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DIGITAL ECOSYSTEMS, DIGITAL SKILL, AND BUSINESS PERFORMANCE: A STUDY ON GRADUATE ENTREPRENEURS

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Abstract

Pandemic COVID-19 has affected the business ecosystem. Nevertheless, the world of digital delivers opportunities for business optimization especially for SMEs to survive these challenges. Even though the digital ecosystem may represent either an opportunity or a challenge to SMEs, the result depends on how SMEs strategically undertake. Therefore, this paper aims to examine the relationship between the digital ecosystem and digital skills on business performance among university graduate entrepreneurs. Three different sectors were chosen namely manufacturing and retail sectors. Respondent profiles, descriptive statistics and correlation analysis and multiple regression were utilized in this study. The findings revealed experience in business is seen as one of the important factors that can affect the performance of a business. A multiple regression analysis depicted that there was a significant influence between all digital ecosystem factors (e-readiness, knowledge management ICT utilization) on business performance. The digital skill also shows high significant influence on business performance. Therefore, it is suggested universities in Malaysia need to equip and prioritize students with more digital ecosystems and skills in their curricula.

Keywords: Business Performance, Digital Ecosystem, Digital Skill, Graduate Entrepreneurs, SMEs

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1. Introduction

In recent years, the COVID-19 pandemic has changed the world's systematic activity, specifically the business ecosystem. This condition has also affected Small and Medium Enterprise (SME) operations. Nevertheless, the world of digital delivers opportunities for business optimization to survive these challenges. The digital ecosystem is highly based on big data advanced technology, and is a no longer precise feature of the organization's software (Yousaf et al., 2021). Even though the digital ecosystem may represent an opportunity or challenge to SMEs, the result depends on how SMEs strategically undertake it. Foremost, the demand for solid business strategy enables SMEs at a different phase of the business ecosystem to drive through smart business solution practices by interpenetrating digital applications for valuable ventures (Viswanathan & Telukdarie, 2021).

In Malaysia, SMEs have been a dynamic power in empowering economic development and industrial resilience. It has contributed 36% of the gross domestic product (GDP); 65% of total employment and 18% of total exports (Nawanir et al., 2020). Today SMEs have changed the way they approach their businesses to stay relevant in the new business environment. SMEs need to be ready for all the changes in the business world especially in adapting to the digital ecosystem. The readiness in adapting to the new way of making business without the physical need to be at a certain place has now become the norm. Given the recent challenges, the assessment of SMEs performance therefore cannot solely rely on traditional products, but it is also essential to enhance other capabilities from the entrepreneurs to make the company sustain in business. Digital and learning capabilities are the most crucial aspects to strengthen SMEs' performance. Nonetheless, it is a challenge for SMEs to adopt new technology and adopt new skills (Dahnil et al., 2014). Even in Malaysia, SMEs in digital are lacking, as the utilization of these technologies has not yet reached the desired level. Therefore, the paper aims to review the relationship between the digital ecosystem and digital skills on business performance among university graduate entrepreneurs.

2. Literature Review

2.1. Digital ecosystem

Most SMEs in Malaysia face difficulties adjusting to the digital ecosystem compared to larger enterprises. Furthermore, the systems established for the SME market do not make it probable to manage reasonable and flexible inter-operational business relationships between small enterprises. Above all, the digital ecosystem in enhancing the performance of the business organization is a greater concern in many works of literature. Previous studies emphasize various factors related to digital such as digital innovation strategy (Nylén & Holmström, 2015), digital workplace (Shahzad et al., 2017), organizational learning (Lin, 2008), division of innovation labour and digital control (Lee & Berente, 2012), and organizational readiness (Lokuge et al., 2019). Nevertheless, there are several vital and significant variables of the digital ecosystem overseen like e-readiness, agile leadership, knowledge management and ICT utilization.

E-readiness is defined as the level of readiness in terms of the economy and society to participate in the digital world. The level of readiness is not only referred to the internal company but also external of

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the company such as customers, suppliers, and trading partners (Ramayah et al., 2005). E-commerce and business are currently a solution for companies with greater profits than traditional businesses. The adoption of digital technology as a major component of the company's operations or business processes will make an important contribution to the company's performance.

