning the role of ownership as a conditioning factor. In response, this study builds a mid-range theoretical model grounded in the RBV by explaining how and why resources such as MO and MIU emerge as performance-yielding capabilities under various internal governance contexts.

Market information use in small firms

The value of information processing and utilization in successfully managing firm resources and capabilities and competitive advantage is extensively documented (Citrin *et al.*, 2007; Khan *et al*., 2022b; Sinkula, 1994). One major concept examined within the information and knowledge management domain is MIU. MIU is defined as "the extent to which managers rely on information in evaluating the productivity of marketing communications programs and the impact that information has on their assessments of productivity" (Low & Mohr, 2001, p. 67).

Effective MIU can be critical for small firms in terms of outcomes at the organizational level, such as SFMP, and at the individual level, such as capability development (Atiase *et al*., 2023). Instrumental MIU refers to the direct application of market information to marketing decisions so that such decisions can be made, carried out, or assessed using information (Low & Mohr, 2001). It is concerned with highly targeted MIU to achieve a specific outcome. Instrumental MIU is commonly treated as incorporating conceptual MIU (Diamantopoulos &

Souchon, 1999; Williams & Chaston, 2004); this is also the case in this study. In contrast, symbolic MIU refers to partial or distorted information use for essentially political purposes, such as justifying actions already taken based on instinct or intuition or legitimizing views already held (Koksal, 2008). In fact, symbolic MIU could even be described as 'misuse', as it includes the distortion or manipulation of information for non-value-creating purposes (Williams & Chaston, 2004). Symbolic MIU, while often politically motivated, lacks strategic depth and accuracy. Its implications can be particularly damaging in competitive markets, as reliance on distorted or misaligned information may lead to poor decision-making, missed opportunities, and an erosion of trust. Thus, symbolic MIU and instrumental MIU sit at opposite ends of MIU, and firms typically move along this continuum throughout their marketing and value-creation journey (Diamantopoulos & Souchon, 1999). From a theoretical standpoint, this continuum also reflects various modes of resource deployment, with only instrumental MIU representing a strategic resource aligned with RBV's criteria for VRIN capabilities. In contrast, symbolic MIU challenges assumptions about rational capability deployment within RBV and encourages a refinement of the theory in informal or politicized decision-making contexts typical of small or family firms.

MIU in small firms has attracted relatively scant but growing attention in SME and family business research (Williams, 2003; Williams & Chaston, 2004; Zaefarian *et al.*, 2023). This line of research finds that decision-makers' linguistic abilities, management experience, and international experience are notable contributors to MIU in small firms (Williams & Chaston, 2004). Likewise, the efficacy of MIU in small firms can be amplified when these firms are adept at leveraging external knowledge sources, such as customer feedback, competitor analysis, and industry trends (Foss *et al.*, 2013). Small firms may host different forces that underpin the extent and range of their MIU. Likewise, MIU is particularly relevant to the food and beverage sector, where the industry faces unique problems and opportunities (Didonet *et*

al., 2020; Malagueño *et al*., 2019) and firms, many of which are small and family-owned, are compelled to properly use their resources and capabilities.

Hypotheses

Market orientation and market information use

MO is inextricably intertwined with the systematic acquisition and utilization of market information (Kohli & Jaworski, 1990; Verhees & Meulenberg, 2004). Market-driven small firms' practices for obtaining, interpreting, and using market information are more systematic, diligent, and anticipatory than other firms (Hernández-Linares *et al.*, 2021). Thus, small firms implementing MO are likely to invest a great deal of time and effort to obtain and use market information instrumentally and learn from the external environment (Schweiger *et al.*, 2019). The generation and dissemination of market intelligence sit at the epicenter of MO (Kohli & Jaworski, 1990). Likewise, MO represents the whole firm culture of valuing and using market information strategically (Narver & Slater, 1990). Thus, it is hypothesized:

H1a: *Small firms' MO is positively associated with their instrumental MIU.*

On the other hand, as symbolic MIU entails placing trivial importance on and politically-driven misuse of market information (Williams & Chaston, 2004), it may be at odds with MO. Small firms investing in and implementing MO are likely driven by the desire to effectively use market intelligence. In contrast, when they have low levels of MO, they are less likely to prioritize leveraging market information to the extent that it is influential and useful for their operations. This means small firms with low MO may be unable to acquire strategic information about their customers and competitors and process such information effectively within their organizational domain. Instead, individuals tasked with managing multiple functions within SMEs are likely to resort to symbolic MIU either to pretend that they use market information or as a futile attempt to leverage limited market information at their disposal with limited means for using such information. Therefore, it is hypothesized that:

H1b: *Small firms' MO is negatively associated with their symbolic MIU.*

Family ownership and market information use

Small firms, many of which are family-owned, often operate under the close supervision and direct control of their owners (Verhees & Meulenberg, 2004). While this hands-on management style may provide some advantages, it can also challenge how these firms manage and utilize market information. Given that MIU requires substantial investment and plays a crucial role in the execution of daily activities (Hernández-Linares *et al.*, 2021; Zaefarian *et al.*, 2023), the ownership structure of the firm can also introduce certain limitations in leveraging market information effectively to drive performance. Family-controlled boards may constrain market sensing activities due to a preference for maintaining traditional methods and an aversion to external perspectives that challenge entrenched beliefs (Khan *et al*., 2022b).

Family-owned firms typically exhibit lower agency conflicts and a strong focus on long-term goals (Ellouze & Mnasri, 2020). However, this long-term orientation can also foster a reluctance to take risks or adopt innovative practices, including investing in market information systems. The strong emotional attachment of family owners to the business and their tendency toward centralized decision-making (Fries *et al*., 2021) may lead to a narrow, intuition-driven approach that undervalues data-driven decision-making. Such an environment may hinder the effectiveness of instrumental MIU, as market information may be either underutilized or dismissed if it conflicts with the owners' subjective knowledge or established practices.

Moreover, the lack of formalized structures in many family-owned firms, while potentially offering flexibility, can also result in ad-hoc decision-making processes that lack rigor and consistency. The intimate involvement of family owners in the business can lead to an over-reliance on personal judgment rather than objective market data, diluting the impact of instrumental MIU on SFMP (Ljungkvist *et al*., 2023). These factors suggest that family ownership may negatively moderate the relationship between instrumental MIU and SFMP, as

the unique dynamics of family firms can limit their ability to fully leverage market information for competitive advantage. Hence, it is hypothesized that:

H2a: *Family ownership negatively moderates the positive relationship between instrumental MIU and SFMP*

Symbolic MIU involves the covert use of information to serve one's own purposes or the use of information merely to support one's prejudices and preconceived judgments (Souchon *et al.*, 2004). It ignores counter-intuitive information and is more suitable for fortifying existing biased ideas and expectations (Koksal, 2008). Family-owned firms are often characterized by a long-term orientation and deep commitment to the business, with owners typically playing a central role in strategic decision-making and daily operations (Ellouze & Mnasri, 2020). However, this hands-on involvement, while beneficial in some respects, may also lead to challenges in effectively utilizing market information.

