

The Impact of E-banking Entrepreneurship Orientation Drivers on Sustainable Performance: A Case Study of Banks Operating in Kingdom Saudi Arabia

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ABSTRACT

Saudi Arabia's vision for 2030 strives to increase the contribution of SMEs in the national economy from 20% to 35% and reduce the unemployment rate from 11.6% to 7%. To achieve this, the Kingdom relies on the vital role of banks to support entrepreneurial projects. This opportunity raised the competition among the different banks operating in Saudi Arabia to attract more customers and gain significant share market through being more pro-active and innovative and ready to risk-taking regarding e-services. This study aims to measure the impact of e-banking entrepreneurship orientation drivers on a bank's sustainable performance. A questionnaire has been developed to test the different hypotheses, and 607 responses have been collected and analyzed. The results show high awareness regarding the drivers supporting e-banking entrepreneurial orientation, especially the human capital. On the other hand, the results show the significant positive impact of e-banking entrepreneurial orientation on the sustainable performance dimensions, namely, environmental, ethical, and social performance.

Keywords: entrepreneurial orientation drivers, e-banking entrepreneurial orientation, sustainable performance

A. INTRODUCTION

E-banking entrepreneurship orientation and sustainable practices and performance in the banking sector have been paid increased attention, especially after the introduction of the ambitious Saudi vision 2030. This latest strives to increase the contribution of SMEs in the national economy from 20% to 35% and reduce the unemployment rate from 11.6% to 7%. To achieve this, the Kingdom relies on the vital role of banks to support entrepreneurial projects on one hand, and to reinforce sustainable practices on the other hand. Nowadays, to ensure survival and growth in this increasingly uncertain competitive environment, banks can use E-entrepreneurial orientation as a strategic weapon through building three pillars on which should be based the competitive strategy, namely, the ability of innovation, pro-activeness, and the ability to risk-taking (Al-Omouh, 2020).

Banks operating in Kingdom of Saudi Arabia (KSA) are distinguishably willing to the importance of entrepreneurship orientation for e-services and products. For instance, Rajhi Bank's five-year strategy is built on developing new capabilities to ensure sustainable performance amidst a changing environment as well as leveraging Saudi vision goals through establishing a thriving financial system. To achieve this, Rajhi bank strategy is highly focused on cost-efficient technological improvements and operations' sustainability to be known as "The Bank of the Future". Based on this strategy, Rajhi banks aims to be the best in class in digital services and sustainable practices through smartly expanding the channels, digitizing customers' journeys, migrating customers to self-service channels, and providing innovative payment methods (Rajhi Annual Report, 2019).

The notion of e-entrepreneurship oriented-banks involves practices related to innovation in digital services and products, as well as proactive and risk-taking capabilities (K. S. Al-Omouh, 2020). In the same context, banks' sustainable performance relates to the banks' ability to consider environmental, ethical, and social issues (Al-Hariri, 2020). Many studies, either in developed or developing countries, have been conducted on sustainable banking practices adoption (Lehner, 2016; Carè, 2018; Kumar & Prakash, 2019). However, research on e-entrepreneurship drivers as pre-requisites and important success criteria for e-entrepreneurship orientation, as well as their influence on banks' long-term performance in Saudi Arabia, are scarce.

Based on the above discussion, the research question could be crystallized as follow: To what extent banks operating in KSA have required drivers to enhance e-banking Orientation, and how does this latest influence the sustainable performance dimensions? To answer this research question, this paper is structured as follows: First, a theoretical framework to develop a research model and hypotheses has been presented. Second, the research methodology has been exposed. Then, data analysis based on reliability and validity as well as hypotheses testing has been examined. Finally, results discussions have been provided.

This study presents many practical implications: first, it provides banks' managers a clear understanding of the status quo of divers devoted to leveraging e-entrepreneurship orientation in banks operating in KSA. Also, the research reflects the shortcomings in adopting e-entrepreneurship orientation in banks, namely, innovativeness, pro-activeness and risk-taking. Finally, the research presents a first study dealing with the maturity of sustainable performance and its relationship with e-entrepreneurship orientation in banks operating in KSA.

