Entrepreneurial Strategies on Sustaining Tourism Business (Evidence from the Horn of Africa Zone)

Mengistu Matino Eltamo[1] Prof. Jaladi Ravi[2] and Yatoute Djagba[3]

[1]Andhra University, DCMS, India, mmew2016@gmail.com
[2]Andhra University, DCMS, India, dr.ravijaladi@gmail.com
[3]Andhra University, DCMS, India, yatoute2016@gmail.com

Abstract

The entrepreneurs joining the tourism business would like to sustain themselves by using different strategies. The research evidence shows that eco-process, eco-tourism policy, social media, eco-organizational, eco-product, and eco-marketing innovations are all influencing environmental performance. This research aims to examine the influence of entrepreneurial strategies on the growth of tourism businesses, with growth measured through environmental performance. The sample selection utilized both cluster and stratified sampling techniques. Data analysis was conducted using structural equation modeling. Additionally, convergence validity and discriminant validity were tested through cross-loadings. The regression weight results indicate that all entrepreneurial strategies identified in this study have a positive relationship with, and a strong influence on, environmental performance. Thus, organizations should prioritize implementing and improving innovations in eco-process, eco-tourism policy, ecoorganizational, eco-product, eco-marketing, and social media. By focusing on these areas, businesses can achieve substantial improvements in environmental performance and support broader sustainability goals.

Key Words: *Entrepreneur, Strategies, Sustainability, Tourism Business, Environmental performance*

1. Introduction

Sustaining business Tourism is a social phenomenon that connects tourists, companies, governments, and communities' worldwide (Assaye et.al. 2023). Tourism business shows a vigorous role in the development of business sectors. In the world, Asian countries like Thailand, Singapore, Malaysia, Indonesia, and others hold significant tourism growth due to their rich cultural heritage and environmental resources, especially by entrepreneurs. The economic expansion in these regions gives more opportunities for tourism development.

Similarly, the Horn of African countries such as Eritrea, Djibouti, Somalia, Kenya, Ethiopia, South Sudan, Sudan, and Uganda are experiencing tourism booms, which are contributing to their gross domestic product (Singleton et al., 2018). This growth has encouraged these nations to take significant steps toward further developing their tourism industries.

While the tourism sector has positively influenced economic development, it has also brought about negative social, cultural, and environmental consequences. Therefore, a sustainable expansion tactic is pressing the need to focus on restoring the sustainability of tourism (Lasso & Dahles, 2018).

The Horn of Africa is economically crucial, as it serves as a vital passageway for maritime trade routes and military operations. Its proximity to key sea lanes, which connect oil-producing countries with Europe and America, enhances its strategic importance (Al-Hassan, 2021).

This article provides guidance for policymakers to develop effective strategies for promoting sustainable business tourism through hotel industries. It explores the influence of entrepreneurial strategies in fostering sustainable tourism development in Eastern Africa.

Despite the wealth of literature on business tourism research, certain gaps remain unaddressed. Thus, the researchers are trying to fill the gaps in this ongoing research, which is necessary. Numerous studies conducted on business sustainability within the tourism sector; however, research specifically focused on the Horn of Africa remains limited, particularly concerning certain underlying factors that warrant further investigation. This study explores sustainable tourism growth in Eastern Africa, focusing on ecological product, process, policy, organizational, and social media innovation factors.

(Manzoor et al., 2019) assessed the progress of sustainable tourism without specifically addressing whether the contributing factors had a direct economic impact. Additionally, (Smolović et al., 2018) delved deeper into maintainable tourism progress and innovation potential paths, exploring potential paths for innovation. Similarly, (Etemadi et al., 1998) conducted research on Science mapping is a crucial tool for maintainable tourism advance, but this study builds upon their findings by using more recent data.

Moreover, social media contributes greatly in influencing supportable tourism growth. (Hysa et al., 2022) analyze how social media impacts tourism development, highlighting its role as an effective tool for information dissemination, education, and communication. Social media enables the firms to improve their environmental and economic performance, thereby promoting sustainability in the industry. It also allows these firms to maintain contact with stakeholders, share information, and exchange ideas, further supporting sustainable tourism growth.