Owners of family-owned firms often possess a high level of confidence in their products and value offerings, which can result in resistance to external information that contradicts their preconceived notions, thereby exacerbating the negative effects of symbolic MIU. In such cases, symbolic MIU becomes more pronounced, further distancing the firm from market realities and leading to suboptimal strategic decisions (Souchon *et al*., 2004). Similarly, in family-owned firms, the owners often bear the single-handed responsibility of gathering and utilizing market intelligence while also overseeing the firm's strategic direction and production activities (Alrubaishi *et al.*, 2021). Therefore, symbolic MIU may become more prevalent, as owners might use information selectively to reinforce their existing strategies and biases rather than to inform and adapt to changing market conditions. The influence of ownership in family firms may also lead to a tendency to ignore or downplay counter-intuitive market information that does not align with the owners' expectations or business philosophy (Koksal, 2008). In this context, symbolic MIU will likely have a more pronounced negative impact on SFMP,

perpetuating strategic inertia and limiting the firm's ability to innovate and adapt. Consequently, it is hypothesized that:

H2b: *Family ownership positively moderates the negative relationship between symbolic MIU and SFMP*

Mediating role of market information use

In the context of small firms with resource constraints and limited access to market information (Didonet *et al.*, 2020), MIU is critical to navigating hyper-competitive and rapidly changing markets and developing offerings that have relevant value to a wide range of customers (Citrin *et al.*, 2007; Low & Mohr, 2001; Sinkula, 1994; Souchon *et al.*, 2004). Thus, small firms are increasingly compelled to utilize both internal and external sources of market information to remain relevant and expand their market presence.

That said, how market information is used greatly matters for small firms' performance outcomes. This study argues that small firms' instrumental MIU serves their market performance better than symbolic MIU. Part of this expectation stems from the core premise of instrumental MIU as a means to make, implement, or evaluate marketing decisions (Low & Mohr, 2001). Small firms that adopt instrumental MIU and strategically leverage their information sources can be better positioned to monitor market dynamics and make evidence-based decisions regarding their marketing strategy. The enabling role of instrumental MIU in understanding customer needs and implementing informed marketing decisions will likely have a positive impact on their market performance. Thus, it is hypothesized that:

H3a: *Small firms' instrumental MIU is positively associated with their market performance.*

The strategic and formal MIU is crucial to support the decision-making process. Accurate market information is critical for identifying customer needs, finding ways to reach them, and uncovering competitive threats (Parry & Song, 2010). Small firms often rely heavily on their agility and responsiveness to market changes, which heightens the importance of leveraging

instrumental MIU as a systematic approach to information use. Consequently, the profit-enhancing potential of customer information relies on not only enabling and motivating the internal communication of relevant information but also effectively embedding this information into actionable strategies (Korhonen-Sande & Sande, 2014). Instrumental MIU empowers small firms to adapt quickly, improve customer satisfaction, and enhance SFMP by facilitating the structured and rational implementation of MO. Thus, it is hypothesized that:

H3b: *Small firms' instrumental MIU positively mediates the relationship between their market orientation and market performance.*

While information is an invaluable intangible resource (Souchon *et al.*, 2004), the way it is processed and used matters more for performance than its mere presence (Koksal, 2008; Souchon *et al.*, 2004). In this vein, given the misalignment between the primary purpose of symbolic MIU (i.e., to support a politically-driven agenda (Williams & Chaston, 2004)) and the market imperatives that demand information to be used more instrumentally, there is a high likelihood that symbolic MIU actually curbs small firms' performance. In fact, when small firms treat market information merely in a cursory and misdirected way, they are likely to miss important opportunities to use market information to create relevant value (Souchon *et al.*, 2004) and fall behind their competitors in their markets. Therefore, it is hypothesized that:

H4a: *Small firms' symbolic MIU is negatively associated with their market performance.*

Symbolic MIU often results in a distorted or partisan use of information to legitimize and sustain previously held executives' dispositions (Diamantopoulos & Souchon, 1999; Menon & Varadarajan, 1992). Managers tend to focus on past experiences regarding environmental aspects, which can result in informal and incomplete processes of information collection (Bode & Geiger, 2021; Parry & Song, 2010). Although informal and somehow distorted, symbolic MIU cannot be ignored when managing market information generated through MO. This is because symbolic MIU serves as a way to justify decisions already made, often at the expense

of data integrity and effective utilization. Small firms may rationalize inefficient or suboptimal strategies using symbolic MIU, thus undermining their ability to achieve consistent performance improvements. We draw on this rationale to suggest that while symbolic MIU may enable firms to process information to pursue good performance levels, the quality and objectivity of such information are often compromised, leading to reduced effectiveness (Bode & Geiger, 2021). Because market information may be consciously used inappropriately, this does not necessarily enhance SFMP and, in some cases, may harm it by reinforcing suboptimal strategies (Maltz *et al*., 2006). Therefore, it is hypothesized that:

H4b: *Small firms' symbolic MIU negatively mediates the relationship between their market orientation and market performance.*

The conceptual framework for this study is depicted in Figure 1.

---------- Insert Figure 1 Here ----------

Methodology

Sampling, data collection, and sample characteristics

This research is rooted in a community-engaged action research approach, which emphasizes collaboration. This collaborative spirit between researchers and the community extends to small businesses, owners, and stakeholders involved in the research ecosystem. The essence of community-engaged research is to ensure that the research directly addresses community needs and contributes to positive social impact (Kohli & Haenlein, 2021). In the context of this paper, the 'community' is not limited to the academic community but also encompasses those directly impacted by the research. The data for this study was generated by an action research project (*Who Buys My Food* at the University of East Anglia) in which over 150 small food and drink producers are given access to market information derived from loyalty card data provided by a major UK supermarket. This access to market information is provided, free of charge, via a web application that allows users to view key performance metrics for their

products and the category in which their products are ranged. In return, these businesses consent to sharing their data with the researchers and participating in research studies focusing on MIU and its impact on SFMP. All the firms in this study are defined as small (BEIS, 2020), having fewer than 50 employees and an annual turnover of less than £6 million. However, they have all grown sufficiently to enter the highly competitive grocery retail sector, selling to mainstream supermarkets, under a local or regional food banner, or simply as a niche brand within their respective market category.

The UK grocery retail market has an oligopolistic structure, with the four largest supermarkets accounting for almost two-thirds of retail sales (Kantar, 2023). Of additional relevance to this study is the growth of 'local' product ranges within all of the major supermarkets, the majority of which are produced by small businesses, many of which are family-owned, taking their first steps into supermarket distribution. In recent years, the sales value of local lines has fallen, leaving small suppliers vulnerable to range rationalization and increasing the importance of proactive marketing initiatives informed by objective marketing performance metrics and market intelligence (Kantar, 2020).

This research methodology combines primary (perceptual) and secondary (objective) data, a deliberate choice that brings distinct benefits and enhances the study's rigor. Using both types of data, the study gains a more comprehensive understanding of the research topic, providing richer insights and a more holistic view (Forth & McNabb, 2008; Voukelatou *et al.*, 2021). The perceptual measures of MO and MIU are combined with the objective measurement of SFMP. This combined use of primary (perceptual) and secondary (objective) data is grounded in arguments that both types offer more holistic and triangulated insights. While primary (perceptual) data capture firsthand experiences, opinions, and perceptions, providing rich insights into the phenomena, objective data from existing sources offer a comprehensive and broad overview, allowing researchers to understand trends, patterns, and linkages at a larger

and objective scale; and while perceptual data allow cross-verification and corroboration of different viewpoints, objective data enhance the overall validity of the research, especially for outcome variables like SFMP (Forth & McNabb, 2008; Voukelatou *et al.*, 2021).

The data on MIU were collected by an online survey conducted over three months, from January to March 2020. An invitation with a link to the survey was sent to the individuals in each participating firm who had access to the market information via the web portal. 79 responses were received, which follows the minimum sample size for the model as calculated by the post-hoc G*Power test and considering the parameters defined by Hair *et al.* (2014). In particular, this study surpasses the minimal criteria for the existing model structure and follows Hair *et al*.'s (2021) "10-times rule," which adds to the sufficiency of the sample size. While this study offers valuable insights into the uniqueness of a community-engaged action research approach, we recognize that the generalizability of the results may be limited by the context-specific nature of the study and the small sample size.