B. LITERATURE REVIEW

Enhancing E-Banking Entrepreneurship Orientation Through EO Drivers

There is an assumption stipulating that firms with entrepreneurial orientation (EO) differ from other types of firms. EO has been regarded as a building block of a firm seeking success under a dynamic and uncertain environment (Niemand et al., 2017). According to (Mintzberg, 1973; Kreiser et al., 2002), firms entrepreneurially oriented tend to take risks more than their rivals and proactively search for novel opportunities. In the same context, (Miller & Friesen, 1983) emphasize the fact product-market strategies for entrepreneurial-oriented firms are built on the high level of innovation. The literature review shows that the maturity of entrepreneurial orientation depends on the exhibition level of each firm regarding the three sub-dimensions previously mentioned, namely, innovation, pro-activeness and risk-taking.

Entrepreneurship orientation drivers, e-business and sustainable performance are still attracting both scholars and professionals since the advancement in technological solutions could provide a sustainable competitive advantage for those companies dealing with fast-changing environments and customers appreciating innovative products and services (Zupic, 2014; Al-Omoush, 2020). Some research, such as Al-Omoush (2019) investigated the impact of e-banking entrepreneurship drivers on three dimensions of performance for banks operating in Jordan, namely (competitiveness, financial performance and customer services) through the mediating role of e-entrepreneurship orientation. Halberstadt et al. (2021) investigated the impact of social entrepreneurship orientation on start-ups and established firms and analyzed the consequences of heterogeneity in firms' characteristics using multi-group structural equation modeling and fsQCA as methods of comparison. Other researchers, such as Ahmad et al. (2021) showed the multi-applicability of entrepreneurship orientation in different fields, such as spiritual marketing to ensure sustainable competitive advantage. Nasution et al. (2021) examined the dimensions of entrepreneurial orientation (EO), knowledge management process (KMP) and dynamic capability (DC) toward the adoption of e-commerce of SME's.

Many previous studies investigated the companies' maturity level of entrepreneurship orientation practices, namely, the maturity of innovation, pro-activeness and risk-taking practices (Miller & Friesen, 1982; Scheepers & Hough, 2017; Reuber & Fischer, 2011; Al-Swidi & Al-Hosam, 2012; Al-Omoush, 2019; Al-Hariri, 2020). There is a unanimity about these three dimensions of entrepreneurship orientation for the e-business or traditional business.

According to the first sub-dimension, namely, innovation, Schumpeter (1934) was the first researcher who argued that innovation is the fundamental undertaking of entrepreneurial firms (Kreizer et al, 2002). Innovation refers to the capability of generating and applying new ideas on products and services and process and market, and business model (Kreiser et al., 2002; Scheepers & Hough, 2017; Al-Omouh, 2019). For the bank's sector, the creation and provision of new e-services as well as the use of progressing IT features to manage transactions present the new strategic weapon to succeed competition (Nissen & von Rennenkampff, 2017).

The second sub-dimension, namely, pro-activeness, it refers to the firm's ability to behave proactively regarding its rivals (Porter, 1997). For pro-activeness has two main attributes (Knight GA, 1997; Lumpkin & Dess, 2001; Stevenson & Jarillo, 2007; Kreiser et al., 2002): (1) aggressiveness in terms of behaving towards competitors, and (2) keeping pace with pursuing novel business opportunities. For, pro-active firms are (Lumpkin & Dess, 2001) (1) opportunity-seeker, (2) forward-looking perspective involving introducing new products or services ahead of rivals and have the ability to anticipate future demand to shape the environment. For banks sector, the attribute of pro-activeness allows banks to elaborate aggressive strategies based on forward-looking and detection of new e-business and services opportunities to stay ahead of other banks (Nissen & von Rennenkampff, 2017).

In the same context, and like all other sectors, banks could be more proactive than rivals by being more willing to introduce new e-services (Wang & Chiu, 2015; Matejun, 2016; Al-Omouh, 2021). The third sub-dimension of entrepreneurship orientation, namely risk-taking, refers to the willingness of firms to engage in estimated risky business (Brockhaus, 1980; Scheepers & Hough, 2017; Kreiser et al., 2002). Risk-taking involves the allocation of resources to support new innovative projects within an uncertain environment and unclear results (Miller, 1983; Kim et al., 2015). For the banking sector, risk-taking reflects the ability of banks to develop new e-products and services that could be associated with risk and failure because of the changing technology solutions and business operations (Al-Omouh, 2021).

