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Entrepreneurial Orientation and Organizational Performance of Online Business in Malaysia: The Mediating Role of the Knowledge Management Process

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Abstract: The aim of this paper is to examine the role of the knowledge management process as a mediating variable in the relationship between entrepreneurial orientation and organizational performance. This study employed a quantitative method and utilised a self-administered questionnaire. A total of 350 data were collected from the owners/founders of online businesses. A Partial Least Squares-Structural Equation Modelling (PLS-SEM) analysis was performed to test the proposed hypotheses of the study. The findings indicated that entrepreneurial orientation positively the knowledge management process, which in turn exerts a positive effect on the organizational performance of a company. Additionally, the indirect effect analysis revealed that the knowledge management process plays a significant role as a mediator between entrepreneurial orientation and organizational performance. The research fills a gap in the literature by considering a mediating variable in enhancing the relationship between entrepreneurial orientation and organizational performance. This research also provides a particular contribution to the literature and some suggestions for future research.

Keywords: entrepreneurial orientation; knowledge management process; organizational performance; online business; Malaysia

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1. Introduction

The e-commerce industry is acknowledged as a significant field in the Malaysian economy. The Malaysian government has implemented the National Strategic Roadmap 2.0 as a catalyst for the growth of the e-commerce industry by targeting the e-commerce market to be worth RM1.5 trillion by the year 2025 [1]. Therefore, the e-commerce industry is expected to double up its performance and growth to achieve this aspiration. Online business in Malaysia has turned out to be progressively vital, as it offers opportunities for generating revenue and creating a future. Thus, with the support and opportunities provided, the government believes that the steps taken will help in developing and increasing

the number of online ventures in Malaysia, to enhance the performance of businesses in line with the current development [2] Hence, the government has prepared for an intensive transformation by focusing on the digital market to produce high-quality online business entrepreneurs capable of being more innovative and proactive, besides keeping up with the current development. At the same time, the aim is to increase the number of online adoptions among retailers to achieve the government's objectives. Therefore, organizations must understand the factors that could improve the performance of online business. This understanding may motivate them to carry out their responsibility as an owner or founder to implement good decision-making. This is a way for organizations to achieve business success, stay competitive in the digital market and ultimately contribute to the country's economy. In fact, the encouragement of entrepreneurs to engage in business development improves their chances of survival in a saturated market [3–6]. Previous studies have proved that entrepreneurial orientation (EO) is an effective tool that assists organizations in maintaining their performance [7–9]. EO refers to the process of strategy-making that provides the basis for business decisions and behaviour for organizations [10]. EO comprises innovativeness, proactiveness, risk-taking and competitive aggressiveness, and autonomy elements are key ingredients for organizational success. The studies on EO are mainly focused on large companies and SMEs compared to online businesses [11,12]. Hence, there is a call to examine the effect of EO on the performance in the context of e-commerce sectors.

In addition, previous research also suggests that knowledge management practices are essential to overcome the challenges brought upon by the rapid growth of the new digital economy, e.g., [13,14]. From the perspective of the organization, the knowledge management process (KMP) has always been an integral aspect of general business management activities [15], especially in making fast, accurate and timely decisions, which makes all the difference among companies [16]. For decision-makers within the organization, knowledge is regarded as an important asset. The lack of an effective implementation of KMP may result in problematic decision-making, thus delaying the growth of an organization. The successful and effective implementation of KMP is derived from good decision-making processes based on the EO, that is geared towards achieving business success. EO has been shown to be a valuable method to help organizations maintain their performance trajectories [17–20]. Therefore, the successful adoption of EO within the organization requires individuals to have creativity and risk-taking abilities to achieve an effectual KMP [21]. In the context of online business, the development of online business strategies requires a critical evaluation of various opportunities and risks for the implementation of good strategies or decisions. This evaluation definitely requires the use of knowledge, especially in the modern digital economy. Knowledge has been described as one of the main success factors for effective online business models [22].

The studies on the relationship among KMP, EO and organizational performance (OP) have been conducted in various industries, including manufacturing industries [23] and small and medium-sized enterprises (SMEs) [24]. While studies on KMP have also been performed among Japanese managers [25], human resource (HR) professionals [26], business owners or senior managers of small and medium-sized enterprises (SMEs) [10], and the banking sector [27]. In the Malaysian perspective, studies on EO and organizational performance had focused on entrepreneurs and organizations in the SME sector. Comparative studies that identify the differences between online business sectors are still limited. Meanwhile, for KMP, it was recommended for future research to possess a better comprehension of the relationship between EO and the process of KMP, which can contribute to the field of study. There have been limited studies on mediating influences in the relationships concerning EO. Based on the literature, most previous studies have investigated the relationship between EO and organizational performance or KMP separately. Therefore, the potential mediator role of KMP was proposed in this study, which can enhance the relationship between EO and organizational performance, besides contributing towards extending the KBV theory. However, to the researchers' knowledge, very few studies have examined the role of KMP on the relationship between EO and OP, especially on online

businesses. Therefore, this study aims to examine the relationship between KMP, EO and OP, particularly within the context of Malaysian online businesses.

Specifically, this research intends to address three research questions:

1. Is there a significant relationship between EO and KMP in Malaysian online businesses?
2. Is there a significant relationship between KMP and OP in Malaysian online businesses?
3. Does KMP mediate the relationship between EO and OP in Malaysian online businesses?

This paper is structured in the following way. Section 1 introduces the background of the research and highlights the concepts of EO and KMP. Section 2 provides a literature review on the EO, KMP and OP literature and ends by justifying the hypothesis. This section is followed by Section 3 which discusses the method used for this study. Subsequently, Section 4 presents the findings. Finally, Section 5 discusses the results of this study, followed by limitations and suggestions for future studies.

2. Literature Review

2.1. Entrepreneurial Orientation (EO)

In organizational research, EO has attracted comprehensive theoretical and empirical attention [2,12]. It has emerged as one of the most commonly recognized firm-level constructs in the literature on entrepreneurship and one of the key topics in entrepreneurship studies [28]. Most previous studies have agreed on one thing, that is, to suggest that EO should be viewed as a phenomenon at the firm level [29–31]. In fact, EO is seen as an organizational tool that helps companies differentiate themselves from their rivals [29,32]. EO influences how firms act strategically in gaining a competitive advantage, which may be assessed at the firm level across industries and cultures, allowing for comparative studies [33]. Based on the review of the previous literature [34,35], EO is the mechanism that represents the owners or founders' processes, habits and decision-making styles used to function entrepreneurially by practicing the five elements in managing their online business. The five elements are innovativeness, proactiveness, risk-taking, competitive advantage and autonomy, which are equally important for business performance [36]. In this study, EO is operationally defined as the process that reflects the methods, practices and decision-making styles used by owners or founders to act entrepreneurially by practising five elements (innovativeness, proactiveness, risk-taking, competitive aggressiveness and autonomy) in managing their online business.

2.2. Organizational Performance (OP)

Organizational performance refers to a company's actual results as measured against its strategic goals. It also has been described as the process of action efficiency and effectiveness [37]. Organizational performance is one of the important factors for determining why some organizations succeed while others fail. It is crucial for business owners, managers and entrepreneurs to know the performance level of their organizations and take appropriate steps. This is a concern that needs attention because it will impact an organization's competitiveness [2,38]. Previous research [39–41] merged financial and non-financial metrics to analyse the performance of the organizations. Hernández-Perlines et al. [42] reported that the combination of financial and non-financial metrics will lead to a balanced assessment of success in a business setting. For this study, organizational performance is defined as a concept that evaluates a company's position in the marketplace and its capacity to fulfil its stakeholders' requirements.

2.3. Online Business (OB)

Online business is a new business model that has become a trend in almost all businesses. The rapid advancement in Information and Communication Technologies has allowed this important domain to become a strategy that successfully directs business processes across organizational boundaries [43]. Specifically, online business can remove the boundaries of separation and empower organizations to move into more inaccessible markets without having a physical presence. Online business is defined in this study as

any type of retail sale over the internet, which comprises all aspects of running a business that sells goods and services, including marketing, earning and retaining customers, procurement, developing business partners and customer education [44,45].

2.4. Knowledge Management Process (KMP)

The knowledge management (KM) concept is implemented in organizations to transform them into entities with a competitive advantage in this borderless world [27]. Razali et al. [46] defined KM as a management method that consists of people, information technology (IT) and organizational elements to capture information, which is an organization's most valuable asset. However, until recently, there is no common consensus on the concept of knowledge management, since researchers and practitioners tend to define KM based on their own field and interest [47]. This is because varying perspectives on the concept of knowledge lead to diverse definitions and processes of knowledge management; therefore, it is not surprising that the expected outcomes of KM efforts are defined differently [47]. Nevertheless, many studies emphasized that KM typically constitutes three processes, which are knowledge acquisition, sharing and application [24,48]. Hence, this study operationalized KMP based on these three processes to achieve a good business performance.

