

HOW DOES BUSINESS PERFORMANCE FOR SMES IN INDONESIA COMPARE?

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Abstract

The demographic component of East Java's economic growth may be observed in Lamongan Regency, which has a number of small and medium enterprises (SMEs), with food and handicraft solid kinds observing particularly big growth. These hobbies still have a lot of difficulties and problems, however. Having insufficient human resources is one of them. An explanatory method of research was used in this study's quantitative research. The objective of the research is to demonstrate and explain in an empirical way how innovation affects knowledge management and entrepreneurial leadership, both of which improve business performance. The probability sampling method and proportional area random sampling were employed to select a sample of 285 SMEs from an overall population of 462. In this study, structural equation modeling (SEM) was used as.

Keyword: Innovation, Entrepreneurial Leadership, Business Performance and Small and Medium Enterprises (SMEs).

Introduction

According to Lorenzo et al.'s findings (2018, p. 182), entrepreneurial leadership is defined as a leader who is imaginative, totally committed to their work, and able to see opportunities and take advantage of them directly from their perspective (Cho & Lee, 2018; Darroch, 2005; Lechner & Gudmundsson, 2014; Lin et al., 2008; Juárez et al., 2016). Influences In the end, only a climate and physical working environment that foster creativity will lead to the attainment of corporate performance. According to several studies (Davila et al., 2019; Zamora et al., 2013; Hult et al., 2004; Rosli & Sidek, 2013; Setvanti, 2013; Teece, 2010; Juárez et al., 2016), company performance will be generated through innovation at the

individual, organizational, and macroeconomic levels (Awasthi et al. 2021).

The level of uniqueness of the goods and services offered, which are currently the focus of economic development at the government most fundamental level through the study of antecedent variables, should be examined as a mediator of business performance in Songkok handicraft MSMEs in light of the various information and research discussed above (Sawhney et al. 2023, Tyagi et al. 2023).

TheoreticalBackgroundAndHypothesis Building

Entrepreneurial Leadership

According to House & Dessler (1974) and Vasella (2011), entrepreneurial leadership is leadership that has the ability

to delegate, develop responsible people, make and implement decisions, and operate autonomously. With this knowledge, it is clear that those who are good role models and actively participate in the tasks he has assigned and the judgments he makes are considered to be leaders (Awasthi et al. 2016, Gupta et al. 2014).

Business Performance

A business organization can attain company success by producing some observable outcomes. The accomplishment of business objectives, such as survival, profitability, and growth, is supported by performance. Sales volume. strong profitability, return on investment. turnover rate, and market share are all indicators of business performance (Jauch & Glueck, 1998). Efficiency, growth, and profitability are used in performance measurement by Li et al. (2005). As demonstrated by this. business performance is a complex phenomenon that is challenging to quantify (Sánchez and Marn, 2005; Srivastava, 2022).

Three criteria are used by Carmison (in Sanchez and Marn, 2005) to evaluate the success of SMEs: profitability, productivity, and marketability. Lee and Tsang (2001) use a measure of corporate growth that includes increases in revenue, firm assets, and profitability. Research can examine the attitudes of SME owners to ensure the availability of true facts for profitability (Dess and Beard, 1984).

Innovation

Carmison (in Sanchez and Marn, 2005) uses the following three factors to assess the success of SMEs: profitability, productivity, and marketability. While Lee and Tsang (2001) employ a metric for

measuring business growth that takes into account improvements in sales, firm assets, and profitability. To ensure the availability of accurate facts for profitability, research might look at the attitudes of SME owners (Dess and Beard, 1984).

Innovation becomes the key to a competitive advantage in a dynamic market, driving the expansion and competition of SMEs. Five innovation performance indicators-the development of new goods, process applications, new markets. resource development, and organizational models—are listed by Vyas (2009). The four aspects of innovationproduct innovation, process innovation, marketing innovation, and organizational innovation—were also stressed by Tanaka et al. (2005).