The resource-based view theory states that SMEs can manage their resources to adapt to today's world economy, where technological advances are growing rapidly. It aims to help companies to achieve competitive advantages in the global market in a sustainable manner. SMEs need business readiness in adopting innovations to develop and utilize information and communication technology so that they can compete in the industrial era 4.0. The e-readiness is realized by utilizing information and communication technology such as e-commerce or e-business (Fathian et al., 2008). The higher adoption of e-readiness will lead to higher business performance. Hashem and Alsaleh (2014) and Astuti and Nasution (2014) suggested similar results that e-readiness can affect the company's performance.

A positive mindset of organizational members and supportive organization structure and process are crucial in e readiness of a business organization. Having these elements in the organization would ensure a positive impact on large or small medium business organizations. It will, directly and indirectly, impact the business performance of such SMEs. According to Ramayah et al. (2005), top management commitment, infrastructure, and technology significantly impact SMEs' e-readiness. However, human capital, resistance to change, and information security do not have a significant impact or contribution to e-readiness in SMEs.

Agile leadership can be categorized as an agile leader who can guide their team and continually influence the team's behaviour by defining, spreading, and maintaining organizational vision Parker et al., (2015). Marquest (2018) stated that the entire performance situation is the current fast and agility is the crucial element to staying in a business game. Leadership agility is important in affecting people to make some modifications in the community. The current managers need to have these agility skills to manage their workers and increase business performance.

Knowledge management (KM) has been regarded as a critical issue for practitioners and academicians in these years (Chen et al., 2010). Yadav (2013) also has a similar idea stating that knowledge owned by the organization is usually considered a vital factor in performance levels. While Al-Shanti (2017) has a similar opinion to Yadav (2013) highlighting that knowledge management enables the employees of the organization to carry out continuous activities and studies aimed at acquiring knowledge, storing, distributing and applying knowledge to achieve outstanding business performance.

Earlier studies have also proved that ICT adoption and utilization have a significant relationship with business performance (Brynjolfsson & Hitt, 2000; Ghobakhloo & Hong, 2014). In agreement, Westerman et al. (2012) reported that profitability and revenue generation are higher for firms with above-average digital innovation values. Similarly, Weill and Woerner (2015) reported an increase in revenue growth and profit margins for companies that are embracing digital technology, and operating within the digital ecosystem. Nonetheless in Malaysia, the systems used in SMEs cover primarily the internal processes within the enterprise, and therefore do not provide enough support for the relationships and processes between enterprises.

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2.2. Digital skill

Digital skill is defined differently by many sources and it is broadened over time. European Commission (2017) has defined digital skills as skills and capabilities that enable businesses to exploit opportunities provided by ICT, to ensure more efficient and effective performance, and to explore new ways of conducting business and establishing new businesses. Mastery of the digital skills for the latest technology for SMEs in developing countries is needed so that they can compete in the international market (Lahovnik & Breznik, 2014). Nonetheless, it is highlighted that the shortage of digital skills is among the obstacles to the development of SMEs in the digital ecosystem. It is supported by European SME Survey (2019) employees' digital skills gap is a key barrier to the digital ecosystem.

Skills and digital technology are necessary for entrepreneurs with limited resources to make their businesses succeed (Li et al., 2018). Numerous studies on digital skills in relationship with the performance of SMEs in the UK. For example, the study carried out by the Massachusetts Institute of Technology in 2016 conducted surveys of more than 400 companies across the globe showing that companies with more powerful digital competence enjoy revenue growth of 9%, show 26% higher value and reach 12% higher market assessment. The improving digital skills and ability to use digital tools could add £9.9 billion, or 0.5% of the total UK GDP. It is highlighted that the digital skills become a prominent integral part of businesses in the UK and it is found there is a positive link between digital skill levels and the turnover growth of SMEs (Baker & Lomax, 2015). Wardaya et al. (2019) who used the Systematic literature review (SLR) method show there is a positive association between digital skills and firm performance. In entrepreneurship, Indonesia is one of the countries that have a large population of SMEs and contributed to a GDP of up to 60.34% (Hani et al., 2012). Nevertheless, Istighfaroh and Nuraeni (2020) found digital skills are less of a concern for SME owners in Indonesia.

