

The Role of Creativity in Moderating the Effect of Entrepreneurial Experience on Product Innovation: A Study on Startups in Indonesia

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Abstract- The study discussed how the experience of entrepreneurs affected product innovation in Indonesian startup entrepreneurs through creative variables. The entrepreneurial experience plays a crucial role in an undertaking's starting capability or an occupational goal of this study is to test and analyze the impact an entrepreneurial experience might have on product innovation capabilities in Indonesian startup entrepreneurs moderating creativity variables. Sampling techniques are using random sampling techniques with the responders of 30 people, Indonesia's starting up business. The analysis tool used what is smart PLS v. 3.2.7 by shem's method of analysis. Results in this study suggest that the experience of entrepreneurship does not significantly affect product innovation, the experience of entrepreneurship influences significantly to creativity, creativity influences significantly to product innovation, and the experience of entrepreneurship impacts to the ability of product innovation through creativity variables. Then it may be concluded that entrepreneurial experience affects the ability of product innovation through creative variables.

Keywords: Entrepreneurship Experience, Products Innovation, Creativity.

I. INTRODUCTION

Entrepreneurship is ability somebody or perpetrator business to make matter new And different, with other words a businessman required to creative and innovative and can find ideas fresh which can contribute towards business. entrepreneurship is an ability creative and innovative which made into base and source power for look for opportunity towards success, where process creative only done by person which own soul, attitude and behavior entrepreneurship [1].

Draft from entrepreneurship and economic concepts creative own element the same one namely creativity, ideas, concepts, and draft innovation which means creativity in business which means a way in apply creativity in a the work that on going in order to bring up product and structure company which new at a time help improve performance company to direction Which more good [2].

Behavior entrepreneurship has several the indicator that to influence uhi is the courage to take risks, be responsive to opportunities and be independent, which then entrepreneurial behavior can influenced by factor environment n and individual factors [3], and that affects individuals on behavior entrepreneurship is experience businessman Where every gender own experience businessman Which different. Experience entrepreneurship n is one of the aspect important demographics in influencing the

entrepreneurial attitudes of business actors, where experience plays a role in increasing knowledge and ability in Entrepreneur [4]. Experience Entrepreneurs play a very important role in the start-up capabilities of a business or job [4].



Figure 1. Distribution of Numbers Start up Indonesia

Source : [6]

Based on the image above, it shows that that the distribution of the number of start-ups in Indonesia is the highest Still held by Greater Jakarta Area with score 522 (52.62%), then followed by Sumatra with score 115 (11.59%), Java East 113 (11.39%), special region Yogyakarta 54 (5.44%), Java west 44 (4.44%), Sulawesi 34 (3.43 %), Bali And NTB 32 (3.23%), Kalimantan 24 (2.42%), And a number of island other by 24 (2.42%).



Entrepreneurship is a dynamic process to create additional prosperity And additional prosperity that created by individual u or business actors who are able to bear risks, spend time, and provide various products and services [6] . The entrepreneurial experience of a business actor is one of the important factors that influences success. entrepreneurship.

The world of entrepreneurship is so challenging and very risky with uncertainty related to launch new business and constraints on resource Which limit businessman so experience businessman is levels from a person's mastery of knowledge and skills in entrepreneurship. Each gender has different experiences, where the gap is happen because in equality gender that often a topic discussion in world businessman, make existence difference treatment between man and women even often women entrepreneurs are considered to be just a burden, where this can happen for a reason, not only because of a culture that does not respect women but also because women need more time during menstruation, childbirth and breastfeeding UI makes women a second option in the world of entrepreneurship [7] .

Creativity is influenced by entrepreneurial experience that can seen from the aspect of success that occurs due to openness to experience, observation of seeing in the usual way, independence in judgment, thoughts and actions which are then applied to self-confidence and the courage to take risks thanks to observations of previous entrepreneurial experiences that have been taken into account [8] .

Thus, every company is required to do creativity on its products in order to create a new innovation which will have an impact on competitive advantage. Creativity has the ability to develop And combining new ideas from the idea that has been owned sourced from the customer so that creativity can create competitive advantage, apart from creativity, competitive advantage can be formed through product innovation.

II. LITERATURE REVIEW

2.1 Innovation Product

Moment This innovation very hold role important in improvement competitiveness of a product Because product innovation is the result of new product development by a company or industry, both existing and non-existent [9] . Product innovation is an

important way for companies to continue to adapt to the market, technology and competition [10] .

