

### THE COLLABORATIVE BUSINESS INCUBATION MODEL AND ITS IMPACT ON CREATIVE INDUSTRIES INNOVATION IN EAST JAVA, INDONESIA

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#### Article's Information

##### DOI:

10.32812/jibeka.v17i1.1373

##### ISSN:

0126-1258

##### ISSN-E:

2620-875X

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#### ABSTRACT

*Creative industries need to innovate in this digital era to face the rapidly changing business environment and fierce competition. This study explored the collaborative business incubation model by stakeholders in the creative economy sector and its impact on tenant innovation. The innovations emphasized in this study are product innovation and marketing innovation. A total of 190 creative entrepreneurs in East Java have been researched using a set of questionnaires and produced quantitative data, which is then analyzed statistically through PLS analysis. The study results show that business incubation mentors significantly affect product innovation but not marketing innovation. On the other hand, the business incubation method significantly affects marketing innovation but not product innovation. Meanwhile, the business incubation curriculum significantly affects both product and marketing innovation. Further research is expected to analyze the type of mentor and the right business incubation method for tenants to significantly impact product and marketing innovation.*

**Keywords:** Creative Industry, Business Incubation Model, Product Innovation, Marketing Innovation

#### ABSTRAK

Industri kreatif harus berinovasi di era digital ini untuk menghadapi lingkungan bisnis yang berubah dengan cepat dan persaingan yang ketat. Studi ini mengeksplorasi model inkubasi bisnis kolaboratif oleh para pemangku kepentingan di sektor ekonomi kreatif dan dampaknya terhadap inovasi tenant. Inovasi yang ditekankan dalam penelitian ini adalah inovasi produk dan inovasi pemasaran. Sebanyak 190 pengusaha kreatif di Jawa Timur telah diteliti dengan menggunakan seperangkat kuesioner dan menghasilkan data kuantitatif, yang kemudian dianalisis secara statistik melalui analisis PLS. Hasil penelitian menunjukkan bahwa mentor inkubasi bisnis berpengaruh signifikan terhadap inovasi produk, bukan inovasi pemasaran. Di sisi lain, metode inkubasi bisnis berpengaruh signifikan terhadap inovasi pemasaran tetapi tidak berpengaruh pada inovasi produk. Sementara itu, kurikulum inkubasi bisnis berpengaruh signifikan baik terhadap inovasi produk maupun pemasaran. Penelitian lebih lanjut diharapkan dapat menganalisis jenis mentor dan metode inkubasi bisnis yang tepat bagi tenant untuk memberikan dampak yang signifikan terhadap inovasi produk dan pemasaran.

**Kata Kunci:** Industri Kreatif, Model Inkubasi Bisnis, Inovasi Produk, Inovasi Pemasaran



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## Introduction

The acceleration of digital transformation due to the policy of limiting people's activities during the Covid-19 pandemic has increasingly put pressure on every industry to survive and adapt to extreme changes in the global business environment (Schwer & Hitz, 2018). The business environment is changing so rapidly that it eventually triggers intense competition and forces every creative industry to determine the right strategic steps to deal with it (Benyahya & Matošková, 2021).

Although the local market had experienced a severe recession (Hanelt et al., 2021), yet in the end the pandemic passed gave birth to a new normal era which triggered the industry to continue to empower its innovative potential in facing competition (von Leipzig et al., 2017). to build competitiveness in the digital era by increasing the potential for innovation is also a challenge that is not easy to overcome (Shvindina et al., 2022), especially in the context of SMEs with limited capabilities (Saulina, 2016). Truthfully SMEs in creative economy sector, play an important role as a driver of the country's economic growth (Boccella & Salerno, 2016). So it is considered quite crucial to pay attention to innovations that can be carried out by SMEs in this sector (Hermawati, 2020).

SMEs must think of innovation as a long-term strategy in a rapidly changing business environment. To achieve this, SMEs can rely on business incubators as drivers of innovation (Gonthier & Chirita, 2019). Business incubator support through sustainable programs enables SMEs to innovate (Mvulirwenande & Wehn, 2020). As found by Mvulirwenande & Wehn (2020) which proves that incubator support allows innovators to innovate systematically, especially by maintaining relationships between the various phases of the innovation process, and to build a convincing case for innovation.

