

Tourism Supply Chain Management: Evidence from Tourism and Hospitality Industry of Indonesia

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Abstract- The contribution of the Indonesian tourism industry in gross-domestic product (GDP) is below than other developing countries. According to the statistics, hospitality and tourism industry of Indonesia has low contribution in GDP. Therefore, this study investigated various factors which may lead to increase in contribution of this industry by increasing tourism supply chain activities. Therefore, the current study is one of the attempts to examine the role of internal and external knowledge to expediate service innovation and tourism supply chain management in Indonesia. Population of the study is based on the hospitality companies which facilitates tourists. Respondents of the study was the employees of these hospitality companies. Total 400 questionnaires were used through area cluster sampling. Partial Least Square (PLS) was used to attain final results. It is found that internal knowledge and external knowledge are the major determinants of service quality in tourism and hospitality industry. Increase in service innovation, increases the tourism supply chain. Both the internal knowledge and external knowledge has positive effect on service innovation which has positive contribution to tourism supply chain.

Keywords; *Tourism supply chain, internal knowledge, external knowledge, service innovation.*

1. Introduction

Tourism supply chain management is one of the most important area in the current decade [1]. As the tourism is one of the most important industry which has an important contribution in gross-domestic-product (GDP) of every country. Because industry performance has a significant association with gross-domestic-product (GDP) [2]. It is an important industry which provides the livelihood opportunities to the general public. Tourism industry is linked with hospitality industry. Both industries work in the same time and contribute to each other's economic activities.

Hospitality and tourism industry is a key contributor towards economic growth and GDP [3]. It makes a significant direct contribution to economic growth, which

is primarily related to services quality supplied to the customers [4]. However, the contribution of the Indonesian tourism industry in GDP is below than average. According to the statistics, hospitality and tourism industry of Indonesia has low contribution in GDP. On the other hand, in the case of other developing countries such as India, the contribution of the tourism industry in GDP is 6.2% and 7.1 million visitors visit. In the case of China, contribution in GDP is 9.2% and 124.7 million visitors visit. Moreover, the tourism industry contributes to the GDP of Saudi Arabia is 4.3%, and 15.7 million visitors visit in each year. The contribution of Thailand is also higher than Indonesia. No doubt Indonesian hospitality and tourism industry are more attractive to the visitors due to the natural beauty. However, based on various service issues, this industry lost its contribution to economic growth.

According to the latest statistics of Asian countries, the Chinese hospitality and tourism industry is leading with 402.3 billion U.S. dollars contribution in GDP, following by India having 91.3 billion U.S. dollars contribution. Moreover, the contribution of Thailand is 42.2, billion U.S. dollars. However, Indonesia only has 19.4 billion U.S. dollars contribution in GDP, as it is shown in Figure 1 [5]. Low performance of Indonesian hospitality and tourism industry can be well managed through better innovative services. Service innovation requires incorporation of knowledge from external sources and expansion of internal innovation. "Innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation, respectively" [6].

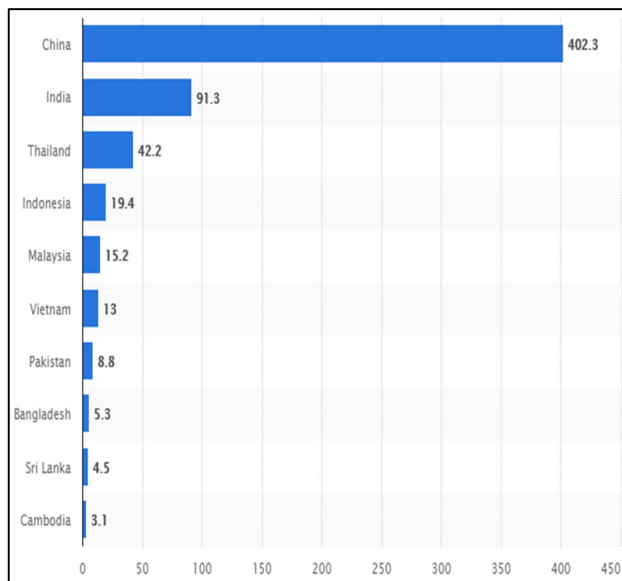


Figure 1. Travel and tourism's contribution to GDP

Source: Statista [5]

Hospitality and tourism industry has remained the intention of various researchers [7-13], however, it is rare that any study comprehensively documented the role of internal as well as external knowledge to expediate service innovation and tourism supply chain, particularly in Indonesia. Hence, this study is one of the attempts to examine the role of internal and external knowledge to expediate service innovation and tourism supply chain hospitality. Innovation is most important because opening up the ideas has the ability to boost service innovation [6].

Further, service innovation has a significant contribution to business performance [14, 15]. Therefore, this study is one of the attempts to examine the role of internal and external knowledge to expediate service innovation and tourism supply chain management in Indonesia. However, the sub-objectives are listed below;

1. To investigate the role of external knowledge and internal knowledge to expediate service innovation.
2. To investigate the role of service innovation to expediate tourism supply chain.
3. To investigate the mediating role of service innovation.

