International Journal of Economics and Business Administration
Volume X, Issue 4, 2022

pp. 82-100

The Effect of Digital Entrepreneurship on Creative Cities in the Pandemic Covid-19 Era

Submitted 11/10/22, 1st revision 29/10/22, 2nd revision 28/11/22, accepted 30/12/22

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Abstract:

Purpose: *The aim of this article is to find out the influence of digital entrepreneurship on creative cities in the current Covid-19 pandemic conditions. The research was conducted in the city of Bandung, Indonesia.*
Design/methodology/approach: *The analysis uses three dimensions of digital entrepreneurship variables, namely entrepreneur, entrepreneurship process, and ecosystem, as well as creative city variables. This research is based on a quantitative approach with a sample of 314 creative industry players in the city of Bandung. The statistical method used to test the hypothesis in this study is Structural Equation Modeling (SEM) through the Partial Least Square (PLS) v3.0 approach.*
Findings: *The research findings show that entrepreneurs have a significant effect on creative cities, with a contribution of 19.4%, the Entrepreneurship process has a significant effect on creative cities, with a contribution of 29.2%, and Ecosystems have a significant effect on creative cities, with a contribution of 28.6%. Overall, the condition of Digital Entrepreneurship has a significant effect on supporting the creative city of Bandung, with a total contribution of 77.2% which is dominated by the entrepreneurship process.*
Practical implications: *Research on the role and interaction of creative economy stakeholders involved in the digital entrepreneurship ecosystem in supporting creative cities is a suggestion for further research.*
Originality/value: *From the value of the contribution of the entrepreneurship process that dominates, it can be seen that the impact of the Covid-19 pandemic has created new habits from creative industry players in the City of Bandung by maximizing the use of technology and internet networks, without being limited by space that can be accessed by everyone.*

Keywords: *Entrepreneurs, entrepreneurship process, ecosystems, creative city, creative industry, digital entrepreneurship.*

JEL codes: *M10, M13, M15.*

Paper type: *Research article.*

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1. Introduction

In the Corona Virus Diseases-19 (COVID-19) pandemic, digitalization has become something that must be understood and utilized by business actors as a market opportunity to develop their business. In addition, several policies also need to be considered by the government, because it is still a challenge to accelerate the transition of small and medium-sized businesses to digital platforms, such as the availability of fast and equitable internet through the provision of telecommunications infrastructure, development of quality human resources and assurance of network security (Purbasari *et al.,* 2021).

One of the keys to facing these challenges is the ability to utilize digital media in creating innovation and creativity. The positive impact of digitalization on entrepreneurship also occurs in the form of promoting innovation, creating job opportunities, and increasing productivity both socially and economically for the government and industry (Song, 2019).

Especially now that global changes are affecting the development of the business world, with global economic conditions becoming increasingly uncertain, such as the closure of retail outlets, disruption of product supply chains, and disruptions in product delivery due to the ongoing Covid-19 pandemic that is sweeping the world (Karabag, 2020; Fabeil *et al.,* 2020). This situation requires business actors to maintain their business, invest in human resources, and other factors that affect productivity in the medium and long term (Baker *et al.,* 2020).

Pandemic conditions cause disruptions that harm business activities such as disruption of supply chains, disrupting the effectiveness and efficiency of performance, and reducing profitability and business sustainability (Hughes *et al.,* 2019; Senyo *et al.,* 2019; Papadopoulos *et al.,* 2020).

Globalization and changes in the dynamics of a very dynamic world force humans to continue to innovate and be creative, including in carrying out economic activities. If you look at the 2045 World Megatrend, Indonesia's vision in 2045 is to become a high-income country and the world's largest economy with a Gross Domestic Product (GDP) per capita of USD 23,199 in 2045 (Kementerian PPN/Bappenas, 2019). By looking at the era of free trade that is happening as it is today, the development of Indonesia's creative economy is a positive thing to be developed further.

Determination of 2021 as the year of the creative economy by the United Nations (UN), United Nations Resolution on the designation of 2021 as the year of the Creative Economy by the United Nations General Assembly on the initiative of Indonesia (On Resolution on International year on Creative Economy For Sustainable Development) (Bekraf, 2019).