Innovation and innovation skills are highlighted through entrepreneurial innovation. Innovation in both products and processes improves an organization's flexibility and adaptability, as well as its competitiveness and leverage. They can then use those resources to innovate further, giving them a chance to gain a competitive advantage (De Silva, Howells, & Meye, 2018). Innovation becomes essential to gaining a competitive edge in a changing market, fueling SME growth and rivalry. Vyas (2009)outlines five innovation performance indicators: the creation of new products. process applications, new markets. resource development, and organizational models. Tanaka et al. (2005) also emphasized the four facets of innovation: product innovation, process innovation, marketing innovation, and organizational innovation. (Paricherla et al. 2022, Tyagi et al. 2022).

Entrepreneurial Leadership and Business Performance of SMEs

A conceptual model by Covin, J. G., and Slevin, D. P. (1991) demonstrates how entrepreneurial leadership is positively correlated with business performance. In this paradigm. entrepreneurial leadership entails taking calculated risks, being creative, and being proactive when it comes to seizing business possibilities. The following study was done by Naman, J.L., and Slevin, D.P. Consider the (1993).alignment of leadership qualities with the external environment while examining the connection entrepreneurial between leadership and business performance. According to research. more entrepreneurial leadership is linked to business performance, improved particularly when the external environment and the leadership traits are in harmony (

Ojha et al. 2016, Narayan et al. 2023, Babu et al. 2022).

InnovationasModiationofEntrepreneurialLeadershipandBusiness Performance

According to Zhang, Y., Duysters, & Cloodt (2014), successful entrepreneurs' use of entrepreneurial leadership in universities can encourage more students to pursue their own businesses. The results of innovation and business performance then be impacted by this may entrepreneurial intent. The same is demonstrated by study findings, which indicate а link between corporate performance and entrepreneurial approach, particularly entrepreneurial leadership. The findings indicate that high levels of entrepreneurial orientation are positively correlated with corporate performance, with innovation serving as a key mediator in this relationship.





Hypothesis: H1: Entrepreneurial Leadership has a significant effect on business performance H₂: Innovation has a significant effect on business performance

Method

The handicraft MSME industry in Lamongan, East Java, Indonesia, serves as the study's population. contains a total of 285 randomly selected samples. utilizing an online Google form. Processing data with structural equation modeling (SEM) (Narayan et al. 2023, Babu et al. 2017,

Result

Analisis Statistik

Cross Loading

The purpose of this analysis is to determine the level of importance of the

primary variable and its component items or indicators. The maximum amount of crossloading permitted in statistical testing is 0.5. All indicators were over 0.5 in the results, demonstrating the high validity of all variables. The weight of the indicator used to measure each variable is referred to as the loading factor value. The variable with the highest measurement is said to have the strongest measurement. All constructions had a value higher than 0.70, according to the findings. The focus of the study is the handcraft MSME industry in Lamongan, East

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Java, Indonesia. contains a total of 285 samples chosen at random. using a Google

form online. using structural equation modeling (SEM) to process data.

Variable	Indicator	Loading Factor				
Entrepreneurial	X2	0,630				
Leadership	X2 X3	0,611				
Leadership	X4	0,693				
	X4 X5	0,693				
	X5 X6	0,799				
	X0 X7	0,662				
	X7 X8	0,002				
		<i>c</i>				
	X9	0,644				
	X10	0,692				
Business	Y1	0,629				
Performance	Y2	0,513				
	Y3	0,546				
	Y4	0,717				
	Y5	0,548				
	Y6	0,665				
	Y7	0,906				
	Y8	0,957				
	Y9	0,645				
	713	0,592				
Innovation	Z1	0,532				
	Z2	0,529				
	Z3	0,618				
	Z4	0,556				
	Z9	0,619				
	Z10	0,117				
	Z11	0,717				
	Z12	0,823				
	Z13	0,862				
	Z14	0,735				
	Z15	0,554				

