



# The Role of Competence and Digital Entrepreneurs Career Maturity on Business Performance in Disruption Era

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## Abstract

**Purpose:** At the end of the pandemic, many digital startups had negative performances. For that, this study aims to analyze the mediating role of entrepreneurial competence and digital entrepreneur career maturity. Seven hypotheses were proposed, namely the effect of entrepreneurship orientation, digital entrepreneurship experience, and digital entrepreneur career maturity on digital entrepreneurial competence, the effect of digital entrepreneurial experience on digital entrepreneurial career maturity, the influence of entrepreneurial orientation, entrepreneurial competence, and digital entrepreneur career maturity on business performance. **Research design, data and methodology:** The population is digital entrepreneurs in Central Java, Indonesia with a business duration of more than 4 years. The number of samples as many as 184 people were carried out by questionnaire distribution through face-to-face, email, and Google forms. Partial Least Square Structural Equation Modeling was used to test the path coefficient statistics. **Results:** The results showed that all the hypotheses proposed were accepted. Digital entrepreneurial competencies and digital entrepreneurial career maturity are also proven to have a mediating role. **Conclusions:** The findings of this study can contribute to the development of digital entrepreneurship research. Practically, the government's role is needed to facilitate the three main elements of digital business: e-commerce, payment methods, and distribution channels.

**Keywords :** Digital Entrepreneur, Digital Entrepreneur Competence, Digital Entrepreneur Career Maturity, Business Performance, Distribution

**JEL Classification Code:** M13, L25, L26, L86

## 1. Introduction

The era of disruption as a result of the fourth industrial revolution brought digitalization and automation which

resulted in the replacement of most low- and middle-skilled jobs (Amuda, 2020). This has resulted in a lot of work that was previously done by humans to be done by digital, along with the increasing development of digital businesses both

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for meeting industrial needs and for business development. This phenomenon offers great opportunities for digital entrepreneurship career development in the near future. Traditional businesses by digital entrepreneurs have been transformed in terms of product, distribution, business location, new media and the internet through digitalization (Prendes-Espinosa et al., 2021). This digital business is considered profitable because of its ability to access and analyze a number of competitive information and potential customers (von Arnim & Mrozewski, 2020).

The emergence of electronic commerce has created opportunities and challenges in managing channels of distribution (Webb, 2002). Digital e-commerce has utilized the internet as a global distribution channel that transcends business boundaries (Cichosz et al., 2020; Javalgi & Ramsey, 2001). The rapid development of digital business is supported by aspects of distribution providers as the backbone of e-commerce operations (Delfmann et al., 2002).

The arrival of the Covid-19 pandemic in March 2020 should have made Indonesia's digital business find its momentum. However, the reality is just the opposite. The results of the Katadata survey showed that 83.4% of digital startups experienced a negative impact, 41.8% experienced a decline in the company's condition, and ecosystems supporting digitalization such as marketplaces were deteriorating. This condition caused as many as 34.2% of digital economy actors to reduce the number of employees. During pandemic, only 48.9% of startups have survived for longer than one year (Fadillah & Helmi, 2022).

Underlying Global Entrepreneurship Monitoring (2020), after going through the Totally Early-Stage Entrepreneurial Activity (TEA) phase for 3.5 years, an entrepreneur will enter a period of entrepreneurship establishment. In this phase, an entrepreneur has chosen entrepreneurship as his career so that an entrepreneurial career maturity is needed as a foundation for success and success as an entrepreneur. The maturity of one's entrepreneurial career comes from one's experience in managing his business. Based on human capital theory, human capital in the form of experience can increase one's motivation to start a business (Davidsson & Honig, 2003). Individually, an entrepreneur is required to have the characteristics that must be possessed by an entrepreneur which includes pro-activeness, innovativeness, and risk taking as a strategy to gain competitive advantage in the market.

However, in several previous studies, it is still found that there are differences in the results of research on the influence of entrepreneurial orientation and entrepreneurial experience on the success of entrepreneurial performance. Research conducted by Herlinawati et al. (2019) proves that entrepreneurial orientation has a positive and significant influence on business performance, while research

conducted by Frank et al. (2010) and Killa et al. (2017) concludes that the entrepreneurial orientation has no significant effect on business performance. The results of research by Sreih et al. (2016), Sajilan et al. (2015), Chandler and Hanks (1994) prove that entrepreneurship experience has a significant effect on business performance, while Chandler and Jansen (1992) conclude entrepreneurship experience has no effect significant to business performance.

To bridge the existing gap, entrepreneurship career maturity and entrepreneurial competence can be expected to be a solution that bridges aspects of human capital (digital entrepreneurship experience) and strategic aspects (entrepreneurial orientation) to achieve the expected digital business performance for digital entrepreneurs. Several previous studies conducted by Hidayat et al. (2019), and Khan and Bashir (2020) proved that entrepreneurial career maturity and entrepreneurial competence have the ability to mediate aspects of human capital and aspects of entrepreneurial strategy.

The fact that there is a gap phenomenon regarding the small number of digital entrepreneurs facing the era of the Industrial Revolution 4.0 and a research gap on the factors that affect the performance of digital entrepreneurs requires research on digital entrepreneurship. The lack of a database on digital entrepreneurship needs to be followed up with basic research on digital entrepreneurship based on demographic factors, motivations and types of business. To overcome the research gap problem, the concept of digital entrepreneur career maturity and digital entrepreneur competence is proposed, which is a synthesis of the concept of digital entrepreneurial behavior, career development theory, social cognitive theory and entrepreneurial competence

## **2. Literature Review**

### **2.1. Digital Entrepreneur Career Maturity**

It is a synthesis of career development and career maturity as a necessity for an entrepreneur to decide on his career as a digital entrepreneur and becomes a mediation and solution to research gap research. Career development theory begins with the trait-and-factor theory by Parsons (1909). Furthermore, several theories were developed that discussed career development, including Occupancy Selection Theory, Roe Theory, Self Concept Theory, Vocational Personalities Theory, and Social Cognitive Career Theory.

The self-concept theory is a very important part of the Super (1953) approach that has contributed to the study of vocational behavior including the formulation of

developmental stages, including growth, exploratory, maintenance, and decline. Super views the self-concept as a vital force that shapes the career patterns that individuals follow throughout their lives. Savickas' theory is a development of Super's (1953) theory which divide a person's career development into five stages: growth, exploration, establishment, maintenance or management, and decline.

According to Super (1953) to be able to complete certain career development tasks at each stage of career development, career maturity is required. Maturity in language can be interpreted as a perfected condition or arrived at the highest or the highest point of development or excellence. Crites (1973) adds career maturity to a person's readiness, choosing a job, and planning steps toward the expected career. According to Super (1980), career maturity is defined as the level of readiness in which a person has completed typical career development tasks at a certain stage of development. Borges et al. (2007) defines career maturity as a process of improving capabilities up to the decision-making of the chosen career.