2. Critical Review Literature, Hypotheses and Conceptual Framework

(Liu etal., 2023) and (Mat Dahan & Yusof, 2020) found that eco-process improvement in sustainable tourism has led to significant social and environmental benefits, particularly in developing countries, resulting in increased growth outcomes. Similarly, (Firman et al., 2023) noted that tourism has boosted investment opportunities in regions with limited economic

prospects. Eco-process innovation has helped eliminate barriers in the tourism supply chain, enhancing overall perceptions of tourism and streamlining operations.

This innovation has notably improved the tourism industry by reducing environmental impacts and improving the quality of life for tourists. Studies indicate that sustainable tourism growth in developing countries, such as Indonesia, can be enhanced through the effective implementation of eco-process innovation. Collaboration among tourism stakeholders has also contributed to the creation of green policies and improved industry performance (Chien et al., 2021). Eco-process improvement is serious for the change of the sector, as it supports sustainable growth, enhances facilities, and promotes environmental sustainability. This, in turn, increases tourist intentions and drives further growth in sustainable tourism. (Firman et al., 2023) emphasized the importance of integrating eco-process innovation into national tourism policies. Based on the scholars' finding, the researcher derived the following debate procrastination:

- **H$_1$**: The Horn of Africa Zone sustainable tourism growth influenced by eco-process innovation
  Tourism growth significantly contributes to economic stability in developing countries like Indonesia. To enhance tourism and address low performance, effective policies and measures implemented. Ecotourism policies, in particular, have positively affected tourism destinations in recent years. Balancing economic, ecological, and social factors is essential for promoting sustainable tourism growth. (Pujar & Mishra, 2021) highlight the importance of strategic tourist planning and the development of facilities to support sustainable tourism. This approach fosters the creation of tourist-friendly policies that promote sustainable development.

  (Boley & Green, 2016) explored the effective policies that have been implemented in Indonesia to expand sustainable tourism, resulting in improved opportunities and outcomes for the local population. Ecotourism policies have served as a valuable tool in balancing economic growth with environmental and social considerations, facilitating the strategic planning of sustainable tourism expansion. These regulations not only enhance income and living standards, but also provide numerous benefits to tourists and visitors. To further improve outcomes and highlight the industry's global performance, many nations actively encourage tourism development. Based on Boley and Green 2016, Zhao et.al 2021 explanation, the researcher derived the following debatable hypothesis:

- **H$_2$**: The Horn of Africa Zone sustainable tourism growth influenced by ecotourism policy (Hussain, 2021) investigated the integration of social media into tourism activities, noting its role in attracting tourists globally and contributing to growth and sustainability. Countries such as Indonesia leverage social media as a tool to attract foreign visitors and offer investment programs aimed at improving outcomes and enhancing visitor experiences.

(Keelson et al., 2024) found that social media platforms are essential marketing tools for travelers as they have a big impact on their decision-making and support long-term, sustainable financial progress. Additionally, (Perles-Ribes et al., 2020) examined and promoting the value of social media to sustainability and growth of residential tourism destinations. They highlighted how trending tours and social media engagement encourage tourists to stay connected and fully enjoy their travel experiences. Having this evidence of scholars finding, the following debatable hypothesis was derived:

- **H3**: The Horn of Africa Zone sustainable tourism growth influenced by Social media

(Y. Zhang, 2023) revealed that the Eastern African tourism industry has experienced significant growth due to the adoption of eco-organizational strategies and innovations. This approach has positively affected sustainable tourism, offering opportunities and benefits to organizations as well as the middle class. Improved infrastructure, legislation, and a focus on natural resource management are some of the ways that enhanced trust and eco-organizational innovation promote tourism.

(Kuo et al., 2023) emphasize the proactive strategies employed by the industry to enhance core competencies, advantages, and eco-innovation. These strategies involve transforming services and facilities to promote environmental responsibility, benefiting both society and institutions. (Kuo et al., 2023) examine the necessity of eco-organizational improvement for maintainable tourism, emphasizing the dual benefits to both corporations and the environment. With the growing trends in tourism and increasing investments, innovation in organizational management has become essential for continued growth in the sector. This supported by the following hypothesis debate:

- **H4**: The Horn of African Zone sustainable tourism growth influenced by eco-organizational innovation

Tourism progression is essential for creating global opportunities and delivering widespread benefits. Innovation within tourism business, particularly in the development of eco-products, has played a significant role in fostering sustainable growth. Eco-products provide affordable and environmentally friendly options that attract tourists from around the world. Additionally, the implementation of effective policies and incentives for eco-product innovation has further boosted tourism. Environmental management and dynamic capabilities are key factors in supporting sustainability and driving eco-product innovation. The establishment of eco-product advances has provided numerous benefits to tourists, especially as many conventional products can have negative effects on their health and well-being. This eco-friendly approach has attracted a growing number of tourists globally, underscoring the importance of eco-product innovation in the tourism industry (Araújo & Franco, 2021)