Top Management Support and E-Banking Entrepreneurship Orientation

The literature review shows the importance of top management support (TPS) as a key factor for change management to succeed in the implementation of any innovative projects and improvement (Madininos et al., 2014). The previous studies emphasized the crucial role of decision-makers to succeed in the adoption of IT solutions through the allocation of necessary resources, namely financial, human and material resources, as well as delegating authority to the appropriate people to ensure the well-direction of initiatives (Al-Omouh, 2020). The top

management influences organization's innovativeness in two ways: (1) when the leaders and managers are, themselves, innovators, this will make them adopt exploration orientation and a continuous search for new ideas (Wang & Dass, 2017); (2) the second level of top management support could be through, first, recognizing the need for innovation as a strategic tool of competitiveness, and then, deploying the required resources and the appropriate environment to enhance ideas generating and implementation (Reuber & Fischer, 2011; Niemand et al., 2017). Based on the above discussion, the first study hypothesis could be crystallized as follow:
H_{a1}: Top management support strongly enhances e-banking entrepreneurship orientation for banks operating in KSA.

Technological Environment and E-Banking Entrepreneurship Orientation

Technological environment refers to the internal and external technical resources and practices of a firm (Oliveira, 2011). The success of any strategy, either based on cost reduction or differentiation and innovation, is strongly associated with the support of technological resources. These latest provide the required capabilities to enhance communication, process integration, flexibility, information sharing, coordination among all parties in the firm's network (Henderson & Venkatraman, 1989; Laghouag, 2016). The technological resources include IT infrastructure, practices, IT capabilities, security issues (Hanafizadeh & Zare Ravasan, 2018).

The previous studies, such as Ratten (2012) and Hanafizadeh & Zare Ravasan (2018) showed the high impact of IT capabilities on e-banking products and services. Some studies, such as Martín-Rojas et al. (2011) highlighted the importance of IT competencies for exploiting technological opportunities for the development of a firm's entrepreneurship. Also, Hanafizadeh & Zare Ravasan (2018) and Sikdar et al. (2015) demonstrates that a firm with successful IT experiences has the better technical knowledge and an in-depth understanding of the entrepreneurial opportunities of new IT. Al-Omoush (2019) investigate the drivers of e-banking entrepreneurship and the results revealed a significant role of technological resources on the level of e-business entrepreneurship. The findings also reveal a direct impact of e-banking entrepreneurship on achieving a competitive advantage, financial performance, and customer performance. Based on this discussion, the second study hypothesis could be crystallized as follow:

H_{a2}: technological environment strongly enhances e-banking entrepreneurship orientation for banks operating in KSA.

Human Capital and E-Banking Entrepreneurship Orientation

Human capital presents a crucial and influential driver that explains technological innovation nowadays (Ang et al., 2011; Danquah & Amankwah-Amoah, 2017; Khan et al., 2020; Hu, 2021). Human capital is a systemic combination of knowledge application, know-how, human competencies and experience, education, and expertise (Hayton, 2005). The quantity and quality of human capital, within a firm or a country, strongly determine the ability to generate and implement new ideas (Lucas Jr, 2009). Also, human capital improves the absorptive capacity of a firm or a country, namely the ability to detect and collect and assimilate novel information, which increases productivity and innovation (Ali et al., 2017). Qualified, talented, skillful, self-driven people with a high level of readiness are considered as golden people who present a pillar of human capital through providing and transferring their tacit and explicit knowledge to others and the firm as well and shaping their behaviors and agility (Gowthorpe, 2009).

Many researchers have used the term entrepreneurial capital as a crucial component or dimension of human capital. In other words, entrepreneurial capital refers to individuals and groups knowledge and skills related to entrepreneurship activities (Audretsch & M Keilbach, 2004; Albort-Morant & Rey-Martí, 2015). Previous studies have confirmed the importance of HC as a determinant of EO. Hu (2021) concluded that improved and developed human capital are more likely to affect total technological innovation. Also, Al-Omouh (2019) investigate the drivers of e-banking entrepreneurship and the results revealed a significant role of human capital on the level of e-business entrepreneurship.