In Indonesia, the creative economy is included in the labor-intensive economic sector which shows positive growth in the workforce. The absorption of 18.21 million people in 2018 rose to 19.01 million people in 2019. Along with contributing to GDP, the three largest sub-sectors of labor absorption are culinary, fashion, and craft. The net export value of creative products was 21.24 billion USD to 22.07 billion USD. The contribution came from creative culinary, fashion, and craft products. From this, the government through the Creative Economy Agency is committed to making the creative economy a new source of income for the Indonesian economy.

The creative economy has a fairly high contribution to the national economy. The largest contributor to creative economy exports came from West Java (31.96%), followed by East Java (24.36%), Banten (15.23%), Central Java (14.49%), and Jakarta (8.97%). And the largest contributors to Creative Economy GDP are Yogyakarta (16.12%), Bali (12.57%), West Java (11.81%), East Java (9.37%), and North Sumatra (4.77%). The role of the creative economy will become increasingly important in the future, especially when non-renewable natural resources are increasingly limited or scarce.

Since 2007 Indonesia has been trying to include the city of Bandung as one of the creative cities in East Asia through the Creative Cities International Meeting forum. The development of the city of Bandung as a creative city is an attraction for creative economic actors in the world. The city of Bandung is recognized as a pioneer of creative cities in Indonesia and has received international recognition as the emerging creative city from international forums, and in 2015 was proposed as a UNESCO creative city (Unesco, 2020).

Based on this phenomenon, the researcher considers that the role of digital transformation and social networking is so important in the creative city of Bandung, it forms social capital through optimal use of information technology in creative industry players in Bandung. In this study, the author will focus on the creative industry in the city of Bandung. The points that became the basis for selecting the subsector were interesting to be used as research loci, namely: having great potential and opportunities in increasing economic contribution, employment, increasing exports of Bandung City, and supporting the status of a creative city owned by the City of Bandung.

Based on observations made by researchers on creative industry players in the city of Bandung in the current Covid-19 pandemic situation, the average turnover of industrial players in the city of Bandung fell by 79% (Bandung City MSME Service, 2020). Then, there are other problems such as the not-yet maximal use of digital technology by business actors, due to difficulties in adapting to existing changes. The Covid-19 pandemic has made the creative industry of Bandung City experience a decline in turnover so some have had to close their outlets. This is due to changes in new habits with the implementation of health protocols which have an impact on

the decline in people's purchasing power. In the economic context, the impact of the Covid-19 pandemic can finally encourage the creation of a new ecosystem, namely digital entrepreneurship. In other words, this ecosystem has encouraged creative industry players to transform by optimizing digitalization.

This can be seen in the adaptation of creative industry players to the use of marketplaces and social media in digital marketing. The role of social media platforms has also become the main focus of creative industry players. In addition, creative industry players are also starting to adapt using various supporting applications such as digital financial platforms. Digital transformation in the creative industry during the Covid-19 pandemic can finally make the creative industry re-develop its business. Thus, digitalization, especially in the field of marketing during the Covid-19 pandemic, can be an alternative to save the creative industry sector to survive.

Bandung, which consists of 30 sub-districts and 151 urban villages with a population of 2,404,589, has a fairly large number of creative economy actors. Based on data from (Patrakomala, Bandung City Culture and Tourism Office, 2021) that the creative economy actors in the city of Bandung reached 2,139 in total with 1,465 verified actors and 674 unverified actors, and 1,593 business pentahlix creative economy actors until 2021.

Digital Entrepreneurship has been seen as an important pillar for economic growth, job creation, and innovation in many countries (Zhao *et al.,* 2016), so this has become one of the reasons why more and more entrepreneurs are interested in developing it, mainly because it can provide many benefits for companies, such as wider market access and better positioning due to the very wide reach of digital technology, lower costs because infrastructure is no longer needed to store products and better engagement with stakeholders. interests (João Ferreira *et al.,* 2020). However, many companies do not know how to adapt or develop it, therefore a comprehensive understanding of the determination of digital entrepreneurship is needed (Jorge Ferreira and Coelho, 2020).

