

The Influence of E-Commerce Technology Competence and Entrepreneurial Spirit on the Commitment of Craft SMEs

Aznuriyandi^{1*}, Fatkhurahman², Dinda Nabillah³, Ipe perdamaian⁴,
Martha Susilowati Nainggolan⁵, Nola Novita Nababan⁶

^{1,2} Faculty of Economics and Business, Universitas Lancang Kuning, Pekanbaru, Indonesia

ARTICLE INFO

Article history:

Received October 08, 2024
Revised October 18, 2024
Accepted October 18, 2024
Available online December 10, 2024

Keywords:

E-Commerce Technology Competence; Entrepreneurial Spirit; Entrepreneur Commitment; Craft SMEs



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

ABSTRACT

The phenomenon of commitment of small and medium industry (IKM) entrepreneurs in the craft sector in the regions is interesting to discuss because this sector has an important contribution to the local economy, culture, and community empowerment. Regional craft products need attention to support local tourism programs. This study proves that the competency factors possessed by IKM entrepreneurs and their entrepreneurial spirit also play a role in building a commitment to producing local craft products. Through a survey study of IKM craft entrepreneurs in Pekanbaru City, questionnaires were distributed to 60 IKM and the data was analyzed using quantitative techniques. The results of the study showed that e-commerce technology competence and entrepreneurial spirit had a significant effect on the commitment of IKM craft entrepreneurs in Pekanbaru City. The higher their competence and the better their entrepreneurial spirit, the higher their commitment to work.

*Corresponding author.

E-mail: fatkhurahman@unilak.ac.id (Fatkhurahman)

INTRODUCTION

The commitment of SMEs (Small and Medium Industries) in producing competitive products is very important to improve their position in the market. Commitment to quality helps SMEs in producing products that meet or even exceed consumer expectations. Good quality is one of the main factors that influence purchasing decisions. Quality products will increase customer satisfaction, which leads to loyalty and repeat purchases. With a commitment to innovation, SMEs can be more responsive to changes in consumer trends and needs, and create new, relevant products. Continuous innovation allows SMEs to remain competitive and not be left behind by competitors, both local and international. SMEs' commitment to quality and innovation helps them plan and run their businesses with sustainable strategies. By focusing on improving quality, SMEs can reduce the risk of product failure and strengthen their position in the market. Commitment to high-quality products helps SMEs in building a positive image that makes their brands better known and trusted. Customers are more likely to choose products from SMEs that have a good reputation, which is built through a commitment to quality and service. SMEs that are committed to producing good products can compete with large companies that often have more resources. Quality products can open up opportunities for SMEs to enter international markets, increase income, and expand business reach. SME commitment to producing good products will contribute to job creation at the local level. Competitive SMEs can make a significant contribution to local and national economic growth, helping to strengthen the economy as a whole.

SME commitment to producing competitive products is not only important for the sustainability of their own businesses, but also contributes to overall economic development. With a strong commitment, SMEs can play an important role in creating a healthy and sustainable business ecosystem.

The problem of SME (Small and Medium Industries) commitment to producing competitive products can vary, SMEs often face obstacles in obtaining sufficient capital to invest in equipment, technology, and raw materials needed to produce quality products. Limited access to skilled and experienced workers can hinder SMEs' ability to commit to quality and innovation. Many SMEs have not utilized the latest technology in their production processes, which can result in low efficiency and inconsistent product quality. Without adequate technology, SMEs find it difficult to innovate in products and processes, reducing competitiveness in the market. Some SMEs may not understand the importance of commitment to product quality and its impact on customer satisfaction. Lack of knowledge about quality standards and certification can hinder SMEs from producing products that meet market expectations. In Indonesia, SMEs have a strategic role in the national economy. This can be seen from the number of business units which amount to 3.4 million units and constitute more than 90 percent of the national industrial business units. SMEs have a variety of products that are able to fill a wide market area,

and become a source of income for the wider community and are resilient to various crises that occur (Abadiyah & Ilviyah, 2022).