Product innovation is defined as a product (goods or service) new which are introduced to the market to meet market needs [11] . Objective main from product innovation is to meet demand in the market so Innovation products are one of the things that can be used as competitive advantage for players business or company [12] . Product innovation has three indicators, that is: 1) Product Extension (Line Extension) Where product expansion is a product Which still familiar to business organizations but new to the market, 2) Product Imitation (me-too product) Product imitation is a product which is considered new by business but familiar to the market, and 3) New Products (new-too-the-world) are products that are considered new good by company and by market [13] .

Based on this, there are several factors that can influence product innovation, namely 1) Demand. Which adequate. 2) Product in accordance with the marketing structure Which There is. 3) Products new more main and more profitable. 4) Ability finance 5) Ability that does not violate law. And 6) The existence of management capabilities adequate For handle [14] .

2.2 Entrepreneurial Experience

Entrepreneurial experience is the level of mastery of a person's knowledge and skills. in entrepreneurship which can measured from time length of time in business and from the level of knowledge and skills that he has [15] . Entrepreneurial experience is a valuable intangible asset on which the sustainability of the business depends. business is determined by entrepreneurial experience, entrepreneurial experience is considered to play an important role in success company or business the new one established [16] .

Experience entrepreneurship is past Which positive and found more conducive to re-entry into businessman but still there a number of a matter of heated debate among experts regarding the consequences of business results [18]. previously Which Possible negative, And a number of Which other see failure as a learning method that is considered effective [17] . Entrepreneurial experiences are things that make and make something benchmark And learning when Want to running a business, where a person Entrepreneurs want to build their business depending on will, passion and also enthusiasm in entrepreneurs [18] .



Entrepreneurs who have a lot experience leveraging their experience to make learning investments, because previous experience provides a means for entrepreneurs to learn what what is successful and what is not. Business actors consider that learning occurs through failure and success when establish a startup then from the experience of the perpetrator business can see action like What Which appropriate For handle problem Which happened in time front. In context technology entrepreneurship, exploitation of opportunities can rest on the entrepreneur's ability to correctly match information or knowledge from the customer domain and the technology domain to optimize conformity product market [11].

2.3 Creativity

Creativity is the ability to develop new ideas and ways of solving problems and finding opportunities [19]. Creativity is any action, idea, or product that transforms an existing domain into something new. In a business context, creativity is often translated to in development idea, innovation product new, and adapt i or enhance existing innovations. Creativity is also stated as an integral part of entrepreneurial skills needed to successfully start a business. effort [20].

Creativity as an important dimension in entrepreneurship because it can help generate new ideas and useful [21]. Creativity can help business actors to identify opportunities And generate ideas new as well as innovative. Therefore, creativity is considered as one of the important antecedents of entrepreneurship and entrepreneurial intention. Based on this, creative people have more possibilities. For involved on entrepreneurship.

III. RESEARCH METHODS

Design research is all processes Which required in planning and implementation study, in in context This component design can covers all research structures that started from finding ideas until research results are obtained, In a narrow sense, research design is a detailed description clear about connection between variable, collection data, And analysis data, so that with design Which Good researchers and person other Which interested parties have an idea of how the variables are related and how to measure them [22].

Population on study This is existing start-up business actors in Indonesia, the population in this study was not known with Certain (Population Infinitive). Population Infinitive is a group of objects that continue to develop (undergoing processes as a

result of life) or a process of events) [9]. As for the technique from the taking data used in research this is questionnaire. Questionnaire is list statement about object study given to individuals or groups to obtain certain information such as preference, beliefs, interests, and behavior [23].

Analysis data Which used in this research is path analysis. Path analysis allows us to test direct relationships between variables as well as indirect relationships between variables in a model. In its current development This is an extended path analysis and deepened into the form of analysis "Structural Equation Modeling" or known by the 35 abbreviations SEM [24]. Path analysis is used to analyze causal relationships between variables with the aim of determining their influence. directly and No direct variable cause of A effect variable.

IV. RESULTS AND DISCUSSION

Findings which got on study This shared become two testing namely, testing the Structural Model (outer model), and Testing the Structural Model (inner model). Test outer The model is done through several test analysis, including convergent validity tests, validity tests discriminant validity and test reliability. Test Validity and reliability were carried out using Smart PIs software with a sample size of 30. respondents. The following are the results and findings from structural outer model testing. The following is the design of the structural model process via smart pls 0.3, and following appearance results pls algorithm.



Figure 2. Bootstrapping Outer Model

Source : Smart PIs (2025)

On mark bootstrapping stated that mark Experience Businessman which influence Innovation product as big as 3%, whereas mark entrepreneurial experience that influences creativity by 50% and the value of creativity that influences uhi innovation product by



66.2%.

