

Research Paper

Impact of e-Satisfaction on Customer Engagement and Loyalty in E-Commerce

Susanta^{1*}, Didik Indarwanta², Dewi Novianti³, Tri Saptono⁴
^{1,2,3} Business Administration, Universitas Pembangunan Nasional Veteran Yogyakarta, Indonesia
⁴ Communication, Universitas Pembangunan Nasional Veteran Yogyakarta, Indonesia

| Received : September 24, | Revised : October 7, | Accepted : October 8, 2025 | Online : October 15, 2025 |
|--------------------------|----------------------|----------------------------|---------------------------|
| 2025 | 2025 | | |

Abstract

The purpose of this study is to investigate how consumer engagement and e-loyalty are affected by e-satisfaction. Customers in the Yogyakarta Special Region who use the Shopee online platform were the target of this study. Closed questionnaires were used to gather information from Shopee patrons residing in the Special Region of Yogyakarta. 200 Shopee consumers who were chosen according to specific criteria made up the sample size for this study. The analysis tool utilizes WarpPLS. The study's findings indicate that e-satisfaction has a significant influence on both consumer engagement and e-loyalty, that e-loyalty is significantly impacted by customer engagement, and that e-satisfaction has a significant influence on e-loyalty through customer engagement. These results demonstrate the importance of e-satisfaction and consumer engagement in promoting loyalty.

Keywords E-Satisfaction, Customer Engagement, E-Loyalty, Shopee Customers, E-Commerce Industry

INTRODUCTION

According to Statista (2023), Indonesian e-commerce continues to show high growth rates, ranking 5th in the world for the largest number of internet users. E-commerce in Indonesia is experiencing rapid growth, with 90% of internet users shopping online (iPrice, 2023). In this context, research on consumer behavior in the digital era is very important. Existing literature has explored the importance of customer satisfaction and loyalty in traditional business models (Chotisarn & Phuthong, 2025; Hameed et al., 2024; Uzir et al., 2025); however, research specifically addressing the unique dynamics of e-satisfaction and its impact on customer engagement and loyalty in the rapidly growing e-commerce sector remains limited (Firmansyah & Mahfudz, 2023).

Previous research indicates that e-satisfaction does not directly influence e-loyalty (Pratama et al., 2024). Other research shows that e-satisfaction affects e-loyalty (Rachmawati et al., 2024; Simangunsong & Putri, 2025; Widyaningrum et al., 2025). Research on customer engagement, particularly from Indonesia, remains limited the majority of the articles were from the USA (32), UK (28), India (27), China (5), whereas the research originating from Indonesia is only one (Devi et al., 2024).

This research examines the relationship between e-satisfaction and e-loyalty, with customer engagement acting as an intermediary that strengthens the connection between the two. Businesses can enhance customer experiences and strengthen brand relationships by better understanding how customer satisfaction impacts loyalty. A study by Wahid and Afifah (2023) demonstrates that e-loyalty is significantly influenced by e-satisfaction, and this influence is strengthened by consumer engagement.

Copyright Holder:

This Article is Licensed Under:

© Susanta, Didik, Dewi, & Tri. (2025)

Corresponding author's email: susanta@upnyk.ac.id



LITERATURE REVIEW

E-satisfaction

E-satisfaction, also known as electronic satisfaction, refers to the degree of contentment experienced by users when engaging with electronic services or platforms (Simangunsong & Putri, 2025). E-satisfaction, within the realm of online retail, is characterized as a customer's assessment of an e-retail service informed by their prior purchasing experiences (Rodríguez et al., 2020). E-satisfaction, as defined by Ong et al. (2014), refers to customer satisfaction based on prior transactions made using specific e-services.

E-satisfaction refers to the level of customer satisfaction that emerges from prior authentic purchasing experiences. (Anderson & Srinivasan, 2003), highlighting the relationship between online service providers and their users. Ahmad et al. (2017) argue that e-satisfaction encompasses a comprehensive evaluation of the interaction between website users and e-retailers. In the e-commerce environment, satisfaction refers to "the contentment of the customer with respect to his or her prior purchasing experience with a given electronic commerce firm" (Anderson & Srinivasan, 2003). E-satisfaction is a crucial factor in establishing long-term relationships between businesses and consumers in both traditional and online settings. E-satisfaction is grounded in online experience and reflects consumers' perceptual fluency in utilising information available online, which subsequently influences their cognitive efforts and selection of virtual environments (Tran et al., 2019).