In the same line, Batjargal (2007) emphasized the vital role of human capital in enabling the use of IT innovatively to strengthen business operations and processes. Other researchers, such as Charband & Jafari Navimipour (2016), examined the manner how HC can use IT potentialities in absorbing and deploying new ideas and getting novel technological innovations. The results provided by Zhao's (2006) study showed that highly educated and experienced human capital for both managerial and operational levels enhances e-business entrepreneurial orientation. Going from this discussion, the third study hypothesis could be formulated as follow:

H_{a3}: Human capital support strongly enhances e-banking entrepreneurship orientation for banks operating in KSA.

Impact of E-Banking Entrepreneurship Orientation on Sustainable Performance

Previous studies investigated the relationship between entrepreneurship orientation and organizational and firms' performance. It is to say that some studies found a positive impact such as Ali et al. (2020) and Khan et al. (2020). Other studies didn't find a significant direct impact of EO on performance (Chow, 2006; Purnomo et al., 2019). Finally, some other researchers, such as Hughes & Morgan (2007) found a negative impact of EO and business performance. These results highlight that the contributions of EO on a firm's performance are inconclusive and are still the subject of investigation.

For the banking sector, Al-Omouh (2019) found a positive impact between EO and banks' performance dimensions, namely, competitiveness, financial performance, and quality service. The study also found a positive impact of drivers on e-entrepreneurship orientation. In the same context, Ghozali et al.,(2020), found a significant mediating role between dynamic capabilities and banks' competitive advantage. Also, AlSudani (2017) found a positive impact between EO dimensions and balanced scorecard performance dimensions in the banks sector, namely learning and development, internal process, customers, and financial dimension. Finally, Al-Hariri (2020) examined the relationship between EO dimensions and sustainable performance dimensions. Banks, nowadays, are taking more and more proactive, and innovative approaches towards addressing sustainability issues in the banking industry (Kumar & Prakash, 2019a). In the following lines, the topic of EO impact on sustainable performance will be discussed:

E-Banking Entrepreneurship Orientation and Environmental Sustainability

According to Jiang et al. (2018); Kraus et al. (2018); and Tseng et al. (2019) advocate that there is a positive relationship between entrepreneurship orientation and environmental sustainability since the EO improves environmental performance through inventing sustainable products, reducing Muda for all resources: raw materials, energy, water, and ensure employees' and customers' safety. For Roxas (2021), entrepreneurial orientation is a moderation variable that fosters efficient utilization of resources to enable firms to engage in environmental sustainability. In the same context, Orji IJ (2018) highlights the importance of environment protection and quality life improvement for society through the achievement of sustainable performance. Moreover, the previous studies show that EO is an important antecedent of investments in sustainability initiatives such as environmental responsibility (Mullens, 2018). Some previous studies show that the focus of banks is on more addressing social sustainability rather than environmental issues, and development of sustainable products a sustainability

reporting (Kumar & Prakash, 2019b). It seems relevant to investigate the way e-banking entrepreneurship orientation influences environmental issues by formulating the following hypothesis:

H_{b1}: E-banking entrepreneurship orientation strongly and positively enhances environmental sustainability

E-Banking Entrepreneurship Orientation and Ethical Sustainability

Ethical sustainability refers to the organizations' ability to lead their operations based on the principles of integrity, transparency, impartiality, and reliability (Dogarawa, 2006). According to Kumar & Prakash (2019a), ethical sustainability refers to banks' commitment and engagement to ensure high ethical standards application regarding the anti-corruption system, human rights, etc. In other words, the ethical sustainability reflects what extent the bank is committed to global sustainability code of conduct and engaging in disclosing the nonfinancial performance. Environmental considerations are important for sustainable organizations, but not enough, social, and ethical issues are also important to serve the deprived layer of society. Also, ethical concerns are vital for risk management, improving the organization's image (Wilson et al., 2010). The term "sustainable banking" incorporates ethical value-driven banking practices by banking institutions (Kumar & Prakash, 2020). Mullens (2018) investigated the relationship between EO and ethical sustainability and finds that firms entrepreneurially oriented are significantly and positively investing in sustainability initiatives, including ethical sustainability practices. Further, according to Jones (2016), managers are recompensed with high rewards and returns if they behave ethically and honestly when having transactions with customers. Going from this discussion, the fifth study hypothesis could be formulated as follow:

H_{b2}: E-banking entrepreneurship orientation strongly and positively enhances ethical sustainability