The maturity of a digital entrepreneur's career is very important for digital entrepreneurs, namely someone who understands digital issues and uses his entrepreneurial skills to produce digital business products an agent who carries out commercial or social activities, both government and industry using digital technology (Sussan & Acs, 2017). This factor is expected to have a mediating role of aspects of human capital (digital entrepreneurship experience) and strategic aspects (entrepreneurial orientation) in strengthening the performance of digital entrepreneurs.

## 2.2. Digital Entrepreneurial Experience

Regarding the Theory of human capital by Borges (1964), individuals acquire a set of skills and knowledge after bearing through learning. Individual-based entrepreneurship learning requires the support of individual internal resources sourced from human capital. Human capital describes a person's investment in the form of skills and knowledge (Becker, 1964). According to (Deakins et al., 2000), human capital in the form of experience can influence the development of business ideas. Therefore, human capital is considered to have a positive influence on the success of starting a business, and human capital in the form of experience can increase one's motivation to start a business (Davidsson & Honig, 2003).

## 2.3. Entrepreneurial Orientation

Entrepreneurial Orientation is widely known through the work of Miller (1983), which summarizes the characteristics of entrepreneurial firms, consisting of 3 things, namely:

Innovativeness (organizational willingness to innovate to renew market offerings), Risk-Taking (taking risk to try new products and services that are uncertain, Pro-activeness (being more proactive than competitors to seize new market opportunities. Entrepreneurial orientation is a strategic concept that consists of pro-activeness, innovativeness, and risk-taking to improve and change the market climate (Lumpkin & Dess, 2001), and as an important precedent of business success (Bernoster et al., 2020).

## 2.4. Entrepreneurial Orientation on Digital Entrepreneurial Competence

Entrepreneurial orientation which includes innovativeness, pro activeness and risk taking can play a role in encouraging entrepreneurial competence (Kreiser et al., 2013). Innovativeness is the capacity and desire of employers for innovative developments that can result in new products or services, while proactive is the pursuit of competitive opportunities and competition to anticipate potential demands to improve and change the market climate, with risk taking making entrepreneurs consciously devote resources to work with a high potential for profit or failure, which may also involve a high probability of failure (Lumpkin & Dess, 2001). These three aspects will encourage the competence of digital entrepreneurs as things needed by digital entrepreneurs in realizing the success and sustainability of their digital businesses. Khan et al. (2020) found a significant result entrepreneurial orientation on entrepreneurial competence small medium enterprises in Pakistan.

**H1:** The better entrepreneurial orientation, the higher digital entrepreneurial competence

## 2.5. Digital Entrepreneurial Experience on Digital Entrepreneurial Competence

Experience is a way to translate knowledge into skills. According to Volery et al. (2015) experience, training, or coaching will be able to form or develop competencies. Entrepreneurs with more experience will have higher competencies than those with less or no experience (Kyndt & Baert, 2015). Digital entrepreneurship experience gained from other people or while developing their own digital business, will increasingly make them have the competence (knowledge, skills, and attitudes) to develop the digital business they are involved in.

**H2:** The better digital entrepreneurial experience, the higher digital entrepreneurial competence.

## 2.6. Digital Entrepreneurial Experience on Digital Entrepreneurial Career Maturity

Entrepreneurial experience gained by mentoring is a way to get career maturity as a developmental process towards career maturity in entrepreneurship (Nabi et al., 2021). Entrepreneurial experience as human capital gained through flow experience will make entrepreneurs more mature and will lead them to the process of entrepreneurship career maturity.

**H3:** The better digital entrepreneurial experience, the higher digital entrepreneurial career maturity.

## 2.7. Digital Entrepreneurial Career Maturity on Digital Entrepreneurial Competence

Career maturity that is obtained by a person in stages will make him have the competence that brings him to the decision making of the career he chooses (Borges et al., 2007). The process of digital entrepreneur career maturity that a digital entrepreneur goes through, starting from starting a business (intention), developing a business (behavior) to deciding on digital entrepreneurship as a career has led him to increase his competence as a digital entrepreneur.

**H4:** The better digital entrepreneurial career maturity, the higher digital entrepreneurial competence.

## 2.8. Entrepreneurial Orientation on Business Performance

An entrepreneur must have an entrepreneurial orientation to manage his business, because entrepreneurial orientation is the process of creating an entrepreneurial strategy that is used by key decision makers to set their company's organizational goals, maintain its vision, and create a competitive advantage (Mason et al., 2015). Entrepreneurs who have a high entrepreneurial orientation will improve company performance. Other previous studies, among others, were conducted by Grande et al. (2011), Lisboa et al. (2016), and Atikur et al. (2021) have proven that entrepreneurial orientation has a positive effect on company performance.

**H5:** The better entrepreneurial orientation, the higher business performance.

## 2.9. Digital Entrepreneurial Competence on Business Performance

In the field of digital entrepreneurship, digital

entrepreneurship competence is defined as the ability of an entrepreneur to express themselves in building relationships through the formation of relational competencies based on a spirit of intimacy to create a business network with the business environment (Meutia & Ismail, 2012). Barazandeh et al. (2015) defined entrepreneurial competence as entrepreneur's skills and entrepreneurial personality, and their research results concluded that entrepreneurial competence has a positive effect on business performance. Another studies proved that skill, creating, and innovation positively effect on business performance (Kamuri, 2021); Sariwulan et al., 2020).

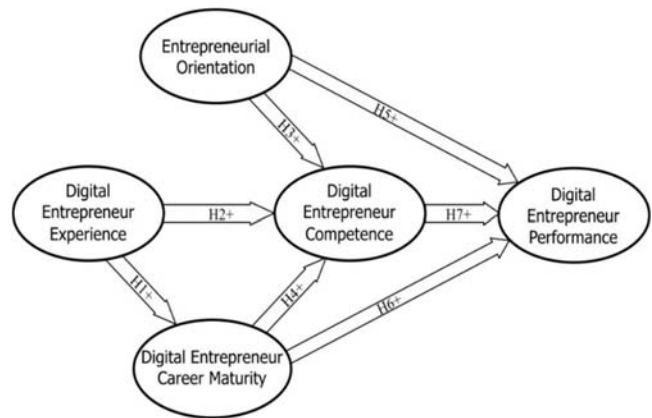
**H6:** The better digital entrepreneurial competence, the better business performance.

## 2.10. Digital Entrepreneur Career Maturity

According to Super (1980), one's career maturity is related to one's success in completing the task, which includes four aspects, namely planning, exploration, competence and decision making. Underlying entrepreneurial phases (Bosma et al., 2020), this study examines digital entrepreneurs who have been in the position of owner manager of an established business so that they have decided to have a career as a digital entrepreneur. Previous study by Venkatesan (2020) showed that digital entrepreneurial maturity had a positive effect on firm performance.

**H7:** The better digital entrepreneurial career maturity, the higher business performance.

Based on the literature review, the research model can be explained in Figure 1.



