

# ORGANISATIONAL CULTURE AND MARKET ORIENTATION AS PREDICTOR OF ACADEMIC ENTREPRENEURSHIP OF PRIVATE UNIVERSITIES TEACHING STAFF IN SOUTHWEST, NIGERIA.

**Fehintola Tomi Lemo**

Olabisi Onabanjo University, Ago-Iwoye, Ogun state, E-mail:  
[tomi.akintolu@gmail.com](mailto:tomi.akintolu@gmail.com)

**Prof. Subuola C. Abosede**

Olabisi Onabanjo University, Ago-Iwoye, Ogun state,  
[abosede.subuola@oouagoiwoye.edu.ng](mailto:abosede.subuola@oouagoiwoye.edu.ng)

**Dr Kenny A. Soyemi**

Olabisi Onabanjo University, Ago-Iwoye, Ogun state,  
[k.ade.soyemi@gmail.com](mailto:k.ade.soyemi@gmail.com)

## ABSTRACT

*This study is an investigation of Organizational culture and Market orientation as predictor of academic entrepreneurship in private universities teaching staff. The study adopted survey research design and the sample comprised one thousand, three hundred and nineteen (1,319) academic staff of private universities in Southwest selected through simple random sampling techniques. Organisational Culture Questionnaire ( $r=0.96$ ), Market Orientation Scale ( $r= 0.92$ ) and Academic Entrepreneurship Scale ( $r= 0.92$ ) were the major instruments used for data collection in the study. Data were analysed using Multiple Regression Analysis. Results showed that Organisational culture and market orientation predicted academic entrepreneurship of teaching staff at private universities ( $R = .100$ ;  $R^2 = .010$ ;  $Adj. R^2 = .008$ ;  $F(2, 1095) = 5.514$ ;  $p.05$ ). It also showed that there is significant relative contribution of Organisational culture ( $\hat{\alpha}=.038$ ;  $t = 2.336$ ;  $p = .020$ ) and market orientation ( $\hat{\alpha}=.052$ ;  $t = 2.47$ ;  $p = .013$ ) to academic entrepreneurship of teaching staff of private universities. The study concluded that there is significant combination and relative contribution Organisational culture and market orientation to academic entrepreneurship of teaching staff of private universities. The study recommended that Private universities in the Southwest should work with industries, businesses, the government, and non-governmental organisations to develop fresh, relevant, and sustainable entrepreneur curricula.*

**Keywords: Academic Entrepreneurship, Organizational Culture, Market Orientation, Private universities.**

## INTRODUCTION

In order to boost economic competitiveness, numerous governments all over the world have implemented laws aimed at facilitating and encouraging commercial exploitation of university research. This implies that all organisations, both for-profit and non-profit, can benefit from entrepreneurship because, it is a key and wellspring of creativity involving both the development of new organizational structures and business models for existing businesses. Private universities spring out of entrepreneurial mindset either by individual, group of individuals or religious and the source of funding are mainly shouldered by the owners. It is imperative to state that academic entrepreneurship will be apt to solve the financial problems facing some of these private universities.

Entrepreneurship is essential for economic growth, eradication of poverty and jobs creation (Carl and Agboola, 2012). Continuous debate and contribution of entrepreneurship have led to breakthrough of its different forms. However, all forms of entrepreneurship from sole proprietorship, corporate ventures, necessity- and opportunity-driven ventures, social entrepreneurship, academic ventures, and so forth, are interconnected within a larger framework of the identical idea, showing a shared knowledge of entrepreneurship (Mwatsika et al., 2018). *Academic entrepreneurship is a money-making endeavor which can be characterized as a taking of risks, knowledge- and smaller businesses focused on technology that stabilizes the academic institutions in which it operates. It has to do with turning academic research into a profit enterprise, thus the process by which academia markets its research developments as "products" and "sells" them at conferences in a manner akin to other commercial enterprises. Academic entrepreneurship has been related to commercialising academic activities, including teaching, research, and university-community-industry collaborations (Siegel & Wright, 2015; Adisa et al., 2023). Universities employ Academic entrepreneurship as a strategy to grow and have a beneficial effect on the economy and society (Mirani & Yusof, 2016). The endeavours include industry-university partnerships, start-ups by academics, faculty dual appointments in businesses and academic institutions, consulting, licensing, and patent applications.*