The resulting sample comprises micro (37 firms) and small firms (42 firms), with most of them being family-owned businesses (57 firms) that exhibit traditional business characteristics, considering that almost half of the sample (38 firms) have been in operation for more than 20 years.

When considering the competence of the firm in different areas, the majority of firms show satisfactory or outstanding levels of competence in all areas, such as sales (87%), marketing (66\%), new product development (NPD) (73%), and customer relationship management (CRM) (86%). Competence in sales is the most emphasized competence in all firms. This is not surprising when considering the importance of sales to small firm survival and growth (Didonet *et al.*, 2020) as well as its role in creating and retaining durable links with customers (Pitkänen *et al.*, 2014). On the contrary, marketing tends to be the least emphasized competence in the sampled firms. Forty-nine firms claimed satisfactory marketing competence,

and 27 revealed unsatisfactory levels. The low evidence of marketing competence may translate into difficulties in implementing marketing strategies and/or reinforcing the firm's strategic orientation.

Common method variance

Different procedures were considered to reduce the potential common method variance (CMV) in this study. First, the independent variables (IVs) were measured perceptually by respondents, and the dependent variable (DV) was assessed through objective measures (Hulland *et al.*, 2018; Podsakoff *et al.*, 2003). Thus, the risk of CMV is lower, as observed relationships are more likely to reflect true variations in the study constructs rather than being artifacts of the measurement method. Additionally, Kock's (2015) procedure for addressing common method bias in PLS-SEM is followed, and a full collinearity test based on the variance inflation factor (VIF) is performed to assess both vertical and lateral collinearity simultaneously. The inner VIF values, ranging from 1.086 to 1.335, suggest that multicollinearity is not a concern for further analysis.

Research variables and model testing

All perceptual variables were measured using a seven-point scale ranging from 1= "strongly disagree" to 7= "strongly agree" except for performance measures and ownership. Hsieh *et al.'s* (2008) scale of MO was adapted in this study as the authors were interested in exploring the MO of small firms in their relationships with retail customers. The scale of Diamantopoulos and Souchon (1999) was adapted to measure MIU. This study used the original scale, which considered instrumental and conceptual MIU as parts of a single dimension. The original scale also measures instrumental/conceptual and symbolic MIU and takes both as dimensions of one unique construct, i.e., MIU. Alternatively, this study used both dimensions, i.e., symbolic and instrumental MIU, as independent variables following Williams' (2003) assumption regarding the independence of both dimensions when considering the SME context.

SFMP was measured via objective secondary data (Parnell, 2013). The objective measurement of SFMP provides a more tangible and verifiable representation of the construct. Since it is not influenced by respondents' subjective interpretations, the objectivity of the SFMP serves as a safeguard against CMV that may affect perceptual measures. Two different measures were taken in this regard, i.e., the growth of sales and share of category sales with the specified retailer. Sales and category share growth were assessed using annualized growth rates for the previous three years (2016-2019). Standardized scores (Z-scores) were used in both measures to minimize the distance between and within the results (Mooi *et al.*, 2018). When variables are standardized to the same scale using the Z-score transformation, new variables with a mean of "0" and a standard deviation of 1 are created.

Ownership was measured as a categorical variable. Respondents were asked to indicate whether the firm was a family-owned business. The responses were then coded using a dummy variable (0 = no family-owned business; 1 = family-owned business). Firm age and size were included as control variables in the model. Age was measured by the number of years the SMEs had been operating, while the number of employees served as a measure of firm size. Table 1 presents the measures and descriptive statistics of the model's variables.

---------- Insert Table 1 Here ----------

Exploratory factor analysis (EFA) was performed to confirm the set of latent constructs previously identified from the literature. EFA results confirmed the set of measured variables for MO (51,45% of variance explained; KMO = 0.834; Bartlett's test and Chi-Square value = 350.660), IMI (71,33% of variance explained; KMO = 0.865; Bartlett's test and Chi-Square value = 341.895), and SMI (61,04% of variance explained; KMO = 0.768; Bartlett's test and Chi-Square value = 157.692).

Partial least squares-structured equation modeling (PLS-SEM) was employed for hypothesis testing using the SmartPLS 4.0 software. PLS-SEM is particularly well-suited for

exploratory research, where the primary goal is to develop and test theoretical models rather than confirm established ones (Hair *et al*., 2019). Given that this study aims to explore the relationships between MO, MIU, firm ownership, and SFMP within the context of small firms - a relatively underexplored area - PLS-SEM is an appropriate choice. Thus, the exploratory nature of the model, the measures, and the sample size were considered when choosing the statistical package of PLS (Hair *et al.*, 2011; Hair *et al*., 2019). Another critical reason for employing PLS-SEM is its robustness in handling small sample sizes and non-normal data distributions, which are common challenges in research involving small firms (Hair *et al*., 2019). PLS-SEM does not require the strict assumptions of normality that techniques like covariance-based SEM do. It provides more flexibility to researchers regarding data requirements, model complexity, and relationship specification (Sarstedt *et al*., 2014; Sarstedt and Liu, 2024). It is also suitable for doing a more precise analysis of interaction effects as tested in our model (Hair *et al*., 2021). Given the data characteristics in this study, including a relatively small sample size and potential deviations from normality, the use of PLS-SEM is appropriate to ensure the validity and reliability of the results.

The use of PLS-SEM has been recognized in the field of marketing, strategic management, and various other disciplines as its methodological features facilitate researchers' understanding of the complex interrelationship between attitudinal and behavioral theories (Sarstedt and Liu, 2024; Vaithilingam *et al*., 2024; Guenther *et al*., 2023). Research in the field of small businesses, where researchers often encounter over-surveyed respondents and decreasing response rates, as well as increasing complexity of theories and cause-effect models (Sarstedt *et al*., 2014), has highlighted the use of PLS-SEM (Hernandez-Perlines *et al*., 2021; Kalali, 2022; Didonet and Fearne, 2023; Atiase *et al*., 2023; Gil-Cordero *et al*., 2024).

In addition to checking model fit measures (SRMR = 0.076; NFI = 0.937), thorough procedures were followed to validate the measurement model, including assessing construct

validity, reliability, and discriminant validity using established criteria. Bootstrapping was employed to assess the significance of path coefficients and calculate the path coefficients' significance with 5,000 bootstrap samples, which helps mitigate issues related to sample size and provides robust estimates of standard errors (Hair *et al.*, 2011).

VIF (variance inflation factor) values were checked for multicollinearity reasons, and values less than 5 (ranging from 1.074 to 4.193) (see Table 1) suggest it is not a concern for further analysis (Hair *et al*., 2019). The results of construct AVE (average variance extracted), CR (composite reliability), Cronbach's alpha, convergent and discriminant validity of the tested model are shown in Table 2 and are in line with the recommended threshold values of 0.70 for CR and 0.50 for AVE (Bagozzi & Yi, 2012). The AVE square root values exceeded the correlation with other latent variables, indicating the model's discriminant validity (Fornell & Larcker, 1981).

---------- Insert Table 2 Here ----------

Although the results of Cronbach's alpha for SFMP do not meet the adequate level considered by the researcher, i.e., 0.70, the construct presents satisfactory results in terms of composite reliability, convergent, and discriminant validity, which confirm its contribution to the model. Therefore, it is assumed that this measure has meaningful content coverage and reasonable unidimensionality and that it may not be a major impediment to its use (Schmitt, 1996). The correlations' heterotrait-monotrait ratio (HTMT) confirmed discriminant validity, with all the values at or below 0.536 (Henseler *et al*., 2015).