Table 1.Loading factor for Convergent Validity Test

From the results of the analysis in the table above, it can be seen that there is a significant influence between entrepreneurial leadership, business performance, and innovation variables. However, continuous analysis combined with confirmatory factor analysis shows that entrepreneurial leadership variables do not affect innovation, and entrepreneurial leadership does not affect business performance. The same is also shown in the innovation variable, where there is no influence on business performance (Srivastava at al. 2019, Kumar et al, 2021),

			Estimate	S.E.	C.R.	Р	Label
IN	<	EL	0.008	0.065	0.12	0.904	par_35
BP	<	IN	0.354	0.08	4.442	***	par_34
BP	<	EL	-0.094	0.064	-1.476	0.14	par_38

Tabel 2. Standardize Regression Weight

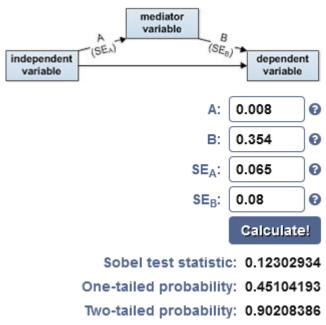
Sumber: Ouput Amos 23 (2023)

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Finding out the relative weights of the major variable's constituent components or indicators is the goal of this study. In statistical testing, a crossloading factor of 0.5 is the maximum allowed. The results showed that all indicators were greater than 0.5, indicating the excellent validity of all variables. The loading factor value is the mass of the indicator that is used to measure each variable. The term "strongest

measurement" refers to the variable having the highest measurement. The results showed that all buildings had a value higher than 0.70. The handicraft MSME sector in Lamongan, East Java, Indonesia, is the study's primary area of interest. comprises 285 samples overall, picked at random. utilizing an online Google form. processing by means of structural equation modeling (SEM)

Gambar 4.Mediation Test of Innovation Variables between Leadership and MSME Performance



With a t-statistic value of 0.123 and a P-value of 0.902 greater than 0.05, the findings of the mediation test demonstrate that innovation is unable to mediate the influence of firm leadership on MSME performance

Discussion

Entrepreneurial leadership and innovation do not significantly affect corporate performance, according to the study and interpretation of research findings. In this context, "entrepreneurial leadership" refers to a leadership style that places an emphasis on fostering innovation within SMEs, taking calculated risks, and developing entrepreneurial abilities. However, innovation is the process of creating and executing fresh concepts, goods, or commercial strategies that benefit SMEs. (Mohseni et al .2021)

Iplications of The Theory

(2016) Zampetakis, L. A., Bakatsaki, M., and C. Examine the connection between corporate performance, entrepreneurial leadership, and orientation. The results demonstrate that, with innovation acting as a mediator. entrepreneurial leadership is crucial in fostering positive link between a entrepreneurial attitude and firm performance. When combined, innovation and entrepreneurial leadership can significantly affect how well a company performs. Entrepreneurial leadership creates an organizational culture of innovation and offers

strategic direction that helps organizations maximize those prospects. Innovation creates new growth potential and efficiencies (Awasthi et al. 2020, Awasthi et al. 2020).

Conclusion

Covin, J.G., and Wales, W.J. (2012), This entrepreneurial study measures orientation and demonstrates that one of the crucial factors affecting entrepreneurial orientation is entrepreneurial leadership. The findings demonstrate a beneficial relationship between innovative leadership and corporate performance. Despite the fact that a number of theories and earlier studies have shown a beneficial connection between entrepreneurial leadership, innovation, and business association performance, the was not significant in the context of this investigation of the relationship between innovative leadership and corporate performance. Despite the fact that a number of theories and earlier studies have shown a beneficial connection between entrepreneurial leadership, innovation, and business performance, the association was not significant in the context of this investigation. This indicates that, despite the fact that entrepreneurial leadership and innovation might be seen as crucial elements in the growth of a firm, in this instance, they have little impact on the operation of the company. Research has taken into account a wide range of variables that can impact business success as well as a sizable representative sample of the relevant population. The findings, however, indicated that innovative leadership and entrepreneurship did not significantly affect business success in the particular environment examined.