*Academic entrepreneurship can occur at the level of individuals or groups acting on their own or in concert with other university system members to launch new businesses, spur innovation or renewal inside or outside of the university through science and technology parks, university-owned businesses, or research centres. Academic entrepreneurs who start their own small firms aim to use their accumulated abilities, skills, and "insider" knowledge in addition to their purely scientific experience. Through their work, they are able to transfer knowledge, information, expertise, and skills from the academic world to business or from the outside world to the local market (Riazi, 2018).*

The university benefits society through disseminating information by educating students who go on to work in a variety of fields, hold conferences, consulting and considering both public and private interests, publishing research findings. Intellectual property (IP) that professors patent and license to industry a kind of knowledge transfer that is generally ignored yet has significant societal and economic ramifications to private enterprise (Styhre, 2012). Along with teaching, the research publications are also the important source of new knowledge created within the universities. These publications should be the sources of ideas for new businesses in the society. With the introduction of the third mission of universities (Etzkowitz, 2003) that requires universities to commercialized the research and knowledge created, the universities are playing active role in commercialization activities, which also contributes to the Gross Domestic Product of a nation (Siegel & Wright, 2015). Academic entrepreneurship was traditionally justified on the grounds of commercialization of academic research would be enhanced and provide an income stream for the institution. There have been questions expressed concerning the ability of academics in African universities, particularly those in Nigeria, to interact effectively and constructively with business, the community, and the government as well as to contribute pertinently to issues facing the real world. (Bogoro 2015; Sá 2014; Athreye et al., 2023). The pressure from policymakers who see the commercialization of research as a vital factor in boosting national competitiveness and shrinking university finances are the driving forces behind the academic entrepreneurial inclination (Ambos et al., 2008). Entrepreneurial behaviour among academic staff helps the institution to react to and flow with economic and environmental changes like; actions of competitors, preferences of the parents or guardians and technological advancements. Athreye (2023) assert that Nigeria has a culture of academic research, but the country's higher education sector lacks innovation and entrepreneurial skills at the individual and organizational levels, and commercialization rates are low). In order to thrive, obtain a competitive edge over rival institutions, and deliver superior performance, universities must adopt entrepreneurial behaviours and create a supportive organizational culture (Otache & Mahmood, 2015).

The creation of a new culture based on the driving forces behind the establishment of university with an entrepreneurial spirit is entrepreneurial values (Mkrtychyan, 2016). According to Aydin (2018), culture determines what is viable or unworkable, significant or unimportant, right or incorrect, and acceptable or unsuitable. Thus, the nature of organizational culture in universities could affect Academic entrepreneurship.

Organisational culture affects how people of the organisation set their own personal and professional goals, carry out their jobs, manage and administer their resources to achieve them (Huyghe and Knockaert, 2015). Organisational culture provides the fundamental ideals, convictions, and guiding principles underpinning for any organisational practices and procedures (Idiegbeyan-ose et al., 2018). The structure (organisational boundaries) must foster the administrative mechanism which concepts are assessed, picked, and put into practise (Hornsby et al., 2002).

According to Esther et al. (2018), a sort of organisational culture known as "market orientation" is one where all employees are committed to continually providing superior customer value or as a series of marketing initiatives that boost productivity. Market orientation forces a company to increase value for customers in order to create a long-lasting competitive advantage (Narver & Slater, 1990). Abidemi et al. (2018) claim that market-oriented institutions put their clients and stakeholders at the core of their operations by providing services that meet their needs and expectations in order to increase client satisfaction. Therefore, one of the key factors that promotes the growth of competitive advantage is the development of market orientation, creativity, and innovation. To compete in the global economy, entrepreneurial colleges must develop sustainable competitive advantages (Wasitowati, 2017). Market orientation has potentials to improve performance within the university system. It is also believed to give psychological and social benefits to the academia, staff/faculty members, and management in the form of greater pride and sense of belonging, as well as greater commitment to the university (Renwarin, 2017). By producing jobs, inventing or developing new products and services for an enhanced quality of life, and strengthening the economy, research-based entrepreneurial activities in Nigeria can benefit the country more. As they educate sizeable segments of the population and produce information, universities play a key role in modern civilizations. From the foregoing, the objective of the study was to use organisational culture and market orientation to predict academic entrepreneurship of private universities teaching staff in southwestern Nigeria.

### **The Statement of the Hypotheses**

H01: There is no significant composite influence of organisational culture and market orientation on academic entrepreneurship of private universities' teaching staff in Southwest Nigeria.

H02: There is no significant relative influence of organisational culture and market orientation on academic entrepreneurship of private universities teaching staff in Southwest Nigeria.