(Pan & Dossou, 2020) identified a connection among tourism business and its sustainable economic growth in Indonesia, noting that eco-product innovation has led to increased tourism and the rise of health-conscious exports, driven by evolving tourist

preferences. Depend on the above scholar view; the following hypothesis debate was derived:

- **H$_5$**: The Horn of African Zone maintainable tourism growth influenced by eco-product innovation

2.1 Conceptual Framework

Source: Modified from literature 2024
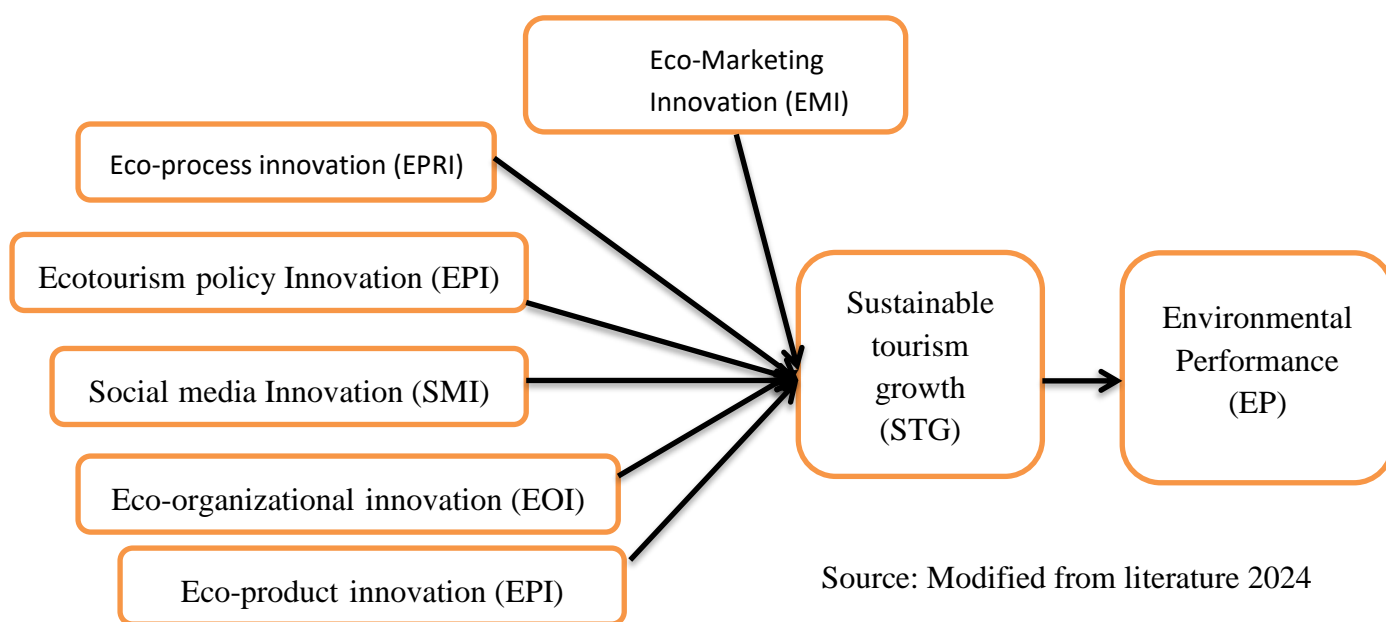
3. Methods of Research

Primary data, collection techniques, such as questionnaires, were employed in this study to gather information from the selected respondents with the assistance of the Kobo Toolbox. Both cluster and stratified sampling techniques were utilized.

The study examined six predictor variables and one dependent variable called sustainable tourism development.

The measurement items adapted from previous research. For instance, the scale for sustainable tourism development was derived from (Choi & Sirakaya, 2005) and consisted of nine questions. (Yurdakul & Kazan, 2020) provided six items for measuring eco-product innovation. Four items related to eco-process innovation obtained from Yurdakul and Kazan (2020). Similarly, their sixitem scale for eco-organizational innovation incorporated into this study. (H. Zhang et al., 2023) contributed four items for assessing eco-tourism policy. Finally, a four-item social media measure was adapted from (Chau et al., 2023).