However, keep in mind that these findings are not conclusive and that they only apply to the study's specific environment. The specific factors that can affect the relationship between entrepreneurial leadership, innovation, and company performance vary depending on the organization and industry. Therefore, more study is required to fully comprehend these issues.

References

- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: Cumulative empirical evidence. Journal of Business Venturing, 24(1), 45-63.
- Akgün, A. E., & Keskin, H. (2014). Organisational resilience capacity and firm product innovativeness and performance. *International Journal of Production Research*. https://doi.org/10.1080/00207543.2014 .910624
- Baldwin, J., & Gellatly, G. (2003). Innovation strategies and performance in small firms. In *Innovation Strategies and Performance in Small Firms*. https://doi.org/10.4337/978178100970 3.
- Birasnav, M. (2014). Knowledge management and organizational performance in the service industry: The role of transformational leadership beyond the effects of transactional leadership. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2013. 09.006
- Brown, R. (2020). The Impact of Covid-19 on Scottish Small and Medium- Sized Enterprises (SMEs): Prognosis and Policy Prescription. *Economic Commentary*.
- Busro, M. D. (2020). Teori-teori Manajemen Sumber Daya Manusia. In *Teoriteori Manajemen Sumber Daya Manusia*.
- Castelli, C. (2012). Innovation. In *The Global Governance of Knowledge Creation and Diffusion*. https://doi.org/10.4324/978020381368 3-14
- Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. Entrepreneurship Theory and Practice, 36(4), 677-702.

- Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEOs' transformational leadership and product innovation performance: The roles of corporate entrepreneurship and technology orientation. In *Journal of Product Innovation Management*. https://doi.org/10.1111/jpim.12188
- Cho. Y. H., & Lee. J.-H. (2018). Entrepreneurial orientation, entrepreneurial education and performance. Asia Pacific Journal of Innovation and Entrepreneurship. https://doi.org/10.1108/apjie-05-2018-0028
- Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis Of Effects Of Determinants and Moderators. Academy of Management Journal.

https://doi.org/10.5465/256406

- DuBrin, A. J. (2004). Leadership: Research findings, practice, and skills, 4th ed. In *Leadership: Research findings, practice, and skills, 4th ed.*
- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. Journal of Applied Psychology, 93(5), 1053-1061.
- Harahap, A. P. Hrp, N.K.A.R. Dewi, (2020). Macrozoobenthos diversity as anbioindicator of the water quality in the River Kualuh Labuhanbatu Utara, International Journal of Scientific & Technology Research, 9(4), 2020, pp. 179-183.

Harahap A, Mahadewi EP, Ahmadi D, Tj HW, Ganiem LM, Rafika M, Hartanto A. 2021. Monitoring of macroinvertebrates along streams of Bilah River, North Sumatra, Indonesia. Intl J Conserv Sci 12 (1): 247-258.

Hmieleski, K. M., & Ensley, M. D. (2007). A contextual examination of new venture performance: Entrepreneur leadership behavior, top management team heterogeneity, and environmental dynamism. Journal of Organizational Behavior, 28(7), 865-889.

- House, R. J., & Dessler, G. (1974). The Path-Goal Theory of Leadership: Some Post Hoc and a Prior Test. In *Contingency Approach To Leadership*.
- Harahap, A.,Budianto Bangun, et all 2022. Analysis Of Water Quality From Bio-Physical-Chemical Factors Of The Asahan River North Sumatra. Annals of Forest Researchthis link is disabled, 2022, 65(1), pp. 1513–1528.
- Harahap, Arman. 2020. Species Composition & Ecology Index Of The Family Gobiidae At The Mangrove Belawan Of Sicanang Island International Journal of Scientific & Technology Research Volume 9, Issue 04, April 2020.
- Huang, S., Ding, D., & Chen, Z. (2014).
 Entrepreneurial leadership and performance in chinese new ventures:
 A moderated mediation model of exploratory innovation, exploitative innovation and environmental dynamism. *Creativity and Innovation Management*.https://doi.org/10.1111/ca im.12085
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*. https://doi.org/10.1016/j.indmarman.2 003.08.015
- Islami, A. C., Kunaifi, A., & Gunawan, J. (2017). Ragam Pengukuran Kinerja pada Usaha Mikro, Kecil, dan Menengah (UMKM) di Surabaya. *Jurnal Sains Dan Seni ITS*. https://doi.org/10.12962/j23373520.v6 i2.23112
- Johne, A. (1999a). Successful market innovation. European Journal of Innovation Management. https://doi.org/10.1108/146010699102 48838
- K.Khairul, R Machrizal, A Harahap,2019. Biological aspects of fish indo pacific