The recent interest in organizational knowledge has prompted KMP for organizational benefits [48,49]. Along the line, the primary purpose of knowledge management processes (KMP) is to make an organization aware of its knowledge at both the individual and collective levels, and to use that information to create efficient and effective business processes and a competitive advantage [50]. As a result, KMP enables the formalization of knowledge and decision-making while also developing new competencies to increase organizational performance, profitability and customer satisfaction [51]. Nevertheless, a KM strategy must be implemented prior to achieving sustainable economic growth and to remain globally competitive [52]. Even though KM has been widely discussed, little is known about the effect of KMP implementation, particularly in the Malaysian online business context. Thus, it is important to examine the role of KMP on online business activities among Malaysian entrepreneurs.

2.5. Resource-Based Theory (RBT), and Knowledge-Based View—(KBV)

RBT is one of the most widely used theoretical perspectives to explain differences in performance between organizations [53,54]. This theory has a powerful impact because it provides insights on how an organization can perform better compared to other organizations in the same market. There is a traditional notion that managers have a significant influence on how organizations act, but it is not the sole reason why an organization can outperform other organizations [55]. RBT states that resources and organizational capabilities also influence the growth and performance of an organization [55,56]. Furthermore, this theory requires organizations to focus on obtaining resources to implement their business strategies and use their unique capabilities and resources to increase their performance. Accordingly, RBT explains the EO construct in terms of utilizing unique resources and capabilities as a basis to plan the business strategy [57,58].

Meanwhile, the KBV of a firm, which is an extension of RBT, interprets knowledge as a resource and establishes the theoretical connection between RBT and KBV [59]. The KBV of a firm considers organizations as heterogeneous entities loaded with knowledge [60,61] and postulates that knowledge is the strategic resource for a firm to achieve a superior performance and a competitive advantage [62]. Interestingly, the knowledge of a firm is considered a very special resource that does not depreciate when it is shared; instead, it can generate increasing returns [63]. The essence of KBV is that a firm accumulates a heterogeneous bundle of knowledge-based resources to develop firm-specific capabilities, which will allow the firm to achieve a competitive advantage [64–66].

In line with KBV, the firm will manage its knowledge by generating, acquiring, discovering, organizing and making it available for management activities such as decision-making and strategic planning [67]. Not only that, KMP plays a key role in firm performance

and competition, since the knowledge generated by this process can help improve and develop a competitive advantage, which can be obtained by capitalizing on its capabilities [68].

2.6. The Relationship between EO and KMP

EO is evaluated as a predictor of a small number of KMP, including knowledge usage [69–71], information sharing [72] and knowledge creation [73]. There have been studies that found a significant impact of EO on KMP [58,74,75], particularly of a risk-taking effect on knowledge creation and sharing.

The relationship between EO and KMP was proposed by Madhoushi et al. [24], who studied the effect of EO on KMP in SMEs in Iran and proved that EO has a significant effect on KMP. As extensive and intensive knowledge-based activities require the development of new ideas, products and processes, a high EO is a key input in encouraging and motivating employees to share their skills and knowledge in the knowledge-building process [76]. Therefore, knowledge should be effectively managed owing to its significant role in discovering new opportunities and ideas.

Meanwhile, Gupta and Moesel [75] performed a study on the impact of EO on KMP in building strategic alliances. Their results showed that EO (proactiveness, innovativeness and risk-taking) was positively correlated with the creation and acquisition of knowledge in the establishment of strategic alliances with customers. A similar study also identified that the key to successful decision-making skills was the ability of individuals within the organization to leverage their knowledge [21,73,77]. The authors also stated that the availability of accurate knowledge led to a better chance of making decisions that yielded a positive result for the organization. The study by Severo et al. [78] pointed out that there is a significant relationship between EO and KMP for SMEs in Southern Brazil. Based on the above justifications, this study proposes that EO will enhance the implementation of KMP.

Hypothesis 1 (H1). *There is a positive and significant relationship between EO and KM.*

2.7. The Relationship between KMP and OP

An effective KMP on the part of businesses can improve a firm's performance and competitiveness [67]. For instance, organizations can acquire a competitive advantage by effectively managing their knowledge resources, which will ultimately boost their sales growth, earnings and market share [27]. Thus, improved performance is the result of an excellent KMP and implementation [79].

The relationship between KMP and OP was suggested by Liu and Deng [80], who showed that each KMP attribute had a positive impact on the company's outsourcing business process (BPO) results. They concluded that KMP could be used effectively to increase efficiency, as it offers competitive advantages for companies that are not easily imitated by their rivals. Besides, Kimaiyo et al. [81] highlighted that all the attributes of KMP were crucial for enhancing a firm's performance. Their findings also suggested that firms should apply the principles of KMP continuously through the creation of new knowledge, the conversion of knowledge into new designs or strategies, protecting their knowledge and learning from previous experiences to achieve a better performance. In line with this study, Jyoti and Rani [82] also found a significant and positively relationship between KMP and OP, whereby OP was improved through the acquisition, conversion and application of knowledge within the firm. Furthermore, several studies also reported that KMP leads to an increase in OP [23,83]. Mageswari [84] proved that KM has a positive and significant influence on OP in South Indian manufacturing companies.

Recent studies found that KMP influences OP in terms of innovation. For instance, Obeidat et al. [85], who conducted a study among 216 Jordanian consulting firms, demonstrate that KMP has a significant impact on innovation in Jordanian consulting firms. Rehman and Iqbal [86] investigated the mediating role of KMP and innovation among

312 faculty members of higher education institutions (HEIs) in Pakistan. The findings show that knowledge-oriented leadership has an effect on organizational performance that is mediated through KMP and innovation. The findings of this study reveal that managers of HEIs may effectively manage their knowledge assets, assure a successful implementation of KMP and enhance product and process innovation, all of which lead to a higher organizational performance, by exhibiting knowledge-oriented behaviours. Therefore, practicing KMP effectively will have an important impact on the achievement of higher performance for Malaysian online businesses. Based on the above studies, the following hypothesis is proposed:

Hypothesis 2 (H2). *There is a positive and significant relationship between KMP and OP.*

2.8. KMP as a Mediator in the Relationship between EO and OP

Successful organizations realize that it is imperative to manage their knowledge, develop strategies to accomplish their objectives and devote time, resources and energy towards achieving their goals. Due to this realization, many successful organizations have acknowledged KMP as a key component of organizational success [87] and one of the most vital tools for an organization's survival and prosperity [88,89]. The implementation of KMP will boost the performance of businesses particularly, the long-term goals and objectives of companies. Empirically, a study conducted by Madhoushi et al. [24] among 164 Iranian SMEs' top executives (i.e., presidents, vice presidents, directors or general managers) found that EO affected innovation performance both directly and indirectly.

Moreover, EO acts as a catalyst for producing creativity and innovation in organizations [75,90]. In other words, organizations require people with risk-taking and creative thinking abilities to render KMP effectual [21]. From this study, it is reasonable to conclude that effective knowledge management is derived from the successful implementation of decision-making skills, methods and practices among owners of online businesses, thus indicating the effect of EO on KMP. According to Hunt and Arnett [91], top management members can enhance the knowledge-based activities of their staff through their involvement with EO. The recent study by Aldi Rizkyan [92] proved that KM has a positive relationship between EO and OP in SMEs in the maritime business. In another study, Wang and Huynh [93] investigated the mediating role of KMP in the relationship between the effect of implementing management accounting practices and firm performance. The results revealed the significant role of KMP as a mediator in this relationship. Hormiga et al. [72] examined the role of knowledge-sharing as a mediator in the relationship between EO and OP among 284 researchers at a Spanish university. They found that knowledge-sharing mediates the relationship between EO and OP in an academic setting. In addition, a survey among 172 subsidiaries of multinational businesses (MNEs) in France indicated that KM mediates the link between knowledge-oriented leadership and open innovation [94]. Thus, these researches demonstrated the high potential of KMP as a mediator in the relationship between EO and organizational performance.

KMP was selected as a variable in this study, as many organizations are experiencing an overload of information and require an appropriate platform to benefit from the information (knowledge) which is made available to them [95,96]. Several organizations have pushed towards introducing KMP since the early 1990s in order to gain a competitive edge over their rivals [97]. The evolution and implementation of KMP practices in Malaysia are still in their infancy stages, e.g., [47,98]. However, it has recently gained momentum, especially among online businesses [99]. Therefore, this study proposes KMP as a vital role in mediating the relationship between EO and Malaysian online business performance. Thus, the present study proposes the following hypothesis:

Hypothesis 3 (H3). *KMP mediates the relationship between EO and OP.*

3. Research Methodology

3.1. Research Design and Sample

This study focuses on online business in Malaysia because of its role in achieving the Malaysian government's aspiration to increase its market worth by RM1.5 trillion in year 2025 and its significant contribution to the economic growth. Thus, it offers opportunities for generating revenue and creating a future [70]. The unit of analysis in this study is the online business registered with the Companies Commission Malaysia (CCM) represented by the owner or founder of the online business. Due to the current situation of the country hit by the COVID-19 pandemic, the convenience sampling technique and data collection processes were carried out in a cross-sectional manner using an online survey method (Google Form). Each owner or founder of the online business was given a Google Form link which consisted of a set of questionnaires that included a cover letter specifying the goal of the study and statements on confidentiality and the voluntariness of participation. Four hundred questionnaires were collected from Google Form between September and November 2021, but only 350 were useable, and this amount was adequate to perform the PLS-SEM analysis [100].