Respondents received the questionnaires through various social media platforms. The study's participants were star hotel owners, who hold authority in promoting tourism. They were selected using basic clustering and stratified random sampling techniques. A total of 302

questionnaires were distributed, with all returned, achieving a nearly 100% response rate. Structural equation tool is effective for analyzing both large and small data sets and is particularly useful for primary data analysis (Hair et al., 2017) to examine the associations between variables through structural model evaluation.

4. Results and discussion

Convergent strength was verified using FL, CR, AVE, and Alpha. Discriminant validity was assessed through cross-loadings, the HTMT ratio, and FLrc. According to (Kamis & Fuad, 2021), α and CR inceptions must be greater than 0.70, while the FL and AVE inceptions must exceed 0.50 (Ringle et al., 2014) and applied in this research. Additionally, cross-loadings must demonstrate a stronger relationship with their respective variable than with other variables, and the FLrc values (Ab Hamid et al., 2017) should be higher than the correlations with other constructs.

To process and analyze the collected quantitative data, we used factor analysis, univariate analysis, and linear regression analysis. In this case, SPSS 25 used to analyze the data. For research, including literature reviews and firm management boards, a survey questionnaire was created. Using internal consistency validity, it assesses social, financial, and organizational performance in addition to measuring strategic importance and innovativeness. Factors indicating performance variance and environmental performance are revealed using the Principal Component Analysis. The study utilized structural equation modeling, exploratory factor analysis, and descriptive statistics to analyze strategic determinants affecting corporate innovation in technology, utilizing IBM SPSS V25 Statistics.

4.1 Results of Confirmatory Factor Analysis for Entrepreneurial Tactics

Initially, there were forty-four (44) items related to entrepreneurial tactics. After data cleaning, this number was reduced to twenty-nine (29) items. These remaining items constitute the set of manifest variables used in the confirmatory factor analysis conducted with AMOS 23 software.

Based on the model output and its criteria rule, Table 1 presents the Confirmatory Factor Analysis (CFA) values for covariance from AMOS 23 *meet various model fit criteria* as shown in table 9.Table

All the independent variables were analyzed within the structural equation model to estimate the effects of these entrepreneurial strategies on the growth of sustainable tourism, as illustrated in figure 1. They positively related to each other and significantly influenced business sustainability, as measured by environmental performance using a comprehensive global measurement model.

4.2 Hypotheses Testing for Entrepreneurial Tactics

The AMOS techniques used to assess the assertions about effectiveness, confidence intervals, and hypotheses on assumptions about independent observations, statistical distributions, and the way exogenous variables satisfy distributional criteria. The likelihood of seeing an exceptional critical ratio of $\pm 7.624 < 0.001$ is seen. This indicates that, at the two-tailed 0.001 level, the regression weight for F in predicting F1 differs substantially from 0.

- Based on the results in table 2, the correlation coefficient between Eco-process Innovation and environmental performance estimation is 0.731. This indicates that for each unit increase in Ecoprocess Innovation, environmental performance increases by 0.731 units. The weight estimate is 0.731, with error approximately 0.109. The p-value of 0.000 is less than 5%, and the Student's ttest critical ratio (CR) is 6.713, which exceeds the 1.96 threshold. $Z = 0.731 / 0.109 = 6.713$. These results confirm that Eco-process Innovation significantly influences environmental performance, thereby supporting hypothesis H_1.

- According to Table 2 above, the correlation coefficient between Ecotourism Policy Innovation and environmental performance estimation is 0.855. This indicates that for every unit of increase in Ecotourism Policy Innovation, environmental performance increases by 0.855 units. The estimated regression weight is 0.855, with error approximately 0.112. The p-value is 0.000, which is less than 5%, and the Student's t-test critical ratio (CR) is 7.624, exceeding the 1.96 threshold. By calculating the ratio of the estimated regression weight to the standard error, we obtain $Z = 0.855 / 0.112 = 7.624$. The weight estimate is 7.624 standard errors above zero. These results confirm that ecotourism policy innovation significantly influences environmental performance, thereby validating hypothesis H_2.