2. Literature Review

Tourism supply chain is an emerging area among the academic scholars [16]. This area is appealing the practitioners and academician for latest research. It is also important because tourism is high potential area of interest for most of the countries because of its significant contribution to various economic sectors. Especially, it is most important for the developing countries, as the tourism is most important for the economy and to increase GDP. Indonesia is also one of the developing countries where the tourism has great potential, however, tourism supply chain improvement is not considered with significant intention. Therefore, significant research contribution is required in the tourism industry of Indonesia. Thus, this study is an attempt to highlight this potential area. There are various studies available in

Indonesian context of tourism and hospitality industry [17-19], however, these studies did not consider the role of tourism supply chain. Thus, this study filled this literature gap by incorporating supply chain in tourism.

Particularly, this study focused to increase service innovation in tourism companies. According to the current study, service innovation has the ability to increase tourism supply chain activities in Indonesia which can increase the contribution of this industry to GDP. As the service innovation can foster service performance [20] and tourism industry is completely based on service delivery which requires higher quality of service. Therefore, good service quality may lead to promote tourism supply chain. However, promotion of service innovation is one of the challenges. As most of the service-related companies always try to enhance the service for customer attraction. According to this study, there are two major factors which may lead to better service innovation. These factors are; internal knowledge and external knowledge sharing activities. Both internal as well as external knowledge are vital for every organization [21, 22] which has significant association with supply chain activities of any organization. Therefore, this study is one of the efforts to inspect the role of internal as well as external knowledge to expediate service innovation and tourism supply chain hospitality. The relationship between internal knowledge, external knowledge, service innovation and tourism supply chain are highlighted in Figure 2.

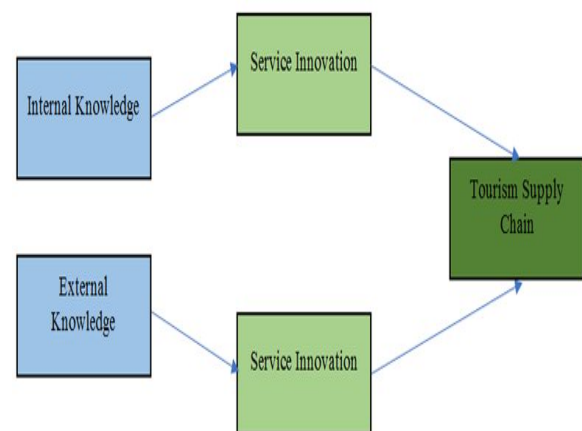


Figure 2. Framework of the Current Study

2.1. Internal Knowledge

Internal knowledge can be based on the knowledge sharing between the employees of the organization. It is most crucial to bring innovations in services, as the communication between the employees is the great source of innovation by generating new ideas. As various studies highlighted that internal knowledge is key to the innovation [23]. Generally, it requires good culture of the organization in which employees believe on internal collaboration to generate new ideas. Culture is the system of norms and values which is common among organization's employees and it determines the attitudes and approaches of organizational members towards confronting different problems in an organization. All the factors related to the culture of organization have significant influence on supply chain of tourism. As it is

revealed that supply chain and organisation culture have direct relationship [24]. Therefore, to enhance service innovation among the tourism companies, it is needed to promote effective culture among the organizations in which employees communicate with each other's and bring new ideas. Employees of the organization should believe on collaboration to generate innovative service. It also increase the satisfaction level among the employees which is important for better performance [25]. The hospitality companies should arrange various seminars and functions in which employees should be invited to share their ideas for service innovations. Because a platform should be provided to the employees of the organization for collaboration. Therefore, employee collaboration is key to the internal knowledge among the employees. Without collaboration, it is quite tough to bring new ideas with the help of internal knowledge sharing [26]. It is also evident from previous studies that most of the service industries are heavily based on the knowledge sharing between the employees of the companies. It indicates that to bring service innovating, employees must be collaborative, and management should provide the opportunities of collaboration, otherwise it is tough to bring innovations in service. Figure 3 shows the internal knowledge sharing which is majorly focused on communication between the employees of the organization. Thus, the communication is vital to bring innovation in services.