### **Methodology**

This study used a descriptive survey design. This method gives the opportunity to obtain data without manipulating any of the study's variables of interest. Thus, the researchers chose this method as it allows respondents to say exactly what they felt about variables under study. The population consisted of the four thousand, three hundred and seventy-seven (4,377) teaching staff in Southwest of Nigeria. The sample comprised One thousand, three hundred and nineteen (1,319) academic staff members of private universities in Southwest. Simple random sampling techniques was used to select three states for this study (Lagos, Ogun, and Oyo States). Also, 50% of the private universities in each of the selected states were picked using proportionate stratified sampling techniques; Lagos (3), Ogun (6), and Oyo (3) while 60% of academic staff was used as the sample size from the selected private universities in southwest. This equal to 417 for Lagos, 626 for Ogun and 267 for Oyo which make up the total of one thousand, three hundred and nineteen (1,319) private universities academic staff.

For the purpose of information gathering, primary data which is a closed ended formal questionnaire was used for the study. The questionnaire consisted of section A which deal with demographic data while section B comprises of three (3) sub sections which are: Organisational Culture Questionnaire, Market Orientation Scale and Academic Entrepreneurship Scale. Organisational culture Questionnaire (OCQ), was adapted from Donald et al (2013). It comprises 35 items. It employed a Likert scale with four possible outcomes. (Strongly Disagree, Disagree, Agree and Strongly Agree). The scale's psychometric characteristics were assessed using three consecutive steps: exploratory analysis, confirmatory analysis, and reproducibility was reported. According to their findings, the completion average was 97%, while the overall response rate was 80%. With a worldwide, 0.70 for the Cronbach's alpha coefficient, and a Goodness of Fit (GoF) criterion of 0.79, the metrological results showed outstanding external model quality. The repeatability was assessed using a test-retest procedure which showed 0.962 using Pearson Product Moment Correlation. Market Orientation Scale (MOS) was developed by Narver and Slater (1990) and Kohli and

Jaworski (1990). It is used to evaluate market orientation of teaching staff in the universities on a scale of twenty five. The questionnaire was adapted for the purpose of this study. The Market Orientation Scale employs a Likert scale with four possible responses (strongly disagree, disagree, agree, strongly agree). Comments A sample of thirty academics were given the scale to test its reliability, and the same group of participants were given the same questionnaire two weeks later. Pearson Product Moment Correlation was used to analysed the result showing a high reliability coefficient of 0.902 using test-retest reliability technique. The Academic Entrepreneurship Scale (AES) was adopted from Zahra's (1996) measure for corporate entrepreneurship, this study expanded based on the category of academic entrepreneurship aspects of enterprise within a corporation. It consists of 21 elements and its used to assess academic entrepreneurial behavior of lecturers. The academic entrepreneurship scale is based on a Likert scale (strongly disagree, disagree, agree and strongly agree). In order to verify content validity, the questionnaires were also given to other researchers for adequate review. For reliability purpose, test-retest method was adopted and the result showed 0.92 reliability coefficient.

## Result

Hypothesis One: Organizational culture and market orientation do not have a significant composite influence on academic entrepreneurship of teaching staff at private universities in South-West Nigeria.

**Table 1: Multiple Regression Analysis of Composite of Organisational culture and Market Orientation on Academic Entrepreneurship of Private Universities Teaching Staff**

Source of variation	Sum of Squares	Df	Mean Square	F-Ratio	P
Regression	489.005	2	244.502	5.514	.004 <sup>a</sup>
Residual	48553.52	1095	44.341		
Total	49042.52	1097			

R = .100; Multiple R = 0.010; Multiple R<sup>2</sup> (Adjusted) = 0.008;  
Stand error estimate = 6.658

- Predictors: (Constant), Market Orientation, Organisational Culture
- Dependent Variable: Academic Entrepreneurship

According to Table 1 findings, organizational culture and market orientation, which were all predictor factors in the regression model, together predicted academic entrepreneurship among academic staff at private universities ( $R = .100$ ;  $R^2 = .010$ ;  $Adj. R^2 = .008$ ;  $F(2, 1095) = 5.514$ ;  $p < .05$ ). This demonstrated that the predictor variables together explained 1% of the variance in academic entrepreneurship among Academic personnel in South -West Nigerian private universities. Therefore, the results of this investigation, hypothesis one is rejected.