These problems require attention and appropriate strategies from SMEs as well as support from the government and related parties to create a conducive environment. By overcoming these challenges, SMEs can be better committed to producing competitive products and contributing to overall economic growth. Several studies have studied the issue of SME commitment in producing competitive products, such as that conducted by Abadiyah & Maufuzah, (2022) that transformational leadership partially has a positive and significant effect on organizational commitment, workload partially has a positive and significant effect on organizational commitment, entrepreneurial motivation partially has a positive and significant effect on organizational commitment, and transformational leadership, workload, and entrepreneurial motivation have a simultaneous effect on organizational commitment. It was also studied by Abadiyah & Ilviyah, (2022) that there is an influence of transformational leadership style on employee performance. Job characteristics affect employee performance. Affective commitment does not affect employee performance. Transformational leadership style affects affective commitment. Job characteristics do not affect affective commitment. Transformational leadership style does not affect employee performance through affective commitment as an intervening variable. Job characteristics do not affect employee performance through affective commitment as an intervening variable. Furthermore, the results of research by Aditya et al., (2024) Leadership style is proven to be positively correlated with all measures of job satisfaction, as well as with measures of entrepreneurial commitment, job satisfaction, and entrepreneurial motivation. The development of an entrepreneurial spirit has an impact on the commitment and performance of MSME managers (Fatkhurahman & Imaludin, 2022); (Fatkhurahman et al., 2024); (Fatkhurahman, 2024a); (Fatkhurahman et al., 2019); and (Hadiyati, Bambang Suroto, Fatkhurahman, 2017). The results of the above studies focus more on commitment as a lever variable. There are still very few who examine commitment as a dependent variable that is influenced and its causal factors such as technological competence and entrepreneurial spirit. Therefore, this study aims to prove whether technological competence and entrepreneurial spirit influence the commitment of MSME entrepreneurs in producing competitive products.

The commitment of MSMEs in producing quality and innovative products is not only important for the sustainability of their own businesses, but also contributes to the development of the local and national economy. With a strong commitment, MSMEs can become a driving force for inclusive and sustainable economic growth. This commitment stems from organizational commitment which is very important for the company. Because with organizational commitment, there will be reciprocity from employees to their company/organization that is mutually beneficial (Abadiyah & Maufuzah, 2022).

Human resources have a major role in the company, especially to achieve company goals, therefore companies are required to be able to manage their human resources, because human resources are valuable assets for the company to plan, implement and

control various operational activities in the company. to maintain the quality of human resource development, companies usually provide training and reciprocity that can improve employee performance (Abadiyah & Ilviah, 2022).

Information technology, there is a greater emphasis on increasing skills (Puspitasari & Tannar, 2024). Entering the evolution and rise of the e-commerce industry, especially in sales in Indonesia. Not only increasing consumer interest and participation, but this industry also recorded very large sales figures and increased demand. Currently, the MSME sector is required to be able to compete in marketing its business, empowering small and medium enterprises (MSMEs) is very strategic, because of its great potential in driving economic activities (Lukiyana, 2021). The variable of technology utilization, the competency variable is also measured using a Likert scale from the responses of MSME owners regarding the statements given in the questionnaire. The Likert scores obtained are then also divided into 5 category groups in the previous job satisfaction variable (Immanuel, 2022). To maintain the success of a business, it should be done by increasing the entrepreneurial spirit. An increasing entrepreneurial spirit accompanied by increased product innovation will have a positive impact on the success of MSME businesses (Wahyuningsih, 2023). The phenomenon of technological developments that require innovation and new creations. the needs of society are increasing day by day, while jobs are also getting fewer and needed. the development of soft skills in the form of an entrepreneurial spirit is more directed at the younger generation and the world of education. Development of an entrepreneurial spirit in the generation of actors in the sense of business actors who learn directly from their experiences to earn income to meet household needs (Fatkhurahman & Imaludin, 2022).