The analysis of the background information of the respondents showed that out of 350 respondents, 39.7 percent were male, while 60.3 percent were female. The majority of respondents (94.0 percent) were Malays, followed by Indians (4.0 percent) and Chinese (1.1 percent), and 0.9 per cent belonged to other races (bumiputera). In terms of years of establishment, 93.7 per cent of online businesses have been established over 5 years, as most of these online businesses had KMP.

3.2. Measures

All constructs were evaluated using validated measures commonly used in previous studies. Respondents were asked to rate their opinions on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Entrepreneurial Orientation (EO) was measured using twenty items (EO1—Our firm often likes to try new and unusual activities that are not typical but not necessarily risky; EO2—Our firm prefers a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before; EO3—Our firm prefers to try our own unique way when learning new things rather than doing it like everyone else does; EO4—Our firm favours experimentation and original approaches to problem-solving rather than using methods others generally use for solving their problems; EO5—Our firm usually acts in anticipation of future problems, needs or changes; EO6—Our firm tends to plan ahead on projects; EO7—Our firms prefers to "step up" and get things going on projects rather than sit and wait for someone else to do it; EO8—Our firm likes to take bold action by venturing into the unknown; EO9—Our firm is willing to spend a lot of time on something that might yield a high return; EO10—Our firm is willing to invest a lot of money on something that might yield a high return; EO11—Our firm is willing to invest a lot of money on something that might yield a high return; EO12—Our firm tends to act "boldly" in situations where risk is involved; EO13—Our firm is most likely to initiate actions that competitors will respond to; EO14—Our firm will be aggressively and intensively competitive rather than making no special effort to take business from the competition; EO15—Our firm supports the efforts of individuals/teams that work autonomously rather than relying on others to guide their work; EO16—Our firm will use alternative strategies to challenge the competitors; EO17—Our firm supports the efforts of individuals/teams that work autonomously rather than relying on others to guide their work; EO18—Our firm receives best results when individuals/teams provide motivation for pursuing business opportunities; EO19—Our firm pursues business opportunities without obtaining approval from others; EO20—Our firm plays a major role in identifying and selecting the entrepreneurial opportunities to pursue new markets) adapted from Lumpkin et al. [101]. The Knowledge Management Process (KMP) was measured using fifteen items (KMP1—Our firm has processes for acquiring knowledge about our customers; KMP2—Our firm has processes for acquiring

knowledge about our suppliers; KMP3—Our firm has a process for acquiring knowledge about new products/services within our firm; KMP4—Our firm has a process for acquiring knowledge about competitors within our firm; KMP5—Our firm has processes for generating new knowledge from existing knowledge; KMP6—Our firm treats people's skills and experiences as a very important part of our knowledge assets; KMP7—Our firm has venues for employees to share knowledge and learn from each other in the firm; KMP8—Our firm shares information and knowledge with employees; KMP9—Our firm has a great deal of face-to-face communication with employees; KM10—Our firm uses technology to facilitate communications effectively (e.g., email, Skype); KM11—Our firm has processes for applying knowledge learned from mistakes; KMP12—Our firm has processes for applying knowledge learned from experience; KMP13—Our firm has processes for using knowledge in the development of new products/services; KMP14—Our firm has processes for using knowledge to solve new problems; KMP15—Our firm uses knowledge to improve efficiency) adapted from Gold et al. [48]. Finally, Organizational Performance (OP) was measured using eighteen items (OP1—Our firm has more repeat sales; OP2—Our firm can easily see repeat clients; OP3—Our firm ensures that customers' product and/or service preferences are satisfied; OP4—Our firm delivers products and/or services that are exactly what customers want; OP5—Our firm delivers products and/or services that exceed customers' expectations; OP6—Our firm's employees like their jobs in this company; OP7—Our firm's employees do not intend to work for a different company; OP8—Our firm uses up-to-date or new technology in the process; OP9—Our firm has enough new products introduced to the market; OP10—Our firm is able to produce products with novelty features; OP11—The quality of our firm's products/services compares well with competing products/services; OP12—Our firm's products/services are of higher quality than competing products/services; OP13—Sales growth; OP14—Market share growth; OP15—Employment growth; OP16—Return on investment (ROI); OP17—Gross profit margin; OP18—Return on asset (ROA)), adapted from Ramayah, et al. [102] and Arshad [103]. Before conducting the main analysis, a pilot test was conducted to establish content validity, face validity and construct reliability [104]. Content validity was conducted by involving five experts in entrepreneurship among academics to see whether the scale items truly reflect the variables assessed. The expert panels were contacted and approached via e-mail. Based on the feedback, several items were modified accordingly to include a more suitable wording, to ensure that the content was clear and understandable to suit the study context. Finally, this indicates that the content validity was ensured. Next, face validity was conducted by involving five selected respondents, namely the owner or founder of the online business in Malaysia, to get their feedbacks on the face validity of the items. The results showed that the respondents were able to understand the items in the questionnaire. Finally, a pilot test was conducted in order to evaluate the feasibility of the study by distributing 30 questionnaires to the owner or founder of the online business in Malaysia [105]. The findings show that all constructs evaluated through Cronbach's alpha have met the threshold, which is more than 0.70 [106,107]. Specifically, the Cronbach's alpha for EO is 0.84, for KM 0.91 and for OP 0.86. As such, the items are validated and can undergo further analysis.

4. Findings

The Statistical Package for Social Sciences (SPSS) version 23 and the SmartPLS package were employed to perform the latent variable analysis [108]. Before testing the hypothesis, this study implemented construct validity and common method bias.

4.1. Construct Validity

This study tested the construct validity of all variables (Entrepreneurial Orientation (EO), Knowledge Management Process (KMP) and Organizational Performance (OP) using convergent and discriminant validity [109,110]. Nevertheless, the outer loading for two items of EO,—EO-10 (0.41) (*Our firm is willing to invest a lot of money on something that might*

yield a high return) and EO-15 (0.48) (*Our firm supports the efforts of individuals/teams that work autonomously rather than relying on others to guide their work*)—had to be removed because they did not meet the minimum requirement value. Table 1 shows all item measurements with loadings greater than 0.5 [110], thus confirming construct validity.

Next, composite reliability (CR) values for EO (0.934), KMP (0.927) and OP (0.874) were obtained, thereby indicating that these constructs have a high level of internal consistency. The factor loadings for each variable and average variance extracted (AVE) were also evaluated to determine the convergent validity of the constructs measured in this study. In this study, the AVE scores for all the constructs were above 0.50 after the deletion of four items (*KM10—Our firm uses technology to facilitate communications effectively (e.g., email, Skype)*; *KM11—Our firm has processes for applying knowledge learned from mistakes*; *OP12—Our firm's products/services are of higher quality than competing products/services*; and *OP14—Market share growth*). Therefore, all three constructs met the threshold levels, as the CR values were above the cut-off value of 0.7, and the AVEs were above the cut-off value of 0.5 [110].

Table 1. The summary results' convergent validity for EO, KM and OP.