E-Loyalty

The continuous devotion and recurring preference that consumers exhibit toward an ecommerce platform or brand is known as e-loyalty. E-loyalty is defined as a customer's favorable attitude toward an electronic business, leading to repeat purchasing behavior (Al Amin et al., 2024). According to Jenneboer et al. (2022), customer loyalty refers to the degree to which a buyer remains dedicated to a seller's product, both in attitude and behavior, even when competing alternatives are available from other vendors.

In contrast to traditional loyalty, which is typically based on recurring in-store purchases, e-loyalty emphasizes elements such as simplicity of use, customization, and an emotional bond with the brand to build lasting relationships with customers online. E-loyalty is about building a strong, long-lasting relationship that encourages ongoing participation and brand advocacy, rather than just focusing on repeat purchases. Aslam et al. (2020) analyzed the underlying factors contributing to consumers' trust and loyalty in e-commerce platforms. Their study emphasizes that perceived ease of use, website security, and service quality significantly contribute to building consumer trust, which, in turn, enhances loyalty.

The concept of e-loyalty has undergone substantial evolution, particularly due to technological advancements and the emergence of personalized customer experiences. Peña-García and ter Horst (2025) assert that e-loyalty is today regarded as an emotional allegiance to a brand, influenced by factors such as trust, perceived brand ethics, and favorable customer experiences. They observe that when consumers perceive a brand as congruent with their personal beliefs, such as sustainability or social responsibility, their loyalty intensifies and becomes more lasting. Moreover, the emergence of AI and data analytics has enabled organizations to improve e-loyalty by providing hyper-personalized experiences, resulting in increased emotional engagement and enhanced customer retention (Peña-García & ter Horst, 2025).

Customer Engagement

Customer engagement encompasses the emotional connection, interaction, and active participation that customers maintain with a brand, product, or service (Kaur & Kapil, 2023).

Despite extensive research on customer engagement over the past several decades, a consensus on its definition remains elusive (Algharabat, 2018). Lee et al. (2020) define customer engagement as the direct interaction between an organisation and its customers. Obilo et al. (2021) define customer engagement as consumer actions towards a brand that extend beyond purchasing, and can be positive or negative, depending on the level of interest and loyalty. Meanwhile, Lourenço et al. (2022) define customer engagement as a second-order construct, manifested in three dimensions: cognitive, emotional, and behavioral.

According to Egaña et al. (2021), customer interaction with a brand is "Consumers' cognitive, emotional, and behavioral activities related to the brand during or in relation to the focal interaction between the consumer and the brand". According to recent research, CE is a complex concept that measures the degree to which a customer is invested and connected to a brand (Devi et al., 2024). According to Sashi (2012), client engagement is a marketing competency that embodies a new vision for customer management and the development of relationship marketing.

Prior authors concur that engagement pertains to cognitive, emotional, and behavioral processes (Egaña et al., 2021; Vivek et al., 2012), which result in interactions with the company or with the brand (Egaña et al., 2021; Brodie et al., 2013; Vivek et al., 2012; Hollebeek, 2011). Organizations that understand their clients' engagement levels can make informed decisions to cultivate social capital, resulting in benefits such as increased loyalty, satisfaction, trust, and commitment from clients towards the organization. Matosas-López's (2024) study revealed that the influence of customer involvement on social media as a catalyst for operational revenue is contingent upon the social network management strategy employed by the company on that platform.