An entrepreneurial spirit is an independent spirit in finding sources of income by establishing a business and channeling ideas and thoughts in the business. An entrepreneurial spirit is someone who dares to take risks in creating a business based on their own will based on creativity and soul (Saputra et al., 2023). Cultivating an entrepreneurial spirit through learning activities as a provision to be able to live independently is very necessary (Ayub et al., 2023). Cultivating an entrepreneurial spirit can be done through entrepreneurship training (Ismail et al., 2020). The millennial generation has more innovative, creative and critical thinking. The growth of the Indonesian millennial generation is a force to shape Indonesian society to be more advanced, starting from economic progress, technology, E-commerce and various other fields (Ambarwati & Sobari, 2020). Indonesia really needs many new entrepreneurs, especially the young generation who are entrepreneurs. To become an entrepreneur, of course, first of all, there is an entrepreneurial spirit in the person's soul. When associated with an entrepreneurial spirit, internalization refers to the process of instilling and developing a certain entrepreneurial spirit in a person. Thus, the internalization of soft skills can be interpreted as an educational process in the form of instilling and developing an entrepreneurial spirit that acts as a driving force and becomes a guideline in living life towards independence (Aprillianita et al., 2020). Interest in entrepreneurship will arise because it is preceded by knowledge and information about entrepreneurial science which is then poured into an activity to gain experience and application of the knowledge that has been obtained in the field where finally the desire to carry out the activity arises. Interest in entrepreneurship is not just owned by someone, but can be fostered and directed and developed according to a person's expertise (Khairinal et al., 2022). Small industries, especially MSME actors, are still widely favored by the community because

MSMEs do not require large capital to start their business. A person who has an entrepreneurial spirit must have the following characteristics: 1) self-confidence, 2) able to take risks, 3) have leadership in leading their business, 4) achieve, and 5) have the initiative in taking action that will be taken next (Kamilan & Nurcholisah, 2022); (Pailis, 2020); (Fatkhurahman, 2024b); and (Fatkhurahman, 2020).

From the presentation regarding the commitment of SMEs in producing competitive products, it is related to the ability to use e-commerce technology in marketing and the need to grow an entrepreneurial spirit in SME business managers.

METHODOLOGY

The type of research used in this study and quantitative research where quantitative research is a research method that uses numerical data and statistical analysis to answer research questions. Types of quantitative research can be distinguished based on the objectives, approaches, and techniques used. The data source in this study was SME craft entrepreneurs in Pekanbaru City with a sample of 60 entrepreneurs. The questionnaire was used in this study where this questionnaire is a data collection tool consisting of a series of questions designed to collect information from respondents. Questionnaires are often used in quantitative and qualitative research to gain a better understanding of the behavior, opinions, experiences, or characteristics of respondents. Quantitative analysis techniques with multiple linear regression analysis tools. Multiple linear regression analysis is a statistical technique used to understand the relationship between one dependent variable and two or more independent variables. To conduct multiple linear regression analysis, the software that can assist in the calculation and interpretation of the results is SPSS version 27.

RESULTS AND DISCUSSION

Results

The results of a survey on the commitment of MSME (Small and Medium Industry) entrepreneurs in producing competitive products can provide an overview of how serious entrepreneurs are in improving the quality and competitiveness of their products, as follows:

Table 1. Coefficients

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	-.565	1.533		-.369
	Comp_tech	.273	.112	.244	2.427
	Entrep	.745	.110	.682	6.785
					Sig.
					.714
					.018
					.000

a. Dependent Variable: Produc_Comit
 Source: Processed Data (2024)

Explanation:

- (Constant): The constant value (-0.565) shows the model intercept, but is not significant (Sig. = 0.714). The value of -0.565 indicates that if all independent variables (Comp_tech and Entrep) are equal to zero, product commitment (Produc_Comit) is estimated to be -0.565. However, because the significance value (Sig.) is 0.714, this indicates that the constant is not statistically significant.
- Comp_tech: The coefficient of 0.273 indicates that for every one-unit increase in technological competence, product commitment increases by 0.273, and the results are significant (Sig. = 0.018). The coefficient of 0.273 indicates that every one-unit increase in technological competence (Comp_tech) is associated with a 0.273-unit increase in product commitment. The Sig. value. of 0.018 indicates that this influence is statistically significant, so it can be concluded that technological competence has a positive impact on product commitment.
- Entrep: A coefficient of 0.745 indicates that for every one-unit increase in entrepreneurial spirit, product commitment increases by 0.745, and the results are very significant (Sig. = 0.000). The coefficient of 0.745 means that every one-unit increase in entrepreneurial commitment (Entrep) is associated with a 0.745-unit increase in product commitment. The Sig. value of 0.000 indicates that this influence is very significant, indicating that entrepreneurship is a key factor in increasing product commitment.