  The correlation coefficient between eco-organizational novelty and environmental act estimation is 0.422. This indicates that for each unit increase in eco-organizational innovation, environmental performance increases by 0.422 units. The estimated regression weight is 0.422, with a standard error of approximately 0.059. The p-value is 0.000, which is less than 5%, and the Student's t-test critical ratio (CR) is 7.163, which exceeds the 1.96 threshold. By dividing the regression weight estimate by the standard error, we get $Z = 0.422 / 0.059 = 7.163$. In other words, the regression weight estimate is 7.163 normal errors above zero. These results confirm that eco-organizational innovation significantly influences environmental act, thereby validating assumption H_4.

- The study confirms that eco-product innovation positively influences environmental act, with a positive 1.057 association factor. The regression weight estimate is 6.590 standard errors above zero, indicating that eco-product innovation positively influences environmental actions and validating H_5.

- Eco-marketing innovation and environmental performance estimation have a positive correlation value of .829, meaning that for every unit increase in Eco-Marketing Innovation, the environmental performance increases by 829. The normal error of the linear weight estimates, .829, is approximately .116. The student's t-test (CR) is larger

than 1.96 (7.144), and the probability p (.000) is less than 5%. Z =.829/.116 = 7.144 is the result of dividing the regression weight estimate by the estimate of its standard error. As stated otherwise, the estimate of the linear weight is 7.144 standard errors above zero. These findings support hypothesis H_6 by illustrating how eco-marketing innovation affects environmental performance.

- The correlation coefficient between social media innovation and environmental act estimation is 0.668. This indicates that for each unit increase in Social Media Innovation, environmental performance increases by 0.668 units. The reversion weight approximation is 0.668, with a normal error of approximately 0.114. The p-value is 0.000, which is less than 5%, and the Student's t-test critical ratio (CR) is 5.879, exceeding the 1.96 threshold. Regression weight estimate divided by standard error produces Z = 0.668 / 0.114 = 5.879. In other words, the regression weight estimate is 5.879 standard errors above zero. These results confirm that Social Media Innovation significantly influences environmental performance, thereby validating hypothesis H3.

5. Discussion

Entrepreneurs' strategies are the major concern in this study to examine the environmental performance. The study had six supporting hypotheses. The East Africa Hotel Market Overview shows a surge in supply growth, but short-to-medium-term pressure on Nairobi hotel performance is expected. Other regions face challenges, such as stalled supply pipelines, limited supply, and government focus on conferences and events.

The results presented above provide valuable insights into the association between environmental act and innovations.

Eco-process Innovation: The positive correlation coefficient of 0.731 between ecological performance and eco-process innovation suggests a vigorous relationship. This implies that improvements in eco-process innovations are associated with substantial gains in environmental performance. The high t-test critical ratio (CR) of 6.713 further confirms that this relationship is statistically important. The reversion weight estimate is 6.713 errors above zero indicate a strong effect, validating hypothesis H_1. This result underscores the importance of adopting and enhancing eco-process innovations to drive environmental performance improvements.

Ecotourism Policy Innovation: The correlation coefficient of 0.855 between ecotourism policy innovation and environmental performance indicates a very strong positive relationship. The reversion weight estimate of 0.855, with t-test (CR) 7.624, highlights the statistical significance of this relationship. With the estimate being 7.624 standard errors above zero, it is clear that ecotourism policy innovation profound impact on environmental performance. This supports hypothesis H_2 and suggests that integrating innovative ecotourism policies can significantly enhance environmental outcomes.

Eco-Organizational Innovation: The correlation coefficient of 0.422 between EcoOrganizational Innovation and environmental performance is moderate, but still positive.

The regression weight estimate of 0.422, accompanied by t-test (CR) 7.163, demonstrates that this relationship is statistically significant. The estimate being 7.163 standard errors above zero confirms the meaningful influence of Eco-Organizational Invention on environmental act, thus validating assumption H$_4$. This indicates that organizational practices focusing on eco-innovation can contribute to better environmental performance.

Social Media Innovation: The correlation coefficient of 0.668 between Social Media Innovation and environmental performance reflects a strong positive association. The regression weight approximation of 0.668, with t-test (CR) 5.879, indicates statistical significance. The result, with the estimate being 5.879 standard errors above zero, suggests that Social Media Innovation effectively influences environmental performance. This validates hypothesis H$_3$ and highlights the value of social media in endorsing and enhancing environmental act.