Construct	Measurement Items	Loading	CR	AVE
Entrepreneurial Orientation (EO)	EO1—Our firm often likes to try new and unusual activities that are not typical but not necessarily risky.	0.763	0.934	0.703
	EO2—Our firm prefers a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before.	0.730		
	EO3—Our firm prefers to try our own unique way when learning new things rather than doing it like everyone else does.	0.714		
	EO4—Our firm favours experimentation and original approaches to problem-solving rather than using methods others generally use for solving their problems.	0.801		
	EO5—Our firm usually acts in anticipation of future problems, needs or changes.	0.766		
	EO6—Our firm tends to plan ahead on projects.	0.870		
	EO7—Our firm prefers to "step up" and get things going on projects rather than sit and wait for someone else to do it.	0.738		
	EO8—Our firm likes to take bold action by venturing into the unknown.	0.810		
	EO9—Our firm is willing to spend a lot of time on something that might yield a high return.	0.776		
	EO11—Our firm is willing to invest a lot of money on something that might yield a high return.	0.854		
	EO12—Our firm tends to act "boldly" in situations where risk is involved.	0.794		
	EO13—Our firm is most likely to initiate actions that competitors will respond to.	0.755		
	EO14—Our firm will be aggressively and intensively competitive rather than making no special effort to take business from the competition.	0.765		
	EO16—Our firm will use alternative strategies to challenge the competitors.	0.750		
	EO17—Our firm supports the efforts of individuals/teams that work autonomously rather than relying on others to guide their work.	0.722		
	EO18—Our firm receives best results when individuals/teams provide motivation for pursuing business opportunities.	0.805		
	EO19—Our firm pursues business opportunities without obtaining approval from others.	0.772		
	EO20—Our firm plays a major role in identifying and selecting the entrepreneurial opportunities to pursue new markets.	0.766		

Table 1. *Cont.*

Construct	Measurement Items	Loading	CR	AVE
Knowledge Management Process (KMP)	KMP1—Our firm has processes for acquiring knowledge about our customers.	0.621	0.927	0.719
	KMP2—Our firm has processes for acquiring knowledge about our suppliers.	0.773		
	KMP3—Our firm has a process for acquiring knowledge about new products/ services within our firm.	0.850		
	KMP4—Our firm has a process for acquiring knowledge about competitors within our firm.	0.799		
	KMP5—Our firm has processes for generating new knowledge from existing knowledge.	0.827		
	KMP6—Our firm treats people's skills and experiences as a very important part of our knowledge assets.	0.801		
	KMP7—Our firm has venues for employees to share knowledge and learn from each other in the firm.	0.818		
	KMP8—Our firm shares information and knowledge with employees.	0.853		
	KMP9—Our firm has a great deal of face-to-face communication with employees.	0.864		
	KMP12—Our firm has processes for applying knowledge learned from experiences.	0.819		
	KMP13—Our firm has processes for using knowledge in development of new products/services.	0.828		
	KMP14—Our firm has processes for using knowledge to solve new problems.	0.822		
	KMP15—Our firm uses knowledge to improve efficiency.	0.814		
Organizational Performance (OP)	OP1—Our firm has more repeat sales.	0.846	0.874	
	OP2—Our firm can easily see repeat clients.	0.833		
	OP3—Our firm ensures that customers' product and/or service preferences are satisfied.	0.846		
	OP4—Our firm delivers products and/or services that are exactly what customers want.	0.915		
	OP5—Our firm delivers products and/or services that exceed customers' expectations.	0.805		
	OP6—Our firm's employees like their jobs in this company.	0.765		
	OP7—Our firm's employees do not intend to work for a different company.	0.770		
	OP8—Our firm uses up-to-date or new technology in the process.	0.753		
	OP9—Our firm has enough new products introduced to the market.	0.774		
	OP10—Our firm is able to produce products with novelty features.	0.696		
	OP11-The quality of our firm's products/services compares well with competing products/services.	0.785		
	OP13—Sales growth.	0.772		
	OP15—Employment growth.	0.711		
	OP16—Return on investment (ROI).	0.768		
	OP17—Gross profit margin.	0.773		
	OP18—Return on asset (ROA).	0.811		

Note: CR: Composite reliability; AVE: Average variance extracted.

Further, the discriminant validity was evaluated to ensure that the square root of the AVE was greater than the correlation between constructs. The Heterotrait–Monotrait (HTMT) test was used to determine the discriminant validity (DV) of the constructs [111]. For the analysis of DV, the HTMT values should not be greater than 0.85 (HTMT.85) [112]. Table 2 shows that all the DV values are lower than the recommended HTMT.85. Thus, the

discriminant validity of this study has been ascertained and indicates that each construct is unique and sufficiently distinct from the other constructs in the measurement model. Table 2 presents the results of the HTMT criterion.

Table 2. Results of HTMT criterion.

Construct	Entrepreneurial Orientation	Knowledge Management Process	Organizational Performance
Entrepreneurial Orientation			
Knowledge Management Process	0.116 CI 0.90 (0.131, 0.195)		
Organizational Performance	0.103 CI 0.90 (0.133, 0.214)	0.577 CI 0.90 (0.511, 0.671)	

Note: Criteria Discriminant Validity is established at HTMT0.85.

4.2. Common Method Bias

This study used three stages to account for the typical method's potential bias [104,113]. First, verify that respondents' confidentiality is preserved. Second, collect data from key informants, namely the owner or founder of the online business. Third, do the Harman single-factor test using all variables included in the exploratory factor analysis [113]. This technique's assumption implies that there is no one factor that emerges through factor analysis, as well as no single general factor that will explain the bulk of the covariance among the measurements. Subjective metrics based on self-reported data allow for biases and mistakes. However, when objective measurements are unavailable, subjective measures can be used by choosing important informants to limit biases and inaccuracies [114,115].

4.3. Direct Relationship

The causal relationships between EO and KMP and between KMP and OP were assessed using the structural model. To evaluate the structural model, Hair et al. [116] proposed the use of the coefficient of determination (R^2) and path coefficient (β), and the corresponding t-values obtained via the bootstrapping procedure (5000 interactions) for the validation of the statistical significance.

The findings show that the value of R^2 is 0.473. This means that 47.3 per cent of the variation that exists in KMP (dependent variable) can be explained by EO (independent variable). Observations of the study model found that EO had a significant positive relationship with KM (β = 0.283 t = 4.639, LL = 0.172, UL = 0.371), thus supporting H_1. This finding demonstrates that a high level of EO led to an increase in KMP. Next, a direct relationship between KMP and OP showed that R^2 was 0.546. This means that 54.6 per cent of the variation that exists in OP (dependent variable) can be explained by KMP (independent variable). Specifically, the study model showed that KMP had a significant positive relationship with OP (β = 0.346, t = 4.928, LL = 0.221, UL = 0.453), thus supporting H_2. This observation indicates that a high level of KM increased organizational performance. Hence, it can be concluded that EO and KMP have a positive effect on the OP of Malaysian online businesses and that the two proposed hypotheses are sufficiently supported (see Table 3).

Table 3. Resulting Direct Relationships.

Structural Paths	Path. Coeff.	S.E.	t-Value	*p*-Values	Boot LL	Boot UL
EO → KMP	0.283	0.061	4.639	0.001	0.172	0.371
KMP → OP	0.346	0.070	4.928	0.001	0.221	0.453

Note: EO—Entrepreneurial Orientation, KMP—Knowledge Management Process, OP—Organizational Performance.

4.4. Mediating Relationship

The indirect approach was used to test whether KMP was a mediator in the relationship between EO and OP [117,118], as described in the third hypothesis (H_3). The bootstrapping analysis (β = 0.098) displayed a significant t-value (t = 4.274, $p < 0.001$) at the 95% confidence interval (LL = 0.037, UL = 0.159), which did not contain a value of 0 between the intervals, thereby indicating that there is a mediating effect [118]. Thus, the role of KMP as mediator is statistically significant—specifically, the relationship between EO and OP is mediated by KMP, and therefore H_3 is supported (see Table 4). Thus, KMP is used as a mediating variable in this study as a guideline for Malaysian online businesses to boost the relationship between EO and OP. The overall conceptual model of the role of KMP as a mediator in the relationship of EO and OP is illustrated in Figure 1.

Table 4. Resulting Mediating Relationships.

Structural Paths	Path. Coeff.	S.E.	t-Value	*p*-Values	BC 95% CI	
					Boot LL	Boot UL
EO → KMP → OP	0.098	0.031	4.274	0.001	0.037	0.159

Note: EO—Entrepreneurial Orientation, KMP—Knowledge Management Process, OP—Organizational Performance.

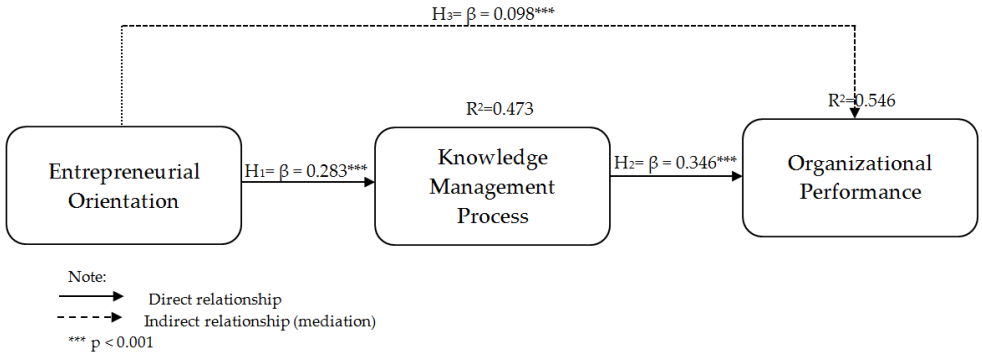

Figure 1. Conceptual model of the role of entrepreneurial orientation as a mediator in the relationship of the knowledge management process and organizational performance.