Digital skills are also associated with the digital ecosystem. When the digital business ecosystem model brings together the digital and service economy and the material economy, it is considered an ecosystem (Martin, 2009). European SME Survey (2019) stated that employees' digital skills gap is a key barrier to the digital ecosystem. It is suggested SMEs upskill their staff in safeguarding their information and assets. Not having the right skills in place to implement and benefit from the adoption of new technology is the second greatest overall barrier, with slightly less than a third (27%) saying it is a very severe or major obstacle (European SME Survey, 2019). Shan et al. (2016) stated technology makes people quick to innovate so that it can be a mediation between entrepreneurial orientation and company performance. SMEs can determine the best strategy in facing market competition with digital skills in technology in order to increase their performance and become better and directed.

3. Methodology

This paper is based on primary data. A questionnaire has been created using the Google Form. The sample used in this research were graduated students and alumni from various universities graduates. In total, there are 321 university graduates who are running various business activities from public universities in east coast Malaysia. Samples were obtained of SMEs who run businesses not less than 5 years and have a number of employees from zero to more than 10 employees. The business activities are

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related to three sectors: manufacturing, business-based services and retail stores. While the respondents are between 20 years old to 49 years old and above. The minimum qualification of the respondents is diploma level to the first degree and the highest is at the Master or PhD level. Besides, the measurement of the study also included the targeted respondents' backgrounds who were from different fields such as social sciences, engineering and computer science. The sampling technique used in this study was based on Krejcie and Morgan (1970) table and it was non-random sampling with a purposive sampling method. Out of the 420 alumni targeted as a sample study, a total of 345 respondents gave their feedback. Of these, only 321 (80.3%) were used for analytical purposes. Respondent profiles, descriptive statistics and correlation analysis and multiple regression were used in the study.

4. Findings and Discussion

The analysis of the respondents' profiles was done descriptively involving some important information about the respondents' background including in terms of gender age, educational level, field of study, business experience and annual sales volume. The distribution of respondent profiles is shown in Table 1.

Table 1. Respondents' profile

	Profile	Manufacturing (N = 133)		Services (N = 135)		Retailing (N= 53)		Overall (N = 321)	
		Total	%	Total	%	Total	%	Total	%
Gender	Male	40	30.1	82	61.5	27	50.9	149	46.4
	Female	93	69.9	53	16.5	26	49.1	172	53.6
Age	Less than 30 years	102	76.7	56	41.5	37	69.8	195	60.7
	30-39	19	14.3	43	31.8	9	17.0	71	22.2
	40-49	11	8.3	26	13.3	5	9.4	42	13.1
	> 49 years	1	0.7	10	7.4	2	3.8	13	4.0
Education Level	Diploma	38	28.6	32	23.7	19	35.8	90	28.0
	Degree	90	67.7	90	66.7	29	54.7	208	64.8
	Master/PhD	5	3.7	13	9.6	4	7.5	23	7.2
Field of Study	Science & Technology	33	24.8	52	38.5	19	35.8	104	32.4
	Social science	100	75.2	83	61.5	34	64.2	217	67.6
Number of employees	Less than 5	112	84.2	78	57.8	37	69.8	228	71.0
	5 -10	11	8.3	35	25.9	6	11.3	52	16.2
	> 10	10	7.5	22	16.3	10	18.9	41	12.8
Business experience	Less than 5 years	99	74.4	60	44.5	35	66.0	195	60.7
	5- 10 years	29	21.8	52	38.5	12	22.7	93	30.0
	>10 years	5	3.8	23	17.0	6	11.3	33	10.3
Annual sales ('000)	Less than RM50	98	73.7	64	47.4	32	60.4	194	60.5
	RM50 – RM100	20	15.0	18	13.3	8	15.1	46	14.3
	RM101–RM200	5	3.8	15	11.1	9	16.9	29	9.0
	RM200– RM500	4	3.0	13	9.7	1	1.9	18	5.6
	> RM 500	6	4.5	25	18.5	3	5.7	34	10.6

Source: Based on the samples survey.

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The study involved a total of 321 university graduates running various business activities. Of these, there were 133 people (41.4 percent) involved in the manufacturing sector, 135 people (42.1 percent) doing business-based services and 52 people (16.5 percent) in the retail sector. The majority (53.6 percent) of the respondents involved are women entrepreneurs while the rest (46.4 percent) are male entrepreneurs. The manufacturing sector is largely monopolized by women while the services and retail sectors are dominated by men. The study found that the majority (60.7 percent) consisted of those under 30 years of age. This distribution is very significant for the manufacturing and retail sectors. A total of 22.2 percent consisted of those aged between 30 and 39 years. Only 17.1 percent are aged 40 and over. In terms of academic qualifications, the majority (64.8 percent) of the respondents involved having bachelor's degrees from various fields of study. There is a total of 28.0 percent of the respondents have a diploma level in addition to 7.2 percent are higher qualified than the first degree. The vast majority (67.6 percent) of the respondents involved graduated in the social sciences. Only 32.4 percent study science and technology such as engineering and computer science.