6. Conclusion

The study explores the use of entrepreneurship in Eastern African star hotels, focusing on 302 hotels in seven countries. The research found that these hotels significantly affect sustainability growth. The study also provides theoretical and managerial insights into the commercial sustainability of the tourist industry. Further research could explore the relationship between entrepreneurship, job generation, performance, and management innovation, as well as the potential influence of attitudes and job generation on sustainability.

The analysis reveals significant and positive influences of various innovations on environmental performance, as evidenced by the high correlation coefficients, substantial regression weight estimates, and strong critical ratios (C.R.). Each innovation type under study demonstrates a meaningful effect on environmental performance, supporting their respective hypotheses: Eco-process Innovation (F3): The regression weight estimate of 0.731 with C.R. 6.713 confirms a robust positive effect on environmental performance. This supports hypothesis H1, indicating that advancements in eco-process innovation substantially improve environmental outcomes.

Ecotourism Policy Innovation (F1): With a regression weight estimate of 0.855 and a C.R. of 7.624, Ecotourism Policy Innovation shows an exceptionally strong influence on environmental performance, validating hypothesis H2. This suggests that strategic policies in ecotourism significantly contribute to enhancing environmental performance.

Eco-Organizational Innovation (F2): The estimate of 0.422 with a C.R. of 7.163 indicates a moderate yet statistically significant impact on environmental performance, supporting hypothesis H4. This finding underscores the importance of organizational practices focused on eco-innovation.

Eco-product Innovation (F4): The regression weight estimate of 1.057 and a C.R. of 6.590 highlight a strong positive effect on environmental performance, validating hypothesis H5.

This result emphasizes the critical role of eco-product innovations in advancing environmental performance.

Eco-Marketing Innovation (F6): An estimate of 0.829 with a C.R. of 7.144 demonstrates a significant influence on environmental performance, supporting hypothesis H6. This suggests that innovations in eco-marketing effectively enhance environmental performance.
Social Media Innovation (F5): The estimate of 0.668 with a C.R. of 5.879 confirms a strong positive relationship with environmental performance, validating hypothesis H3. This result indicates that leveraging social media innovations can contribute positively to environmental performance.

7. Further Implication

In this study, various innovation types enhance environmental performance and underscore the crucial role in the hotel industry. The statistically significant relationships observed suggest that organizations should prioritize implementing and improving innovations in eco-process, ecotourism policy, eco-organizational, eco-product, eco-marketing, and social media. By focusing on these areas, businesses can achieve substantial improvements in environmental performance and support broader sustainability goals.

The study's findings are aligned with the global measurement model presented in Israel at the start of 2024, which examined five dimensions of innovation. For future research and practice, especially in Eastern Africa and other sub-Saharan countries, it would be beneficial to explore additional dimensions, such as innovative funding, natural resources, decision-making, and attitudes. Expanding the scope to include these areas could further enhance the growth and sustainability of tourism in these regions.

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Appendix 1: **Abbreviation and its Explanation**

- ETP = eco-tourism policies,
- EPI = eco-product innovation,
- EOI = eco-organizational innovation, EPRI = eco-process innovation,
- SM = social media.
- STD = sustainable tourism development
- FL= factor loading
- CR = composite reliability
- AVE = average variance extracted
- HTMT = Heterotrait - Monotrait
- FLrc = Fornell-Larcker criterion
- AGFI = Adjusted Goodness of Fit Index,
- TLI = Tucker-Lewis Indexes,
- GFI = Goodness of Fit Index, ,
- RMR = Root Mean square Residual,
- CFI = Comparative Fit Index,
- BIC = Bayes Information Criteria
- RMSEA = Root Mean Square Error of Approximation,
- **IV:** Independent Variable
- **DV:** Environmental Performance
- **F:** Business Sustainability
- **F1:** Ecotourism Policy Innovation
- **F2:** Eco-Organizational Innovation
- **F3:** Eco-Process Innovation
- **F4:** Eco-Product Innovation
- **F5:** Social Media Innovation
- **F6:** Eco-Marketing Innovation
- **H:** Hypotheses

Appendix 2: Table 1: **Indicators and Parameters for Compiled Entrepreneurial Tactics**

Index	Values recorded
Chi-square	1041.195
Degree of freedom	371
P	0.000
Chi-square/df	2.8
GFI	.808

| AGFI	0.771
RMR	0.025
RMSEA	0.077
TLI	0.757
CFI	0.778
Model BIC/ Saturated BIC	0.956