To determine the combined effect of organizational culture and market orientation on academic entrepreneurship of private institutions' academic staff in South-West Nigeria, a stepwise multiple regression analysis was used. The outcomes as seen in Table 2

**Table 2 : Model overview of the Stepwise Multiple Regression Analysis of Organizational Culture, Market Orientation on Academic Entrepreneurship of Private Universities Teaching Staff.**

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	SE	R Square Change	Change Statistics F Change	df1	df2	Sig. F Change
1	.070 <sup>a</sup>	.005	.004	6.67463	.005	5.449	1	1095	.020
2	.099 <sup>b</sup>	.010	.008	6.66109	.005	5.457	1	1094	.020

a. Predictors: (Constant), Market Orientation, Organisational Culture

b. Dependent Variable: Academic Entrepreneurship

According to Table 2 findings, there was a considerable contribution to the prediction of academic entrepreneurship of private universities' academic staff in South-West, Nigeria, when market orientation was added to the regression model as the first predictor variable based on the strength of its relationship with organizational culture. ( $R = .070$ ;  $R^2 = .005$ ;  $Adj R^2 = .004$ ;  $F(1, 1095) = 5.449$ ;  $P < .05$ ). In light of this, market orientation less than 1% of the difference in academic entrepreneurship among academic staff at private universities in South-West Nigeria. Market orientation and organizational culture were included in the regression model as additional predictor variables, and this combination significantly affected the academic entrepreneurship of academic staff at private universities in Southwest Nigeria. ( $R = .099$ ,  $R^2 = .010$ ,  $Adj R^2 = .008$ ,  $F(1, 1094) = 5.457$ ,  $P < .05$ ). As a result, it was shown that 10% of the academic entrepreneurship of academic staff at private universities in Southwest, Nigeria was due to organizational culture and market orientation combined. This proved that organizational culture could boost academic staff predictions of entrepreneurial behaviour at private universities in Southwest Nigeria by less than 1%. This suggests that organizational culture and market orientation together predict the academic entrepreneurship of private universities in Southwest, Nigeria.

**Hypothesis Two:** There is no significant relative influence of organizational culture and market orientation on academic entrepreneurship of private universities teaching staff in Southwest Nigeria

**Table 3: Relative contribution of Market orientation and organisational culture's on Academic Entrepreneurship of Private Universities Teaching Staff in South-West**

Model	Unstandardized Coefficients		Standardized Coefficient s	T	Sig.
	Beta	Std. Error	Beta		
(Constant)	61.685	2.690		22.935	.000
Market Orientation	.052	.021	.075	2.477	.013
Organisational Culture	.038	.016	.070	2.336	.020

a. Dependent Variable:  
Academic entrepreneurship

The findings in Table 3 demonstrated the degree to which the predictor variables caused the criterion variable. Market orientation is the most effective predictor of academic entrepreneurship in Southwest Nigeria among the academic staff of private universities ( $\hat{\beta}=.052$ ;  $t = 2.47$ ;  $p =.013$ ), followed by organizational culture ( $\hat{\beta}=.038$ ;  $t = 2.336$ ;  $p =.020$ ). This result refutes the notion that organizational culture and market orientation have no significant relative influence on the academic entrepreneurship in Southwest Nigeria of academic staff at private universities was rejected by this finding.

### Discussion of findings

The result indicated that organizational and market orientation predicted academic entrepreneurship of private universities teaching staff in Southwest Nigeria. An entrepreneur with a strong focus on the market will create fresh concepts for products or services that cater to the demands of current clients. Understanding consumers' behaviour and future demands is a critical pre-requisite for a successful organization's strategic direction in a competitive environment where market-oriented organizations can profit from competition between competitors. Additionally, internal clients who are corporate employees shouldn't be ignored due to the complexity of consumer behaviour and the requirement to focus on exterior clients. Only then will the business be able to generate value for its clients while acting with an entrepreneurial mindset. This finding implies the necessity of fostering an entrepreneurial spirit with a market orientation such that new products or services are constantly needed to meet the requirements and preferences of consumers. Similar findings were reported by Faroque et al. (2021), Morgan and Anokhin (2020) and Octavia et al. (2020). Because of this, companies that combine market orientation with entrepreneurial development perform better than those that do not (Atuahene-Gima & Ko, 2001). It also supports Shehu and Mahmood's (2014) study, which discovered a solid and favourable connection between market orientation and entrepreneurial activities. Aloulou (2018) provided additional evidence to back up the conclusion that market orientation results in the ability to leverage current resources, particularly in the integration process, acquire, reconfigure, and release resources that are enabling businesses to act rapidly on new opportunities.