tarpon (Megalops cyrinoides Broussonet, 1782) at Belawan River IOP Conference Series: Earth and Environmental Science 348 (1), 012028 vol: | issue : 2019

- Kline, S. J. (2009). An overview of innovation. In *Studies on Science and the Innovation Process*. https://doi.org/10.1142/978981427359 6 0009
- Lai, Y. L., Hsu, M. S., Lin, F. J., Chen, Y. M., & Lin, Y. H. (2014). The effects of industry cluster knowledge management on innovation performance. *Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2013. 11.036
- Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*. https://doi.org/10.1177/026624261245 5034
- Leonard, D. A., & Barton, M. (2014). Knowledge and the Management of Creativity and Innovation. In *The Oxford Handbook of Innovation Management.*
- Li, Y. H., Huang, J. W., & Tsai, M. T. (2009). Entrepreneurial orientation and firm performance: The role of knowledge creation process. *Industrial Marketing Management*. https://doi.org/10.1016/j.indmarman.2 008.02.004
- Lin, C. H., Peng, C. H., & Kao, D. T. (2008). The innovativeness effect of market orientation and learning orientation on business performance. *International Journal of Manpower*. https://doi.org/10.1108/014377208109 19332
- Lorenzo, O., Kawalek, P., Wharton, L., Lorenzo, O., Kawalek, P., & Wharton, L. (2018). Entrepreneurial skills. In Entrepreneurship, Innovation and Technology.

https://doi.org/10.4324/978135101842 5-5

- Lukas, B. A., & Ferrell, O. C. (2000). The effect of market orientation on product innovation. *Journal of the Academy of Marketing* https://doi.org/10.1177/009207030028 2005
- Moeheriono. (2018). *Pengukuran Kinerja Berbasis Kompetensi*. (Cetakan 2). Jakarta: Rajagrafindo Persada.
- Mohd Rosli, M., & Sidek, S. (2013).
 Innovation and firm performance: Evidence from malaysian small and medium enterprises. Entrepreneurship Vision 2020: Innovation, Development Sustainability, and Economic Growth -Proceedings of the 20th International Business Information Management Association Conference, IBIMA 2013.
- Morgan, N. A. (2012). Marketing and business performance. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-011-0279-9
- Mulyadi, I. H. (2013). Improving the Performance of Minimum Quantity Lubrication in High Speed Milling and Environmental Performance Analysis. *Thesis_imp*.
- Murayama, Y. (2000). *Diffusion of Innovation*. https://doi.org/10.1007/978-94017-2006-9 3
- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. Strategic Management Journal, 14(2), 137-153.
- Parthasarthy, R., & Hammond, J. (2002). Product innovation input and outcome: Moderating effects of the innovation process. Journal of Engineering and Technology Management - JET-M. https://doi.org/10.1016/S09234748(01

https://doi.org/10.1016/S09234748(01)00047-9

Pérez-Bustamante, G. (1999). Knowledge management in agile innovative

organisations. Journal of Knowledge Management.