Source: kobo Toolbox data calculation 2025 survey data

Appendix 3: Table **2**: **Test of Hypotheses**

IV	Level of influence	DV	Estimation	S.E.	C.R.	P	Label	H
F3	→	F	.731	.109	6.713	***	par_22	H1
F1	→	F	.855	.112	7.624	***	par_21	H2
F2	→	F	.422	.059	7.163	***	par_23	H4
F4	→	F	1.057	.160	6.590	***	par_24	H5
F6	→	F	.829	.116	7.144	***	par_25	H6
F5	→	F	.668	.114	5.879	***	par_26	H3

Source: AMOS calculation by authors 2025

Appendix 4: Figure 1: Coefficients of Structural Model
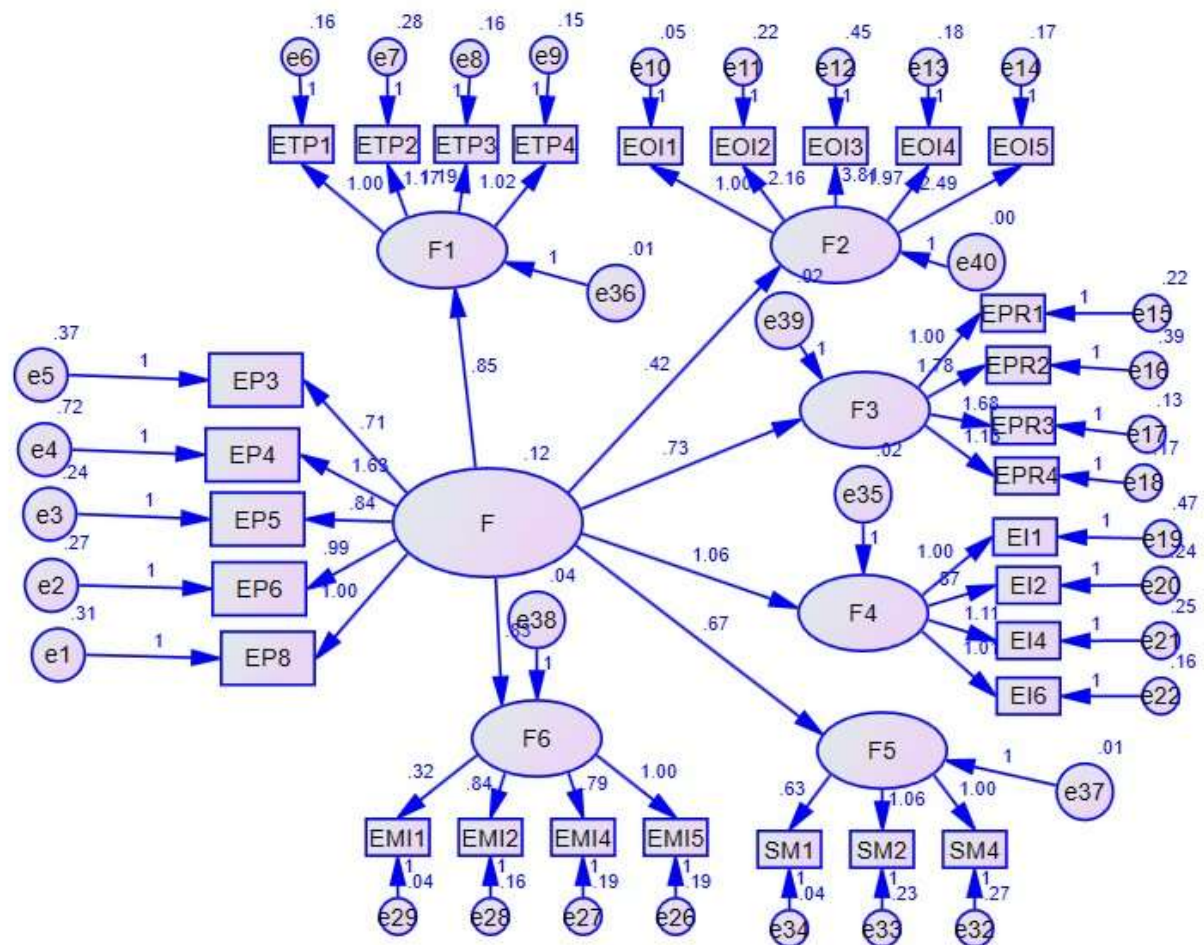
Source: AMOS and Process Macro model 4 softwarers by authors 2025