**Figure 1:** Research Model

### 3. Research Methods and Materials

#### 3.1. Population and Sample

The population in this study are entrepreneurs who are active in digital business or e-commerce activities in Central Java, Indonesia, like Shopee, Tokopedia, Bukalapak, Lazada, Blibli, OLX, and others. Based on data from the Indonesia Central Statistics Agency, in 2021 the number of e-commerce businesses in Central Java was recorded at 406,991 businesses.

The samples size in this study was calculated using Yamane and Cohen Statistical Power Analysis by G\*Power (Chaokromthong & Sintao, 2021; Memon et al., 2020). The results of the calculation of the Yamane (1973) obtained a sample of 100 people, while the calculation of statistical power with G\*Power ( $f^2 = 0.15$ ;  $\alpha = 0.01$ , Power = 0.95, and  $N = 5$ ) obtained a total sample size of 109 (Memon et al., 2020). The samples selected by purposive random sampling technique. Questionnaire distribution is carried out through face-to-face, email and Google Form, from May to November 2022. Based on this, 184 answers deserved data were analyzed. The amount of data meets the provisions of Roscoe (1975) that the sample size is greater than 30 and less than 500 suitable for most behavior studies.

#### 3.2. Operational Definition

The construct in this study is a latent variable measured using a Likert scale with five alternative answers from 1 for Strongly Disagree to 5 for Strongly Agree. The indicator items are compiled by adopting previous studies translated into Indonesian (see Table 1). To get an overview of the respondent's profile, the first part of the questionnaire contains socio-demographic information including gender, age, education, line of business, length of business, and business turnover.

**Table 1:** Variables and Indicators

Variables	Indicators	References
Digital Entrepreneurial Experience (DE)	<ol style="list-style-type: none"> <li>1. Have prior entrepreneurial experience related to the current Industry</li> <li>2. Have a digital startup experience</li> <li>3. Having failed experience in digital entrepreneurship</li> </ol>	(Zhao <i>et al.</i> , 2005; Peng <i>et al.</i> , 2021)
Entrepreneurial Orientation (EO)	<ol style="list-style-type: none"> <li>1. Have the freedom to develop new ideas</li> <li>2. Have a strong tendency to develop new products</li> <li>3. Active in anticipating changing consumer needs</li> </ol>	(Chirico & Sirmon, 2010; Kusa <i>et al.</i> , 2021)

	<ol style="list-style-type: none"> <li>4. Have a tendency to dare to apply new strategies</li> <li>5. Maintain cooperation with partners</li> </ol>	
Digital Entrepreneur Career Maturity (DM)	<ol style="list-style-type: none"> <li>1. Confidence</li> <li>2. Innovativeness</li> <li>3. Loyalty</li> <li>4. Business network</li> <li>5. Leadership skills</li> </ol>	(Beulen, 2021)
Digital Competence (DC)	<ol style="list-style-type: none"> <li>1. Information and data literacy</li> <li>2. Communication and collaboration</li> <li>3. Digital content creation</li> <li>4. Security</li> <li>5. Troubleshooting</li> </ol>	(Bartolomé <i>et al.</i> , 2022; Khan <i>et al.</i> , 2020)
Digital Business Performance (DP)	<ol style="list-style-type: none"> <li>1. Return on Equity</li> <li>2. Net income</li> <li>3. Asset growth</li> <li>4. Market share growth</li> <li>5. Number of complaints</li> <li>6. Customer repurchases</li> </ol>	(Abu-Rumman <i>et al.</i> , 2021; Sousa-Zomer <i>et al.</i> , 2022)

#### 3.3. Data Analysis Technique

Data analysis in this study uses the Partial Least Square Structural Equation Modeling (PLS-SEM), which is a very useful technique for evaluating complex theoretical relationships between several variables (Hair & Alamer, 2022). PLS-SEM has become a quasi-standard in marketing and management research to analyze causal relationships between latent constructs and equivalents to covariance-based SEM (Hair et al., 2011). PLS-SEM can perform mediating role testing to estimate indirect effects and bootstrap-based significance testing. SEM-PLS is suitable for selecting prediction-oriented models rather than theory testing. Composite-based SEM methods such as partial least squares (PLS-SEM) are the preferred and superior approach when estimating mediation and conditional process models (Sarstedt et al., 2020).

### 4. Results and Discussion

#### 4.1. Research Result

Table 2 contains demographic information for the respondents who participated in this study. The findings show that male respondents are dominant at 66%, while women are 34%. Respondents based on the largest age group were 41 to 50 years old by 50%, while the majority of education was Bachelor's with a total of 38%. The majority of respondents have been in business for more than 5 until 10 years by 36%. The most digital business fields being cellular phones and accessories 29%, electronics at 23%, computers 17%, creative industries 9%, and other like fashion, toy, and food are 21%.

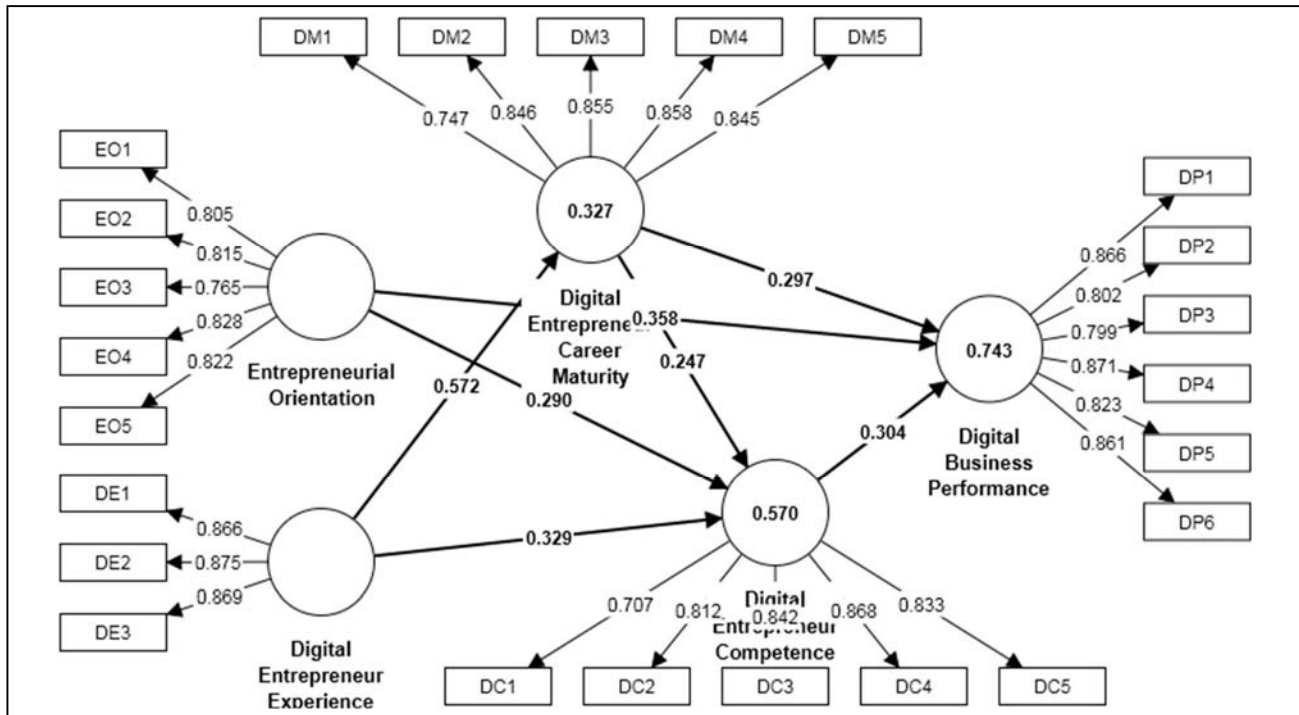
**Table 2:** Respondent's profile (N=184)