Digital Entrepreneurship is a phenomenon that arises through the development of information and communication technology that can access the Internet of Things (IoT), to see the attractiveness, competitiveness, and market development (Le Dinh *et al.,* 2018; Kraus *et al.,* 2019). Guthrie (2014) states that Digital Entrepreneurship is the sale of products or services through electronic networks. Therefore, an entrepreneurial model is needed that can adapt to technological advances. This is what gave birth to the digital entrepreneurship model. This business model comes from a combination of digital technology and entrepreneurship which then produces a new characteristic phenomenon in terms of business (Giones and Brem, 2017).

The creative industry will provide added value both to the production process and to human resources so that the creative economy system is believed to be able to

answer the challenges of various problems that exist today. The development of science and technology has been able to change the perspective, mindset, and pattern of human life and can encourage the creation of inventions that can hinder the scarcity of goods and services (Hurst *et al.,* 2011).

Through continuous innovation, research, development, products, and services are created that consumers want and need (Azizah and Muhfiatun, 2018). The creative industry has problems related to business management, for example, the problem of limited funds, human resource capabilities, the use of technology that has not been maximized, marketing, and others (Chaloupková *et al.,* 2018). Human resources and social capital in the form of social behavior arrangements are important in developing a creative city.

Small and medium-sized industries are still having difficulty adapting to the integration of information systems and technology, which are still dominated by large companies. However, this can be done by increasing the company's capabilities (Teece, 2018). Corporate intellectuals are often insufficient to support significant performance in a rapidly changing environment (Beliaeva *et al.,* 2020). Therefore, in an environment, superior performance depends on the company's ability to integrate, build and reconfigure these resources called dynamic capabilities (Jorge Ferreira and Coelho, 2020; 2021).

As summarized by (Ladeira *et al.,* 2019) which states that there are at least three reasons why entrepreneurship must be fostered in a digital environment. First, is the reason for agility, which refers to the alignment between the company's strategy with its structure and resources. Second, the reason for the digital option refers to a set of skills related to information technology, where the skills in question can be expressed in terms of richness (such as the quality and transparency of information moving from one process to another) and reach (such as the completeness of knowledge that enables the exchange of information between individuals). Third, is the increasing awareness of companies because digital tools allow companies to detect new opportunities in the market.

Developing an urban creative economy requires understanding the specific context of the urbanization process and institutional collaboration. Research conducted by (Londar *et al.,* 2020) tries to find out the relationship between human resource investment and the formation of the creative economy, a locus in the creative economy sub-sector. Research from (Boğa and Topcu, 2020; *Zhao et al.,* 2020) to find out the position of the creative economy in the economy in general by using studies in the literature, reveals the relational relationship of the creative sector with other actors. Then the research conducted by (Pacheco Pardo and Klingler-Vidra, 2019; Gruia *et al.,* 2019) conceptualized and assessed governance in supporting entrepreneurship in the creative economy.

The emergence of competition and changes that are so fast and unpredictable, both in terms of technology, customer needs, and increasingly complex production cycles in the business world, including the creative industry, are unavoidable. Companies that have made digital entrepreneurship their foundation will be based on external basic needs, wants, and market demands as the basis for formulating strategies for each business unit in the organization, and determining the company's success.

Based on this phenomenon, researchers assess that the role of digital is very important for the creative industry in supporting the city of Bandung as a creative city, and has an impact on economic growth. The purpose of this study was to find out how the influence of Digital Entrepreneurship on the creative city of Bandung, a study of the creative industry players in the city of Bandung during the Covid-19 pandemic.

2. Materials and Methods

The statistical method used to test the hypothesis is Structural Equation Modeling (SEM) through the Partial Least Square (PLS) v3.0 approach. In structural equation modeling, there are two types of models formed, namely the measurement model (outer model) and the structural model (inner model). The measurement model explains the proportion of variance for each manifest variable (indicator) that can be explained in the latent variable. Through the measurement model, it will be known which indicators are domains in the formation of latent variables.