Results and discussion

Hypotheses testing

The model tested in this paper was specified based on prior empirical evidence. Constructs and paths were defined prior to analysis, minimizing the risk of post hoc adjustments that could bias the results. The results in Table 3 show that instrumental MIU contrasts with symbolic MIU in

most of the tested relations. Instrumental MIU is strongly and positively influenced by MO (β = 0.526; p-value = 0.000), which supports H1a. The more market-oriented SMEs are, the more likely their marketing decision-making is grounded in instrumental MIU, i.e., based on specific market information to help solve specific problems or exploit specific opportunities (Keszey & Biemans, 2017). The same applies to market-oriented SMEs that use market information instrumentally to develop the broader managerial knowledge base required for evidence-based marketing planning and decision-making (Diamantopoulos and Souchon, 1999). Moreover, instrumental MIU positively impacts SFMP (β = 0.972; p-value = 0.041) as proposed in H3a. This corroborates previous findings that emphasize the importance of market research practices to improve performance (Parry & Song, 2010). Combined with MO, instrumental MIU is also positively associated with SFMP in a mediating role, as hypothesized in H3b (β = 0.512; p-value = 0.069). Therefore, besides the potential improvement of instrumental MIU in market-oriented firms, this use is effectively demonstrated in SFMP results. In contrast, symbolic MIU does not influence SFMP (β = -0.452; p-value = 0.532), which leads us to reject H4a despite the negative coefficient. Moreover, symbolic MIU is not influenced by MO (β = 0.258; p-value = 0.245), failing to support H1b, and does not mediate the relationship between MO and SFMP (β = -0.117; p-value = 0.588), failing to support H4b. Despite the negative coefficient, mediation is not significant. Thus, contrary to expectations, symbolic MIU does not affect, even negatively, the small firm's performance and is not related to the small firm's MO. Symbolic MIU is associated with lower levels of market research knowledge, perceived time pressure, centralization of decision-making, and so forth (Bode & Geiger, 2021). Our results could reflect the managers' consciousness regarding the importance of market knowledge and less centralized decision-making, which tends to lower the appropriate use of market information (Menon & Varadarajan, 1992).

---------- Insert Table 3 Here ----------

When the moderation of ownership is considered in the model, the results for instrumental and symbolic MIU are also contrasting. Family ownership negatively moderates the relationship between instrumental MIU and SFMP (β = -0.873; p-value = 0.063), as proposed in H2a. This evidence suggests that the dominant role of owner-managers in family firms may curtail the effective use of market information and the corresponding knowledge development to inform marketing decision-making (Keszey & Biemans, 2017; Diamantopoulos & Souchon, 1999). In contrast, family ownership does not moderate the relationship between symbolic MIU and SFMP (H2b). The results shown in Table 3 lead us to reject H2b (β = 0.221; p-value = 0.693).

Theoretical implications

While marketing and entrepreneurship have traditionally been treated as separate domains, there is growing recognition of their interdependence, particularly in small and entrepreneurial firms (e.g., Hernandez-Perlines *et al*., 2021; Khan *et al*., 2022a). For entrepreneurial firms, the ability to rapidly acquire and effectively use market information can be a key differentiator between success and failure (Didonet & Fearne, 2023; Zaefarian *et al.*, 2023). To this end, this paper has several important theoretical implications for the entrepreneurial behavior of small businesses from a marketing perspective. First, this paper contributes to the evolving landscape of MO (Hernández-Linares *et al.*, 2021; Kohli & Jaworski, 1990; Länsiluoto *et al.*, 2019; Narver & Slater, 1990) by examining its relationship with MIU vis-à-vis firm ownership in small firms. The study enriches the theoretical underpinnings of MO, moving beyond its traditional association with overall firm performance to explore the dual role of MIU in connecting MO to SFMP. To this end, we contribute to the RBV by extending its application to small firms. We demonstrate how MO and MIU serve as critical resources that small firms can leverage, thus providing a nuanced understanding of RBV in a small firm setting.

Second, the incorporation of family ownership provides a novel dimension to the theoretical framework. The finding that family ownership negatively moderates the relationship between instrumental MIU and SFMP advances the understanding of how ownership structures shape information use in small firms, thereby expanding the theoretical scope of family business literature. This negative moderation implies that the hands-on, centralized decision-making style typical of family-owned firms may unintentionally constrain the effective use of market information for strategic decision-making. Family firms, driven by emotional attachment, tradition, and reliance on tacit knowledge, may deprioritize or undervalue data-driven insights, particularly when they conflict with established practices or personal judgment. This reluctance to fully embrace instrumental MIU may hinder small firms' ability to leverage market information for competitive advantage, limiting their agility in dynamic market environments. While research on family firms holds a considerable space in studies on small firms (e.g., Ellouze & Mnasri, 2020; Ljungkvist *et al.*, 2023; Zaefarian *et al.*, 2023), the analysis of the divergent influence of family ownership on symbolic and instrumental MIU adds nuance to how family ownership shapes MIU in small firms. Hence, this study adds depth to the RBV by highlighting the complexity of resource utilization in small firms with different ownership structures and underscores the need for family firms to adopt more structured and objective approaches to leveraging market information.

Building on the discussion above, we contribute to the RBV by offering a nuanced understanding of how MO and MIU function as critical resources in small firms, particularly under varying ownership structures. While RBV emphasizes the importance of leveraging VRIN resources for competitive advantage (Barney, 1991), this study demonstrates that the effectiveness of such resources is contingent on contextual factors, such as family ownership. As such, the study highlights a significant departure from the traditional assumption that resources are universally beneficial. This finding extends RBV by showcasing the interplay

between firm resources (MO and MIU) and organizational characteristics (family ownership) in shaping performance outcomes. It also calls for integrating organizational behavior considerations into RBV to better account for how ownership characteristics can constrain or amplify the value of resources.

Third, the distinction between instrumental and symbolic uses of market information introduces a nuanced perspective on information use. MIU in small firms is inherently linked to entrepreneurial behavior. While MIU is often recognized as an important element in research on marketing and small firms (Bode & Geiger, 2021; Korhonen-Sande & Sande, 2014; Parry & Song, 2010), this research advances extant research by examining the divergent influences of instrumental and symbolic MIU on SFMP. Furthermore, identifying instrumental MIU as a mediator in the positive relationship between MO and SFMP contributes to the theoretical landscape by elucidating the underlying mechanisms through which MO influences market outcomes. This provides a more intricate understanding of the processes involved in translating a strategic orientation into tangible performance outcomes. The study synthesizes two critical elements in the organizational context by proposing that MIU acts as a mechanism through which MO translates into SFMP. This integration contributes to a more holistic view of how organizations, especially small firms (Hernández-Linares *et al.*, 2021; Länsiluoto *et al.*, 2019), can leverage their MO to achieve enhanced SFMP. The distinction of two different types of MIU also adds granularity to the RBV by demonstrating that not all uses of market information contribute equally to competitive advantage. This research broadens the application of RBV to entrepreneurial and small firm contexts by introducing a dual lens: symbolic MIU and instrumental MIU as distinct forms of MIU with conflicting results.