Characteristic	N	%
Gender		
Male	121	66
Female	63	34
Age		
21-30 years	22	11
31-40 years	61	33
41-50 years	92	50
51+ years	9	5
Education		
High school	53	29
Diploma	50	27
Bachelor	70	38
Master	11	6
Years Business		
3-5 years	64	35
6-10 years	67	36
11-20 years	35	19
21+ years	18	10
Unit Business		
Computer	32	17
Phone	54	29
Electronic	42	23
Creative Industry	17	9
Another (Fashion, Toy, Food)	39	21

This study uses the main SmartPLS4 software in PLS-SEM with the consideration that it has been equipped with

many new algorithms and methodological improvements (Ringle et al., 2022). The results of the Full Model estimation against the research model framework are shown in Figure 2. The R-square value of each endogenous construct shows that digital entrepreneur experience contributes 32.7% to digital entrepreneurial maturity. Furthermore, the variables of entrepreneurial orientation, digital entrepreneur experience, and digital entrepreneurial maturity contributed 57.0% in explaining digital entrepreneurial competence. Finally, all antecedent variables are able to contribute 74.3% to predict digital business performance, and are included in the high category (Hair et al., 2019).

The structural model is then examined for goodness of fit offered by SmartPLS (Table 3). The fit index for the Standardized Root Mean Square Residual (SRMR = 0.067) value below 0.08 indicates that there is no model specification error (Henseler & Sarstedt, 2013; Hu & Bentler, 1998). Another criterion is the Normed Fit Index (NFI = 0.834), which refers to several PLS-SEM studies, NFI values above 0.8 are still acceptable (Akour et al., 2022; Chinelato et al., 2022; Dash & Paul, 2021). It is meaning that the model is more suitable for predicting and testing hypotheses (AlNuaimi et al., 2022; Lohmöller, 1989). Finally, the f2 value shows that it is above 0.02 which means there is a good relevance effect (Chin, 1998; Henseler et al., 2009; Tian et al., 2021).



**Figure 2:** Estimation Result

**Table 3: Fit Model Result**

Fit Indeks	Result	Cut of Value	Evaluation
SRMR	0.055	0.08	Good
NFI	0.834	0.90	Moderate
f <sup>2</sup>	0.053...0.168	0.02	Relevance

The measurement model assessment in this study consists of several criteria commonly used in PLS to test convergent and discriminant validity, as well as internal consistency reliability. First, the study tested convergent validity through the loading indicator factor in the model, where the value should be > 0.7. Furthermore, this study assessed the reliability of the constructs in the research model with Cronbach alpha ( $\alpha$ ), A, composite reliability (CR), and Average Variance Extracted (AVE). The recommended threshold values for Cronbach's alpha ( $\alpha$ ), CR and A range from above 0.8 to 0.9, while the AVE value should be greater than 0.5 (Benitez et al., 2020; Hair et al., 2019; Latan & Noonan, 2017). The results of the analysis for convergent validity in Table 4 illustrate that all criteria have met the required threshold value, loading factor > 0.7; Cronbach's Alpha , rho\_A, and C.R. > 0.8 or > 0.9; and AVE > 0.5.

**Table 4: Measurement Testing Result**

Var. & Indicator	Loadings	C. $\alpha$	rho_A	C. R.	A.V.E.
Digital Entrepreneur Experience		0.840	0.841	0.903	0.663
DE1	0.863				
DE2	0.875				
DE3	0.872				
Entrepreneurial Orientation		0.866	0.866	0.903	0.652
EO1	0.805				
EO2	0.815				
EO3	0.765				
EO4	0.828				
EO5	0.822				
Digital Entrepreneurial Maturity		0.887	0.891	0.918	0.691
DM1	0.750				
DM2	0.845				
DM3	0.856				
DM4	0.858				
DM5	0.842				
Digital Entrepreneur Competence		0.872	0.878	0.907	0.663
DC1	0.707				
DC2	0.812				
DC3	0.842				
DC4	0.868				
DC5	0.833				

Digital Entrepreneur Performance	0.914	0.916	0.934	0.701
DP1	0.866			
DP2	0.802			
DP3	0.799			
DP4	0.871			
DP5	0.823			
DP6	0.861			

Note: C.  $\alpha$  = Cronbach's Alpha; rho\_A, C.R. = Composite Reliability; AVE = Average Variance Extracted

In addition to assessing convergent validity, this study also assesses discriminant validity to ensure that the construction measurements are separate and not overly correlated one construct with another construct. The Fornell-Larcker criteria were chosen to assess discriminant validity (Franke & Sarstedt, 2019; Roemer et al., 2021). The calculation results in Table 5 show that the square root of the AVE is greater than the correlation between the constructs. These results explain the fulfillment of discriminant validity for the four measurements of the research construct.

**Table 5. Discriminant Validity - Fornell-Larcker Criteria**

Variables	DE	EO	DM	DC	DP
Digital Entrepreneur Experience	<b>0.870</b>				
Entrepreneurial Orientation	0.580	<b>0.807</b>			
Digital Entrepreneurial Maturity	0.570	0.788	<b>0.831</b>		
Digital Entrepreneur Competence	0.638	0.675	0.664	<b>0.814</b>	
Digital Entrepreneur Performance	0.679	0.797	0.781	0.743	<b>0.837</b>

Note: Diagonal and bold elements =  $\sqrt{\text{AVE}}$ ; the element under the diagonal is the correlation between the construct

Hypothesis testing was carried out using the Bootstrapping method with a subsample of 5000, two-tailed testing, and a significance level of 0.05. The results as summarized in Figure 3 and Table 6 show that all hypotheses are accepted, it mean H1 until H7 were accepted at the level of  $\alpha=0.01$ .