The study found that the majority (71.0 percent) of employers clarified that they have fewer than five employees. This explains that most of the businesses involved are micro-sized. In addition, there are also a number of businesses with 5 to 16.2 percent employees who are categorized as small enterprises. In addition, there are also businesses with 5 to 10 employees (16.2 percent) that are categorized as small enterprises. While another 12.8 percent explained that they have more than 10 employees. Experience in business is seen as one of the important factors that can affect the performance of a business. Most respondents (60.7 percent) have less than 5 years of business experience. In addition, there are also (30.0 percent) have experience in the business between 5 to 10 years. Only 10.3 percent said they had more than 10 years of business experience. The size of the enterprise is seen to be closely related and has a relationship with the annual sales volume of a business. The majority (60.5 percent) explained that their total annual sales were less than RM50,000. In addition, there are also among the entrepreneurs involved explaining that their annual sales are between RM50,000 to RM100,000 (14.3 percent), RM101,000 to RM200,00 (9.0 percent), RM200,000- RM500,000 (5.6 percent) and exceeding RM500,000 (10.6 percent).

Table 2. Descriptive statistics

Variables	Mean	SD
E readiness	3.637	0.980
Agile Leadership	4.118	0.782
Knowledge management	3.906	0.811
ICT Utilization	3.954	0.945
Digital Skill	3.899	0.873
Business Performance	3.426	0.924

Notes: $N = 321$; ***$p < 0.01$

Table 2 shows the descriptive analysis that makes any analysis of the variables in terms of mean, standard deviation and correlation between the variables involved in the study. The e-readiness was divided into four other categories (agile leadership, knowledge management and ICT utilization). The mean values for all the variables are above level three. This shows the overall tendency of respondents to

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explain the respondents gave high ratings to all variables. Considering the median was 2.5, clearly shows all the variables beyond the level of the variable agile leadership showed the highest mean value (4.118), while the mean was lowest in e-readiness (3.637). The standard deviation (SD), clearly shows that all variables have a small deviation of less than 1. This value does not reflect the large deviation in terms of respondents to the evaluation of all variables.

Correlations coefficients are computed between overall scores. This is to determine the magnitude and direction of the relationship of each variable. This relationship helps the study to identify which independent variables can have stronger impacts on the dependent variables, and therefore leads to efficiently predicting the outcome of a dependent variable. Having a strong relationship, the independent variable can be considered a strong predictor for the dependent variable. The correlation coefficients among the variables are presented in Table 3.

Table 3. Correlation

Variable	Agile leadership	Knowledge Management	ICT Utilization	Digital Skills	Business Performance
Agile Leadership	1				
Knowledge management	0.705***	1			
	(0.00)				
ICT Utilization	0.503***	0.503***	1		
	(0.00)	(0.00)			
Digital Skill	0.573***	0.620***	0.562***	1	
	(0.00)	(0.00)	(0.00)		
Business Performance	0.545***	0.608***	0.609***	0.686***	1
	(0.00)	(0.00)	(0.00)	(0.00)	

***Correlation is significant at 0.01 level of significance

Statistical correlations obtained show the relationship between variables is mixed correlation however all the variables are significant at 0.01. Table 3 indicates that agile leadership has a high correlation ($r = 0.705$; $p<0.01$) with knowledge management.

The Pearson correlation test also shows a positive and moderately significant correlation between ICT utilization and digital skills with agile leadership. When tested between the dependent variable Business performance and agile leadership a positive and moderate significant correlation can be seen (0.545***). This is comparable with business performance and knowledge management r, which also has a moderately significant correlation (0.608***). In addition, it was found that there is a moderate positive association between ICT utilization and business performance (0.609). The same also applies to the correlation between digital skills and business performance (0.686; $p<0.01$).