Fourth, the study's focus on small firms extends the applicability of established theories, offering insights into the unique challenges and opportunities small firms face. This extension contributes to the broader field of organizational theory by enhancing the understanding of how

theoretical constructs operate in diverse organizational contexts. Similarly, this study employs community-engaged action research to investigate the focal phenomena. The approach of this study allows it to develop more impactful research by raising awareness of the issues facing marketing stakeholders (i.e., small firms facing large buyers in hyper-competitive mainstream distribution channels) on the ground (Kohli & Haenlein, 2021). To this end, this research allows for a deeper understanding of the local realities and challenges small businesses face. By actively involving small firms in the research process, this study gains firsthand insights into the nuances of MIU, considering unique challenges like MO and firm ownership prevalent in such small firms. Likewise, involving small firms in the research process fosters a collaborative approach to knowledge creation. Rather than imposing theoretical frameworks from an outsider's perspective, the study's community-engaged action research facilitates the co-creation of relevant and impactful knowledge, where the expertise and experiences of small business owners contribute to refining research questions, and the interpretation of findings and, in turn, insights this study offers are actionable by the research participants.

Conclusions

Small firms grapple with the formidable challenge of navigating large datasets and often struggle to use market information. Thus, utilizing market information becomes a linchpin for small firms' success. Surprisingly, amidst the pivotal role ascribed to market-oriented strategies in firms' growth, there exists a noticeable dearth of studies delving into the intricate relationship between MO and MIU. Given the centrality of market intelligence in market-oriented firms, understanding how managers use this information is paramount for success. Our research findings confirm that MO influences SFMP directly and indirectly through instrumental MIU. Thus, this research addresses this gap by positing MIU as a mechanism through which MO translates into SFMP through a dual-data approach, incorporating both primary (perceptual) and secondary (objective) data.

The significance of this research lies in its exploration of how MO and firm ownership influence MIU in small firms. Additionally, the study dissects the influences of instrumental and symbolic uses of market information on SFMP, unraveling the mediating role of MIU in linking MO to SFMP. By shedding light on the relationship between firm ownership, MIU, and SFMP, this research offers the following implications for police and practice. However, we acknowledge the relatively small sample size and that the specific context of the study may limit the generalizability of the findings.

Implications for policy and practice

The practical implications of this paper extend to small businesses, practitioners, and policymakers, offering valuable insights into MO, MIU, and ownership structures of small firms. The findings underscore the importance of cultivating a strong MO for small business owners and managers. This involves actively seeking, disseminating, and using market information to adapt to changing market conditions, as attested by the findings confirming both MO's positive influence in SFMP and the mediation of instrumental MIU in this relationship. Practical steps may include investing in market research, fostering a customer-centric mindset, and aligning business strategies with market needs. Small firms can also leverage the insights from the study to optimize their MIU. Businesses should recognize the dual nature of instrumental and symbolic use and focus on extracting actionable insights from market data (instrumental use) while acknowledging and resisting the allure of symbolic use to substantiate preconceptions and entrenched views that may negatively impact SFMP. Based on our findings that attested to the positive influence of instrumental MIU in SFMP, small firm managers should prioritize the development of processes that facilitate the instrumental MIU. This involves training managers to make data-driven decisions that are directly linked to market performance rather than using information symbolically to justify pre-existing decisions.

Furthermore, family-owned small businesses can benefit from understanding the challenges associated with ownership structures. For family-owned small firms, it is crucial to balance the benefits of deep commitment and tacit knowledge with the potential drawbacks of idiosyncratic management and nepotism. According to our research findings, this balance can be reinforced by making decisions based on market knowledge (instrumental MIU) to achieve better outcomes. Managers should consider external advisory boards or consulting services to bring objective perspectives, ensuring that market information is used effectively rather than being influenced by internal biases. Likewise, practitioners involved in marketing decision-making within small firms can use the study's insights to navigate the complexities of MIU. This includes recognizing and leveraging the mediating role of MIU in translating MO into SFMP. Decision-makers should prioritize instrumental use for positive outcomes and exercise caution on the possible adverse consequences of symbolic use. In particular, family firms should leverage their strong internal trust and commitment to enhance the instrumental MIU. Introducing more formalized decision-making processes could help mitigate the risk of negative repercussions of symbolic MIU.

Finally, policymakers and industry stakeholders can draw upon the research to develop supportive policies for small businesses. Understanding the challenges faced by family-owned enterprises and the nuances of MIU allows policymakers to tailor interventions that foster a conducive environment for small firms. This may involve offering resources for professional management training, creating incentives for market-oriented practices, and overcoming the liabilities associated with ownership structures. In conclusion, the practical implications of this study provide actionable guidance for small business practitioners, owners, and policymakers. By aligning strategies with the insights derived from the community-engaged action research of this study, stakeholders can utilize MO, improve MIU, and ultimately contribute to the sustained performance of small firms in their respective communities.

Study limitations and further research opportunities

This research opens avenues for future research that can deepen our understanding of MIU in the specific context of small businesses. First, this research focuses only on the food and drink industry and uses a small sample size, which naturally restricts the applicability of the results to other contexts. Future research could explore how the relationships between MO, MIU, and SFMP vary across different industries within the small business sector. Investigating variations in these relationships in diverse industries could reveal industry-specific challenges, opportunities, and best practices.

Second, although this research uses both primary and secondary data, it is cross-sectional. Conducting longitudinal studies would enable researchers to capture the dynamics of MO, MIU, and SFMP over time. Longitudinal data could provide insights into how these relationships evolve, allowing for a more nuanced and temporal understanding of causality and the impact of changes in market conditions.

Third, this study investigates the context of the UK. Investigating additional contexts and contextual factors that may influence the relationships identified in the study could increase the relevance and impact of the research in this area. Factors such as regional economic conditions, cultural influences, and technological advancements may play significant roles in shaping the effectiveness of MO and MIU in small firms. Extending the research to an international context could also offer valuable insights into how MO, MIU, and ownership structures differ across countries. Such comparative studies could uncover global patterns and illuminate the impact of institutional and cultural factors on small business dynamics.

Fourth, future research could explore other moderators and mediators that may influence the relationships studied. For instance, examining the role of leadership styles, organizational culture, or technological capabilities as moderators could provide more comprehensive insights into the contingencies affecting these relationships.

Fifth, complementing quantitative analyses with qualitative approaches, such as in-depth case studies or interviews, could provide a richer understanding of the nuances involved in MO and MIU and answer questions that cannot be answered via quantitative research. Qualitative insights can uncover hidden mechanisms and processes involved in the emergence of related phenomena, providing a more in-depth exploration of individual experiences.

Finally, while the paper relies on the RBV, future research could explore the potential of other theories, such as the dynamic capabilities view. Integrating theories like the dynamic capabilities view could provide additional depth to studying MIU in small firms. This theory can contribute to understanding how organizations combine and integrate their internal and external competencies by efficiently adjusting to changing environments (Teece, Pisano & Shuen, 1997).

References

Alrubaishi, D., McAdam, M. and Harrison, R. (2021), "Culture, Islamic capital and the entrepreneurial behaviour of family firms in Saudi Arabia", *International Journal of Entrepreneurial Behavior & Research,* Vol. 27 No. 6, pp. 1476-1501.

Atiase, V., Wang, Y. and Mahmood, S. (2023), "Does managerial training increase SME managers' effectiveness? A capability development approach", *International Journal of Entrepreneurial Behavior & Research*, Vol. 29 No. 8, pp. 1807-1836.

Bagozzi, R.P. and Yi, Y. (2012), "Specification, evaluation, and interpretation of structural equation models", *Journal of the Academy of Marketing Science,* Vol. 40 No. 1, pp. 8-34.

Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management,* Vol. 17 No. 1, pp. 99-120.