E-satisfaction and Consumer Engagement

Companies with highly satisfied customers tend to have higher levels of customer engagement. By focusing on improving website usability, customer service quality, and personalization, companies can increase e-satisfaction and ultimately drive customer engagement. Overall, by prioritizing both e-satisfaction and customer engagement, companies can create a more loyal customer base and ultimately drive profitability. Pansari and Kumar (2017) stated that satisfaction and emotion are the antecedents influencing customer engagement. Research by Fan et al. (2022) also shows that e-satisfaction influences customer engagement. Therefore, a hypothesis can be proposed:

Hypothesis 1. E-satisfaction has a significant effect on customer engagement

E-satisfaction and E-Loyalty

A significant factor affecting e-loyalty is e-satisfaction. Customers are more inclined to exhibit loyalty towards a brand or business when they are happy with their online shopping experience. According to Jones and Taylor (2007), e-satisfaction may enhance enduring relationships between consumers and brands, which in turn increases e-loyalty. Since satisfied customers are more inclined to make repeat purchases and recommend products to others, high customer satisfaction in the digital world is directly correlated with customer loyalty. Numerous experts concur that e-loyalty is significantly impacted by e-satisfaction. According to Al Amin et al. (2024), e-satisfaction has a direct impact on e-loyalty. Customers who express satisfaction with their buying experience are more likely to continue purchasing products or services from the same company. According to Abed et al. (2022), e-satisfaction is continuously one of the most powerful factors influencing e-loyalty in service industries. Therefore, a hypothesis can be proposed:

Hypothesis 2. E-satisfaction has a significant influence on e-loyalty

Customer Engagement and E-Loyalty

Customers are more likely to show their loyalty to a brand by making repeat purchases and recommending it to others when they feel emotionally and cognitively engaged with it. Research by Rowi et al. (2024) revealed that digital marketing strategies play a crucial role in increasing customer engagement and brand loyalty on electronic commerce (e-commerce) platforms. Research by Chen et al. (2023) in China found that customer interactions with various service elements, such as employees, technology, and the physical environment, contribute to customers' perceived dependability and loyalty. This study suggests that customer engagement in various aspects of a service can strengthen their loyalty to a brand or company. Peña-García and ter Horst's (2025) study highlighted the impact of customer experience, perceived brand ethics, and trust on brand engagement and loyalty. According to this research, a significant mechanism through which elements like customer experience and brand ethics impact loyalty is brand engagement, which represents a favorable emotional bond with a brand. Therefore, a hypothesis can be proposed:

Hypothesis 3. Customer engagement has a significant effect on e-loyalty

RESEARCH METHOD

This research analysis employs a quantitative methodology (Hair et al., 2024). A total of 200 Yogyakarta Shopee customers participated in this study as respondents. All samples completed an online closed-ended questionnaire created and distributed via Google Forms for data collection. Because the research respondents are the Shopee customer community, which is not easily identifiable, the sampling was conducted using accidental sampling techniques. Indicators such as being in line with expectations, choosing in the future, and recommending are used to gauge esatisfaction. Furthermore, indicators of website traffic and interaction, social media engagement, click-through rates, conversion rates, customer reviews and feedback, time spent on the page, usergenerated content, and email open rates are all used to gauge customer engagement. Meanwhile, indicators of e-loyalty include intention to continue using this online company and preference for this online company over others. The attitude scale serves as the primary measurement tool for the study. The scale is a Likert scale, where one signifies "strongly disagree" and five signifies "strongly agree." Primary data gathered from respondent responses served as the primary data source for this investigation. The validity questionnaire was validated through Pearson Correlation testing, and the reliability of the questionnaire was validated through Cronbach's alpha testing. WarpPLS is utilized for data processing.

FINDINGS AND DISCUSSION

Finding

The findings of the validity and reliability tests of the study tool are displayed in Table 1. Thirty respondents participated in the trial of the instrument. According to the test results, every item is reliable (Cronbach's Alpha > 0.6) and valid (coefficient > 0.3). As a result, the questionnaire is suitable for data collection.