Based on the outer model, the value is analyzed AVE can show results evaluation validity For every construct and variable X (Experience Entrepreneurship) and variable Y (Product Innovation). AVE explains the internal intercorrelation between indicators in construct in each latent variable. Mark AVE on study This can seen on table below this :

Table 1. Mark Processing AVE on study

Variables	Average Variance Extracted (AVE)
Innovation Product	0.623
Creativity	0.628
Experience Businessman	0.697

Source : Smart Pls (2025)

The table above shows the AVE values of the product innovation, creativity, and entrepreneurial experience variables. The size of individual reflection can be said to be high if it correlates more than 0.7. However, because this study is in the early stages so standard Which used is 0.5 - 0.6 so, mark AVE on researcher this can said to be accepted because of the value AVE has been more big from 0.5.

Reliability as a measure of the consistency of the indicators of a construct which shows degree to what extent each indicator indicates a general construct. The construct reliability is assessed with count index reliability instrument Which used, the following are the results of the reliability test analysis:

Table 2. Mark processing Composite Reliability

Variables	Cronbach's Alpha	Composite Reliability
Innovation Product	0.932	0.943
Creativity	0.947	0.953
Experience Businessman	0.946	0.954

Source: Smart Pls (2025)

Based on the table above, it shows that the Cronbach's Alpha and Composite Reliability values

each variable has fulfil standard is at in on 0.60. That matter show that reliability study can accepted. Besides That, Composite value Reliability Also Already more tall compared to Cronbach's value ;s The alpha. Matter this indicates that all over study Already fulfil requirements regarding appropriate reliability criteria as the basis for the SEM research analyzed use Smart Pls.

Bootstrapping on shows the path coefficient value for variables which is then assessed for significance based on the t-statistic value of each Path, and the following R-Square value Which used to measure the level of variation in changes in variables latent to variable latent others. The more high r-square value means more and more good prediction model of research model that was submitted.

Table 3. R- Square

	R Square	R Square Adjusted
Innovation Product	0.419	0.376
Creativity	0.250	0.223

Source : Smart Pls (2022)

The R-square value in the table above shows the value R-square on the creativity variable is 0.250 or 25%. This value shows that the creativity variable can be explained by the entrepreneurial experience variable by 25% , while the rest influenced by variable other outside variable . R value Square for the Product Innovation variable is 0.419 or 41.9% which means that the Product Innovation variable can be explained by the Entrepreneurial Experience variable of 41.9% while the rest is in influenced by other variables outside the variables in research This.

The testing of the research hypothesis was carried out with the help of SmartPLS (Partial Least Square) 3.0 software. These values can be seen from the bootstrapping results. Rules of thumb which used on study This is t-statistic >1.96 with level significance p-value 0.05 (5%) And coefficient beta has a positive value .



Table 4. Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STD EV)	T Statistics (O/STD EV)	P Values
Experience -> Innovation Product	0.301	0.346	0.171	1,766	0.088

Source: Smart Pls (2025).

The first hypothesis tests whether Entrepreneurial Experience has a significant effect significant to Innovation Product, results testing shows no there is influence which significant. Because mark t statistics as big as 1,766 not enough from 1.96 and the value p values 0.088 bigger from 0.05. Therefore Ho rejected which means Entrepreneurial Experience is not have an influence that significant to Product Innovation.

Table 5. Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STD DEV)	T Statistics (O/STD DEV)	P Values
Experience Businessman -> Creativity	0.5	0.552	0.103	4,868	0

Source: Smart Pls (2025)

The second hypothesis tests whether Entrepreneurial Experience has a significant effect

on Creativity. The test results show that there is a significant influence between entrepreneurial experience and creativity. Variables Entrepreneurial Experience have an impact on significance n with mark t statistics as big as 4,868 more big from 1.96 and mark p values as much as 0.000 more small from 0.05.

Table 5. Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STD EV)	T Statistics (O/STD DEV)	P Values
Creativity -> Innovation Product	0.662	0.677	0.113	5,844	0

Source: Smart Pls (2025)

Hypothesis second test whether creativity have an impact on significance n towards Product Innovation. The test results show that there is a very significant influence between the creativity variable and product innovation. Things this is shown by the results of t value statistics as big as 5,844 then it is bigger from 1.96 and mark from p value results obtained of 0.000 then more small of 0.05.

The results of the first hypothesis show that the entrepreneurial experience of start-up entrepreneurs cannot influence product innovation. This is in contrast to the results of previous research according to [25] which states that entrepreneurial experience is considered to be a booster for business growth, as shown by the results of bootstrapping. Entrepreneur can influence creativity according to previous research according to [26] which states that based on the results of the research obtained, it is said that business experience indirectly influences business development through creativity.