Table 2. ANOVA (Analisis Varians)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2200.007	2	1100.003	107.626	.000 ^b
	Residual	582.577	57	10.221		
	Total	2782.583	59			

a. Dependent Variable: Produc_Comit

b. Predictors: (Constant), Entrep, Comp_tech

Source: Processed Data (2024)

Explanation:

- Regression: The sum of squares for the regression is 2200.007, with an F-statistic of 107.626 and a significance value (Sig.) of 0.000, indicating that the overall regression model is significant. The F-statistic value of 107.626 with a Sig. value of 0.000 indicates that the overall regression model used is significant in explaining variations in product commitment. This means that there is sufficient evidence to state that at least one of the independent variables (Comp_tech or Entrep) has an effect on the dependent variable (Produc_Comit).
- Residual: The sum of squares for the residual is 582.577.
- Total: The total sum of squares is 2782.583.

Table 3. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 ^a	.791	.783	3.19697

a. Predictors: (Constant), Entrep, Comp_tech
 Source: Processed Data (2024)

Explanation:

- **R:** The R value of 0.889 indicates a strong relationship between the independent variables (Comp_tech and Entrep) and the dependent variable (Produc_Comit).
- **R Square:** The R Square value of 0.791 indicates that 79.1% of the variation in product commitment can be explained by the variables of technological competence and entrepreneurial spirit.
- **Adjusted R Square:** The Adjusted R Square value of 0.783 indicates that this model explains 78.3% of the variation after taking into account the number of independent variables.
- **Std. Error of the Estimate:** This value (3.19697) indicates the standard deviation of the residual.

Discussion

The results of this analysis indicate that technological competence and entrepreneurial spirit have a significant influence on product commitment in SME entrepreneurs. With a high R Square, this regression model can be used to predict product commitment based on the two independent variables.

The influence of technological competence, technological competence refers to the ability of entrepreneurs to use and adopt technology in the production process and business management. The significant influence of technological competence on product commitment can be explained Entrepreneurs with good technological competence tend to be more capable of product innovation. They can utilize new technology to develop products that are of higher quality and attractive to consumers. The use of technology can increase efficiency in the production process, reduce costs, and increase productivity. This has a direct impact on the ability to maintain or increase commitment to product quality. Entrepreneurs who have technological competence are also better at utilizing digital marketing tools, which can expand market reach and increase sales. This contributes to product commitment because products can be better known and accepted by consumers.

The influence of entrepreneurial spirit, entrepreneurial spirit includes attitudes, values, and behaviors that indicate a desire to take risks, innovate, and manage a business well. some significant influences of entrepreneurial spirit on product commitment, entrepreneurs with high entrepreneurial spirit are better able to adapt to market changes and consumer needs. They tend to be more responsive to feedback and can change their

products or strategies as needed. Entrepreneurial spirit drives creativity, which is important in creating new products or improving existing ones. This contributes to increased product commitment because innovation is considered part of the core values of the business. Entrepreneurs who dare to take risks tend to be more open to new opportunities and are willing to invest resources in product development. This shows a commitment to creating competitive products in the market. Overall, technological competence and entrepreneurial spirit have a significant impact on product commitment in SME entrepreneurs. The combination of these two elements can increase the ability of SMEs to innovate, improve product quality, and adapt to market needs, all of which are important for maintaining competitiveness in an increasingly competitive market.

Implications of the research results on product development, these results indicate the importance of investment in technology and entrepreneurial development to increase product commitment in SMEs. Entrepreneurs can focus on technological innovation and entrepreneurial development to improve the competitiveness of their products. Then the training strategy, to increase entrepreneurial commitment, it might be a good idea to hold a training program or seminar for SME entrepreneurs to improve their skills and knowledge. Also in further research, subsequent researchers can continue this research by collecting further data or adding other variables that may also affect product commitment, such as marketing, resource management, or access to financing.