E-Banking Entrepreneurship Orientation and Social Sustainability

Social sustainability refers to the organization's practices regarding social and community services. It turns around social development and responsible dealings with all stakeholders, employees' motivation to enhance business value (Martinez-Conesa, 2017; Ameer, 2020). According to Hussain et al. (2018), social sustainability is associated with conformance to labor law, human rights issues, and general stakeholders. In the same line, Nizam et al. (2019) show a positive impact of social sustainability on firms' performance. For the banking sector, Kumar & Prakash (2019a) highlight that social sustainability indicators

present a building block for banking sustainable performance. For Ameer (2020), the current discussions regarding the relationship between EO and social sustainability are still not conclusive. It is only through analyzing the EO components that the relationship could be established. This fact could be confirmed by the study of (Hernández-Perlines & Rung-Hoch, 2017).

For these researchers, EO relates to establishing excellent relationship with stakeholders, fostering customer quality service and then satisfaction, and finally adopting safe practices for employees. By analyzing the EO, it is found that the innovativeness dimension allows providing sustainable products and services considering the customers' health and safety. The proactiveness ability anticipates the stakeholder's potential needs and then improves the organization's reputation. The risk-taking ability helps to avoid harming society (Mullens, 2018; Fatoki, 2019). For Yu (2019), entrepreneurial orientation is considered as a dynamic capability that allows developing a changing strategy that strongly addresses social concerns. Going from this discussion, the sixth hypothesis could be formulated as follow:

H_{b3}: E-Banking entrepreneurship orientation strongly and positively enhances social sustainability

Following the above hypotheses, this study investigates the relationship between e-banking entrepreneurship drivers and e-banking entrepreneurship orientation, and sustainable performance as shown in Figure 1 below.

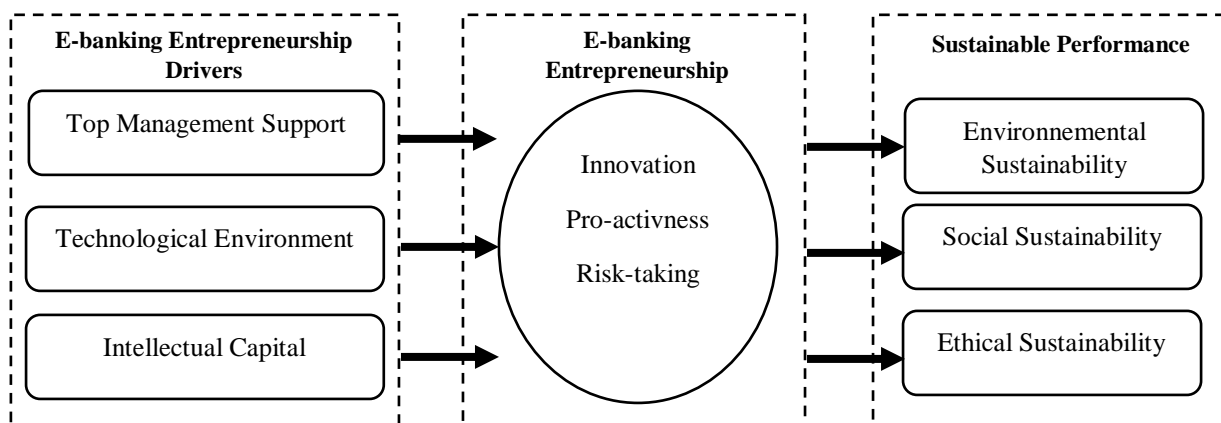


Figure 1: Research Model

C. RESEARCH METHOD

Research Instrument Design

Table 1 below shows the research variables and constructs as well as the related studies adopted to build the items for each variable.