**Table 6: Hypothesis Testing Result**

Hypothesis	Relationship	Estimate ( $\beta$ )	T-Statistics	P-Values
H1	DE $\rightarrow$ DM	0.572	10.467	0.000***
H2	DE $\rightarrow$ DC	0.329	5.260	0.000***
H3	EO $\rightarrow$ DC	0.290	2.984	0.003***
H4	DM $\rightarrow$ DC	0.247	3.019	0.003***
H5	EO $\rightarrow$ DP	0.358	5.226	0.000***
H6	DM $\rightarrow$ DP	0.297	4.209	0.000***
H7	DC $\rightarrow$ DP	0.304	5.552	0.000***

Note: DE = Digital Entrepreneur Experience; EO = Entrepreneurial Orientation; DM = Digital Entrepreneurial Maturity; DC = Digital Entrepreneur Competence; DP = Digital Entrepreneur Performance; \*\*\*  $p < 0.01$

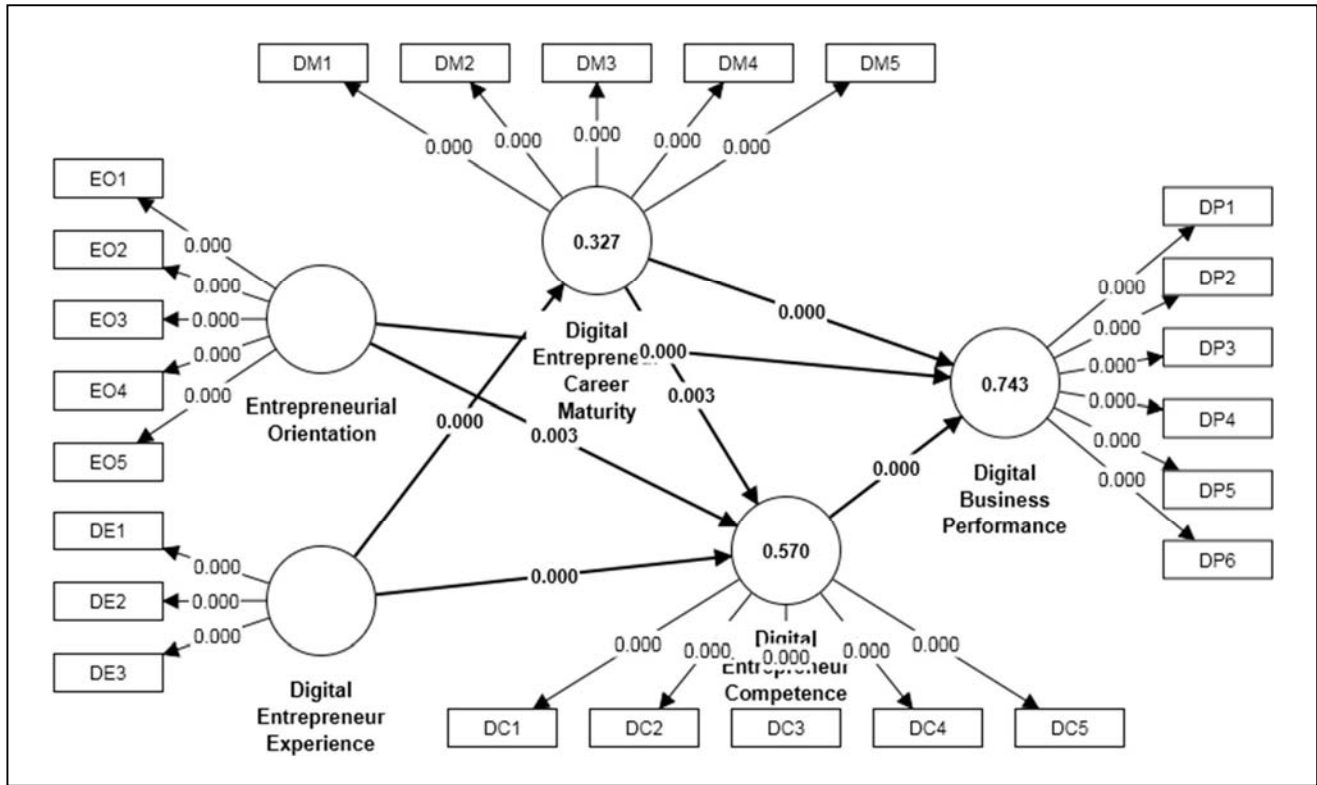


Figure 3: Bootstrapping Result

The mediating role is the focus of this study where the results of the SmartPLS 4 calculation are shown in Table 7. The findings show that digital entrepreneur experience has an indirect effect on digital business performance through digital entrepreneur maturity ( $\beta=0.170$ ;  $t=3.635>2.58$ ;  $p=0.000<0.01$ ), and through digital competence ( $\beta=0.100$ ;  $t=3.510>2.58$ ;  $p=0.000<0.01$ ). Likewise, the mediating role of digital competence is also evident in the relationship between entrepreneur orientation and digital business performance ( $\beta_1=0.088$ ;  $t=2.456>1.96$ ;  $p=0.014<0.05$ ).

Table 7: Mediation Testing Result

Indirect Effect	Estimated ( $\beta$ )	T Statistics	P Values
DE → DM → DP	0.170	3.635	0.000***
DE → DC → DP	0.100	3.510	0.000***
EO → DC → DP	0.088	2.456	0.014**

Note: \*\*\*  $p<0.01$ ; \*\*  $p<0.05$

#### 4.2. Discussion

This study proposes 7 hypotheses, and all of them are stated to be significant, namely: the influence of entrepreneurship orientation, digital entrepreneurship experience, digital entrepreneur career maturity on digital entrepreneurial competence, the influence of digital

entrepreneurship experience on digital entrepreneurial career maturity, the influence of entrepreneurial orientation, entrepreneurial competence, entrepreneurial career maturity digital on business performance.

Entrepreneurial orientation was found to have a significant effect on entrepreneurial competence. Entrepreneurial orientation including innovativeness, proactiveness and risk taking can play a role in encouraging entrepreneurial competence (Kreiser et al., 2013). These three aspects will encourage the competence of digital entrepreneurs as things needed by digital entrepreneurs in realizing the success and sustainability of their digital businesses. Previous study by Al Mamun and Fazal (2018) and Wahyono and Hutahayan-(2021) supported this finding that entrepreneurship orientation has a significant effect on entrepreneurial competence. Entrepreneurial orientation was also found to have a direct influence on business performance. Herlinawati et al. (2019) and Cuevas-Vargas et al. (2019) prove that entrepreneurial orientation has a positive and significant influence on business performance. This is in accordance with the opinion of Magaji et al. (2017) which states that entrepreneurs with a high entrepreneurial orientation can sell more products and earn high profits due to innovation, proactiveness, risk taking, and competitiveness.

Entrepreneurs with more experience will score higher competencies than those with less or no experience (Kyndt & Baert, 2015), because these competencies are changeable, learnable, and attainable through experience, training, or coaching (Volery et al., 2015). This is evidenced in this study which concludes that digital entrepreneurship experience has a significant effect on digital entrepreneurship competence. The entrepreneurial experience gained begins with entrepreneurship training, helping business partners, managing their own business, or known as flow experience by Novak et al. (2000) will also increase the maturity of an entrepreneurial career. The experience of digital entrepreneurship as an aspect of human capital is proven to have a significant influence on the maturity of an entrepreneurial career.