CONCLUSION

Based on the description of the results and discussion above, it can be concluded that e-commerce technology competence and entrepreneurial spirit have a significant effect on the commitment of craft SME entrepreneurs in Pekanbaru City. The higher their competence and the better their entrepreneurial spirit, the higher their commitment to work.

REFERENCES

- Abadiyah, R., & Ilviyah, L. (2022). Peran Komitmen Afektif Dalam Memediasi Gaya Kepemimpinan Transformasional Dan Karakteristik Pekerjaan Terhadap Kinerja Karyawan Ikm Konveksi. *Jurnal Ilmiah Manajemen Dan* <https://ejournal.stie-trianandra.ac.id/index.php/jimak/article/view/484>
- Abadiyah, R., & Maufuzah, I. A. (2022). Kepemimpinan Transformasional, Beban Kerja, Dan Motivasi Berwirausaha Dalam Meningkatkan Komitmen Organisasi Pada Ikm Tas Di Tanggulangin. *Jurnal Ilmiah Manajemen Dan* <https://ejournal.stiesia.ac.id/jimbis/article/view/5378>
- Aditya, R. P., Abadiyah, R., & ... (2024). Membangun Komitmen Berwirausaha Melalui Motivasi Berwirausaha dan Kepuasan Kerja Pada Industri Kecil Menengah (IKM). *Al-Kharaj: Jurnal Ekonomi* <https://journal.laaroiba.ac.id/index.php/alkharaj/article/view/4981>
- Ambarwati, A., & Sobari, I. S. (2020). Membangun jiwa kewirausahaan di era milenial bagi mahasiswa Institut Stiami Kampus Tangerang Selatan. *Jurnal Komunitas:*