Additionally, market orientation promotes information regarding price, the search for high-quality products, desirable models, and well-known brands. The conclusion was further supported by Oplatka and Hemsley (2007), who were cited in Niculescu et al. (2013). They stated that applying market orientation in university settings has several advantages, including fostering a student-centered environment. They also stated that values such as competitor orientation and inter-functional coordination can aid administrators and teachers in better comprehending and structuring the educational environment.

The study also finds significant relative prediction organisational culture and market orientation on the academic entrepreneurship in Southwest Nigeria of academic staff at private universities. This supports the findings of Ireland et al. (2009), who confirmed that the robustness of cultural norms supporting entrepreneurship is positively connected with the level of support for it among organisational members. Earlier research by Ireland et al. (2003) suggested that "effective entrepreneurial culture is one in which new ideas and creativity are expected, risk taking is encouraged, failure is tolerated, learning is promoted, product, process, and administrative innovations are championed, and continuous change is viewed as a conveyor of opportunities. Additionally, past studies (Kirby, 2006; Rothaermel et al, 2007; Luke et al., 2010) highlighted how company cultures could benefit entrepreneurs. According to Todorovic et al. (2011), local cultures inside an organisation have a considerable impact on how university performance and reward schemes are perceived and implemented. Guerrero-Cano et al. (2006) assert that the development of entrepreneurial activity within universities depends heavily on the university culture.

This suggests that the academic entrepreneurship of academic staff at private universities in South-West Nigeria may have been significantly influenced by organisational culture and a market-focused approach. Market orientation, meanwhile, was found to be the strongest predictor of the two factors. Similar findings were also reported in the Montiel-Campos (2018) and Octavia et al. (2020) reports. The research by Franklin et al. (2001) also revealed that institutions that had launched numerous start-ups and those that had been less active in the field of academic entrepreneurship had quite different attitudes and behaviours. The outcome also emphasised the implementation of policies that are culturally and informationally conducive to entrepreneurship, indicating that organisational culture and market orientation have a big impact on academic entrepreneurship. The study also supports Joseph and Francis' (2015) analysis, which showed that organisational performance variations are greatly and favourably impacted by culture. It has been determined that the relationship between organisational culture and performance is moderated by a market orientation.

This finding is in line with Souitaris' (2015) research, which used a multilevel approach to assess the relative significance of individual, subunit, and organisational effects on entrepreneurial intentions in academia and to examine specific components of the subunit effect and how they interact with other levels. According to organisational culture literature, the department's adhocracy culture, which is distinguished by flexibility and an external orientation, has been demonstrated to be positively connected with academic entrepreneurs' activities.

### **Conclusion and Recommendations**

This study focused on influence of organizational culture and market orientation on academic entrepreneurship of private universities teaching staff in Southwest, Nigeria. It was concluded that organizational culture and market orientation significantly predict academic entrepreneurship of private universities teaching staff in Southwest, Nigeria. The study recommended that Private universities in the South West should work with industries, businesses, the government, and non-governmental organizations to develop fresh, relevant, and sustainable entrepreneur curricula. Also, private universities should invest on research and development

## REFERENCES

- Abidemi, B. T., Halim, F., & Alshuaibi, A. I. (2018). The relationship between market orientation dimensions and performance of micro finance institutions. *Journal of Marketing Management and Consumer Behaviour*, 2(3), 1-14.
- Adisa, T.A., Adekoya, O.D., Abdulraheem, I. and Sani, K.F. (2023) Academic Entrepreneurship: Promoting Economic and Societal Developments. In I. Abdulraheem & T. A. Adisa (Eds) *Academic Entrepreneurship in Nigeria: A Book of Reading* (pp. 113-140) University of Abuja Press: Nigeria
- Aloulou, W. J. (2018). Studying the influences of learning orientation and firm size on entrepreneurial orientation-firm performance relationship in Saudi context. *Middle East Journal of Management*, 5(2), 137-160.
- Atuahene-Gima, K., & Ko, A. (2001). An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation. *Organization Science*, 12(1), 54-74.
- Aydin, B. (2018). The role of organisational culture on leadership styles. *MANAS Journal of Social Studies*, 7(1), 1-13
- Carl, O., & Agboola, G. M. (2012). Microfinance and entrepreneurial development in Nigeria. *Journal of Business and Economic Development*, JORIND, 10(3), 1-11
- Esther, M. N., Agu, O., & Ede, E. C. (2018). Effect of market orientation on organisational performance of the selected manufacturing firms in Enugu state, Nigeria. *International Journal of Multidisciplinary Research and Development*, 5(4), 33-40
- Etzkowitz, H. (2003). Research groups as quasi-firms: The invention of the entrepreneurial University. *Research Policy*, 32, 109-121.
- Faroque, A. R., Mostafiz, M. I., Faruq, M. O. & Bashar, M. F. .B. (2021), ?Revisiting entrepreneurial capabilities and export market orientation: A multi-scale investigation in an emerging economy?, *International Journal of Emerging Markets*, 16(3), 556-579, doi: [10.1108/IJOEM-08-2019-0644](https://doi.org/10.1108/IJOEM-08-2019-0644)
- Guerrero-Cano, M., Kirby, D., & Urbano, D. (2006). A literature review of entrepreneurial universities: An institutional approach, Paper presented at 3rd Conference of Pre-communications to Congress. Business Economic Department. Autonomous University of Barcelona, June
- Huyghe, A., & Knockaert, M. (2015). The relationship between University culture and climate and research scientists' spin-off intentions. *The Journal of Technology Transfer*, 2(3), 11-22. doi: [10.1007/s10961-014-9333-3](https://doi.org/10.1007/s10961-014-9333-3)
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(11), 1-18.