2.1 Population and Research Sample

The technique of collecting data from this research is through the distribution of questionnaires. Researchers refer to data from the Patrakomala Department of Culture and Tourism of the City of Bandung (2021), the total population of the creative industry in the City of Bandung is 1465 business units. The unit of analysis in this study is the creative industry with the following characteristics: 1) Registered as a creative industry in the city of Bandung; 2) Is a verified creative economy actor in the city of Bandung; 3) Utilizing digital media in company management; 4) Based on the Bandung City Regional Regulation Number 1 of 2021 concerning the Arrangement and Development of the Creative Economy.

Sampling in this study was conducted using a probability sampling technique (Teddlie and Yu, 2007). The probability sampling method used is random sampling. Random sampling was chosen with the first consideration, that every member of the population has an equal opportunity to be involved in the sample. Second, this research only focuses on the creative industry in the city of Bandung. The formula used to measure the sample, using the Slovin formula (Umar, 2006), namely the sample size which is a comparison of the population size with the presentation of the allowance for inaccuracy, because the sampling can be tolerated or cooled. It is known that the total population is N = 1465, with a confidence level of 95%, it is

known that d = 0.05, the results show that the sample is n = 314. Based on this calculation, the number of elements taken as a sample is 314 respondents.

2.2 Research Hypothesis

The purpose of this study is to find out what variables of digital entrepreneurship have a significant effect on creative cities. The following hypotheses were considered to answer the main objectives of the study:

Research Hypothesis 1: Entrepreneurs have a significant effect on Creative Cities.
Research Hypothesis 2: Entrepreneurship Process has a significant effect on Creative Cities.
Research Hypothesis 3: Ecosystem has a significant effect on Creative Cities.

3. Results

Testing the results of the structural equation modeling (SEM) with the partial least squares (PLS) approach was carried out by looking at the results of the measurement model (outer model) and the results of the structural model (inner model) of the model under study.

3.1 Testing the Measurement Model (Outer Model)

Testing the measurement model (outer model) is used to determine the specification of the relationship between the latent variable and its manifest variable, this test includes convergent validity, discriminant validity, and reliability tests:

1. Convergent Validity:
Convergent Validity relates to the principle that the manifest variables of a construct should be highly correlated. The convergent validity test with PLS software can be seen from the loading factor value for each construct indicator, as for assessing convergent validity the loading factor value must be greater than 0.7 and the Average Variance Extracted (AVE) value must be greater than 0.5 with the results as following:

Table 1. *Convergent Validity Test*

Latent Variable	Indicator Items	*Loading Factor*	*AVE*	Conclusion
Entrepreneur	Ent_1	0,794	0,648	Valid
	Ent_2	0,769		Valid
	Ent_3	0,849		Valid
Entrepreneurship Process	EP_1	0,845	0,687	Valid
	EP_2	0,882		Valid
	EP_3	0,831		Valid
	EP_4	0,753		Valid

Ecosystem	Eco_1	0,860	0,729	Valid
	Eco_2	0,869		Valid
	Eco_3	0,832		Valid
Creative City	KK_1	0,835	0,686	Valid
	KK_2	0,797		Valid
	KK_3	0,852		Valid
	KK_4	0,810		Valid
	KK_5	0,774		Valid
	KK_6	0,865		Valid
	KK_7	0,869		Valid
	KK_8	0,821		Valid

Source: *Own study, 2022.*

Table 1 shows that each manifest variable in the latent variable has a loading factor / outer loading value of more than 0.7 and each AVE value > 0.5 so that all manifest variables are declared to have met the convergent validity requirements. So that all indicators are declared to have high validity in explaining the latent variables and the use of the manifest variables is declared to be able to measure the variables correctly.

2. Discriminant Validity:

Discriminant validity is seen through the measurement of the cross-loading factor and the comparison of AVE with the correlation between variables in a study. Discriminant validity can represent the extent to which a construct empirically differs from other constructs. If this is interpreted statistically, then the AVE of each latent variable must be greater than the highest r2 value with the value of other latent variables. The second criterion for discriminant validity is that the “loading” for each indicator is expected to be higher than its respective "cross-loading". If the fornel lacker assesses discriminant validity at the construct level (latent variable), then "cross-loading" is possible at the indicator level. The following is a cross-loading validity test.