Table 1. Questionnaire Variables and Constructs

Variables	Constructs	Items	Scales	Related researches
E-banking Entrepreneurship Drivers	Top Management Support Technological Environment Intellectual Capital	4 items 4 items 4 items		Al-Omouh et al (2019), Al-Omouh et al (2020)
E-banking Entrepreneurship Orientation	Innovation Pro-activeness Risk-taking	4 items 4 items 4 items	Likert 1-5	Al-Omouh et al (2019), Al-Omouh et al (2020)
Sustainable performance	Environmental Sustainability Ethical Sustainability Social Sustainability	8 items 5 items 5 items		Alhariri (2020), Al-Omouh et al (2019)
Total of items		42		

Sampling & Data collection

Table 2. Sample Size required and Collected responses

	Bank name	N Emp.	%	N Res. Required	N Res. Collected
1	Rajhi Bank	10554	22.84%	85	164
2	Ahli Bank	9631	20.85%	80	134
3	Ryiad Bank	5900	12.77%	48	70
4	NBA	3600	7.8%	30	69
5	Bilad Bank	3552	7.8%	30	38
6	Samba	3497	7.57%	30	32
7	Saudi Fransi Bank	3081	6.67%	25	27
8	Alawal Bank	1,718	3.71%	14	27
9	Inmaa Bank	1600	3.46%	13	13
10	SBI	1416	3.06%	12	12
11	Jazeera Bank	1070	2.3%	9	11
12	Khaleej Bank	565	1.2%	5	10
	Total	46184	100%	380	607

The Saudi Central Bank report shows that the number of banks operating in the Kingdom of Saudi Arabia is up to 12, while the official reports of each bank indicate that the total number of individuals working in banks is approximately 46,184 (March, 2021), which represents the study population. Due to the large sample size, the researcher used the stratified random sample, which is suitable for cases in which the number of individuals in banks varies.

This method requires first determining the required sample from the total population, and then determining the required size of each bank in proportion to the number of individuals in the bank as shown in Table 2 below. As for the sample size, it was determined according to the equation presented by Imam (2008) as follows: $N = 380$ respondents. Through the previous equation, the required sample size is 380 responses from all banks operating in the KSA. This number should be distributed proportionally with the number of individuals working in each bank. The sample size from each bank is met, as well as generalizing the results obtained in this study is possible as shown in table 2.

Table 3 provides the details of respondents' backgrounds. It is to notice that a large number of respondents are evolving in the private sector. Also, they are well-educated with relatively considerable working experience (5-10 years). The descriptive analysis also shows that most of the respondents' position is administrative (81.3 %).

Table 3. Background of respondents

	Frequency	%
Ownership Structure		
• Public	191	31.46 %
• Private	416	68.53 %
Educational Level		
• Bachelor	476	78.41 %
• Master	54	8.89 %
• PHD	2	0.33 %
• Others	75	12.35 %
Years of experience		
• 1-5 Years	192	31.6 %
• 5-10 Years	268	44.15 %
• 10-15 Years	87	14.33 %
• More than 15 Years	60	9.88 %
Position		
• CEF	65	10.7 %
• Executive Director	27	4.44 %
• Vice Director	21	3.45 %
• Administrative	494	81.3 %
Total	607	100 %

D. RESULTS AND DISCUSSION

At this point, the research hypotheses will be tested using the Partial Least Square Structural Equation Modeling (PLS-SEM) approach to predict and assess the measurement and structural model (Henseler et al., 2015). This approach allows to model of complex relationships between variables. For this study, Smart-PLS software has been used. The validation of the research hypotheses will take place in two stages: (1) validation of the

measurement model (Outer Model) and (2) validation of the structural model (Inner Model). The first concerns the validation of latent variables (constructs), namely, top management support, intellectual capital, technological environment, e-entrepreneurship orientation, environmental sustainability, ethical sustainability, and social sustainability. The validation of the structural model concerns the relationships between the latent variables (hypotheses).

Validity and Reliability Analysis

Table 4. Reliability and Validity Analysis

	Cronbach's Alpha	Rho_A	CR	AVE
E-Entrepreneurship Orientation	0.939	0.941	0.947	0.600
Environmental Sustainability	0.950	0.950	0.958	0.740
Ethical Sustainability	0.884	0.890	0.915	0.683
Human Capital	0.856	0.860	0.902	0.699
Social Sustainability	0.932	0.932	0.948	0.786
Technology Environment	0.870	0.872	0.911	0.720
Top Management Support	0.805	0.808	0.872	0.631

In this section, the internal consistency, convergent and discriminant validity will be examined. To purify the research questionnaire, loading analysis has been applied. The results reveal that loadings of all items are superior to 0.50 for all the constructs (Figure 2), which leads to keep all the items for the next step of the analysis. Alpha Cronbach coefficient, Rho A and composite reliability (CR) have been calculated to test internal consistency reliability. Table 4 below shows high level of reliability for all the constructs since the scores are superior to 0.70 threshold. Moreover, to test convergent validity, the AVE value has been calculated, all the scores are higher than 0.50, which means that the construct explains more than 50% of the items' variance.