Table 1. Research Instrument Test Results (N=30)

| | Coefficient | Cronbach Alpha | |
|---|-------------|-------------------|--|
| e-Satisfaction | | | |
| In line with expectation | 0,746 | | |
| Will choose in the future | 0,878 | 0,771 | |
| Will recommend | 0,854 | | |
| Customer Engagement | | | |
| Website traffic and interaction | 0,656 | | |
| Social media engagement | 0,780 | | |
| Click-through rates | 0,785 | | |
| Conversion rate | 0,813 | 0.000 | |
| Customer feedback and review | 0,807 | 0,898 | |
| Time spent on the page | 0,804 | | |
| User-generated content | 0,601 | | |
| Email open rates | 0,712 | | |
| e-Loyalty | | | |
| Intention to continue using this online company | 0,891 | 0.720 | |
| Preference for this online company over others | 0,884 | 0,729 | |

Final Structural Model

The assessment of model fit and quality indices pertains to the WarpPLS analytical tool (Hair et al., 2024). The results indicate that the model possesses quality indicators that meet the WarpPLS criteria and is supported by robust data

Hypothesis Testing

According to Hypothesis 1, customer engagement is significantly impacted by esatisfaction. Hypothesis 1 is accepted since the results (Table 2) indicate that the p-value is less than 0.005. Positive coefficients show that customer engagement increases with satisfaction levels. According to Hypothesis 2, e-loyalty is significantly impacted by customer engagement. Hypothesis 2 is accepted since the results (Table 2) indicate that the p-value is less than 0.005. Positive coefficients suggest that e-loyalty increases with customer engagement. According to Hypothesis 3, e-loyalty is significantly impacted by e-satisfaction. Hypothesis 3 is accepted since the results (Table 2) indicate that the p-value is less than 0.005. Higher levels of e-satisfaction are indicated by positive coefficients.

| Path | Coefficient | p-Value | Description | |
|-------------------------------------|-------------|---------|-------------|--|
| e-Satisfaction →Customer Engagement | 0.342 | 0,000 | Accepted | |
| Customer Engagement →e-Loyalty | 0.436 | 0,000 | Accepted | |
| e-Satisfaction→ e-Loyalty | 0.272 | 0.000 | Accepted | |

Table 2. Hypothesis Testing Results



Figure 1. Final Structural Model

Discussion

The Effect of e-Satisfaction on Customer Engagement

According to this study, customer engagement is significantly impacted by e-satisfaction. The findings of this study align with prior research (Pansari & Kumar, 2017; Fan et al., 2022). e-Satisfaction positively impacts consumer engagement; thus, increased e-satisfaction correlates with elevated customer engagement.

The Effect of Customer Engagement on E-Loyalty

According to the study's findings, e-loyalty is significantly impacted by client engagement. These results strengthen the outcome of previous studies conducted by Rowi et al. (2024), Chen et al. (2023), and Peña-García & ter Horst (2025). Customer loyalty to the brand increases with the quality of customer involvement.

The Effect of E-Satisfaction on E-Loyalty

The findings of this study indicate that e-loyalty is profoundly influenced by e-satisfaction. The first claim that e-satisfied customers will exhibit great e-loyalty is reinforced by this study. These results strengthen the results of previous research conducted by Jones and Taylor (2007) and Abed et al. (2022).

Research Implications

The study has management and theoretical ramifications. The novelty of these research findings lies in the relationships between customer e-satisfaction and customer engagement, as well as the relationship between customer engagement and electronic loyalty. This finding represents a novel contribution to research, as previous studies on customer engagement have been limited (Devi et al., 2024). E-satisfaction can increase customer engagement because satisfied customers are generally more engaged with a brand. This occurs because customers who are satisfied with their online shopping or service experience are more likely to trust and connect with a brand. This suggests that to achieve high consumer loyalty, companies need to ensure that e-satisfaction not only occurs but also results in a deep level of engagement.

CONCLUSIONS

Customer engagement is significantly impacted by e-satisfaction. The level of client engagement increases with e-satisfaction. The influence of consumer engagement on electronic loyalty is substantial. The level of electronic loyalty increases with customer interaction. Electronic loyalty is significantly impacted by electronic satisfaction. Client loyalty increases in proportion to client e-satisfaction. Shops must create online services with their clients in mind in order to make them feel happy, e-satisfied, and e-loyal. From this research finding, future research could look into how developing technologies can improve customer engagement and loyalty, as digital platforms and technologies like artificial intelligence (AI) and personalization tools are becoming more and more important in determining customer experiences.

LIMITATIONS & FURTHER RESEARCH

There are restrictions on the sample selection for this study. This research sample cannot yet represent all Yogyakarta Regency shop patrons. Therefore, it is envisaged that a larger sample of all store patrons will be available for future research.