4.5. Determination of Coefficient (R^2), Effect Size (f^2) and Predictive Relevance (Q^2)

In addition to the basic measures (path coefficient), it is recommended that the predictive relevance (Q^2) and the effect sizes (f^2) also be reported [117,119]. To measure the effect size (f^2), the guidelines proposed by Cohen [120] were used, with f^2 = 0.02, 0.15 and 0.35 representing small, medium and substantial effect sizes, respectively. Table 5 shows that EO has a slight effect on KMP (f^2 = 0.062), which in turn has a small effect on OP (f^2 = 0.084). Additionally, the predictive relevance (Q^2) was evaluated in this study using the blindfolding procedure. Studies have suggested that a Q^2 value higher than 0 indicates the models' predictive relevance for a particular construct [110]. Table 5 shows the Q^2 values of 0.391 and 0.414 for KMP and OP, respectively, which demonstrates an acceptable level of predictive relevance.

Table 5. Determination of coefficient (R^2), effect size (f^2) and predictive relevance (Q^2).

Path	Coefficient of Determination (R^2)	Effect Size (f^2)		Predictive Relevance (Q^2)
Entrepreneurial Orientation (EO)		0.062	Small	
Knowledge Management Process (KMP)	0.473	0.084	Small	0.391
Organizational Performance (OP)	0.546			0.414

5. Discussion

The purpose of this study is to examine the factors that can improve organizational performance (OP) among online businesses in Malaysia. Two factors, namely entrepreneurial orientation (EO) and the knowledge management process (KMP), were examined to determine their effects on OP. Specifically, this study aims to examine the role of KMP as a mediator in the relationship between EO and OP. A PLS-SEM analysis was used to examine data from a sample of 350 owners or founders of online businesses in Malaysia. The data fully support the study's claim that KMP plays a significant role in mediating the relationship between EO and OP. An explanation of this discussion is described as follows:

First, the positive and significant relationship between EO and KMP is consistent with the Resource-Based View Theory, that claims that EO is made up of resources and capabilities, and that it may be used to develop a business strategy [57,58]. These findings are in line with the empirical studies on the effects of EO on KMP, e.g., [21,24,73,75,78]. Other study findings also agree that firms with EO are more likely to focus their attention and efforts on KMP [121]. Besides, Desouza and Paquette [74] argued that the capacity of individuals within the company to exploit expertise is crucial for the effectiveness of decision-making. This indicates that a strong EO is able to enhance the KMP in the organization. Therefore, a positive relationship between EO and KMP was established.

Second, this study shows a positive and significant relationship between KMP and OP. This is consistent with previous studies that found that organizations that implement KMP improve their OP, e.g., [23,80,82–84]. Organizations that successfully acquire knowledge become more outstanding in order to give a high competitive advantage to the organization [122]. According to Mahrinasari et al. [52], many studies have found that KMP factors are the most successful common strategies for organizational growth and survival for organizations [52]. This study's findings provide empirical proof that KMP has an effect on OP. Hence, KMP is an important factor in improving OP for Malaysian online businesses.

Finally, the important findings on the indirect relationship between EO and OP through KMP are in line with the findings of previous studies, e.g., [24,92,93]. These findings showed that an effective KMP has been practiced in online business to enhance the relationship between EO and OP. This finding is in line with KBV, since knowledge is the most strategically significant resource for a firm to achieve superior performance and a competitive advantage [62]. The findings of the study indicate that three hypotheses have been validated and provide a clear understanding of EO for running an online business. Specifically, the EO has a direct relationship with the KMP and, subsequently, with the OP. KMP acts as a mediator in the relationship between EO and OP. This finding offers a novel insight into this field of study and contributes to the important theoretical implications of the performance of online businesses. More importantly, the effective application of KMP in online businesses enhanced the relationship between EO and OP.

5.1. Theoretical Implications

This study extended the body of knowledge by emphasizing that EO, which includes innovativeness, proactiveness, risk-taking, competitive aggressiveness and autonomy elements, is required to promote organizational performance in online business. In addition, since there are limited studies on this research area, this study contributed new knowledge by providing more information regarding the importance of implementing EO in online business, especially from the perspective of Malaysia and developing countries. Although this study proved the joint effect of the five elements of EO, it does not show which element affects KMP the most. As such, this study has further reinforced the proposition that EO is a critical antecedent of organizational performance. This study has contributed further to the existing literature on EO's improving of organizational performance through the KM that is being practiced by the organization, especially in online businesses in Malaysia. Another contribution is towards KBV, which posits that knowledge is the most strategic resource for a firm to achieve a superior performance and a competitive advantage [62]. It is evident that to enhance organization performance, an effective KMP is imperative, as one of the

important elements in the model, which are derived from better decision making, methods and practices. Theoretically, this finding has added value to the importance of KMP for organizations and their employees, and towards the quality of knowledge creation.

5.2. Practical Implications

Based on the findings of this study, business education in Malaysia, particularly on online business, should conduct seminars and workshops incorporating the theoretical and empirical findings from the research in their programmes. They can emphasize the skills, characteristics and knowledge that successful online entrepreneurs must have in order to combat the constantly changing and demanding environment. Universities or other agents, like the Small and Medium Industries Development Corporation (SMIDEC), the Malaysian Franchise Association (MFA), etc., should identify individuals with the necessary EO characteristics at an early stage to provide the necessary support to groom them into successful entrepreneurs before they embark into online businesses. Furthermore, the main function of university should be to groom the students from entrepreneurship subjects and have the syllabi preserve and convey knowledge and skills including the EO. This function could be achieved through the implementation of an entrepreneurship-oriented teaching mode, whereby students are actively encouraged to express their EO via role play or simulation. Through this teaching mode, entrepreneurship education, specifically on online business, could be integrated into the whole teaching design on demand, including the teaching of theory, online business interactions with students, online business competition, online business training and teaching evaluation, to cultivate the EO qualities of entrepreneurs as a basic teaching goal.

5.3. Limitations and Future Research

The limitations of this study are the selection of the study's respondents, from organizations that are registered with CCM only. Even though all necessary efforts were taken to obtain the list of registered organizations from other certification bodies, it was not possible to get the information due to privacy issues. This was due to business strategy and customers' confidential policies. Other established certification bodies do not reveal their customers' status and information, thus making it impossible to access companies' information to form the study population. Therefore, the generalization of results to other alternate settings or organizations not registered under CCM may be not applicable.

Despite its limitations, this study can be extended to further understand the development of EO in the online business sector. First, future research can replicate this study in a wider scope by adding more variables to better comprehend the development of e-business in Malaysia. Furthermore, among all the variables tested in the research model of the current study, the analysis showed that the effect of EO on organizational performance yielded the largest result. Hence, factors contributing to the effect of EO on organizational performance should be investigated in a more holistic approach, by integrating other factors, such as at the individual level, since the current study focused on the organizational level. Additionally, future research should focus on other variables that can strengthen the effect of EO on organizational performance. The findings from this study can be used to inform an extension of this study with the same variables to examine the relationship between KMP and other sectors (i.e., accounting practices). Such a study will be valuable to management practices by investigating the comparisons between management accounting and KMP in terms of their contribution to improving organizational performance. By extending the context of KMP to include other sectors, it is believed that new studies will benefit practicing communities by drawing on the results to engage their specific needs. Furthermore, results emerging from future comparative researches that empirically study the mediation effect of KMP in different contexts or specific business sectors will enhance the ability of practicing communities to sustain an improved organizational performance.

6. Conclusions

This study has achieved its objective by proving the mediating role of KMP in the relationship between the EO and OP of Malaysian online businesses. Data were collected from 350 owners/founder of online businesses in Malaysia and analysed using PLS-SEM. This model incorporated EO, KMP and OP as a standard in Malaysian online businesses. Specifically, the results indicate that EO has a significant effect on KMP, which in turn significantly impacts the OP of online businesses in Malaysia. Besides, the indirect effect analysis revealed that KMP acts as a mediator between EO and OP for Malaysian online businesses. The current findings of this study provide evidence that an effective KMP leads to better decision-making skills, methods and practices, thus achieving a better performance. In addition, it is envisioned that the owners or founders of online businesses can utilize these findings as the basis of their decision-making process regarding the most appropriate motivational techniques to be implemented in their organization, to spur their business performance. Thus, this approach will motivate employees to improve their attitudes towards the implementation of KMP to foster better decision-making skills, methods and practices within their respective organizations, and thus achieve business success.