BEIS, 2020. Department for Business, Energy & Industrial Strategy. Available at: https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy

Bode, C. and Geiger, I. (2021), "Not just another internal service provider: How a firm's marketing research function influences uses of market research information", *European Journal of Marketing,* Vol. 55 No. 2, pp. 385-419.

Cadogan, J.W., Kuivalainen, O. and Sundqvist, S. (2009), "Export market-oriented behavior and export performance: quadratic and moderating effects under differing degrees of market dynamism and internationalization", *Journal of International Marketing,* Vol. 17 No. 4, pp. 71-89.

Chen, M.-J. and Hambrick, D.C. (1995), "Speed, stealth, and selective attack: How small firms differ from large firms in competitive behavior", *Academy of Management Journal,* Vol. 38 No. 2, pp. 453–482.

Citrin, A.V., Lee, R.P. and McCullough, J. (2007), "Information use and new product outcomes: The contingent role of strategy type", *Journal of Product Innovation Management,* Vol. 24 No. 3, pp. 259-273.

Diamantopoulos, A. and Souchon, A.L. (1999), "Measuring export information use: Scale development and validation", *Journal of Business Research,* Vol. 46 No. 1, pp. 1-14.

Didonet, S.R. and Fearne, A. (2023), "The impact of market information use on entrepreneurial performance: insights from the UK food industry", *Journal of Small Business and Enterprise Development*, Vol. 30, No. 5, pp. 967-986

Didonet, S.R., Fearne, A. and Simmons, G. (2020), "Determining the presence of a long-term/short-term dilemma for SMEs when adopting strategic orientation to improve performance", *International Small Business Journal,* Vol. 38 No. 2, pp. 90-110.

Foss, N.J., Lyngsie, J. and Zahra, S.A. (2013), "The role of external knowledge sources and organizational design in the process of opportunity exploitation", *Strategic Management Journal,* Vol. 34 No. 12, pp. 1453-1471.

Ellouze, D. and Mnasri, K. (2020), "Risk-taking behaviour of family firms: Evidence from Tunisia", *International Journal of Entrepreneurship and Small Business,* Vol. 39 No. 1-2, pp. 192-221.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research,* Vol. 18 No. 1, pp. 39-50.

Forth, J. and McNabb, R. (2008), "Workplace performance: A comparison of subjective and objective measures in the 2004 workplace employment relations survey", *Industrial Relations Journal,* Vol. 39 No. 2, pp. 104-123.

Fries, A., Kammerlander, N. and Leitterstorf, M. (2021), "Leadership styles and leadership behaviors in family firms: A systematic literature review", *Journal of Family Business Strategy,* Vol. 12 No. 1, pp. 100374.

Gil-Cordero, E., Maldonado-López, B., Ledesma-Chaves, P. & García-Guzmán, A. (2024), "Do small- and medium-sized companies intend to use the Metaverse as part of their strategy? A behavioral intention analysis", *International Journal of Entrepreneurial Behavior & Research*, Vol. 30 No. 2/3, pp. 421-449.

Golann, B. (2006), "Achieving growth and responsiveness: process management and market orientation in small firms", *Journal of Small Business Management,* Vol. 44 No. 3, pp. 369-385.

Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S. and Ringle, C. M. (2021), "Executing and interpreting applications of PLS-SEM: Updates for family business researchers", *Journal of Family Business Strategy*, Vol. 12 No. 3, pp. 100392.

Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: Indeed a silver bullet", *Journal of Marketing Theory and Practice,* Vol. 19 No. 2, pp. 139-152.

Hair, J. F. Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). "A primer on partial least squares structural equation modeling (PLS-SEM)". *SAGE Publications, Inc.*

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", European Business Review, Vol. 31 No. 1, pp. 2-24.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015). "A new criterion for assessing discriminant validity in variance-based structural equation modeling." *Journal of the Academy of Marketing Science,* Vol.43*,* pp. 115–135.

Hernández-Linares, R., Kellermanns, F.W. and López-Fernández, M.C. (2021), "Dynamic capabilities and sme performance: The moderating effect of market orientation", *Journal of Small Business Management,* Vol. 59 No. 1, pp. 162-195

Hernandez-Perlines, F., Ribeiro-Soriano, D. and Rodríguez-García, M. (2021), "Transgenerational innovation capability in family firms", *International Journal of Entrepreneurial Behavior & Research*, Vol. 27 No. 1, pp. 1-25.

Hodgkinson, I.R., Hughes, P., Leite, H. and Lee, Y. (2023), "Entrepreneurial orientation, proactive market orientation and society: Evidence from public service organizations in Brazil", *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-04-2022-0337

Horng, S.-C. and Chen, A.C.-H. (1998), "Market orientation of small and medium-sized firms in Taiwan", *Journal of Small Business Management,* Vol. 36 No. 3, pp. 79.

Hsieh, M.-H., Tsai, K.-H. and Wang, J.-R. (2008), "The moderating effects of market orientation and launch proficiency on the product advantage–performance relationship", *Industrial Marketing Management,* Vol. 37 No. 5, pp. 580-592.

Hulland, J., Baumgartner, H. and Smith, K.M. (2018), "Marketing survey research best practices: Evidence and recommendations from a review of jams articles", *Journal of the Academy of Marketing Science,* Vol. 46 No. 1, pp. 92-108.

Hult, G.T.M., Snow, C.C. and Kandemir, D., 2003. "The role of entrepreneurship in building cultural competitiveness in different organizational types". *Journal of Management*, Vol. 29 No. 3, pp. 401-426.

Hunt, S.D. and Morgan, R.M. (1995), "The comparative advantage theory of competition", *The Journal of Marketing,* Vol. 59 No. 2, pp. 1-15.

Jaworski, B.J. and Kohli, A.K. (1993), "Market orientation: Antecedents and consequences", *Journal of Marketing,* Vol. 57 No. 3, pp. 53-70.

Kalali, N. S. (2022), "Entrepreneurial orientation in family firms: the effects of long-term orientation", *International Journal of Entrepreneurial Behavior & Research*, Vol. 28 No. 7, pp. 1732-1750.

Kantar, 2020. COVID-19 purchase behaviour shifts: assortment and portfolio implications in the UK [online]. Available from: https://www.kantar.com/uki/inspiration/coronavirus/covid-19-purchase-behaviour-shifts-assortment-and-portfolio-implications [Accessed 28 July 2024].

Kantar, 2023. Grocery market share [online]. Available form https://www.kantar.com/campaigns/grocery-market-share [Accessed 25 August 2024].

Keszey, T. and Biemans, W. (2017), "Trust in marketing's use of information from sales: The moderating role of power", *Journal of Business & Industrial Marketing,* Vol. 32 No. 2, pp. 258-273.

Khan, H., Mavondo, F. and Zahoor, N. (2022a), "Integration of outside-in and inside-out entrepreneurial marketing capabilities, marketing agility and resources for entrepreneurial firm performance", *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-02-2022-0193

Khan, H., Zahoor, N., Gerged, A.M., Tarba, S. and Makrides, A. (2022b), "The efficacy of market sensing and family-controlled board in the new product development performance of family firms in emerging market", *Journal of Business Research,* Vol. 141, pp. 673-684.

Kock, N. (2015). "Common method bias in PLS-SEM: A full collinearity assessment approach." *International Journal of e-Collaboration*, Vol. 11, No. 4, pp. 1-10

Kohli, A.K. and Haenlein, M. (2021), "Factors affecting the study of important marketing issues: Implications and recommendations", *International Journal of Research in Marketing,* Vol. 38 No. 1, pp. 1-11.