- Jurnal Pengabdian* <http://ojs.stiami.ac.id/index.php/jks/article/view/736>
- Aprillianita, P. Y., Ahman, E., & ... (2020). Internalisasi soft skills dan minat kewirausahaan dalam pembentukan jiwa kewirausahaan. *Jurnal Riset Pendidikan* <https://ejournal.unikama.ac.id/index.php/jrpe/article/view/4578>
- Ayub, S., Rokhmat, J., Busyairi, A., & ... (2023). Implementasi Proyek Penguatan Profil Pelajar Pancasila (P5) Sebagai Upaya Menumbuhkan Jiwa Kewirausahaan. *Jurnal Ilmiah Profesi* <http://jipp.unram.ac.id/index.php/jipp/article/view/1373>
- Fatkhurahman, F. (2020). Creativity and Opportunity on Traditional Food Products: Business quality in competitive environment. In *IOP Conference Series: Earth and Environmental Science* (Vol. 469, Issue 1). <https://doi.org/10.1088/1755-1315/469/1/012066>
- Fatkhurahman, F. (2024a). KEBIJAKAN BISNIS USAHA MIKRO KECIL DAN MENENGAH DALAM MENCAPAI KINERJA UNGGUL. *Jurnal Bisnis Kompetitif.* <https://ejournal.kompetif.com/index.php/bisniskompetif/article/view/1853>
- Fatkhurahman, F. (2024b). Prospects and analysis of coastal ecotourism in Malay community. *AACL Bioflux*, 17(1), 360–373. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85192483591&origin=inward>
- Fatkhurahman, F., Hadiyati, H., & Murnawati, M. (2024). The Influence of the Ability to Use Information Technology and Capital Access on the Competitiveness of SMEs in Pekanbaru City. *Proceedings of the 2nd* <https://doi.org/10.4108/eai.30-10-2023.2343084>
- Fatkhurahman, F., & Imaludin, H. (2022). Pengembangan Jiwa Kewirausahaan: Memahami Dampak Daya Saing Terhadap Prestasi Berwirausaha IKM di Kota Pekanbaru. *Jurnal Bisnis Kompetitif.*
- Fatkhurahman, F., Priadana, S., & Rusliati, E. (2019). Entrepreneurship on Strategies To Build Competitive Advantages of Riau Specialty Food Products. *Trikonomika.* <https://journal.unpas.ac.id/index.php/trikononika/article/view/1528>
- Hadiyati, Bambang Suroto, Fatkhurahman, N. (2017). Jiwa Kewirausahaan Mahasiswa Tempatan (Studi Mahasiswa Bidang Ekonomi Di Kota Pekanbaru). *Journal of Techno* <https://publisher.uthm.edu.my/ojs/index.php/JTS/article/view/1761>
- Immanuel, J. (2022). *Pengaruh Kompetensi dan Kesiapan Sumber Daya Manusia terhadap Pemanfaatan Teknologi E-commerce bagi UMKM kecamatan Mustika Jaya.* repository.uksw.edu. <https://repository.uksw.edu/handle/123456789/26323>
- Ismail, I., Al-Bahri, F., Ahmad, L., & ... (2020). IbM pelatihan kewirausahaan sebagai upaya menumbuhkan jiwa kewirausahaan dan menggali ide usaha baru. *Jurnal Pengabdian* <http://journal.stmiki.ac.id/index.php/jpni/article/view/3>
- Kamilan, J. A., & Nurholisah, K. (2022). Pengaruh Kemampuan Menyusun Laporan Keuangan dan Jiwa Kewirausahaan terhadap Kinerja Operasional UMKM. In *Jurnal Riset* download.garuda.kemdikbud.go.id. [http://download.garuda.kemdikbud.go.id/article.php?article=2916781&val=25654&title=Pengaruh Kemampuan Menyusun Laporan Keuangan dan Jiwa Kewirausahaan terhadap Kinerja Operasional UMKM](http://download.garuda.kemdikbud.go.id/article.php?article=2916781&val=25654&title=Pengaruh%20Kemampuan%20Menyusun%20Laporan%20Keuangan%20dan%20Jiwa%20Kewirausahaan%20terhadap%20Kinerja%20Operasional%20UMKM)
- Khairinal, K., Syuhadah, S., & Fitriani, F. (2022). Pengaruh Lingkungan Keluarga, Pendidikan Kewirausahaan, dan Jiwa Kewirausahaan Terhadap Minat Berwirausaha Siswa Smkn 1 Kota Jambi. *Jurnal Manajemen Pendidikan*

- <https://dinastirev.org/JMPIS/article/view/863>
- Lukiyana, L. (2021). *Pengaruh Kompetensi Teknologi Dan Tampilan Produk Terhadap Minat Beli Yang Di Moderasi Pemanfaatan E Commerce Pada Umkm Onezo Di Jakarta.* journal.uta45jakarta.ac.id.
<https://journal.uta45jakarta.ac.id/index.php/MSE/article/view/5855>
- Pailis, E. A. (2020). Indigenous community approach through indigenous leaders social entrepreneurship in five luhak in rokan hulu regency riau indonesia. *International Journal of Scientific and Technology Research*, 9(3), 5249–5255.
<https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85084703533&origin=inward>
- Puspitasari, M., & Tannar, O. (2024). Pengaruh Bisnis E-Commerce, Teknologi Informasi, dan Kompetensi Auditor terhadap Kebutuhan Jasa Audit E-Commerce: Studi Kasus pada Kantor Akuntan Publik *Al-Kharaj: Jurnal Ekonomi*
<https://journal-laaroiba.com/ojs/index.php/alkharaj/article/view/1746>
- Saputra, F., Mahaputra, M. R., & ... (2023). Pengaruh Jiwa Kewirausahaan terhadap Motivasi dan Minat Berwirausaha (Literature Review). *Jurnal Kewirausahaan*
<https://siberpublisher.org/JKMT/article/view/10>
- Wahyuningsih, R. (2023). Jiwa Kewirausahaan Dan Inovasi Produk Pada Ikm Kerupuk Rambak Di Bangsal Mojokerto. *Jurnal Pendidikan Ekonomi (JURKAMI)*.
<https://jurnal.stkippersada.ac.id/jurnal/index.php/JPE/article/view/2224>