- Kuratko, D. F., Goldsby, M. G. (2004). Corporate entrepreneurs or rogue middle managers? A framework for ethical corporate entrepreneurship. *Journal of Business Ethics*, 55, 13-30
- Mirani, M. A., & Yusof, M. (2016). Determinants of academic entrepreneurship: An organizational level model. *Journal of Global Business and Social Entrepreneurship*, 2(3), 48-56
- Mkrtychyan, G. A (2016). Entrepreneurial University culture: The clash of values and resistance to change. Basic Research Program Working Papers Series: WP BRP 31/EDU/2016.
- Morgan, T. & Anokhin, S.A. (2020). The joint impact of entrepreneurial orientation and market orientation in new product development: studying firm and environmental contingencies. *Journal of Business Research*, 113, 129-138.
- Mwatsika, C., Kambewa, P., & Chiwaula, L. (2018). Untangling the concept of entrepreneurship towards a common perspective. *African Journal of Business Management*, 12(14), 451-470.
- Narver, J. C., & Slater, S. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(11), 20-35.
- Niculescu, M., Xu, B., Hampton, G. M., & Peterson, R.T. (2013). Market orientation and its measurement in universities. *Administrative Issues journal*, 3(2), 1-16.
- Oplatka, I., & Hemsley-Brown, J. (2007). The incorporation of market orientation in the school culture. *International Journal of Educational Management*, 21(4), 292-305
- Otache, I., & Mahmood, R. (2015). Corporate entrepreneurship and business performance: The role of external environment and organisational culture: A proposed framework. *Mediterranean Journal of Social Sciences*, 6(4), 31-37
- Renwarin, J. M. J. (2017). The influence of aviation industrial environment and market orientation on competitive strategy and its effects on Aviation business performance (study on Aviation industry in Indonesia), *Journal of Internet Banking and Commerce*, 22(3), 11-25
- Riazi, Z. (2018). Investigating the relationship between educational dimensions of entrepreneurial. *Iranian journal of educational Sociology*, 1(8), 16-32.
- Rothaermel, F.T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: A taxonomy of the literature. *Industrial and Corporate Change*, 16(4), 691-791. DOI:[10.1093/icc/dtm023](https://doi.org/10.1093/icc/dtm023)
- Shehu, A. M., & Mahmood, R. (2014). The relationship between market orientation and business performance of Nigerian SMEs: The role of organizational culture. *International Journal of Business and Social Science*, 5(9), 159-168.
- Siegel, D. S., & Wright, M. (2015). Academic entrepreneurship: Time for a rethink? *Enterprise Research Centre*, ERC Research Paper No.32

- Styhre, A. (2012). Transduction and entrepreneurship: A biophilosophical image of the entrepreneur. *Scandinavian Journal of Management*, 24(2), 103-112.
- Todorovic, Z. W., McNaughton, R. B. & Guild, P. D. (2005). Making university departments more entrepreneurial. The perspective from within. *Entrepreneurship and Innovation*, 115-122
- Wasitowati, S. M. (2017). The role of market orientation, creativity and innovation in creating competitive advantages and creative industry performance. *Jurnal Dinamika Manajemen*, 8(2), 152-166
- Zahra, S. A. (1996). Governance, ownership and corporate entrepreneurship: The moderating impact of industry technological opportunities, *Academy of Management Journal* 39(6), 1713-1735.