Table 2. *Cross Loading Factor Test Results*

Indicator	**Entrepreneur**	**Entrepreneurship Process**	**Ecosystem**	**Creative City**	**Conclusion**
Ent_1	0,794	0,525	0,477	0,556	Valid
Ent_2	0,769	0,433	0,366	0,469	Valid
Ent_3	0,849	0,671	0,641	0,711	Valid
EP_1	0,668	0,845	0,612	0,709	Valid
EP_2	0,561	0,882	0,687	0,706	Valid
EP_3	0,525	0,831	0,686	0,698	Valid
EP_4	0,536	0,753	0,653	0,603	Valid
Eco_1	0,551	0,663	0,860	0,692	Valid
Eco_2	0,542	0,705	0,869	0,718	Valid
Eco_3	0,534	0,666	0,832	0,651	Valid
KK_1	0,611	0,723	0,706	0,835	Valid

KK_2	0,606	0,664	0,668	0,797	Valid
KK_3	0,583	0,711	0,703	0,852	Valid
KK_4	0,542	0,667	0,667	0,810	Valid
KK_5	0,500	0,57	0,581	0,774	Valid
KK_6	0,663	0,731	0,682	0,865	Valid
KK_7	0,683	0,705	0,705	0,869	Valid
KK_8	0,670	0,652	0,616	0,821	Valid

Source: *Own study, 2022.*

Based on the data in Table 2, it can be seen that the value of the cross-loading factor on each indicator is higher than the value of the other constructs. Therefore, it can be said that the indicators used to measure the latent variables have met the requirements.

In addition to using a cross-loading factor, discriminant validity can also be tested by comparing the AVE root with its correlation. The following is a validity test using the Fornell Lacker Criterion test.

Table 3. *Fornell Lacker Criterion Test*

Latent Variable	Entrepreneur	Entrepreneurship Process	Ecosystem	Creative City
Entrepreneur	0,805			
Entrepreneurship Process	0,691	0,829		
Ecosystem	0,635	0,794	0,854	
Creative City	0,736	0,821	0,806	0,829

Source: *Own study, 2022.*

From Table 3 above, it can be seen that the AVE root value of each latent variable has a higher value than the correlation value with other variables, so it can be concluded that the model has good discriminant validity.

Based on the results of the two previous validity tests, namely convergent validity, and discriminant validity, it can be concluded that 18 manifest variables can be used as research indicators in their respective latent variables.

3. Reliability Test:

A reliability test is how far a measurement results on the same object but can produce the same data. In Partial Least Square (PLS), the reliability test can use two methods, namely Composite Reliability and Cronbach's Alpha. The values that must be met so that each variable is declared reliable are > 0.60 for the Composite Reliability value and > 0.60 for the Cronbach alpha value. The results of the reliability test are shown in Table 4.

Based on the data from the reliability test results, the Composite Reliability and Cronbach's Alpha values in each variable are worth more than 0.6, so it can be said

that the data has high reliability. It can be concluded that all variable statements in this research questionnaire are stated to be reliable or consistent (Table 4).

Table 4. *Reliability Test Results*

Latent Variable	Composite Reliability	Critical Value	Cronbach's Alpha	Critical Value	Conclusion
Entrepreneur	0,846	> 0,6	0,733	> 0,6	Reliable
Entrepreneurship Process	0,898		0,847		Reliable
Ecosystem	0,890		0,814		Reliable
Creative City	0,946		0,935		Reliable

Source: *Own study, 2022.*

3.2 Structural Model Testing (Inner Model)

The test of the structural model (inner model) can be seen from the value of the coefficient of determination (R-Square), Predictive Relevance (Q^2), and Goodness of Fit Index (GoF) for each endogenous variable as the predictive power of the structural model. Changes in the value of R-Square can be used to explain the effect of certain exogenous latent variables on endogenous latent variables.