In accordance with previous research according to [27] which states that creativity has influence positive and significant to innovation product with the influence that strong and proven with results from mark bootrtaping which to obtain influence value of 66.2% between creativity variable



and product innovation. Own creativity is accumulation of ideas businessman start up Which in the form of ideas which is able to differentiate a company's product from other companies, then influences product innovation which changes consumers' views of the company's goods or services, the higher the creativity, the greater the influence.

V. CONCLUSION AND SUGGESTIONS

On part this delivered description about The conclusion of this study states that entrepreneurial experience no significantly influential to Product innovation, entrepreneurial experience has a significant influence to creativity. that entrepreneurial experience has an influence in a way No direct to innovation product through creativity. This shows that creativity has a moderate relationship between the experience variables. Businessman to innovation product which influence direction strength of relationship variable independent that is experience entrepreneurship and variable dependent namely innovation product. The suggestion for this research is that the development of this research is suggested to examine on start up entrepreneurs direct without intermediary so that get results which accurate and meet research standards.

VI. REFERENCE

- [1] A. Hendrawan, A. Fauzi, and B. K. Fawzee, "Effect of Service Quality and Company Image on Customer Loyalty with Satisfaction Customers as Intervening Variables (Case Study of Brilink Agent PT Bank Rakyat Indonesia (Persero) TBK. Medan Region Office)," *Int. J. Res. Rev.*, vol. 8, no. 8, pp. 196–202, 2021, doi: 10.52403/ijrr.20210827.
- [2] G. Anggadwita and R. Palalić, "Entrepreneurship in Indonesia: some contextual aspects," ... *Handb. Entrep.* ..., 2020, [Online]. Available: <https://www.elgaronline.com/edcollchap/edcol/1/9781788973700/9781788973700.00018.xml>.
- [3] A. Gunawan and D. Hazwardy, "Pelatihan Digital Entrepreneurship Untuk Mewujudkan Generasi Milenial Berjiwa Wirausaha," *Abdimas Dewantara*, vol. 3, no. 1, p. 81, 2020, doi: 10.30738/ad.v3i1.4311.
- [4] N. Alam, H. Ashfia, S. Salma, and S. Nugraha, "The Influence of Product Innovation and Organizational Innovation On Culinary Business Performance Of Small And Medium Enterprises," vol. 5, no. 4, pp. 275–283, 2023.
- [5] M. N. H. Ryandono, S. Gunawan, and ..., "Startup Business Innovation Development Model for University's Students: Comparison of Indonesia and Malaysia.," *Rev. Cercet. si* ..., 2024, [Online]. Available: <https://www.ceeol.com/search/article-detail?id=1295724>.
- [6] Habiburrahman, A. Prasetyo, T. W. Raharjo, H. S. Rinawati, and ..., "Determination of critical factors for success in business incubators and startups in East Java," *Sustainability*. mdpi.com, 2022, [Online]. Available: <https://www.mdpi.com/2071-1050/14/21/14243>.
- [7] A. I. Wahyuni and S. Noviaristanti, "Startup characteristics and the role of business incubators in Indonesia," ... *Bus. Entrep.* ..., 2022, [Online]. Available: <https://journal.ipb.ac.id/index.php/ijbe/article/view/40269>.
- [8] S. P. H. Triono, A. Rahayu, L. A. Wibowo, and A. Alamsyah, "The Impact of Entrepreneurial Strategy on the Firm Performance of Indonesian Technology Startups," *Jurnal Manajemen Indonesia*. 2024, [Online]. Available: <https://pdfs.semanticscholar.org/5cf6/06a3e66373bcce62b8e36d829662b90ba55a.pdf>.
- [9] R. Prijadi, A. S. Santoso, T. E. Balqiah, H. Jung, and ..., "Does effectuation make innovative digital multi-sided platform startups? An investigation of entrepreneurial behavior in platform-based open innovation," *Benchmarking An* ..., 2023, doi: 10.1108/bij-02-2021-0078.
- [10] R. Ubaidillah and S. Santoso, "Analysis of Increasing Added Value Ecosystem Creative Economy Startup in The Culinary Sector (Case Study of the First Winner of Food Startup Indonesia ...)," ... *International Journal for Community Service & ...* uijrt.com, 2022, [Online]. Available: <https://uijrt.com/articles/v3/i9/UIJRTV3I90008.pdf>.
- [11] W. Wahidmurni, M. A. Nur, and ..., "Curriculum development design of entrepreneurship education: a case study on Indonesian higher education producing most startup funder," ... *Entrep.* ..., 2019, [Online]. Available: <http://repository.uin-malang.ac.id/4574/>.