The process of digital entrepreneur career maturity that a digital entrepreneur goes through, from starting a business (intention), developing a business (behavior) to deciding on digital entrepreneurship as a career has led him to increase his competence as a digital entrepreneur. This is evidenced in this study which concludes that entrepreneurship career maturity has a significant effect on digital entrepreneurship competence. The results of this study support the research of Hidayat et al. (2019) concluding the positive influence of career maturity on entrepreneurial competence. Digital business career maturity is an instrument that plays a role in encouraging digital entrepreneurs to improve their performance. Digital entrepreneurs must have this capability to build career maturity that comes from personality, learning, environment and strategies for business success.

In the field of digital entrepreneurship, digital entrepreneurship competence is defined as the ability of an entrepreneur to express themselves in building relationships through the formation of relational competencies based on a spirit of intimacy to create a business network with the business environment (Meutia & Ismail, 2012). The results of this study prove that entrepreneurial competence has a significant effect on business performance. The results of this study support previous research conducted by Wani and Butt (2017), and Al Mamun and Fazal (2018) proving that entrepreneurial competence has a significant influence on business performance. This research also proves the mediating role of competence and career maturity of digital entrepreneurs in bridging aspects of human capital and business strategy on business performance. The entrepreneurial orientation and entrepreneurial experience possessed by digital entrepreneurs will be even better if they are encouraged by increasing entrepreneurial competencies and entrepreneurial career maturity. Previous research conducted by Hidayat et al. (2019), and Khan et al. (2020) proved that entrepreneurial career maturity and entrepreneurial competence have the ability to mediate

aspects of human capital and aspects of entrepreneurial strategy.

## **5. Conclusions**

### **5.1. Summary**

The emergence of the 4th industrial revolution has the impact that most of the jobs with middle and low skills will be replaced by digitalization, including the e-commerce, payment, and distribution business. This space offers a substantial contribution to the development of a research model to achieve digital business performance. Digital entrepreneurial orientation and digital entrepreneurial experience have important role in developing digital business performance but still found different results in previous study. Competence and career maturity of digital entrepreneurs are proposed as mediating role in bridging the research gap between aspects of human capital (entrepreneurial experience) and strategic aspects of digital entrepreneurial business performance in Central Java, Indonesia.

Overall, there are 7 hypotheses proposed, namely: the effect of entrepreneurship orientation on digital entrepreneurial competence, digital entrepreneurship experience on digital entrepreneurial competence, digital entrepreneurship experience on digital entrepreneurial career maturity, digital entrepreneur career maturity on digital entrepreneurial competence, influence of entrepreneurial orientation on business performance, digital entrepreneurship competence on business performance, career maturity of digital entrepreneurs on business performance. The results of the study concluded that all hypotheses were stated to be significant. Likewise, the mediating role of digital entrepreneur career maturity and digital entrepreneurial competence is stated to be significant.

### **5.2. Implication**

The implication of this study can provide significant contribution in academic implication. The research findings will strengthen the role of developing the theory of human capital, theory of self-determination, social cognitive career theory and career development theory in supporting the creation of digital entrepreneurs to face the fourth industrial revolution. Digital entrepreneur competence is a synthesis of digital entrepreneur behavior derived from the development of the theory of planned behavior and from the development of the theory of self-determination, as the basis for the creation of digital entrepreneurs. The behavior of digital entrepreneurs is the realization of digital

entrepreneurship and is a fundamental aspect for digital entrepreneurs, while the competence of digital entrepreneurs is what digital entrepreneurs need in realizing the success and sustainability of their digital businesses. Digital entrepreneurial career maturity underlies career development theory and career maturity theory applied in the field of digital entrepreneurship.

The practical implication of this study is contribute the necessity of digital business facilities in stimulate the rapid growth of digital business. The role of the government as a regulator is needed to assist regulations that further encourage the advancement of digital entrepreneurs. The places of business provided for digital businesses are generally still very expensive; in this case the government can help build a good and affordable digital business place. The emergence of digital businessman will make a big contribution to nation's economy in a whole.

### 5.3. Limitation and Recommendation for Further Research

Thus study has some limitations and recommendations. Firstly, due to limitation of time and cost, the respondents are only located in Central Java, Indonesia. The next study is recommended to expand in a wider sampling area, such as in another province or comparison between two or more countries. Secondly, this study is a cross-sectional research and using a questionnaire to collect the data which potentially effect inherent problems, therefore a longitudinal study is recommended for further research. The positive result of competence and entrepreneurial career maturity result as mediating variable can be explored to another factor in another study.

## References

- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link? *Journal of Innovation and Entrepreneurship*, 10(1), 1-16. <https://doi.org/10.1186/s13731-021-00170-8>
- Akour, I. A., Al-Marouf, R. S., Alfaisal, R., & Salloum, S. A. (2022). A conceptual framework for determining metaverse adoption in higher institutions of gulf area: An empirical study using hybrid SEM-ANN approach. *Computers and Education: Artificial Intelligence*, 3, 100052. <https://doi.org/10.1016/j.caeai.2022.100052>
- Al Mamun, A., & Fazal, S. A. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12, 379-398. <https://doi.org/10.1108/apjie-05-2018-0033>
- AlNuaimi, B. K., Kumar Singh, S., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*, 145, 636-648. <https://doi.org/10.1016/j.jbusres.2022.03.038>
- Amuda, Y. J. (2020). Potential entrepreneurship careers of fourth industrial revolution-based in Saudi Arabia. *Academy of Entrepreneurship Journal*, 26, 1-8
- Atikur, R. M., Fatema, L. K., Shi, M., Monwarul, I., & Atif, W. H. M. (2021). The Effect of Entrepreneurial Orientation, Market Orientation and Gender on Business Performance: An Empirical Study of SMEs in Bangladesh. *The Journal of Asian Finance, Economics and Business*, 8(6), 741-746. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0741>
- Barazandeh, M., Parvizian, K., Alizadeh, M., & Khosravi, S. (2015). Investigating the effect of entrepreneurial competencies on business performance among early stage entrepreneurs Global Entrepreneurship Monitor (GEM 2010 survey data). *Journal of Global Entrepreneurship Research*, 5(1), 1-12. <https://doi.org/10.1186/s40497-015-0037-4>
- Bartolomé, J., Garaizar, P., & Larrucea, X. (2022). A Pragmatic Approach for Evaluating and Accrediting Digital Competence of Digital Profiles: A Case Study of Entrepreneurs and Remote Workers. *Technology, Knowledge and Learning*, 27(3), 843-878. <https://doi.org/10.1007/s10758-021-09516-3>
- Benitez, J., Henseler, J., Castillo, A., & Schubert, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information & management*, 57(2), 103168. <https://doi.org/10.1016/j.im.2019.05.003>
- Bernoster, I., Mukerjee, J., & Thurik, R. (2020). The role of affect in entrepreneurial orientation. *Small business economics*, 54(1), 235-256. <https://doi.org/10.1007/s11187-018-0116-3>
- Beulen, E. (2020). Digital Maturity: A Survey in the Netherlands. In: Oshri, I., Kotlarsky, J., Willcocks, L.P. (eds) *Digital Technologies for Global Sourcing of Services. Global Sourcing 2019. Lecture Notes in Business Information Processing*. Switzerland: Springer Nature. [https://doi.org/10.1007/978-3-030-66834-1\\_4](https://doi.org/10.1007/978-3-030-66834-1_4)
- Borges, N. J., Richard, G. V., & Duffy, R. D. (2007). Career Maturity of Students in Accelerated Versus Traditional Programs. *The Career Development Quarterly*, 56(2), 171-176. <https://doi.org/10.1002/j.2161-0045.2007.tb00029.x>
- Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *Global Entrepreneurship Monitor 2019/2020 Global Report*. London: Global Entrepreneurship Research Association, London Business School
- Chandler, G. N., & Hanks, S. H. (1994). Founder competence, the environment, and venture performance. *Entrepreneurship theory and practice*, 18, 77-89
- Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7, 223-236
- Chaokromthong, K., & Sintao, N. (2021). Sample Size Estimation using Yamane and Cochran and Krejcie and Morgan and Green Formulas and Cohen Statistical Power Analysis by G\* Power and Comparisons. *Apehit International Journal*, 10(2), 76-86
- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling* (Vol. 295)
- Chinelato, F. B., Filho, C. G., & Júnior, C. L. N. (2022). Does brand-relationships matter? The role of brand attachment in