Table 5. *Value of Path Coefficient and Structural Equation*

Variable	Path Coefficient	T-Stats (|O/STERR|)
Entrepreneur (X_1) → Creative City (Y)	0,264	5,110
Entrepreneurship Process (X_2) → Creative City (Y)	0,356	5,029
Ecosystem (X_3) → Creative City (Y)	0,355	5,962

Source: *Own study, 2022.*

Based on Table 5 above, the coefficient of the structural path X_1 to Y is 0.264, the coefficient of the structural path X_2 to Y is 0.356, and the coefficient of the structural path X_3 to Y is 0.355. Thus, the structural equation model is obtained as follows:

$$Y = 0{,}264X_1 + 0{,}356X_2 + 0{,}355X_3 + \zeta$$

1. Coefficient of Determination (R-Square):

The value of the R square is the coefficient of determination on the endogenous construct. The value of R-Square is the coefficient of determination on the endogenous construct. The higher the R-Square value, the better the prediction model of the proposed research model, the following are the results of the reliability test (Table 6).

Based on Table 6, the value of the coefficient of determination is obtained from the result of multiplying the value of the path coefficient with the respective correlation values. From the table it is known that the influence given by the Entrepreneur

variable (X_1) to the Creative City variable is 19.4%, from the Entrepreneurship Process variable (X_2) to the Creative City is 29.2%, and from the Ecosystem variable (X_3) to Creative Cities is 28.6%. Overall, the simultaneous effect of the three exogenous latent variables on the endogenous variables is 77.2% which is dominated by the entrepreneurship process while the remaining 22.8% is the influence of other factors not examined (ζ).

Table 6. *Analysis of the Coefficient of Determination (R-Square)*

Influence	Path Coefficient	Correlation	Influence (%)
Entrepreneur (X_1) → Creative City (Y)	0,264	0,736	19,4%
Entrepreneurship Process (X_2) → Creative City (Y)	0,356	0,821	29,2%
Ecosystem (X_3) → Creative City (Y)	0,355	0,806	28,6%
Total Influence (R^2)			77,2%

Source: *Own study, 2022.*

2. Predictive Relevance (Q^2):

Predictive Relevance (Q^2) is used to measure how well the observed values generated by the model and parameter estimates are. If the Q Square value is less than 0 (zero) then the model lacks predictive relevance, whereas if the Q Square value is greater than 0 (zero) then the model has predictive relevance. The following is the calculation of the inner model test with Predictive Relevance (Q^2) using the formula:

$Q^2 = 1-(1-R1^2)(1-R2^2)....(1-Rp^n)$
$Q^2 = 1-(1-0,722)$
$Q^2 = 0,596$

Then Predictive Relevance (Q^2) has a value of 0.596 meaning that Q^2 is greater than 0 (zero) explaining that the model has a relevant predictive value.

3. The goodness of Fit Index (GoF):

The fit-test of the combined model is a fit test to validate the overall model, using the Goodness of Fit index (GoF) value. GoF is a single measure used to validate the combined performance of the measurement model and the structural model, which is obtained from the root of the mean AVE value multiplied by the average R-square value. GoF values range from 0-1 with an interpretation of 0.1 (GoF small); 0.25 (GoF medium); and 0.36 (GoF large) (Hengky Latan and Imam Ghozali, 2012:88).

Table 7. *Results of Goodness of Fit (GoF)*

	AVE^2	*R Square* (R^2)
Average	0,473	0,772
Multiplication	0,365	
GoF Value	0,604	

Source: *Own study, 2022.*

Based on Table 7, it is known that the Goodness of Fit (GoF) index value obtained from the root of the product of the AVE and R-square values is 0.604. The GoF value of 0.604 is classified as large/strong, so it can be concluded that the results of the goodness of fit model fit test are already strong.

3.3 Hypothesis Testing

The t-test is a hypothesis testing. The significant values used (two-tailed) t-values were 1.65 (significant level 10%), 1.96 (level significance 5%) and 2.58 (level significance 1%). In this study, researchers used an alpha level of 5% (a two-way test). So that the t table used is 1.96. To assess the significance of the prediction model in testing the structural model, it can be seen from the t-statistic value between exogenous variables to endogenous variables in the path coefficient table at the following SmartPLS v3.0 output:

Table 8. *Hypothesis Testing*

Latent Variable	*Original Sample*	*Sample Mean*	*Standard Deviation*	*T Stats*	*P Values*
Entrepreneur (X_1) → Creative City (Y)	0,264	0,262	0,052	5,110	0,000
Entrepreneurship Process (X_2) → Creative City (Y)	0,356	0,367	0,071	5,029	0,000
Ecosystem (X_3) → Creative City (Y)	0,355	0,345	0,060	5,962	0,000

Source: *Own study, 2022.*

Based on the t-statistic and p-value in the table above, the test results for each hypothesis are as follows:

H1: Entrepreneurs have a significant effect on Creative Cities in Bandung City.