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Table 4. Result of the Multiple Regression Analysis

Construct	Tolerance	VIF	Model 1			
			Manufacturing (n = 133)	Services (n = 135)	Retailing (n = 53)	Overall (n = 321)
Digital ecosystem						
E Readiness	0.562	1.778	0.183**	0.279***	0.283*	0.235***
Knowledge management	0.420	2.384	0.244***	0.287***	0.032	0.251***
Agile leadership	0.469	2.134	0.060	0.175**	0.213	0.103*
ICT Utilization	0.352	2.839	0.386***	0.178**	0.314**	0.295***
Digital Skill	0.240	3.344				
R2			0.536	0.543	0.521	0.529
Adjusted R2			0.521	0.529	0.481	0.523
R2 Change			0.536	0.543	0.521	0.529
Statistics F			36.963***	38.641***	13.070***	88.638***
Construct	Tolerance	VIF	Model 2			
			Manufacturing (n = 133)	Services (n = 135)	Retailing (n = 53)	Overall (n = 321)
Digital ecosystem						
E Readiness	0.562	1.778	0.161**	0.187**	0.283*	0.190***
Knowledge management	0.420	2.384	0.226**	0.212***	-0.062	0.199***
Agile leadership	0.469	2.134	0.051	0.138*	0.203	0.081
ICT Utilization	0.352	2.839	0.178**	0.004	0.245	0.123*
Digital Skill	0.240	3.344	0.275**	0.377***	0.178	0.297***
R2			0.555	0.591	0.529	0.555
Adjusted R2			0.537	0.575	0.479	0.548
R2 Change			0.019	0.048	0.007	0.026
Statistics F			31.674***	37.237***	10.544***	78.630***

Source: Based on the sample survey (2020)

Analysis of the digital ecosystem on business performance involves five critical factors. To see the influence of each construct on business performance, the study was analyzed through multiple regression method. The analysis is done comparatively based on the data involving three business types: manufacturing, services, retail and overall. The results of multiple regression analysis showed that the illuminating power (R2) was 50 percent. F-test questions were significant at the significance level of one percent ($p < 0.01$). This explains that all independent variables are significantly able to explain the variation in business performance among respondents. Analysis to explain all research hypotheses is made based on the findings of the study shown in Table 4.

Hierarchical multiple regressions were used to assess the ability of digital ecosystem factors (e-readiness, agile leadership, knowledge management and ICT utilization) and digital skill to predict business performance. As shown in this table, Model 1 excluded the digital skill in its' estimation, whilst Model 2 included digital skills for the estimation. By separating the model estimations into two, the

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impact of digital skills among entrepreneurs on business performance can be seen more clearly through the improvement of the explanatory power of the model (R^2). The finding shows that all the R^2 values are moderately high. More importantly in comparison with Model 1, the inclusion of digital skills among entrepreneurs in Model 2 resulted in the improvement of R^2 values across the manufacturing, services, retailing and overall samples. This means that the factor of digital skills gives a better explanation for the variation in business performance among graduates.

Referring to Table 4, Model 1 shows that the relationship between e readiness variable with the performance of small and medium enterprises for all data sets is positive and significant, namely manufacturing ($\beta = 0.183$, $p < 0.05$), service ($\beta = 0.279$, $p < 0.01$), retailing ($\beta = 0.283$, $p < 0.1$) and overall ($\beta = 0.253$, $p < 0.01$). Model 2 also shows that all the data that explain the relationship between the two variables are positive and significant, namely manufacturing ($\beta = 0.161$ $p < 0.05$), service ($\beta = 0.187$, $p < 0.05$), retailing ($\beta = 0.283$, $p < 0.1$) and overall ($\beta = 0.190$, $p < 0.01$). The finding reveals that the e-readiness of a business in mastering digital technology including in terms of the use of internet facilities in business management at maximum capacity will indirectly have a positive impact on business performance.

The analysis of the study on the relationship between knowledge management variables and SME performance is shown in Table 4. Referring to Model 1, the findings of the study showed that the manufacturing sector ($\beta = 0.244$, $p < 0.01$) and service ($\beta = 0.287$, $p < 0.01$) showed a positive and significant coefficient value between knowledge management variables and SMEs performance. However, the retailing sector shows that there is no significant relationship between the two variables. The same findings are described in Model 2, manufacturing sector ($\beta = 0.226$, $p < 0.05$), and service ($\beta = 0.212$, $p < 0.01$). This explains that knowledge management variables have a significant positive influence on the performance of SMEs. While for the retailing sector, the study found that knowledge management does not affect the performance of SMEs. Analysis of the overall data involving the three business sectors clearly shows that the knowledge management variable ($\beta = 0.199$, $p < 0.01$), has a significant influence on the performance of SMEs. The importance of the knowledge management factor on the performance of SMEs is in terms of management's ability to mobilize employees to increase knowledge, transfer appropriate knowledge and skills to employees, and the company's ability to retain a skilled workforce, especially in ICT to remain in the company.