https://doi.org/10.1108/13673279910259358

- Ratna Pudyaningsih, A., Dwiharto, J., & Ghifary, M. T. (2020). The role of work satisfaction as a mediation leadership on employee performance. *Management Science Letters*. https://doi.org/10.5267/j.msl.2020.7.03 9
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: Cumulative empirical evidence. Journal of Business Venturing, 24(1), 45-63.
- Rogers, E. M. (2003). Diffusion of innovations (5th ed.), [B] New York: Free Press. In Diffusion of innovations (5th ed.). [B] New York: Free Press.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2019). Diffusion of innovations. In An Integrated Approach to Communication Theory and Research, Third Edition. https://doi.org/10.4324/978020371075 3-35
- Rosli, M. M., & Sidek, S. (2013). The Impact of Innovation on the Performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprise*. https://doi.org/10.5171/2013.885666
- Slater, S. F., Olson, E. M., & Finnegan, C. (2011). Business strategy, marketing organization culture, and performance. *Marketing Letters*. https://doi.org/10.1007/s11002-010-9122-1
- Slavković, M., & Babić, V. (2013). Knowledge management, innovativeness, and organizational performance: Evidence from Serbia. *Economic Annals*. https://doi.org/10.2298/EKA1399085S
- Smircich, L. (2017). Concepts of culture and organizational analysis. In *The Anthropology of Organisations*.

https://doi.org/10.4324/978131524137 1-20

- Sri Wahyu Lelly Hana Setyanti, S. W. L. H. S. (2013). Innovation Role in Mediating the Effect of Entrepreneurship Orientation, Management Capabilities and Knowledge Sharing Toward Business Performance: Study at Batik SMEs in East Java Indonesia. *IOSR Journal of Business and Management*. https://doi.org/10.9790/487x-0841627
- Sunarti. (2016). Prototype Knowledge Management System Responsive Mobile Android Untuk Inovasi Ukm Kota Depok Dengan Metode Most Admired Knowledge Enterprise (Make). Indonesian Journal on Computer and Information Technology.
- Tajudin, M. M., Musa, O., & Musa, N. C. (2012). Effects of Organizational Culture, Market Orientation, and Innovativeness toward New Product Performance amongst Malaysian SMEs. International Journal of Innovation and Business Strategy.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*. https://doi.org/10.1016/j.lrp.2009.07.0 03
- Valdez-Juárez, L. E., De Lema, D. G. P., & Maldonado-Guzmán, G. (2016). Management of knowledge, innovation and performance in SMEs. Interdisciplinary Journal of Information, Knowledge, and Management. https://doi.org/10.28945/3455
- Vasella, D. (2011). The Path–Goal Theory of Leadership. In *The Pat-Goal Theory of Leadership*.
- Verhees, F. J. H. M., & Meulenberg, M. T. G. (2004). Market Orientation, Innovativeness, Product Innovation, and Performance in Small Firms.

- Journal of Small Business Management. https://doi.org/10.1111/j.1540627x.200 4.00102.x
- Wang, C. L., & Ahmed, P. K. (2004). The development and validation of the organisational innovativeness construct using confirmatory factor analysis. In *European Journal of Innovation Management*.<u>https://doi.org/10.1108/1</u> <u>4601060410565056</u>
- ZAHRA, S. A., & DAS, S. R. (1993).
 Innovation Strategy And Financial Performance In Manufacturing Companies: An Empirical Study. *Production and Operations Management*. https://doi.org/10.1111/j.1937-5956.1993.tb00036.x
- Zampetakis, L. A., Bakatsaki, M., & Litos, C. (2016). Linking entrepreneurial orientation and firm performance: The role of managerial efficacy and environmental dynamism. British Journal of Management, 27(2), 390-406.
- Zhang, Y., Duysters, G., & Cloodt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. International Entrepreneurship and Management Journal, 10(3), 623-641.
- Zott, C., & Amit, R. (2007). Business model design and the performance of entrepreneurial firms. *Organization Science*.https://doi.org/10.1287/orsc.1 060.0232.
- Awasthi, Shashank, Naresh Kumar, and Pramod Kumar Srivastava. "An epidemic model to analyze the dynamics of malware propagation in rechargeable wireless sensor network." Journal of Discrete Mathematical Sciences and Cryptography 24.5 (2021): 1529-1543.
- Tyagi, Neha, et al. "Data Science: Concern for Credit Card Scam with Artificial Intelligence." Cyber Security in

Intelligent Computing and Communications. Singapore: Springer Singapore, 2022. 115-128.