Kohli, A.K. and Jaworski, B.J. (1990), "Market orientation: The construct, research propositions, and managerial implications", *Journal of Marketing,* Vol. 54 No. 2, pp. 1-18.

Koksal, M.H. (2008), "Determinants of export marketing research in Turkish companies", *Journal of Euromarketing,* Vol. 17 No. 2, pp. 95-107.

Korhonen-Sande, S. and Sande, J.B. (2014), "Getting the most out of cross-functional cooperation: Internal structural change as a trigger for customer information use", *Industrial Marketing Management,* Vol. 43 No. 8, pp. 1394-1406.

Kryeziu, L., Kurutkan, M.N., Krasniqi, B.A., Ramadani, V., Hajrullahu, V. and Haziri, A. (2024), "Cognitive styles and dynamic managerial capabilities: implications for SMEs in a transition economy", *International Journal of Entrepreneurial Behavior & Research*, Vol. 30 No. 1, pp. 200-231.

Ljungkvist, T., Evansluong, Q. and Boers, B. (2023), "Family influences on entrepreneurial orientation in immigrant entrepreneurship", *International Journal of Entrepreneurial Behavior & Research,* Vol. 29 No. 11, pp. 241-267.

Low, G.S. and Mohr, J.J. (2001), "Factors affecting the use of information in the evaluation of marketing communications productivity", *Journal of the Academy of Marketing Science,* Vol. 29 No. 1, pp. 70-88.

Länsiluoto, A., Joensuu-Salo, S., Varamäki, E., Viljamaa, A. and Sorama, K. (2019), "Market orientation and performance measurement system adoption impact on performance in SMEs", *Journal of Small Business Management,* Vol. 57 No. 3, pp. 1027-1043.

Malagueño, R., Gölgeci, I. and Fearne, A. (2019), "Customer categorization, relational justice and SME performance in supermarket supply chains", *Supply Chain Management: An International Journal,* Vol. 24 No. 3, pp. 417-429.

Mallett, O. and Wapshott, R. (2017), "Small business revivalism: Employment relations in small and medium-sized enterprises", *Work, employment and Society,* Vol. 31 No. 4, pp. 721-728.

Maltz, E., Menon, A. and Wilcox, J.B. (2006), "The effects of flexible firm orientations on market information use: intended and unintended consequences", *Journal of Strategic Marketing,* Vol. 14 No. 2, pp. 147-164.

Mazzarol, T., Reboud, S. and Soutar, G.N., 2009. Strategic planning in growth oriented small firms. *International Journal of Entrepreneurial Behavior & Research*, Vol. 15 No. 4, pp. 320-345.

Menon, A. and Varadarajan, P.R. (1992), "A model of marketing knowledge use within firms", *Journal of Marketing,* Vol. 56 No. 4, pp. 53-71.

Mikalef, P., Boura, M., Lekakos, G. and Krogstie, J. (2019), "Big data analytics and firm performance: Findings from a mixed-method approach", *Journal of Business Research,* Vol. 98, pp. 261-276.

Mooi, E., Sarstedt, M., Mooi-Reci, I., Mooi, E., Sarstedt, M. and Mooi-Reci, I. (2018), "Principal component and factor analysis", *Market research: The process, data, and methods using Stata*, pp. 265-311.

Narver, J.C. and Slater, S.F. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing,* Vol. 54 No. 4, pp. 20-35.

Parnell, J.A. (2013), "Uncertainty, generic strategy, strategic clarity, and performance of retail SMEs in Peru, Argentina, and the United States", *Journal of Small Business Management,* Vol. 51 No. 2, pp. 215-234.

Parry, M.E. and Song, M. (2010), "Market information acquisition, use, and new venture performance", *Journal of Product Innovation Management,* Vol. 27 No. 7, pp. 1112-1126.

Perdana, A., Lee, H.H., Koh, S. and Arisandi, D. (2022), "Data analytics in small and mid-size enterprises: Enablers and inhibitors for business value and firm performance", *International Journal of Accounting Information Systems,* Vol. 44, pp. 100547.

Pitkänen, I., Parvinen, P. and Töytäri, P. (2014), "The significance of the new venture's first sale: The impact of founders' capabilities and proactive sales orientation", *Journal of Product Innovation Management,* Vol. 31 No. 4, pp. 680-694.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: A critical review of the literature and recommended remedies", *Journal of Applied Psychology,* Vol. 88 No. 5, pp. 879-903.

Sarstedt, M., Liu, Y. Advanced marketing analytics using partial least squares structural equation modeling (PLS-SEM). *Journal of Marketing Analytics,* Vol. 12, 1–5 (2024).

Schmitt, N. (1996), "Uses and abuses of coefficient alpha", *Psychological Assessment,* Vol. 8 No. 4, pp. 350.

Schweiger, S.A., Stettler, T.R., Baldauf, A. and Zamudio, C. (2019), "The complementarity of strategic orientations: A meta-analytic synthesis and theory extension", *Strategic Management Journal,* Vol. 40 No. 11, pp. 1822-1851.

Sinkula, J.M. (1994), "Market information processing and organizational learning", *Journal of Marketing,* Vol. 58 No. 1, pp. 35-35.

Slater, S.F. and Narver, J.C. (1994), "Does competitive environment moderate the market orientation-performance relationship?", *Journal of Marketing,* Vol. 58 No. 1, pp. 46-55.

Smith, H.C., Herbig, P., Milewicz, J. and Golden, J.E. (1996), "Differences in forecasting behaviour between large and small firms", *Journal of Marketing Practice: Applied Marketing Science,* Vol. 2 No. 1, pp. 35-51.

Souchon, A.L., Cadogan, J.W., Procter, D.B. and Dewsnap, B. (2004), "Marketing information use and organisational performance: The mediating role of responsiveness", *Journal of Strategic Marketing,* Vol. 12 No. 4, pp. 231-242.

Teece, D. J., Pisano, G., and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal,* Vol.18, No. 7, pp. 509–533.

Verhees, F.J.H.M. and Meulenberg, M.T.G. (2004), "Market orientation, innovativeness, product innovation, and performance in small firms", *Journal of Small Business Management,* Vol. 42 No. 2, pp. 134-154.

Voukelatou, V., Gabrielli, L., Miliou, I., Cresci, S., Sharma, R., Tesconi, M. and Pappalardo, L. (2021), "Measuring objective and subjective well-being: Dimensions and data sources", *International Journal of Data Science and Analytics,* Vol. 11, pp. 279-309.

Williams, J.E. (2003), "Export information use in small and medium-sized industrial companies: An application of Diamantopoulos' and Souchon's scale", *International Marketing Review,* Vol. 20 No. 1, pp. 44-66.

Williams, J.E. and Chaston, I. (2004), "Links between the linguistic ability and international experience of export managers and their export marketing intelligence behaviour", *International Small Business Journal,* Vol. 22 No. 5, pp. 463-486.

Yoshino, N. and Taghizadeh-Hesary, F. (2019), "Optimal credit guarantee ratio for small and medium-sized enterprises' financing: Evidence from Asia", *Economic Analysis and Policy,* Vol. 62, pp. 342-356.

Zaefarian, R., Tasavori, M., Eng, T.-Y. and Demirbag, M. (2023), "Development of international market information in emerging economy family smes: The role of participative governance", *Journal of Small Business Management,* Vol. 61 No. 2, pp. 560-589.

Zontanos, G. and Anderson, A.R., 2004. Relationships, marketing and small business: an exploration of links in theory and practice. *Qualitative Market Research*, Vol. 7 No. 3, pp. 228-236.