- salesperson performance in retailing. *Spanish Journal of Marketing - ESIC*, 26(1), 117-144. <https://doi.org/10.1108/SJME-11-2020-0192>
- Chirico, F., & Sirmon, D. G. (2010). Entrepreneurial orientation and performance in family firms: The joint effect of generational involvement and participative strategy. *Strategic Entrepreneurship Journal*, 979(1), 1-39
- Cichosz, M., Wallenburg, C.M. & Knemeyer, A.M. (2020). Digital transformation at logistics service providers: barriers, success factors and leading practices. *The International Journal of Logistics Management*, 31(2), 209-238. <https://doi.org/10.1108/IJLM-08-2019-0229>
- Crites, J. O. (1973). *Theory and research handbook for the Career Maturity Inventory*. Monterey, CA: CTB/McGraw Hill
- Cuevas-Vargas, H., Parga-Montoya, N., & Fernández-Escobedo, R. (2019). Effects of entrepreneurial orientation on business performance: The mediating role of customer satisfaction—A formative–Reflective model analysis. *SAGE Open*, 9(2), 1-14. <https://doi.org/10.1177/2158244019859088>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, 121092. <https://doi.org/10.1016/j.techfore.2021.121092>
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331. [https://doi.org/10.1016/S0883-9026\(02\)00097-6](https://doi.org/10.1016/S0883-9026(02)00097-6)
- Deakins, D., Sullivan, R., & Whittam, G. (2000). Developing business start-up support programmes: evidence from Scotland. *Local Economy*, 15, 159-167
- Delfmann, W., Albers, S. & Gehring, M. (2002). The impact of electronic commerce on logistics service providers, *International Journal of Physical Distribution & Logistics Management*, 32(3), 203-222. <https://doi.org/10.1108/09600030210426539>
- Fadillah, R., & Helmi, A. F. (2022). Mixed Virtual Supports Startup Survival During Pandemic. *ANIMA Indonesian Psychological Journal*, 37(2), 268-304. <https://doi.org/10.24123/aipj.v37i2.4692>
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial Orientation And Business Performance – A Replication Study. *Schmalenbach business review*, 62, 175-198. <https://doi.org/10.1007/BF03396804>
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*, 29(3), 430-447. <https://doi.org/10.1108/IntR-12-2017-0515>
- Grande, J., Madsen, E. L., & Borch, O. J. (2011). The relationship between resources, entrepreneurial orientation and performance in farm-based ventures. *Entrepreneurship and Regional Development*, 23, 89-111. <https://doi.org/10.1080/08985620903183710>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Hair, Jr. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-151. <https://doi.org/10.2753/MTP1069-6679190202>
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565-580. <https://doi.org/10.1007/s00180-012-0317-1>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. New Challenges to International Marketing. *Advances in International Marketing*, 20, 277-319
- Herlinawati, E., Ahman, E., & Machmud, A. (2019). The Effect of Entrepreneurial Orientation on SMEs Business Performance in Indonesia. *Journal of Entrepreneurship Education*, 22(5), 1-15
- Hidayat, H., Ardi, Z., Herawati, S., & Amrina, Z. (2019). The contribution of internal locus of control and self-concept to career maturity in vocational higher education. *KnE Social Sciences*, 234–248. <https://doi.org/10.18502/kss.v3i15.4370>
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological methods*, 3(4), 424-453
- Javalgi, R. & Ramsey, R. (2001). Strategic issues of e-commerce as an alternative global distribution system. *International Marketing Review*, 18(4), 376-391. <https://doi.org/10.1108/02651330110398387>
- Kamuri, S. (2021). Creating as an entrepreneurial competence, innovation and performance of value-system actors in Kenya's leather industry. *Scientific African*, 11, e00664. <https://doi.org/10.1016/j.sciaf.2020.e00664>
- Khan, I., & Bashir, T. (2020). Market Orientation, Social Entrepreneurial Orientation, and Organizational Performance: The Mediating Role of Learning Orientation. *Iranian Journal of Management Studies*, 13, 673-703. <https://doi.org/10.22059/ijms.2020.289467.673800>
- Khan, M. A., Rathore, K., & Sial, M. A. (2020). Entrepreneurial orientation and performance of small and medium enterprises: mediating effect of entrepreneurial competencies. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 14(2), 508-528
- Killa, M. F., Kalunga, N. R., & Ara, U. H. (2017). Networks Symbiosis Capability As Mediator Between Strategic Alliance And Business Performance: Empirical Study on Ikat Industry in Bali And East Nusa Tenggara. *Research Journal of Business and Management*, 4(2), 96-102. <https://doi.org/10.17261/Pressacademia.2017.464>
- Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: the non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small business economics*, 40(2), 273-291
- Kusa, R., Duda, J., & Suder, M. (2021). Explaining SME performance with fsQCA: The role of entrepreneurial orientation, entrepreneur motivation, and opportunity perception. *Journal of Innovation & Knowledge*, 6(4), 234-245. <https://doi.org/10.1016/j.jik.2021.06.001>
- Kyndt, E., & Baert, H. (2015). Entrepreneurial competences: Assessment and predictive value for entrepreneurship. *Journal*