REFERENCES

- Abed, H. M., Nofal, M. I., Alnasr, F., Alsheikh, G. A. A., & Alnawafleh, E. A. T. (2022). The Influence of Service Quality, Customer Satisfaction, and Bank Image on Customer Loyalty in Palestinian Islamic Banks. *Journal of Management Information and Decision Sciences*, 25(4).
- Ahmad, A., Rahman, O., & Khan, M. N. (2017). Exploring the role of website quality and hedonism in the formation of e-satisfaction and e-loyalty: Evidence from internet users in India. *Journal of Research in Interactive Marketing*, 11(3). https://doi.org/10.1108/JRIM-04-2017-0022.
- Al Amin, M., Muzareba, A. M., Chowdhury, I. U., & Khondkar, M. (2024). Understanding e-satisfaction, continuance intention, and e-loyalty toward mobile payment application during COVID-19: an investigation using the electronic technology continuance model. *Journal of Financial Services Marketing*, 29(2), 318–340. https://doi.org/10.1057/s41264-022-00197-2.
- Algharabat, R. S. (2018). The Role of Telepresence and User Engagement in Co-Creation Value and Purchase Intention: Online Retail Context. *Journal of Internet Commerce*, 17(1). https://doi.org/10.1080/15332861.2017.1422667.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-Satisfaction and E-Loyalty: A Contingency Framework. *Psychology and Marketing*, *20*(2), 123–138. https://doi.org/10.1002/mar.10063
- Aslam, W., Hussain, A., Farhat, K., & Arif, I. (2020). Underlying Factors Influencing Consumers' Trust and Loyalty in E-commerce. *Business Perspectives and Research*, 8(2), 186–204. https://doi.org/10.1177/2278533719887451.
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1). https://doi.org/10.1016/j.jbusres.2011.07.029.
- Chen, X., Guo, S., Xiong, J., & Ye, Z. (2023). Customer engagement, dependence and loyalty: An empirical study of Chinese customers in multitouch service encounters. *Technological Forecasting and Social Change*, 197. https://doi.org/10.1016/j.techfore.2023.122920.
- Chotisarn, N., & Phuthong, T. (2025). Impact of artificial intelligence-enabled service attributes on customer satisfaction and loyalty in chain hotels: Evidence from coastal tourism destinations in western Thailand. *Social Sciences and Humanities Open, 11*. https://doi.org/10.1016/j.ssaho.2025.101306
- Devi, T. S., Sarmah, B., Dewangan, K. N., & Dixit, S. K. (2024). The Evolving Path of Customer Engagement Research: A Systematic Literature Review. *International Journal of Business Innovation and Research*, *X*(Y).