In a collaborative business incubator, SMEs will meet with many stakeholders, both from academia, government, community, business, and the media to share information and run programs (Anjaningrum *et al.*, 2021). As stated by (Hassan, 2020) that business incubators create an environment where everyone can help others to incorporate new ideas, special skills, and their abilities into new businesses. There are 3 dimensions of the Penta-Helix collaborative business incubation model, namely: method, mentor, and curriculum as formulated by (Anjaningrum dkk., 2021). This research examines the impact of each of these dimensions on the success of creative economy-based SME innovation in East Java, particularly product innovation and marketing innovation. This review can also see the success of the Penta-Helix collaborative business incubation model in East Java in incubating the tenant business.

The contribution of this research is to confirm the development of product and marketing innovation as a result of the participation of creative industries in East Java in the collaborative business incubation model. The study also contributes to existing strategic management knowledge by providing a robust analysis of product and marketing innovations triggered by the outcomes of collaborative business incubation processes.

## Method

The research was conducted through a survey of creative entrepreneurs in East Java Province using an accidental-purposive sampling technique. According to (Hair *et al.*, 2013), the minimum sample size is  $10 \times 19$  (the number of indicators used to measure research variables). This shows that our research involved 190 creative entrepreneurs. Our research involved respondents who had at least three years of business experience. The business survived the start-up and was able to weather the economic shocks during the Covid-19 pandemic. In addition, participants have at least one year of participation in a collaborative business incubation organized by Penta-Helix (government, academia, business, community and media). The collected data were analyzed using PLS with SmartPLS 4.0.8.5 software.

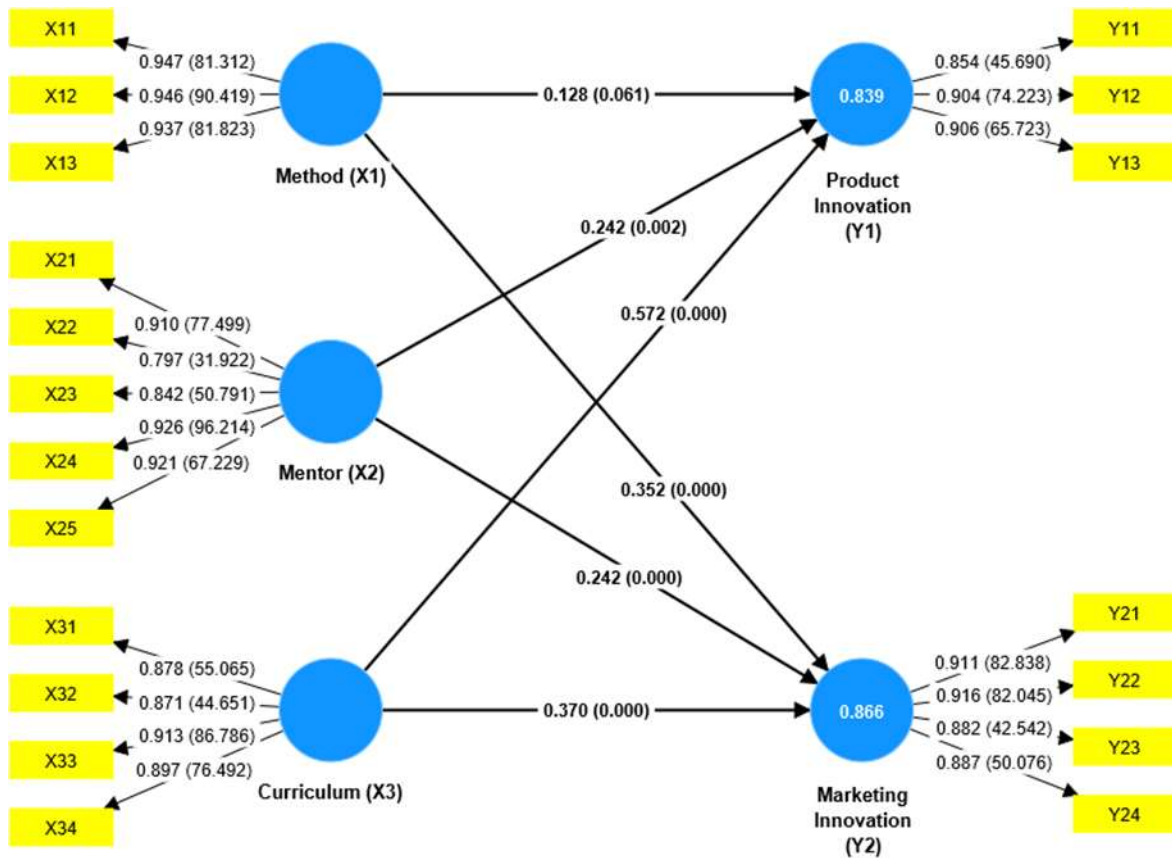
In this study, the relationship was analyzed for each dimension of the Penta Helix collaborative business incubation model according to findings (Anjaningrum dkk., 2021), which consisted of: Method (X1) which was measured through 3 indicators, there are: mentoring (X11), mentoring (X12), and facilitation (X13); Mentors (X2) are measured through 5 indicators, there are: mentors from the community (X21), mentors from business people (X22), mentors from academics (X23), mentors from the government (X24), and mentors from the media; and curriculum (X3) which is measured through 4 indicators, there are: product development (X31), business model (X32), management (X33), and Marketing & Branding (X34). Product innovation (Y1) is measured through 3 indicators developed by (Greco *et al.*, 2015), there are: Innovating existing products (Y11), Developing new products (Y12), Customizing products (Y13). Meanwhile, marketing innovation (Y2) is measured through 4 indicators developed by (Gupta *et al.*, 2016), there are: Approach to market (Y21), Channel of communication (Y22), Product delivery (Y23), and service delivery (Y24).