- Sawhney, Rahul, et al. "A comparative assessment of artificial intelligence models used for early prediction and evaluation of chronic kidney disease." Decision Analytics Journal 6 (2023): 100169.
- Paricherla, Mutyalaiah, et al. "Towards Development of Machine Learning Framework for Enhancing Security in Internet of Things." Security and Communication Networks 2022 (2022).
- Tyagi, Lalit Kumar, et al. "Energy Efficient Routing Protocol Using Next Cluster Head Selection Process In Two-Level Hierarchy For Wireless Sensor Network." Journal of Pharmaceutical Negative Results (2023): 665-676.
- Narayan, Vipul, A. K. Daniel, and Pooja Chaturvedi. "E-FEERP: Enhanced Fuzzy based Energy Efficient Routing Protocol for Wireless Sensor Network." Wireless Personal Communications (2023): 1-28.
- NARAYAN, VIPUL, A. K. Daniel, and Pooja Chaturvedi. "FGWOA: An Efficient Heuristic for Cluster Head Selection in WSN using Fuzzy based Grey Wolf Optimization Algorithm." (2022).
- Faiz, Mohammad, et al. "IMPROVED HOMOMORPHIC ENCRYPTION FOR SECURITY IN CLOUD USING PARTICLE SWARM OPTIMIZATION." Journal of Pharmaceutical Negative Results (2022): 4761-4771.
- Babu, S. Z., et al. "Abridgement of Business Data Drilling with the Natural Selection and Recasting Breakthrough: Drill Data With GA." Authors Profile Tarun Danti Dey is doing Bachelor in LAW from Chittagong Independent University, Bangladesh. Her research discipline is business intelligence,

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- Narayan, Vipul, et al. "Enhance-Net: An Approach to Boost the Performance of Deep Learning Model Based on Real-Time Medical Images." Journal of Sensors 2023 (2023).
- Ojha, Rudra Pratap, et al. "Global stability of dynamic model for worm propagation in wireless sensor network." Proceeding of International Conference on Intelligent Communication, Control and Devices: ICICCD 2016. Springer Singapore, 2017.
- Shashank, Awasthi, et al. "Stability analysis of SITR model and non linear dynamics in wireless sensor network." Indian Journal of Science and Technology 9.28 (2016).
- Gupta, Sandeep, Arun Pratap Srivastava, and Shashank Awasthi. "Fast and effective searches of personal names in an international environment." Int J Innov Res Eng Manag 1 (2014).
- Srivastava, Arun Pratap, et al. "Fingerprint recognition system using MATLAB." 2019 International conference on automation, computational and technology management (ICACTM). IEEE, 2019.
- Kumar, Neeraj, et al. "Parameter aware utility proportional fairness scheduling technique in a communication network." International Journal of Innovative Computing and Applications 12.2-3 (2021): 98-107.
- Awasthi, Shashank, et al. "A New Alzheimer's Disease Classification Technique from Brain MRI images." 2020 International Conference on Computation, Automation and Knowledge Management (ICCAKM). IEEE, 2020.
- Awasthi, Shashank, et al. "Modified indel treatment for accurate Phylogenetic Tree construction." 2020 International Conference on Computation,

Automation and Knowledge Management (ICCAKM). IEEE, 2020.

Mohseni, S., Yang, F., Pentyala, S., Du, M., Liu, Y., Lupfer, N., ... & Ragan, E. (2021, May). Machine learning explanations to prevent overtrust in fake news detection. In Proceedings of the International AAAI Conference on Web and Social Media (Vol. 15, pp. 421-431).