- of *Vocational Behavior*, 90, 13-25. <https://doi.org/10.1016/j.jvb.2015.07.002>
- Latan, H., & Noonan, R. (2017). *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*. Heidelberg, Germany: Springer
- Lisboa, A., Skarmeas, D., & Saridakis, C. (2016). Entrepreneurial orientation pathways to performance: A fuzzy-set analysis. *Journal of Business Research*, 69, 1319-1324. <https://doi.org/10.1016/j.jbusres.2015.10.099>
- Lohmöller, J.-B. (1989). Predictive vs. structural modeling: Pls vs. ml *Latent variable path modeling with partial least squares* (pp. 199-226). Heidelberg, Germany: Springer. [https://doi.org/10.1007/978-3-642-52512-4\\_5](https://doi.org/10.1007/978-3-642-52512-4_5)
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429-451. [https://doi.org/10.1016/S0883-9026\(00\)00048-3](https://doi.org/10.1016/S0883-9026(00)00048-3)
- Magaji, M. S., Baba, R., & Entebang, H. (2017). Entrepreneurial Orientation and Financial Performance of Nigerian SMES:. *Journal of Management and Training for Industries*, 4, 25-41. <https://doi.org/10.12792/jmti.4.1.25>
- Mason, M. C., Floreani, J., Miani, S., Beltrame, F., & Cappelletto, R. (2015). Understanding the Impact of Entrepreneurial Orientation on Smes' Performance. the Role of the Financing Structure. *Procedia Economics and Finance*, 23, 1649-1661. [https://doi.org/10.1016/s2212-5671\(15\)00470-0](https://doi.org/10.1016/s2212-5671(15)00470-0)
- Memon, M. A., Ting, H., Cheah, J.-H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: review and recommendations. *Journal of Applied Structural Equation Modeling*, 4(2), 1-20
- Meutia, M., & Ismail, T. (2012). The development of entrepreneurial social competence and business network to improve competitive advantage and business performance of small medium sized enterprises: A case study of batik industry in Indonesia. *Procedia-Social and Behavioral Sciences*, 65, 46-51. <https://doi.org/10.1016/j.sbspro.2012.11.089>
- Miller, D. (1983). The Correlates of Entrepreneurship in three Types of Firms. *Management Science*, 29, 770-791. <https://doi.org/10.1287/mnsc.29.7.770>
- Nabi, G., Walmsley, A., & Akhtar, I. (2021). Mentoring functions and entrepreneur development in the early years of university. *Studies in Higher Education*, 46(6), 1159-1174. <https://doi.org/10.1080/03075079.2019.1665009>
- Novak, T. P., Hoffman, D. L., & Yung, Y.-F. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing science*, 19(1), 22-42
- Peng, H., Chang, Y., & Liu, Y. (2021). Risk preference, prior experience, and serial entrepreneurship performance: evidence from China. *Asia Pacific Business Review*, 1-19. <https://doi.org/10.1080/13602381.2021.2012987>
- Prendes-Espinosa, P., Solano-Fernández, I. M., & García-Tudela, P. A. (2021). EmDigital to Promote Digital Entrepreneurship: The Relation with Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(63), 1-14. <https://doi.org/10.3390/joitmc7010063>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2022). SmartPLS 4. from <https://www.smartpls.com>
- Roemer, E., Schuberth, F., & Henseler, J. (2021). HTMT2—an improved criterion for assessing discriminant validity in structural equation modeling. *Industrial Management & data Systems*, 121(12), 1-14
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences*. New Yor: Holt, Rinehart and Winston
- Sajilan, S., Hadi, N., & Tehseen, S. (2015). Impact of Entrepreneur's Demographic Characteristics and Personal Characteristics on Firm's Performance Under the Mediating Role of Entrepreneur Orientation. *Review of Integrative Business and Economics Research*, 4(2), 36-52.
- Sariwulan, T., Suparno, S., Disman, D., Ahman, E., & Suwatno, S. (2020). Entrepreneurial performance: The role of literacy and skills. *The Journal of Asian Finance, Economics and Business*, 7(11), 269-280. <https://doi.org/10.13106/jafeb.2020.vol7.no11.269>
- Sarstedt, M., Hair, J. F., Nitzl, C., Ringle, C. M., & Howard, M. C. (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*, 62(3), 288-299. <https://doi.org/10.1177/1470785320915686>
- Sousa-Zomer, T.T., Neely, A. & Martinez, V. (2020), Digital transforming capability and performance: a microfoundational perspective, *International Journal of Operations & Production Management*, 40(7/8), 1095-1128. <https://doi.org/10.1108/IJOPM-06-2019-0444>.
- Sreih, J. F., Assaker, G., & Hallak, R. (2016). Entrepreneurial Experience, Support for Community and Family Firm Performance: A Cross-Study of Product and Service-based. *Contemporary Management Research*, 12, 467-496. <https://doi.org/10.7903/cmr.15360>
- Super, D. E. (1980). A Life-Span, Life Space Approach to Career Development. *Journal of Vocational Behavior*, 16(3), 282-298. [https://doi.org/10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1)
- Super, D. E. A. (1953). A theory of vocational development. *Psychologist*, 8, 185-190.
- Sussan, F., & Acs, Z. J. (2017). The digital entrepreneurial ecosystem. *Small business economics*, 49(1), 55-73. <https://doi.org/10.1007/s11187-017-9867-5>
- Tian, H., Iqbal, S., Anwar, F., Akhtar, S., Khan, M. A. S., & Wang, W. (2021). Network embeddedness and innovation performance: a mediation moderation analysis using PLS-SEM. *Business Process Management Journal*, 27(5), 1590-1609. <https://doi.org/10.1108/BPMJ-08-2020-0377>
- Venkatesan, L. (2020). *The effect of digital maturity and entrepreneurial agility on firm performance in digital transformation of traditional organisations*. University of Pretoria.
- Volery, T., Mueller, S., & von Siemens, B. (2015). Entrepreneur ambidexterity: A study of entrepreneur behaviours and competencies in growth-oriented small and medium-sized enterprises. *International Small Business Journal*, 33(2), 109-129
- von Arnim, L., & Mrozewski, M. (2020). Entrepreneurship in an Increasingly Digital and Global World. Evaluating the Role of Digital Capabilities on International Entrepreneurial Intention. *Sustainability*, 12(7984), 1-18. <https://doi.org/https://doi.org/10.3390/su12197984>

- Wahyono, W. & Hutahayan, B. (2021). The relationships between market orientation, learning orientation, financial literacy, on the knowledge competence, innovation, and performance of small and medium textile industries in Java and Bali. *Asia Pacific Management Review*, 26(1), 39-46. <https://doi.org/10.1016/j.apmr.2020.07.001>
- Wani, A. N., & Butt, K. A. (2017). Entrepreneurial Competencies and Venture Performance: A Literature Review and Conceptual Development. *Journal of Entrepreneurship and Management*, 6(1), 23-32
- Webb, K. L. (2002). Managing channels of distribution in the age of electronic commerce. *Industrial Marketing Management*, 31(2), 95-102. [https://doi.org/10.1016/S0019-8501\(01\)00181-X](https://doi.org/10.1016/S0019-8501(01)00181-X)
- Yamane, T. (1973). *Statistics: An Introductory Analysis*. London: John Weather Hill, Inc.
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272. <https://doi.org/10.1037/0021-9010.90.6.1265>