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References

1. Department of Statistics, Malaysia (Ed.) *E-Commerce Statistics Malaysia*; Wilayah Persekutuan Putrajaya: Putrajaya, Malaysia, 2019.
2. Adam, S.; Ramliy, M.K.; Chin, T.A.; Mas'od, A.; Muharam, F.M. Entrepreneurial orientation and organizational performance of e-business in Malaysia: The moderating role of external environment. *Adv. Int. J. Bus. Entrep. SME's* **2019**, *1*, 1–17. [CrossRef]
3. Abd Aziz, N.A.; Hanafiah, M.H.; Abd Hamid, H.; Isa, R.M. Survival of Franchising Firm: A Study of Self-Service Laundry Franchisor. *Int. J. Entrep.* **2019**, *23*, 1–6.
4. Abd Aziz, N.A.; Hanafiah, M.H.; Abd Latif, M.N. Supply chain management in franchising literature review: Synthesis of conclusion. *LogForum* **2020**, *16*, 521–534.
5. Abd Aziz, N.A.; Ramdan, M.R.; Nik Hussin, N.S.; Abdul Aziz, Z.; Osman, J.; Hasbollah, H.R. The Determinants of Global Expansion: A Study on Food and Beverage Franchisors in Malaysia. *Sustainability* **2021**, *13*, 10328. [CrossRef]
6. Abd Aziz, N.A.; Hanafiah, M.H.; Hussin, N.S.N.; Latif, M.N.A.; Aziz, Z.A. Franchising Relationship: Malaysian Franchisees' Perspectives. In Proceedings of the International Conference on Business and Technology, Istanbul, Turkey, 14–15 November 2020; Springer: Berlin/Heidelberg, Germany, 2020; pp. 317–335.
7. Farooq, R.; Vij, S. Linking entrepreneurial orientation and business performance: Mediating role of knowledge management orientation. *Pac. Bus. Rev. Int.* **2018**, *10*, 174–183.
8. Kumar, S.; Paray, Z.A.; Dwivedi, A.K. Student's entrepreneurial orientation and intentions: A study across gender, academic background, and regions. *High. Educ. Ski. Work. Based Learn.* **2020**, *11*, 78–91. [CrossRef]
9. do Adro, F.; Fernandes, C.I.; Veiga, P.M.; Kraus, S. Social entrepreneurship orientation and performance in non-profit organizations. *Int. Entrep. Manag. J.* **2021**, *17*, 1591–1618. [CrossRef]
10. Ibarra-Cisneros, M.-A.; Hernandez-Perlines, F. Entrepreneurial orientation, absorptive capacity and business performance in SMEs. *Meas. Bus. Excell.* **2019**, *24*, 417–429. [CrossRef]
11. Fatima, T.; Bilal, A.R. Achieving SME performance through individual entrepreneurial orientation: An active social networking perspective. *J. Entrep. Emerg. Econ.* **2019**, *12*, 399–411. [CrossRef]

12. Lumpkin, G.; Pidduck, R.J. Global entrepreneurial orientation (GEO): An updated, multidimensional view of EO. In *Entrepreneurial Orientation: Epistemological, Theoretical, and Empirical Perspectives*; Emerald Publishing Limited: West Yorkshire, UK, 2021; pp. 17–68.
13. Mizintseva, M.; Gerbina, T. Knowledge management: A tool for implementing the digital economy. *Sci. Technol. Inf. Process.* **2018**, *45*, 40–48. [CrossRef]
14. Almunawar, M.N.; Islam, M.Z.; de Pablos, P.O. *Digitalisation and Organisation Design: Knowledge Management in the Asian Digital Economy*; Routledge: London, UK, 2022.
15. Delshab, V.; Pyun, D.Y.; Kerwin, S.; Cegarra-Navarro, J.-G. The impact of unlearning context on organizational performance through knowledge management: A case of community sport clubs in Iran. *Sport Manag. Rev.* **2021**, *24*, 156–178. [CrossRef]
16. Sumbal, M.S.; Tsui, E.; See-to, E.W. Interrelationship between big data and knowledge management: An exploratory study in the oil and gas sector. *J. Knowl. Manag.* **2017**, *21*, 180–196. [CrossRef]
17. Covin, J.G.; Lumpkin, G.T. Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrep. Theory Pract.* **2011**, *35*, 855–872. [CrossRef]
18. Mantok, S.; Sekhon, H.; Sahi, G.K.; Jones, P. Entrepreneurial orientation and the mediating role of organisational learning amongst Indian S-SMEs. *J. Small Bus. Enterp. Dev.* **2019**, *26*, 641–660. [CrossRef]
19. Vaitoonkiat, E.; Charoensukmongkol, P. Interaction effect of entrepreneurial orientation and stakeholder orientation on the business performance of firms in the steel fabrication industry in Thailand. *J. Entrep. Emerg. Econ.* **2020**, *12*, 453–473. [CrossRef]
20. Wales, W.J.; Kraus, S.; Filser, M.; Stöckmann, C.; Covin, J.G. The status quo of research on entrepreneurial orientation: Conversational landmarks and theoretical scaffolding. *J. Bus. Res.* **2021**, *128*, 564–577. [CrossRef]
21. Matin, E.K.; Nakhchian, A.; Kashani, B.H. Effect of employees' entrepreneurial orientations on knowledge management in small and medium enterprises in Iran. *J. Basic Appl. Sci. Res.* **2013**, *3*, 608–617.
22. Rofiaty, R. The relational model of entrepreneurship and knowledge management toward innovation, strategy implementation and improving Islamic boarding school performance. *J. Model. Manag.* **2019**, *14*, 662–685. [CrossRef]
23. Nawaz, M.S.; Shaukat, S. Impact of knowledge management practices on firm performance: Testing the mediation role of innovation in the manufacturing sector of Pakistan. *Pak. J. Commer. Soc. Sci.* **2014**, *8*, 99–111.
24. Madhoushi, M.; Sadati, A.; Delavari, H.; Mehdivand, M.; Mihandost, R. Entrepreneurial orientation and innovation performance: The mediating role of knowledge management. *Asian J. Bus. Manag.* **2011**, *3*, 310–316.
25. Nonaka, I.; Byosiere, P.; Borucki, C.C.; Konno, N. Organizational knowledge creation theory: A first comprehensive test. *Int. Bus. Rev.* **1994**, *3*, 337–351. [CrossRef]
26. Zheng, W.; Yang, B.; McLean, G.N. Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *J. Bus. Res.* **2010**, *63*, 763–771. [CrossRef]
27. Alkhazali, Z.; Bakar, R.; Halim, M.A. The role of knowledge management and entrepreneurial orientation on organizational performance among commercial banks in Jordan. *Int. J. Acad. Res. Bus. Soc. Sci.* **2017**, *7*, 928–936. [CrossRef]
28. Tajeddini, K.; Martin, E.; Ali, A. Enhancing hospitality business performance: The role of entrepreneurial orientation and networking ties in a dynamic environment. *Int. J. Hosp. Manag.* **2020**, *90*, 102605. [CrossRef]
29. Wales, W.J. Entrepreneurial orientation: A review and synthesis of promising research directions. *Int. Small Bus. J.* **2016**, *34*, 3–15. [CrossRef]
30. Narayanan, V. Theorizing on entrepreneurial orientation in international business: A synthetic review. *Int. Entrep. Rev.* **2017**, *3*, 9–23. [CrossRef]
31. Soares, M.d.C.; Perin, M.G. Entrepreneurial orientation and firm performance: An updated meta-analysis. *RAUSP Manag. J.* **2020**, *55*, 143–159. [CrossRef]
32. Omar, N.A.; Aris, H.M.; Nazri, M.A. The effect of entrepreneurial orientation, innovation capability and knowledge creation on firm performance: A perspective on small scale entrepreneurs. *J. Pengur.* **2016**, *48*, 187–200. [CrossRef]
33. Covin, J.G.; Miller, D. International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. *Entrep. Theory. Pract.* **2014**, *38*, 11–44. [CrossRef]
34. Kadam, R.; Rao, S.; Abdul, W.K.; Jabeen, S.S. Impact of cultural intelligence on SME performance: The mediating effect of entrepreneurial orientation. *J. Organ. Eff. People Perform.* **2019**, *6*, 161–181. [CrossRef]
35. Wales, W.J.; Covin, J.G.; Monsen, E. Entrepreneurial orientation: The necessity of a multilevel conceptualization. *Strateg. Entrep. J.* **2020**, *14*, 639–660. [CrossRef]
36. Hughes, M.; Morgan, R.E. Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Ind. Mark. Manag.* **2007**, *36*, 651–661. [CrossRef]
37. Sardi, A.; Sorano, E.; Ferraris, A.; Garengo, P. Evolutionary paths of performance measurement and management system: The longitudinal case study of a leading SME. *Meas. Bus. Excell.* **2020**, *24*, 495–510. [CrossRef]
38. de Waal, A. The high performance organization: Proposed definition and measurement of its performance. *Meas. Bus. Excell.* **2021**, *25*, 300–314. [CrossRef]
39. Lu, C.-M.; Chen, S.-J.; Huang, P.-C.; Chien, J.-C. Effect of diversity on human resource management and organizational performance. *J. Bus. Res.* **2015**, *68*, 857–861. [CrossRef]
40. Kruja, A. Entrepreneurial orientation, synergy and firm performance in the agribusiness context: An emerging market economy perspective. *Cent. Eur. Bus. Rev.* **2020**, *9*, 56–75. [CrossRef]