## Result and Discussion

### SEM-PLS-Analysis-Result.

Through SEM-PLS analysis, relatively detailed results are obtained, not only the relationship between latent constructs, but also how the strength of the reflection of each manifest on the construct. The following is the general output of the analysis using the latest version of SmartPLS software, namely version 4.0.8.5.

Figure 1. Complete-Structural-Model



Source: SmartPLS-4.0.8.5-output

Figure 1. The Complete-Structural-Model shows several things, including, (1) the value of the Loading factor, namely the value that is on the connection line between the manifest and the latent construct, (2) the R-square value, which is the value that is in the blue circle, (3) path coefficient, namely the value that is on the connection line between latent constructs which shows how much influence and the nature of the influence of the exogenous construct on the endogenous direction is positive or negative, (4) the p-value is the value that is on the connection line between latent constructs that are in brackets indicating the significant effect of the exogenous construct on the endogenous if the value is less than 0.05 (the level of significance determined by the researcher) and (5) the manifest t-statistics value, namely the value that is on the line between the manifest and the latent construct in brackets which can show the power of manifest reflection on its latent construct, the greater the value of the t-statistics the stronger it reflects the construct.

Loading factor is one of the outer model measurements that justifies the validity of the research instrument. A loading factor value that is greater than 0.7 indicates the validity of the research instrument (Hair *et al.*, 2014). Based on the figure it appears that all loading

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factors are worth more than 0.7 so that each manifest is proven to be truly able to reflect the construct or the research instrument is proven valid.

The R-Square value for product innovation is 0.839 which shows the percentage of explanation of the collaborative business incubation model both in terms of methods, mentors and curriculum in product innovation of around 83.9%. While the R-Square value for marketing innovation is 0.866 which shows the percentage of explanation of the collaborative business incubation model both in terms of methods, mentors, and the curriculum in product innovation is around 86.6%. Based on this R-square value, it shows that the results of the collaborative business incubation model have more impact on marketing innovation than product innovation.

If examined based on the path coefficient and p-value, the method used in the business incubation model does have a positive effect on product innovation, but this effect is not significant (as evidenced by the p-value of  $0.061 > 0.05$ ). Meanwhile, in marketing innovation, all dimensions of business incubation have a significant impact (as evidenced by a p-value of less than 0.05). This is what makes the results of the business incubation model more impactful on marketing innovation than product innovation.

In addition, it is also known that the success of product innovation and marketing innovation is more dependent on the curriculum used in the incubation process (this can be seen from the highest path coefficient values both towards product innovation and marketing innovation), especially the curriculum that discusses product development and how to implement strategies. marketing & branding (according to the largest statistics value in the manifest (X33) and (X34)). Method is also the second factor after the curriculum which greatly impacts on marketing innovation. In terms of mentoring, mentoring, and facilitation, the three drivers (X11, X12, X13) really support the success of marketing innovation. It's different from product innovation, because of course it requires more budget and facilities to achieve it.

From the mentor side, the mentors who are considered to be in line with the expectations of the incubated tenants are mentors from academia and the government (as evidenced by the highest t-statistics values in the manifest (X24) and (X21)), because these two helixes provide more facilities, in addition to providing mentoring and mentoring.

## **Discussion**

The results of this study prove empirical evidence of the important role of the business incubator in the innovation process carried out by creative economy-based SMEs. These

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results are in line with research (Sedita *et al.*, 2019) which shows the importance of the incubation effect in shaping the innovation performance of new businesses.