- [12] E. W. Riptanti, M. Harisudin, I. Khomah, and ..., "Effect of entrepreneur personality and social network sites on innovation performance: evidence from Indonesia," ... *Sci. E-Journal*, 2024, [Online]. Available: <https://ageconsearch.umn.edu/record/341561/>.
- [13] T. N. Amelia, A. Thoyib, G. Irianto, and A. Rofiq, "Tech Start-up Incubation Program: Business Model Evaluation on Government Based Incubator in Indonesia.," *TEM J.*, 2021, [Online]. Available: <https://www.cceol.com/search/article-detail?id=935871>.
- [14] A. W. A. Rahman, T. Widiyatmoko, and ..., "The influence of entrepreneurial mindset and innovation on startup growth in the digital era," ... *Bus. Digit.* ..., 2025, [Online]. Available: <https://journal.pandawan.id/sabda/article/view/730>.
- [15] D. Tricahyono, D. T. Alamanda, G. Anggadwita, and ..., "The role of business incubator on cultivating innovation on startups: The case study of Bandung techno park (BTP) Indonesia," *International Journal of ... academia.edu*, 2018, [Online]. Available: <https://www.academia.edu/download/73450018/5303.pdf>.
- [16] S. Suparno, H. N. Wafa, A. Lutfia, B. S. Narmaditya, and ..., "Does entrepreneurship education matter for product innovations? The mediating role of Indonesian students creativity," *Cogent* ..., 2024, doi: 10.1080/2331186X.2024.2359880.
- [17] D. Farahdiba, N. M. S. Mahirah, and ..., "Factors Influencing Creative Employees: An Integration of Transformational Leadership Theory in The Case of Start-ups Employees in Indonesia.," *Jurnal Manajemen Teori ... academia.edu*, 2022, [Online]. Available: <https://www.academia.edu/download/96196781/23541.pdf>.
- [18] S. Nugraha, M. Ridwan, and N. A. Hamdani, "The Influence of Customer Involvement and Social Networking Sites on Innovation Performance," vol. 5, no. 3, pp. 176–183, 2023.
- [19] P. A. Nugroho, F. S. Hutama, N. Nurdianasari, and F. Anis, "Mengaktifkan Otomasi Pembelajaran PKn: Kemandirian Belajar, Self-Managed Learning dan Refleksi untuk Pembelajaran di SD," *Jurnal Ilmu Pendidikan Sekolah ...* 2024.
- [20] F. Kartika, "The Role of Innovation in Startup Success: A Comprehensive Review," *Adv. J. Ekon. & Bisnis*, 2024, [Online]. Available: <http://advancesinresearch.id/index.php/AJEB/article/view/240>.
- [21] T. Qoriawan and I. D. Apriliyanti, "... connections within the technology-based entrepreneurial ecosystem (EE) in emerging economies: understanding the entrepreneurship struggle in the Indonesian EE," ... *Entrep. Emerg. Econ.*, 2023, doi: 10.1108/jeee-02-2021-0079.
- [22] W. D. Anjaningrum, A. P. Sidi, A. N. Yogatama, and ..., "The collaborative business incubation model and its impact on creative industries innovation in East Java, Indonesia," *J. Ilm. Bisnis ...*, 2023, [Online]. Available: <http://jibeka.asia.ac.id/index.php/jibeka/article/view/1373>.
- [23] J. W. Creswell, *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: pustaka pelajar, 2016.
- [24] Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. Yogyakarta: ALFABETA, 2019.
- [25] D. Bernardus, M. F. Arisa, S. A. Sufa, and ..., "Supporting start-ups in Indonesia: Examining government policies, incubator business, and sustainable structure for entrepreneurial ecosystems and capital," ... *J. Business, Law ...*, 2024, [Online]. Available: <http://ijble.com/index.php/journal/article/view/372>.
- [26] S. Ulandari and D. D. Rapita, "Implementasi Proyek Penguatan Profil Pelajar Pancasila sebagai Upaya Memperkuat Karakter Peserta Didik," *J. Moral Kemasyarakatan*, vol. 8, no. 2, pp. 116–132, 2023.
- [27] M. R. Anwar, M. Yusup, S. Millah, and S. Purnama, "The role of business incubators in developing local digital startups in Indonesia," ... *Business Digital (SABDA Journal)*. 2022.
- [28] R. Panjaitan *et al.*, "Pkm webinar 'show up your mind to be a success entrepreneur' bagi mahasiswa pendidikan biologi," *J. Pengabdian Dharma Laksana*, vol. 5, no. 2, p. 414, 2023.