41. Adamu, G.A.; Musa, S.L. Effect of Entrepreneurial Orientation on Business Performance in Small And Medium Scale Enterprises in Adamawa State. *Fudma J. Manag. Sci.* **2021**, *3*, 178–192.
42. Hernández-Perlines, F.; Covin, J.G.; Ribeiro-Soriano, D.E. Entrepreneurial orientation, concern for socioemotional wealth preservation, and family firm performance. *J. Bus. Res* **2021**, *126*, 197–208. [CrossRef]
43. Khamis, N.; Sulaiman, A.; Mohezar, S. Achieving e-Business Excellence through Knowledge Management and Organizational Learning Capabilities: A Malaysian Perspective. *Int. J. Econs. Mgmt.* **2014**, *8*, 343–364.
44. Maditinos, D.; Chatzoudes, D.; Sarigiannidis, L. Factors affecting e-business successful implementation. *Int. J. Commer. Manag.* **2014**, *24*, 300–320. [CrossRef]
45. Zabukovšek, S.S.; Šišovska, I.; Mravljak, M.; Bobek, S. E-business in micro companies: Lessons learned/e-poslovanje v mikro podjetjih–nova spoznanja. *Naše Gospod. Our Econ.* **2015**, *61*, 15–23. [CrossRef]
46. Razali, M.N.; Lee, J.; Zainuddin, A.Z.; Yunus, N.M. Development of knowledge management strategies for property management companies in Malaysia. *J. Technol. Manag. Bus* **2016**, *3*, 1–29.
47. Ishamudin, M. The Mediating Effect of Process-Based Management on the Relationship between Knowledge Quality, Knowledge Sharing, Self-Efficacy and Quality Management System Maintenance. Ph.D. Thesis, Universiti Teknologi Malaysia, Skudai, Malaysia, 2016.
48. Gold, A.H.; Malhotra, A.; Segars, A.H. Knowledge management: An organizational capabilities perspective. *J. Manag. Inf. Syst.* **2001**, *18*, 185–214. [CrossRef]
49. Teixeira, E.K.; Oliveira, M.; Curado, C.M.M. Knowledge management process arrangements and their impact on innovation. *Bus. Inf. Rev.* **2018**, *35*, 29–38. [CrossRef]
50. Azan, W.; Bootz, J.-P.; Rolland, O. Community of practices, knowledge transfer, and ERP project (ERPP). *Knowl. Manag. Res. Pract.* **2017**, *15*, 238–256. [CrossRef]
51. Shahzadi, A.; Li, S.; Sahibzada, U.F.; Malik, M.; Khalid, R.; Afshan, G. The dynamic relationship of knowledge management processes and project success: Modeling the mediating role of knowledge worker satisfaction. *Bus. Process Manag. J.* **2021**, *27*, 1657–1676. [CrossRef]
52. Mahrinasari, M.; Hussain, S.; Yapanto, L.M.; Esquivel-Infantes, S.M.; Untari, D.T.; Yusriadi, Y.; Diah, A. The impact of decision-making models and knowledge management practices on performance. *Acad. Strateg. Manag. J.* **2021**, *20*, 1–13.
53. Hoopes, D.G.; Madsen, T.L.; Walker, G. Guest editors' introduction to the special issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strateg. Manag. J.* **2003**, *24*, 889–902. [CrossRef]
54. Safari, A.; Saleh, A.S. Key determinants of SMEs' export performance: A resource-based view and contingency theory approach using potential mediators. *J. Bus. Ind. Mark.* **2020**, *35*, 635–654. [CrossRef]
55. Barney, J.B.; Clark, D.N. *Resource-Based Theory: Creating and Sustaining Competitive Advantage*; Oxford University Press: New York, NY, USA, 2007.
56. Shaw, S.; Grant, D.B.; Mangan, J. A supply chain practice-based view of enablers, inhibitors and benefits for environmental supply chain performance measurement. *Prod. Plan. Control.* **2021**, *32*, 382–396. [CrossRef]
57. Do, H.; Budhwar, P.; Shipton, H.; Nguyen, H.-D.; Nguyen, B. Building organizational resilience, innovation through resource-based management initiatives, organizational learning and environmental dynamism. *J. Bus. Res.* **2022**, *141*, 808–821. [CrossRef]
58. Nasution, M.D.T.P.; Rafiki, A.; Lubis, A.; Rossanty, Y. Entrepreneurial orientation, knowledge management, dynamic capabilities towards e-commerce adoption of SMEs in Indonesia. *J. Sci. Technol. Policy Manag.* **2021**, *12*, 256–282. [CrossRef]
59. Ariely, G. Knowledge Management as A Methodology towards Intellectual Capital. In Proceedings of the 3rd European Knowledge Management Summer School, San Sebastian, Spain, 7–12 September 2003; Coventry University: San Sebastian, Spain, 2004; pp. 1–7.
60. Hoskisson, R.E.; Wan, W.P.; Yiu, D.; Hitt, M.A. Theory and research in strategic management: Swings of a pendulum. *J. Manag.* **1999**, *25*, 417–456. [CrossRef]
61. Pereira, V.; Bamel, U. Extending the resource and knowledge based view: A critical analysis into its theoretical evolution and future research directions. *J. Bus. Res.* **2021**, *132*, 557–570. [CrossRef]
62. Wright, R.W. *The Competitive Advantage of Knowledge-Based Resources in the Semiconductor Industry*; Routledge: New York, NY, USA, 2021.
63. Curado, C.; Bontis, N. The knowledge-based view of the firm and its theoretical precursor. *Int. J. Learn. Intellect. Cap.* **2006**, *3*, 367–381. [CrossRef]
64. Coates, T.T.; McDermott, C.M. An exploratory analysis of new competencies: A resource based view perspective. *J. Oper. Manag.* **2002**, *20*, 435–450. [CrossRef]
65. Sirmon, D.G.; Hitt, M.A.; Ireland, R.D. Managing firm resources in dynamic environments to create value: Looking inside the black box. *Acad. Manag. Rev.* **2007**, *32*, 273–292. [CrossRef]
66. Upadhyay, S.; Weech-Maldonado, R.; Lemak, C.H.; Stephenson, A.; Mehta, T.; Smith, D.G. Resource-based view on safety culture's influence on hospital performance: The moderating role of electronic health record implementation. *Health Care Manag. Rev.* **2020**, *45*, 207–216. [CrossRef]
67. Hussinki, H.; Kianto, A.; Vanhala, M.; Ritala, P. Assessing the universality of knowledge management practices. *J. Knowl. Manag.* **2017**, *22*, 1596–1621. [CrossRef]
68. Ulrich, D.; Smallwood, N. Capitalizing on capabilities. *Harv. Bus. Rev.* **2004**, *82*, 119–127, 138.