In more depth, the findings in this study are new in strategic research that links the results of collaborative business incubation models with innovation, especially product innovation and marketing innovation. The relationship between the business incubation model and innovation is not seen in general, but is examined one by one in each dimension resulting in relatively detailed findings such as evidence that the impact of the methods used in the collaborative business incubation model on product innovation SMEs based on the creative economy in East Java is still lacking.

Basically, all business incubators carry out their programs with the main objective of accelerating the growth and development of existing businesses, one of which is through innovation. The major similarities among incubators as found (Allahar & Brathwaite, 2016) are in terms of the services offered, and funding challenges, but there is a growing acceptance of incubators as potentially valid tools to promote business development and innovation although most incubators are in the initial stage or when the UKM is in the start-up period.

The subject of innovative start-ups and how to support the development of these start-ups is very important (Tola & Contini, 2015), especially in the creative economy sector. The business incubator in this research proves to be one of the solutions that can be considered in the economics literature, to develop new businesses with a strong innovative component. The diffusion of innovation is very important for economic development and competitiveness.

Incubator support enables innovators to innovate systematically, especially by maintaining relationships between the various phases of the innovation process, and to build a convincing case for innovation (Mvulirwenande & Wehn, 2020). From a temporal perspective, various types of stakeholders, in this case, in Indonesia are the penta-helix (academicians, government, business, community, and media), play different roles in business incubation. As researched by (Liu, 2020), these stakeholders differ in initiating, managing, and taking part, during the process of launching and developing a tenant business. The increasing number of business incubators and currently conducting collaborations shows that business incubators are a good catalyst for economic development even though there are deficiencies in practice (Torun *et al.*, 2018) as in research findings that show a lack of precise methods business incubation both in the process of mentoring, assisting, and facilitating in the product innovation process of tenant

companies. This implies that evaluation of business incubation performance is urgent enough to be reviewed.

## Conclusion

This research explores the impact of the collaborative business incubation model on innovation carried out by its tenants. Carrying out innovation is one of the most crucial strategic steps in the current era of very high competition. However, for businesses of the SME scale, especially SMEs based on the creative economy, of course, they face many limitations in doing so. This is where the importance of participating in collaborative business incubation carried out by stakeholders. If SMEs are oriented towards preferring to carry out marketing innovations, then both the curriculum, methods and incubation mentors are relatively appropriate in accelerating their achievements. Unfortunately, the existing methods, be it mentoring, mentoring, or facilitation, are still not able to support the achievement of product innovation. This is still homework for stakeholders to devise the right method for incubating SMEs based on the creative economy in East Java if the target is product innovation. In addition, future researchers are expected to be able to analyze the right type of mentor and business incubation method for tenants to have a significant impact on product innovation and marketing. In addition, future researchers are expected to specify the object of research, perhaps focusing on only one sub-sector and including control variables in the model.

## Acknowledgement

Our deepest gratitude to the Ministry of Education, Culture, Research and Technology (Kemdikbudristek) for funding the second year of Collaboration Research between Higher Education (PKPT) in 2022 through Decree Number: 262/E5/PG.02.00. PT/2022 and Contract Agreement Number: 030/SP2H/PT-L/LL7/2022, Derivative Contract Number: 0094/B.1/LP2M/ITB-ASIA/III/2022 dated 17 March 2022. So that the additional output of PKPT in Both of these can be solved optimally.

## Reference

- Allahar, H., & Brathwaite, C. (2016). Business Incubation as an Instrument of Innovation: The experience of South America and the Caribbean. *International Journal of Innovation*, 4(2), 71–93. <https://doi.org/doi.org/10.5585/iji.v4i2.107>
- Anjaningrum, W. D., Hermawati, A., Yogatama, A. N., & Puji, R. (2021). Creative Industry in the Post-Pandemic Digital Era : Meaningful Incubation , Customer Focus , and High Innovation as Strategies to Compete. *International Conference of Economic , Business, and Entrepreneurship (ICEBE)*, 2–8. <https://doi.org/10.4108/eai.7-10-2021.2316784>