The test results are presented in the following Table 9:

Table 9. *Hypothesis Testing 1*

Latent Variable	Path Coefficient	t-stats	t-table	*p-value*	H_1
$X_1 \rightarrow Y$	0,264	5,110	1,96	0,000	Accepted

Source: *Own study, 2022.*

From Table 9, information is obtained that the path coefficient value of the entrepreneur variable to the creative city has a positive value of 0.264 with a t-statistic value of 5.110. The t-statistic value is greater than the t-table (5.110 > 1.96) and the p-value (0.000) < 0.05 with a significant positive result. So it can be concluded that H_0 is rejected and H_1 is accepted, meaning that the entrepreneur has a significant effect on the creative city in Bandung, where the better the entrepreneur, the better the creative city in Bandung, so the research hypothesis proposed in the previous chapter is accepted.

H2: The entrepreneurship process has a significant effect on Creative Cities in Bandung City.

The test results are presented in the following Table 10:

Table 10. *Hypothesis Testing 2*

Latent Variable	Path Coefficient	t-stats	t-table	*p-value*	H_2
$X_2 \rightarrow Y$	0,356	5,029	1,96	0,000	Accepted

Source: *Own study, 2022.*

From Table 10 above, information is obtained that the path coefficient value of the entrepreneurship process variable for creative cities is positive at 0.356 with a t-statistic value of 5.029. The t-statistic value is greater than the t-table (5.029 > 1.96) and the p-value (0.000) < 0.05 with a significant positive result. So it can be concluded that H_0 is rejected and H_1 is accepted, meaning that the entrepreneurship process has a significant effect on the creative city in Bandung, where the better the entrepreneurship process, the better the creative city in Bandung, so the research hypothesis proposed in the previous chapter is accepted.

H3: The ecosystem has a significant effect on Creative Cities in Bandung City.

The test results are presented in the following Table 11:

Table 11. *Hypothesis Testing 3*

Latent Variable	Path Coefficient	t-stats	t-table	*p-value*	H_3
$X_3 \rightarrow Y$	0,355	5,962	1,96	0,000	Accepted

Source: *Own study, 2022.*

From Table 11 above, information is obtained that the path coefficient value of the ecosystem variable for creative cities is positive at 0.355 with a t-statistic value of 5.962. The t-statistic value is greater than the t-table (5.029 > 1.96) and the p-value (0.000) < 0.05 with a significant positive result. So it can be concluded that H_0 is rejected and H_1 is accepted, meaning that the ecosystem has a significant effect on the creative city in Bandung City, where the better the ecosystem, the better the creative city in Bandung City, so the research hypothesis proposed previously was accepted.

4. Discussion

Digital entrepreneurs as decision-makers must have clear, precise, and effective ideas by taking managerial actions, planning, implementing, monitoring, and evaluating digital business ideas (Antonizzi and Smuts, 2020). The introduction of digital technology has sparked the creation of new business models and revenue streams. Emerging technologies such as artificial intelligence (AI), cloud computing, and the Internet of Things (LoT) are accelerating transformation, while basic

technologies such as data management and analytics are required to analyze the vast amounts of data generated by digital transformation (Elia *et al.,* 2020).

The digital environment provides entrepreneurs with a wealth of information, which can be utilized for their business purposes. Access to this information allows Bandung City, creative industry players, to analyze precisely what their potential customers are looking for. This is one of the differentiating or perhaps advantages of digital entrepreneurs compared to traditional entrepreneurs, who lack access to information. Research (Lin and de Kloet, 2019) states that by using big data and algorithms, digital entrepreneurs can identify needs before customers realize them or manipulate consumer behavior and attitudes, for example with selective and customized advertising.