- Egaña, F., Pezoa-Fuentes, C., & Roco, L. (2021). Article the use of digital social networks and engagement in Chilean wine industry. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5). https://doi.org/10.3390/jtaer16050070.
- Fan, W., Shao, B., & Dong, X. (2022). Effect of e-service quality on customer engagement behavior in community e-commerce. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.965998.
- Firmansyah, I., & Mahfudz. (2023). The Effect Of E-Service Quality And Brand Image On Customer Loyalty With Customer Satisfaction As A Mediation Variable. *Journal of Business, Social and Technology, 4*.
- Hair, J. F., Sarstedt, M., Ringle, C. M., Sharma, P. N., & Liengaard, B. D. (2024). Going beyond the untold facts in PLS–SEM and moving forward. *European Journal of Marketing*, *58*(13), 81–106. https://doi.org/10.1108/EJM-08-2023-0645.
- Hameed, I., Chatterjee, R. S., Zainab, B., Tzhe, A. X., Yee, L. S., & Khan, K. (2024). Navigating loyalty and trust in the skies: The mediating role of customer satisfaction and image for sustainable airlines. *Sustainable Futures*, 8. https://doi.org/10.1016/j.sftr.2024.100299.
- Hollebeek, L. (2011). Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, 19(7). https://doi.org/10.1080/0965254X.2011.599493.
- Jenneboer, L., Herrando, C., & Constantinides, E. (2022). The Impact of Chatbots on Customer Loyalty: A Systematic Literature Review. *Journal of Theoretical and Applied Electronic Commerce Research*, *17*(1), 212–229. https://doi.org/10.3390/jtaer17010011.
- Jones, T., & Taylor, S. F. (2007). The conceptual domain of service loyalty: How many dimensions? *Journal of Services Marketing*, *21*(1). https://doi.org/10.1108/08876040710726284.
- Kaur, S., & Kapil, R. (2023). Measuring Customer Engagement in Digital Marketing. In *Journal for Re Attach Therapy and Developmental Diversities*, 6(6s).
- Matosas-López, L. (2024). Can customer engagement in social media be used as a predictor of operating revenue in SMEs? *Journal of Open Innovation: Technology, Market, and Complexity*, 10(4). https://doi.org/10.1016/j.joitmc.2024.100380.
- Ong, T. S., Hong, Y. H., Teh, B. H., Soh, P. C. H., & Tan, C. P. (2014). Factors that affect the adoption of internet banking in Malaysia. *International Business Management*, 8(2).
- Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 45(3). https://doi.org/10.1007/s11747-016-0485-6.
- Peña-García, N., & ter Horst, E. (2025). Loyalty beyond transactions: the role of perceived brand ethics in e-commerce. *Frontiers in Communication*, 10. https://doi.org/10.3389/fcomm.2025.1605171.
- Pratama, R. A., Prasetyo, W. B., & Ramli, A. H. (2024). E-Service Quality, E-Trust, E-Satisfaction And E-Loyalty In Online Shopping. *Jurnal Ilmiah Manajemen Kesatuan*, 11(3). https://doi.org/10.37641/jimkes.v11i3.2313.
- Rachmawati, B. N., Hurriyati, R., Hendrayati, H., & Wibowo, L. A. (2024). *The Moderating Roles of E-Satisfaction in the Relationships Between E-Service Quality and E-Loyalty* (pp. 650–661). https://doi.org/10.2991/978-94-6463-234-7_68.
- Rodríguez, P. G., Villarreal, R., Valiño, P. C., & Blozis, S. (2020). A PLS-SEM approach to understanding E-SQ, E-Satisfaction and E-Loyalty for fashion E-Retailers in Spain. *Journal of Retailing and Consumer Services*, 57. https://doi.org/10.1016/j.jretconser.2020.102201.
- Rowi, A. S., Aria Wahyudi, M., Oswari, T., & Purwoko, B. (2024). The Role of Digital Marketing Strategies in Enhancing Customer Engagement and Brand Loyalty: A Study of E-Commerce Platforms, 5(2).
- Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media.

- Management Decision, 50(2), 253-272. https://doi.org/10.1108/00251741211203551.
- Simangunsong, A. S., & Putri, S. E. (2025). Analysis of E-WOM and E-Trust on E-Satisfaction and E-Loyalty of Shopee Users. *Formosa Journal of Multidisciplinary Research*, *4*(3), 1179–1192. https://doi.org/10.55927/fjmr.v4i3.109.
- Tran, L. T. T., Pham, L. M. T., & Le, L. T. (2019). E-satisfaction and continuance intention: The moderator role of online ratings. *International Journal of Hospitality Management*, 77, 311–322. https://doi.org/10.1016/j.ijhm.2018.07.011.
- Uzir, M. U. H., Bukari, Z., Wahab, S. N., Jerin, I., Rasul, T., & Bin Amin, M. (2025). Investigation of customer satisfaction, brand trust and brand loyalty in electronics home appliances: CB-SEM Approach. *Social Sciences and Humanities Open, 12*. https://doi.org/10.1016/j.ssaho.2025.101943.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, *20*(2). https://doi.org/10.2753/MTP1069-6679200201.
- Wahid, A., & Vivi Afifah. (2023). Increasing E-Loyalty of E-Commerce Users Through E-Satisfaction and E-Trust. *Dinasti International Journal of Management Science*, 4(3). https://doi.org/10.31933/dijms.v4i3.1771
- Widyaningrum, C., Wijaya, A. R., & Robbie, I. (2025). Building E-Loyalty through E-Service Quality. *Business Innovation Management and Entrepreneurship, 04.*