- Anjaningrum, W. D., Yogatama, A. N., Sidi, A. P., Hermawati, A., & Suci, R. P. (2021). *Strategi Penguatan Kapabilitas Ekonomi Kreatif di Era Digital* (1st ed.). Litera Media Tama.
- Benyahya, P., & Matošková, J. (2021). Partnership Between the Employer and the Staff as a Vital Factor for Knowledge Sharing. *International Journal of Learning and Intellectual Capital*, 18(1), 5–27. <https://doi.org/10.1504/IJLIC.2021.113659>
- Boccella, N., & Salerno, I. (2016). Creative Economy, Cultural Industries and Local Development. *Procedia - Social and Behavioral Sciences*, 223, 291–296. <https://doi.org/10.1016/j.sbspro.2016.05.370>
- Gonthier, J., & Chirita, G. M. (2019). The Role of Corporate Incubators as Invigorators of Innovation Capabilities in Parent Companies. *Journal of Innovation and Entrepreneurship*, 8(1), 1–21. <https://doi.org/10.1186/s13731-019-0104-0>
- Greco, M., Grimaldi, M., & Cricelli, L. (2015). Open innovation actions and innovation performance. *European Journal of Innovation Management*, 18(2), 150–171. <https://doi.org/10.1108/ejim-07-2013-0074>
- Gupta, S., Malhotra, N. K., Czinkota, M., & Foroudi, P. (2016). Marketing innovation: A consequence of competitiveness. *Journal of Business Research*, 69(12), 5671–5681. <https://doi.org/10.1016/j.jbusres.2016.02.042>
- Hair, J. J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). Multivariate Data Analysis. In *Exploratory Data Analysis in Business and Economics* (Seventh Ed). Pearson Education Limited. [https://doi.org/10.1007/978-3-319-01517-0\\_3](https://doi.org/10.1007/978-3-319-01517-0_3)
- Hair, J. J. F., Sarstedt, M., Hopkins, L., & Kuppelwiesier, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM) An Emerging Tool in Business Research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/10.1111/joms.12639>
- Hassan, N. A. (2020). University business incubators as a tool for accelerating entrepreneurship: theoretical perspective. *Review of Economics and Political Science*. <https://doi.org/10.1108/reps-10-2019-0142>
- Hermawati, A. (2020). The Implementation of Dynamic Capabilities for SMEs in Creating Innovation. *Journal of Workplace Learning*, 32(3), 199–216. <https://doi.org/10.1108/JWL-06-2019-0077>
- Liu, Y. (2020). Technological Forecasting & Social Change The micro-foundations of global business incubation: Stakeholder engagement and strategic entrepreneurial partnerships. *Technological Forecasting & Social Change*, 161(June), 120294. <https://doi.org/10.1016/j.techfore.2020.120294>
- Mvulirwenande, S., & Wehn, U. (2020). Opening the Innovation Incubation Black Box: A Process Perspective. *Environmental Science and Policy*, 114(August), 140–151. <https://doi.org/10.1016/j.envsci.2020.07.023>



- Saulina, M. (2016). Performance measurement approach for innovation capability in SMEs. *International Journal of Productivity and Performance Management*, 65(2), 162–176.
- Schwer, K., & Hitz, C. (2018). Designing organizational structure in the age of digitization. *Journal of Eastern European and Central Asian Research*, 5(1), 1–11. <https://doi.org/10.15549/jeecar.v5i1.213>
- Sedita, S. R., Apa, R., Bassetti, T., & Grandinetti, R. (2019). Incubation matters: Measuring the effect of business incubators on the innovation performance of start-ups. *R and D Management*, 49(4), 439–454. <https://doi.org/10.1111/radm.12321>
- Shvindina, H., Taraniuk, L., Kotenko, S., Abayomi, A., Taraniuk, K., & Hongzhou, Q. (2022). Cross-Country Analysis of Competitiveness Towards Innovation Potential Assessment for Industrials. *Journal of Eastern European and Central Asian Research*, 9(2), 165–182. <https://doi.org/10.15549/jeecar.v9i2.711>
- Tola, A., & Contini, M. V. (2015). From the Diffusion of Innovation to Tech Parks, Business Incubators as a Model of Economic Development: The Case of “Sardegna Ricerche.” *Procedia - Social and Behavioral Sciences*, 176, 494–503. <https://doi.org/10.1016/j.sbspro.2015.01.502>
- Torun, M., Peconick, L., Sobreiro, V., & Kimura, H. (2018). International Journal of Innovation Studies Assessing business incubation: A review on benchmarking. *International Journal of Innovation Studies*, 2(3), 91–100. <https://doi.org/10.1016/j.ijis.2018.08.002>
- von Leipzig, T., Gamp, M., Manz, D., Schöttle, K., Ohlhausen, P., Oosthuizen, G., Palm, D., & von Leipzig, K. (2017). Initialising Customer-orientated Digital Transformation in Enterprises. *Procedia Manufacturing*, 8(October 2016), 517–524. <https://doi.org/10.1016/j.promfg.2017.02.066>