The contribution of this research has additional implications for management practice, as it informs each manager to aim to take advantage of the existing potential, requiring business actors to quickly adapt to the rapidly increasing digital ecosystem. Digital entrepreneurship adds up-to-date insights and guidelines that help practitioners understand and manage an organization's digital infrastructure and thereby dynamic business processes (Bouwman *et al.,* 2019; Caputo *et al.,* 2019; Garzella *et al.,* 2021).

Therefore, digital information and its management are not only a source of digital entrepreneurship but must also be a sustainable driver. In addition to information access, the platform's high user base can also provide a tremendous network effect. The network effect, which is defined as the support of users or participants who adopt the provided technology, interaction, and feedback from the digital community, also offers great potential for digital entrepreneurs (Kraus *et al.,* 2019).

Efforts to maintain the status of creative cities through the development of creative industries must also be supported by the role of the government. This is because the creative industry players in the city of Bandung still need a lot of support, guidance, and capital from government policies during the Covid-19 pandemic. If the collaboration and synergy between creative industry players, government, and stakeholders is carried out properly, the digital transformation process will certainly develop quickly.

So that the government's target of improving the economy in the creative industry sector and reducing poverty can be realized. Rosyadi *et al.* (2000) investigated the efforts of two small and medium enterprises in the creative economy sector at the local level in introducing their business to external parties. Digital entrepreneurship in the creative industry of Bandung City also contributes to the economic ecosystem and can become a locomotive for other subsectors, especially being able to attract or encourage the tourism sector of Bandung City.

To grow creative behavior in the city's economy, simultaneous support from all elements, both government, economic actors, and society is needed (Aranha *et al.*, 2017). Although human resources and the availability of supporting facilities and infrastructure are factors that play an important role in the formation and development of creative cities, entrepreneurship is far more important and complex in influencing the existence of creative cities (Yagoubi and Tremblay, 2015). Creative industry players in the city of Bandung are required to be able to increase their knowledge and understanding regarding the use of digitalization.

Research on the role and interaction of creative economy stakeholders involved in the digital entrepreneurship ecosystem in supporting creative cities is a suggestion for further research. Especially about the application of a systems science approach in the field of entrepreneurial transformation and the further formation of a portfolio of competencies.

Such an approach will advance the understanding of the interrelationship of the entrepreneurial process with the dimensions of the socioeconomic system, particularly in terms of global societal transitions (Rebernik and Hojnik, 2017). This shows how the socio-economic system is sustainable. In addition, to determine the role of digital entrepreneurs in contributing to the idea and innovation system in particular, as well as a sustainable socio-economic system in general.

The results obtained in this study make it possible to contribute to a better understanding of digital entrepreneurship in the complexity of digitally induced transitions. So that it can define digital with the skills of using digital media by business actors related to the business environment, which characterizes the ability of human resources with relevant competencies, but also with personal characteristics and entrepreneurial competencies (Satalkina and Steiner, 2020).

5. Conclusions

Based on the results of research related to the influence of digital entrepreneurship on creative cities using the SEM-PLS analysis method, several conclusions can be drawn according to the research objectives and hypotheses that have been proposed with the results that Entrepreneurship has a significant effect on creative cities with a contribution of 19.4%, Entrepreneurship process has a significant effect on creative cities with a contribution of 29.2%, Ecosystem has a significant effect on creative cities with a contribution of 28.6%.

Overall, the condition of Digital Entrepreneurship has a significant effect on supporting the creative city of Bandung, with a total contribution of 77.2% which is dominated by the entrepreneurship process while the remaining 22.8% is the influence of other factors not examined.

The findings of this study are the entrepreneurship process that dominates the value of digital entrepreneurship contributions. The entrepreneurship process is a phase of the entrepreneurial process that has a certain meaning and function, which must be followed and pursued in running a business.

As currently, the impact of the Covid-19 pandemic has given rise to new habits from creative industry players in the City of Bandung, by maximizing the use of technology and internet networks, where users can easily participate, communicate, share, and create various creativity without being limited by space and time, this is what changes the form of business that was originally offline to online, so that digital entrepreneurship has a big impact on the creative industry to support the status of a creative city owned by the City of Bandung.

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