Table 5. Discriminant Analysis

	E-EO	Environmental Sustainability	Ethical Sustainability	Human Capital	Social Sustainability	Technology	Top Management Support
E-EO	0.839						
Environmental Sustainability	0.809	0.860					
Ethical Sustainability	0.740	0.764	0.826				
Human Capital	0.775	0.765	0.72	0.836			
Social Sustainability	0.754	0.832	0.759	0.726	0.887		
Technology	0.710	0.602	0.657	0.731	0.563	0.848	
Top Management Support	0.667	0.571	0.594	0.667	0.566	0.738	0.794

To evaluate discriminant validity and show that measures of constructs are not highly correlated, cross-loading comparisons among constructs has been conducted. The results show

that the AVE of each latent variable (construct) is superior to the construct's highest squared correlation with any other latent variable. Thus, discriminant validity is ensured.

Testing Hypotheses

After testing the measurement model (outer model), the second step is to test the structural model (inner model). Figure 2 and Table 6 illustrates the path coefficient among all constructs.

Table 6. Research Hypotheses Testing Results

		β	t-value	Sig	Result
Ha1	Top Management Support -> E-EO	0.132	2.737	0.006	Supported
Ha2	Technology -> E-EO	0.136	2.852	0.005	Supported
Ha3	Human Capital -> E-EO	0.651	15.345	0.000	Supported
Hb1	E-EO -> Environmental Sustainability	0.809	33.455	0.000	Supported
Hb2	E-EO -> Ethical Sustainability	0.74	26.067	0.000	Supported
Hb3	E-EO -> Social Sustainability	0.754	28.996	0.000	Supported



Figure 2: Path Coefficient Analysis

The hypotheses test will be done through the analysis of two dimensions: (1) The path coefficient (β) analysis reflects the degree of change in the dependent variable for every single change in the independent variable. (2) The second dimension is the t-value test. Actually, whatever the value of (β), this coefficient is significant only if the t-value > 2. Table 6 above

shows that all the hypotheses are supported, namely the results reveal that top management support significantly and positively influences the e-entrepreneurship orientation (Ha1), technological environment significantly and positively influences the e-entrepreneurship orientation (Ha2), intellectual capital significantly and positively influences the e-entrepreneurship orientation (Ha1). Also, e-banking entrepreneurship orientation significantly and positively influences sustainable performance dimensions, namely environmental, ethical, and social sustainability (Hb1-Hb3).

Discussions

The results above reflect a considerable level of banks' willingness, in KSA, regarding all the drivers influencing the e-banking entrepreneurship orientation or the factors enhancing the sustainable performance. It is to notice that all the banks are striving to be leaders in digital services to keep pace with the ambitious vision of 2030. The results highlight a significant impact of top management support to make their banks more proactive, providing more innovative services and products, and accepting a certain level of risk through engaging in new projects, products, and services. The results of this study confirm the results of previous studies (Al-Omouh, 2019; Al-Omouh, 2020; Martín-Rojas et al., 2011; Niemand et al., 2017).

Also, the results make evident the importance given to investment in new technological resources, which strongly support the banks' entrepreneurship orientation to e-banks leaders. According to RBV theory, technological resources can provide banks with the required capabilities to develop distinguished e-products and services, which allows them to develop a sustainable competitive advantage. The results regarding the impact of the technological environment on e-entrepreneurship orientation are in line with the results of previous studies (Al-Omouh, 2019; Zhu et al., 2006; Hanafizadeh & Zare Ravasan, 2018).

The intellectual capital in the studied banks seems to have the most positive impact on e-banking entrepreneurship orientation, which reflects the continuous efforts of banks in Saudi Arabia to benefits from this vital resource and enhance their HR through the implementation of many development programs. The current findings confirm the previous studies dealing with this issue such as Al-Omouh (2019), Petti & Zhang (2011), and Bahrami et al. (2016) that have emphasized the role of intellectual capital in fostering entrepreneurship mindset.