69. Wach, K.; Głodowska, A.; Maciejewski, M. Entrepreneurial orientation, knowledge utilization and internationalization of firms. *Sustainability* **2018**, *10*, 4711. [CrossRef]
70. Adam, S.; Mahadi, B.; Rahman, A. The effect of entrepreneurial orientation towards organizational performance of E-Business in Malaysia. *Int. J. Entrep. Manag. Pract.* **2018**, *1*, 12–21.
71. Adam, S.; Mahadi, B.; Panatik, S.A.; Rahman, A. The mediating role of knowledge management in e-Business in Malaysia. *Asia Pac. Manag. Account. J.* **2018**, *13*, 1–25.
72. Hormiga, E.; de Saá-Pérez, P.; Díaz-Díaz, N.L.; Ballesteros-Rodríguez, J.L.; Aguiar-Diaz, I. The influence of entrepreneurial orientation on the performance of academic research groups: The mediating role of knowledge sharing. *J. Technol. Transf.* **2017**, *42*, 10–32. [CrossRef]
73. Jiang, F.; Wang, G.; Jiang, X. Entrepreneurial orientation and organizational knowledge creation: A configurational approach. *Asia Pac. J. Manag.* **2019**, *36*, 1193–1219. [CrossRef]
74. Desouza, K.; Paquette, S. *Knowledge Management: An Introduction*; Neal-Schuman Publishers, Inc.: New York, NY, USA, 2011.
75. Gupta, V.K.; Moesel, D. The Impact of Entrepreneurial Orientation on Knowledge Management in Strategic Alliances: Evidence from High-Technology SMEs. In Proceedings of the Annual USASBE Conference, Orlando, FL, USA, 11–14 January 2007; Citeseer: Princetone, NJ, USA, 2007.
76. Lumpkin, G.T.; Dess, G.G. Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad. Manag. Rev.* **1996**, *21*, 135–172. [CrossRef]
77. Omotayo, F.O. Knowledge Management as an important tool in Organisational Management: A Review of Literature. *Libr. Philos. Pract.* **2015**, *1*, 1–23.
78. Severo, E.A.; de Guimarães, J.C.F.; Dorion, E.C.H. Cleaner production, social responsibility and eco-innovation: Generations' perception for a sustainable future. *J. Clean. Prod.* **2018**, *186*, 91–103. [CrossRef]
79. Ali, R.A.; Irfan, M.; Ali, M.H.; Shahbaz, Q. An Empirical Study to Investigate the Effect of Knowledge Management Practices on Organizational Performance through the Mediation and Moderation Mechanisms. *J. Soc. Sci. Humanit.* **2022**, *2*, 1–14.
80. Liu, S.; Deng, Z. Understanding knowledge management capability in business process outsourcing: A cluster analysis. *Manag. Decis.* **2015**, *53*, 124–138. [CrossRef]
81. Kimaiyo, I.; Kapkiyai, C.; Sang, J.C. Effect of knowledge management on firm performance in commercial banks in Nakuru, Eldoret and Kisumu. *Eur. J. Manag. Bus. Econ.* **2015**, *7*, 207–216.
82. Jyoti, J.; Rani, A. High performance work system and organisational performance: Role of knowledge management. *Pers. Rev.* **2017**, *46*, 1770–1795. [CrossRef]
83. Abu Bakar, H.; Mahmood, R.; Ismail, N.N.H. Combined effect of knowledge management and entrepreneurial orientation on performance of small and medium enterprises. In Proceedings of the Knowledge Management International Conference (KMICe), Langkawi, Malaysia, 12–15 August 2014; pp. 554–560.
84. Mageswari, S.U. Knowledge Management Practices and Organisational Performance in Manufacturing Companies. *Resource* **2020**, *82*, 8201–8212.
85. Obeidat, B.Y.; Al-Suradi, M.M.; Tarhini, A. The impact of knowledge management on innovation: An empirical study on Jordanian consultancy firms. *Manag. Res. Rev.* **2016**, *39*, 1214–1238. [CrossRef]
86. Rehman, U.U.; Iqbal, A. Nexus of knowledge-oriented leadership, knowledge management, innovation and organizational performance in higher education. *Bus. Process. Manag. J.* **2020**, *26*, 1731–1758. [CrossRef]
87. Bosua, R.; Venkitachalam, K. Aligning strategies and processes in knowledge management: A framework. *J. Knowl. Manag.* **2013**, *17*, 331–346. [CrossRef]
88. Teece, D.J.; Pisano, G.; Shuen, A. Dynamic capabilities and strategic management. *Strateg. Manag. J.* **1997**, *18*, 509–533. [CrossRef]
89. Kamhawi, E.M. Knowledge management fishbone: A standard framework of organizational enablers. *J. Knowl. Manag.* **2012**, *16*, 808–828. [CrossRef]
90. Njoroge, M.; Anderson, W.; Mossberg, L.; Mbura, O. Entrepreneurial orientation in the hospitality industry: Evidence from Tanzania. *J. Entrep. Emerg. Econ.* **2020**, *12*, 523–543. [CrossRef]
91. Hunt, S.D.; Arnett, D.B. Does marketing success lead to market success? *J. Bus. Res.* **2006**, *59*, 820–828. [CrossRef]
92. Aldi Rizkyan, S. The effect of knowledge management and entrepreneurial orientation towards organizational performance in small and medium enterprises (study on maritime business in Jakarta and Bandung). *J. Ilm. Maha. FEB* **2020**, *8*, 1–8.
93. Wang, D.H.-M.; Huynh, Q.L. Mediating role of knowledge management in effect of management accounting practices on firm performance. *J. Knowl. Manag. Econ. Inf. Technol.* **2013**, *3*, 1–25.
94. Naqshbandi, M.M.; Jasimuddin, S.M. Knowledge-oriented leadership and open innovation: Role of knowledge management capability in France-based multinationals. *Int. Bus. Rev.* **2018**, *27*, 701–713. [CrossRef]
95. ALhawamdeh, M.A. The role of knowledge management in building e-business strategy. *Organization* **2007**, *9*, 2–6.
96. Kavalić, M.; Nikolić, M.; Radosav, D.; Stanisavljev, S.; Pečujlija, M. Influencing factors on knowledge management for organizational sustainability. *Sustainability* **2021**, *13*, 1497. [CrossRef]
97. Suhaimee, S.; Abu Bakar, A.Z.; Alias, R.A. Knowledge Sharing Culture in Malaysian Public Institution of Higher Education: An Overview. In Proceedings of the Postgraduate Annual Research Seminar 2006, Skudai, Malaysia, 24–25 May 2006; Universiti Teknologi Malaysia: Skudai, Johor, Malaysia, 2006; pp. 354–359.

98. Chua, J.; Eze, U.; Goh, G. Knowledge Sharing and Total Quality Management: A Conceptual Framework. In Proceedings of the 2010 IEEE International Conference on Industrial Engineering and Engineering Management, Macao, China, 10 December 2010; IEEE: Macao, China, 2010; pp. 1107–1111.
99. Hamoud, M.; Akour, M.; Al-Salti, Z. Developing the main knowledge management process via social media in the IT organisations: A conceptual perspective. *Int. J. Bus. Adm.* **2016**, *7*, 49–64.
100. Faul, F.; Erdfelder, E.; Lang, A.-G.; Buchner, A. G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav. Res. Methods.* **2007**, *39*, 175–191. [CrossRef]
101. Lumpkin, G.T.; Cogliser, C.C.; Schneider, D.R. Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrep. Theory. Pract.* **2009**, *33*, 47–69. [CrossRef]
102. Ramayah, T.; Samat, N.; Lo, M.C. Market orientation, service quality and organizational performance in service organizations in Malaysia. *Asia-Pac. J. Bus. Adm.* **2011**, *3*, 8–27. [CrossRef]
103. Arshad, A.S. *Leadership Styles, Entrepreneurial Orientation and Business Performance of Technology-Based Small Medium Enterprises in Malaysia*; Universiti Teknologi Malaysia: Skudai, Malaysia, 2016.
104. Ramdan, M.R.; Abd Aziz, N.A.; Abdullah, N.L.; Samsudin, N.; Singh, G.S.V.; Zakaria, T.; Fuzi, N.M.; Ong, S.Y.Y. SMEs Performance in Malaysia: The Role of Contextual Ambidexterity in Innovation Culture and Performance. *Sustainability* **2022**, *14*, 1679. [CrossRef]
105. Cavana, R.; Delahaye, B.; Sekeran, U. *Applied Business Research: Qualitative and Quantitative Methods*; John Wiley & Sons: Hoboken, NJ, USA, 2001.
106. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Tatham, R.L. *Multivariate Data Analysis*, 7th ed.; Pearson Education Limited: London, UK, 2014.
107. Fuzi, N.M.; Habidin, N.F.; Janudin, S.E.; Ong, S.Y.Y. Critical success factors of environmental management accounting practices: Findings from Malaysian manufacturing industry. *Meas. Bus. Excell.* **2019**, *23*, 1–14. [CrossRef]
108. Ringle, C.M.; Wende, S.; Becker, J.-M. SmartPLS 3. Available online: www.smartpls.com (accessed on 10 December 2021).
109. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis: A Global Perspective*, 7th ed.; Pearson Education Inc.: Upper Saddle River, NJ, USA, 2010.
110. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; SAGE Publications: Thousand Oaks, CA, USA, 2014.
111. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]
112. Kline, R.B. *Principles and Practice of Structural Equation Modeling*, 4th ed.; Guilford publications: New York, NY, USA, 2015.
113. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.-Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [CrossRef] [PubMed]
114. Richard, P.J.; Devinney, T.M.; Yip, G.S.; Johnson, G. Measuring organizational performance: Towards methodological best practice. *J. Manag.* **2009**, *35*, 718–804. [CrossRef]
115. Dess, G.G.; Robinson Jr, R.B. Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strateg. Manag. J.* **1984**, *5*, 265–273. [CrossRef]
116. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed.; Sage publications: Thousand Oaks, CA, USA, 2017.
117. Ramayah, T.; Cheah, J.; Chuah, F.; Ting, H.; Memon, M.A. *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using smartPLS 3.0*; Pearson: Kuala Lumpur, Malaysia, 2018.
118. Hayes, A.F.; Preacher, K.J. Statistical mediation analysis with a multicategorical independent variable. *Br. J. Math. Stat. Psychol.* **2014**, *67*, 451–470. [CrossRef]
119. Hair, J.F.; Howard, M.C.; Nitzl, C. Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *J. Bus. Res.* **2020**, *109*, 101–110. [CrossRef]
120. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences New Jersey Lawrence Erlbaum Associates*; Publishers Inc.: New York, NY, USA, 1988.
121. Centobelli, P.; Cerchione, R.; Esposito, E. Measuring the use of knowledge management systems in supply firms. *Meas. Bus. Excell.* **2019**, *23*, 426–441. [CrossRef]
122. Miller, K.D. Knowledge inventories and managerial myopia. *Strateg. Manag. J.* **2002**, *23*, 689–706. [CrossRef]