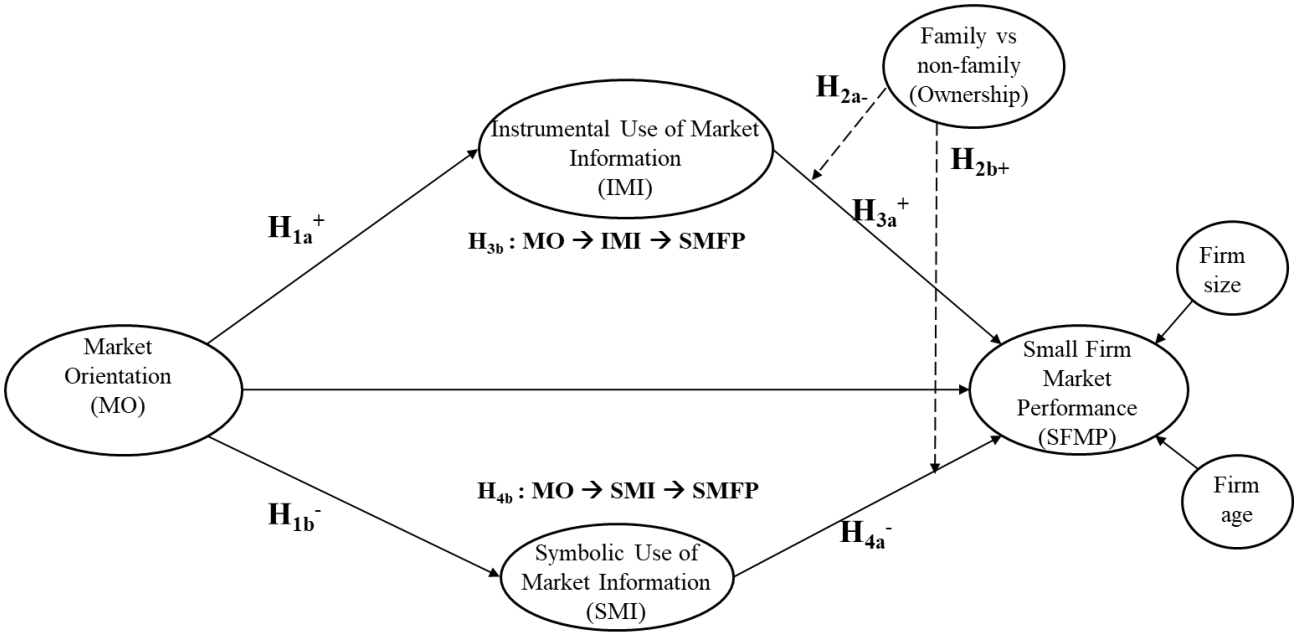

Figure 1. Conceptual framework and tested model (Source: Authors own work)

Table 1. Measures and Descriptive Statistics (Source: Authors own work)

Construct	Items	Mean	SD	VIF
Market Orientation (Hsieh *et al.*, 2008)	1 Our business objectives are driven by customer satisfaction	5.62	1.26	1.62
	2 Monitor and evaluate staff attitude towards delivering customer satisfaction	4.68	1.48	1.64
	3 Measure customer satisfaction frequently	*	*	*
	4 Aware of customer needs and wants	5.09	1.13	1.98
	5 Respond rapidly to competitive actions	4.73	1.47	3.35
	6 Pay close attention to industry and market trends	5.29	1.23	3.02
	7 Target opportunities for competitive advantage	5.20	1.25	2.91
	8 Business functions integrated into serving our customer's needs	5.03	1.22	2.34
	9 Market information is shared with all the functions of the business	4.68	1.56	1.75
	10 Culture of mutual cooperation between different functions in our business	5.16	1.40	2.37
Instrumental Use of Market Information (Diamantopoulos & Souchon, 1999)	1 Market information is sought out in response to specific marketing decisions	4.96	1.50	3.85
	2 Market information is used to make a particular marketing decision	4.80	1.44	3.62
	3 Market decisions based on market orientation are more accurate than ...	*	*	*
	4 Confidence in making marketing decisions is increased as a result of using ...	5.18	1.24	3.21
	5 Without market information, our marketing decisions would be very different	4.68	1.43	2.14
	6 Market information is translated into significant practical action	4.78	1.28	4.19
	7 Market information is preserved and can be used by individuals other than ...	4.91	1.42	2.12
	8 Majority of market information we have is not used	*	*	*
	9 Market information often has little decision relevance	*	*	*
	10 Our uncertainty associated with marketing activity is greatly reduced by ...	*	*	*
	11 Same piece of market information is often used for more than ...	*	*	*
	12 No marketing decisions are made without the use of market information	*	*	*
Symbolic Use of Market Information (Diamantopoulos & Souchon, 1999)	1 Market information collected to justify marketing decisions that have already been made	3.58	1.52	1.90
	2 Market information used to reinforce expectations	4.22	1.42	2.09
	3 Instinct/intuition is combined with market information when making marketing decisions	*	*	*
	4 Market information is not considered in making decisions for which was initially requested	*	*	*

	5 Market information is manipulated to justify marketing decisions that are really made on...	*	*	*
	6 Senior managers often distort market information when passing it on	*	*	*
	7 Market information is sometimes taken into account to justify the cost of having...	*	*	*
	8 Market information is used to back up hunches prior to the implementation of a particular marketing decision	3.92	1.42	1.81
	9 Market information supports marketing decisions made on other grounds	4.19	1.31	2.26
	10 If market information is difficult to obtain, guesses are made instead	*	*	*
	11 Market information supports decisions made on other grounds	4.29	1.21	1.90
Mkt Perf	1. Retail sales growth (%)	0.87	5.78	1.07
(Parnell, 2013)	2. Category share growth (%)	0.38	1.04	1.07

Notes: SD=standard deviation;*Items excluded from analysis due to low inter-item correlation and/or low AVE.

Table 2. Construct Reliability, Convergent, and Discriminant Validities (Source: Authors own work)

	α	**AVE**	**CR**	**1**	**2**	**3**	**4**
1. Instrumental	.92	0,71	.94	**.84**			
2. Symbolic	.84	.61	.88	.42	**.78**		
3. Market Orientation	.88	.51	.90	.53	.25	**.71**	
4. Mkt Performance	.42	.61	.74	.19	.15	.20	**.78**
5. Ownership	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: α= Cronbach's alpha; CR= composite reliability; AVE=average variance extracted; bold numbers show the squared root of AVE

Table 3. Results of the tested model (Source: Authors own work)

Hypotheses	**Path**	**Coefficient**	**SD**	**t-value**	**p-value**	**Status of Hypotheses**
H1a	MO -> IMI	0.526	0.086	6.099	0.000	Supported
H1b	MO -> SMI	0.258	0.222	1.164	0.245	Not supported
H2a	Ownership*IMI -> SFMP	-0.873	0.469	1.860	0.063	Supported
H2b	Ownership*SMI -> SFMP	0.221	0.315	0.652	0.693	Not supported
H3a	IMI -> SFMP	0.972	0.475	2.047	0.041	Supported
H3b	MO -> IMI -> SFMP	0.512	0.281	1.819	0.069	Supported
H4a	SMI -> SFMP	-0.452	0.576	0.786	0.532	Not supported
H4b	MO -> SMI -> SFMP	-0.117	0.215	0.542	0.588	Not supported

Notes: SD = standard deviation; SFMP = small firm market performance; MO = markete orientation; IMI = instrumental market information use; SMI = symbolic market information use