The multiple regression analysis in Table 4 also shows the influence of agile leadership variables on the performance of small and medium enterprises. In model 1, the analysis of the study showed that only the service sector ($\beta = 0.175$, $p < 0.05$) and overall ($\beta = 0.103$, $p < 0.1$) had a significant relationship between agile leadership variables with business performance. While the manufacturing and retailing sectors clearly show that there is no significant relationship between the two variables. In Model 2, the empirical analysis also showed that only the service sector ($\beta = 0.138$, $p < 0.1$) explained that the agile leadership factor has a relationship with business performance. While for the manufacturing and retailing sectors, it is clear that the agile leadership variable does not have a significant influence on the performance of small enterprises. This directly affects the overall data which empirically shows that the factor has no significant relationship with business performance. These findings explain the failure of

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management to understand the needs and problems of staff as well as the inability to address challenges in the shift of change will have a negative impact on the performance of the business conducted.

The analysis of the study clearly shows that in model 1 the value of the coefficient of ICT utilization variables for all sectors namely manufacturing ($\beta = 0.386$, $p < 0.01$), service ($\beta = 0.178$, $p < 0.05$), retailing ($\beta = 0.314$, $p < 0.05$) and overall ($\beta = 0.295$, $p < 0.01$) were significant to explain the influence of these variables on the performance of SMEs. The digital skill in Model 2, the study found that only the manufacturing sector ($\beta = 0.178$, $p < 0.05$) showed a significant positive relationship between ICT utilization variables with the performance of small and medium enterprises. As for the service and retailing sectors, the findings of the study found that there was no significant relationship between the two variables. However, the analysis of the overall data ($\beta = 0.123$, $p < 0.1$) showed that there was a relatively weak significant positive relationship between ICT utilization variables with the performance of small and medium enterprises. Based on the findings in model 2, the study depicts that ICT utilization can affect the performance of SMEs. This explains the company's ability to adopt ICT in business management will have a positive impact including in terms of operating cost savings, the ability to build collaboration with various stakeholders, and solve problems that occur in the company effectively.

The influence of digital skill variables on the performance of SMEs is shown in Table 4. Based on Model 2, the analysis found that two sectors, namely manufacturing ($\beta = 0.275$, $p < 0.05$) and services ($\beta = 0.377$, $p < 0.01$) showed a significant positive relationship between digital skill variables with small and medium enterprise performance. While the retailing sector empirically explains that there is no significant relationship between the two variables. Analysis of the overall data ($\beta = 0.297$, $p < 0.01$) involving all sectors showed that the digital skill factor significantly and positively influences business performance in small and medium enterprises. Empirical evidence suggests that these variables have the most significant influence on the performance of small and medium enterprises compared to other factors under the digital ecosystem involved in the study. This finding can explain that the higher the efficiency possessed by entrepreneurs in the field of ICT, the better the performance of the business.

5. Conclusion

Many studies have researched the importance digital ecosystem in the new world of the digital environment. Issues on business performance have attracted several scholars' attention and generated lots of arguments. In fact, changes in a new environment in the business world, have led to the development of new theories and approaches in order to increase business performance. Based on previous studies, the digital ecosystem, as well as digital skills, play an important role in the success of business performance. Based on the study it is found that most graduate entrepreneurs are involved in micro-sized and small enterprises. The study also shows that experience in business is seen as one of the important factors that can affect the performance of a business. Findings from multiple regression in the overall three sectors indicate that e-readiness, knowledge management, ICT utilization and digital skill are very significant in influencing business performance. Nonetheless, agile seems to be not an important factor in influencing the business graduate. Businesses need to be ready for all the changes in the business world especially in adapting to the digital ecosystem and digital skills. Therefore, it is suggested that universities in Malaysia need to equip and prioritize students with more digital ecosystem and skills in their universities' curricula.

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