At the second level of impact, namely, the contribution of e-banking entrepreneurship orientation to sustainable performance, likewise, the results attest that bank in Saudi Arabia are more and more interested to develop the three capabilities required to be entrepreneurially oriented towards e-products and services. Also, the R^2 of all sustainable performance

dimensions reflect that the dependents variables change is strongly due to change in e-banking entrepreneurship orientation change. First, the results show a significant positive impact of e-entrepreneurship orientation on environmental sustainability, which explains the adoption of environmental issues in the bank's strategies. The banks show a high level of commitment to address environmental sustainability challenges and meet vision 2030 goals. These results have an agreement with the previous studies such as Jiang et al. (2018), Kraus et al. (2018), Ameer (2020), Al-Hariri (2020), and Nizam et al. (2019).

In the same context, the studied banks show a significant positive impact of e-entrepreneurship orientation on ethical sustainability, which reflects a balanced approach that considers ethical practices in the banks, the coefficient of determination shows that 54.3% of ethical sustainability is explained by e-entrepreneurship orientation. The results are in line with previous studies provided by Ferreira et al. (2016) and Al-Hariri (2020), as well as the study presented by Leone & Belingheri (2017) that found a significant impact of innovation on ethical considerations.

The results are striving, through the e-banking entrepreneurship orientation, to have a responsible relationship with all stakeholders, building a healthier relationship with customers and society. All the banks show a particular attention to be society-centric banks and deliver the best they have to society. These findings confirm the existing results achieved by Ameer (2020), Al-Hariri (2020), Nizam et al. (2019), and Hernández-Perlines & N Rung-Hoch (2017).

E. CONCLUSION

The main purpose of this study is to investigate the relationship of drivers that stands behind the success of e-banking entrepreneurship orientation, and how this latest influence positively the sustainable performance that represents, nowadays, a challenge for all organizations, including banks. This study is the first of its kind in Saudi Arabia and aims to diagnose sustainable performance through exploring and analyzing its roots, namely, the e-banking entrepreneurship orientation as well as its key success factors.

The banking system in Saudi Arabia represents the building block for Saudi Vision 2030 to succeed through supporting the different sectors that KSA is striving to develop, such as tourism, health sector, global supply chains, renewables energies, petrochemicals, etc. The banks consider the vision as an unprecedented opportunity to consolidate its position in the market and ensure its sustainable survival. This research aims to study the maturity of banks

regarding the existence of required drivers to support their entrepreneurship orientation related to e-products and services. Also, the second aim is to measure how banks perform sustainably and how the e-entrepreneurship orientation influences sustainable practices and performance.

According to the research methodology, a research model and a questionnaire have been developed based on an in-depth literature review. Afterward, data has been collected beside a significant sample including all the banks operating in KSA in a proportional base. The analysis highlights particular attention regarding the availability of required drivers, namely, top management support, technological environment, and development of intellectual capital. Also, the results show the willingness of banks managers to the importance of e-banking entrepreneurship orientation and how it can enhance the sustainable performance dimensions, namely, environmental, ethical and social considerations.

According to the practical implications, this study presents: first, it provides banks' managers a clear understanding about the status quo of divers devoted to leverage e-entrepreneurship orientation in banks operating in KSA. Also, the research reflects the shortcomings in adopting e-entrepreneurship orientation in banks, namely, innovativeness, proactiveness and risk-taking. Finally, the research presents a first study dealing with the maturity of sustainable performance and its relationship with e-entrepreneurship orientation in banks operating in the kingdom of Saudi Arabia.

Regarding the limitations, direction, and future research, it is to notice that the study focus was mainly on a single industry, namely the banking sector that has specific regulations and characteristics. Expanding the sample to investigate other industries seems to be relevant for generalizing the research results. Also, this study considers the sustainable performance dimensions, namely, environmental, ethical, and social responsibilities as the final outcomes, while these latest could have a mediating role between e-banking entrepreneurship orientation and banks performance dimensions such as competitiveness, financial performance, and customer service. Besides, the banking sector is not the only influencer on environmental activities compared to some other industries that have considerable impact and that could be a subject to future studies. This study recommends examining the impact of more variables such as green intellectual capital and green innovation on e-entrepreneurship orientation and sustainable performance since no studies dealt with this issue before.

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