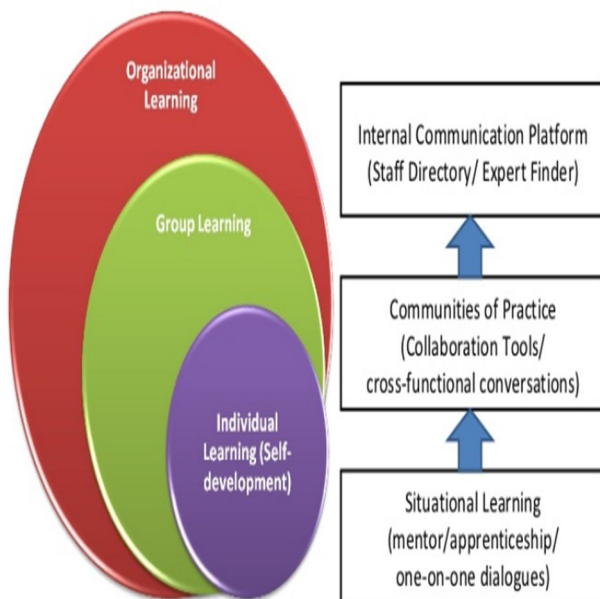


Figure 3. Internal Knowledge Sharing

Knowledge sharing between the employees of the company is an integral element of innovation performance [26]. Especially it is most important in-service related organizations such as hospitality and tourism companies. It is the way to bring something new in the existing services. It is also important to create innovative services which can attract the tourists by promoting tourism supply chain. It is important because increase in tourism supply chain increases the overall performance of the companies. It has significant effect GDP which lead to the nation's economic development. As it is evident that internal knowledge increases the business performance [22, 27] by

increasing the innovations in services. Therefore, internal knowledge sharing is vital to generate innovations in services.

H1: Internal knowledge has positive effect on service innovation.

2.2. External Knowledge

External knowledge heavily based on the information from external stakeholders. External stakeholders include; suppliers, customers and external partners. It also includes the information from market. Therefore, external knowledge is described as the information collection from the suppliers, customers and external partners [28]. It is the knowledge which is extracted from the external sources and bring in to the boundaries of the firm where the employees of the organization utilize this knowledge for new idea development. Bring the information from outside the company to inside the boundaries is also important, however, the extraction of valuable information from huge amount of information is most important. Because, suppliers, customers and external partners always have lot of information, but all the information cannot be valuable, therefore, extraction of important knowledge is most important for the organization.

Particularly, external knowledge is most important for better services. As external knowledge is most important sources which brings innovation in services. It also has the ability to bring new innovation instead of refining the already prevailing services. Therefore, it is key to the service innovation, especially among service-related industries such as tourism and hospitality. Knowledge from the customers and suppliers provide the information about the weakness of the services. It also provides the information about the demands of the customers. Therefore, with the help of these information, customized services can be generated which can increase the satisfaction level among the customers. It will ultimately lead to the better business performance of tourism industry. It is proved by the literature that external knowledge is one of the most important sources of innovations [29, 30]. Therefore, it is vital for the hospitality and tourism industry to maximize the external knowledge equalisation to generate better service innovations. Previous studies also proved that the companies who do not collaborate with various external partners like suppliers and customers, cannot bring significant innovative contribution in services. Because, without the collaboration with supplier and customers, it is very tough to bring customize services. Collaboration with customers provide the idea that what customer like and what dislike. It provides the information about the standard of services which helps to bring some thing new and unique for customers. Particularly, in hospitality and tourism companies, collaboration with suppliers and customers cannot be neglected. It is one of the most essential element of service innovation which lead to the higher business performance among the tourism companies. That is the reason previous studies mentioned that external knowledge is the key to get success in service innovation for the customers [31, 32].

H2: External knowledge has positive effect on service innovation.

2.3. Service Innovation

How to provide excellent services? It is one of the most crucial question which always remained under investigation among all the organizations. Definitely, a huge innovation can bring excellent services or a process of continuous improvement involving innovation. Therefore, service innovation is key to provide excellent services. It is most important within service-related industries. Particularly, in tourism as well as hospitality industry, it is most imperative. Because these industries are only based on services. Service innovation is used to refer to numerous things. These comprise but not limited to: activities of innovation among services, in various services – new or amended service products. Frequently this is compared with “technological innovation”, with the help of service products having technological elements. However, the current study is only discussed the innovation in services related to the tourism as well as hospitality industry. As literature shows that service innovation is quite vital in tourism and hospitality businesses [33].

Service innovation is most important in tourism supply chain. Increase or decrease in tourism supply chain has significant role by service innovation. The tourism companies having better services always get success in competitive environment. However, those companies having not get success in services, generally, face the failure in such as competitive environment. Therefore, better services are the ultimate need of tourism companies to improve tourism supply chain. It is also proved by the literature that services have key role in organizations success [34, 35]. Therefore, tourism companies should adopt higher level of services to capture customer intention. Practically, it is proved that various companies suffering with low performance due to the low success rate. Thus, service innovation is key to enhance tourism performance. Literature also highlights that service innovation has important role in the performance of tourism and hospitality companies [36] which promote supply chain in tourism. It is imperative to promote supply chain related to tourism because supply chain is important for every organization which requires significant level of quality [37]. In the current study, service innovation is playing a mediating role between internal knowledge and tourism supply chain. It is also playing a mediating role between external knowledge and tourism supply chain. Thus, following hypotheses are proposed;

H3: Service innovation has positive effect on tourism supply chain.

H4: Service innovation mediates the relationship between internal knowledge and tourism supply chain.

H5: Service innovation mediates the relationship between external knowledge and tourism supply chain.

3. Research Methodology

There are various research designs available in the research field. However, suitable research design should be selected. As it has significant effect on the results. This study used cross-sectional research design. This study employs a quantitative method of data collection. The quantitative method of data collection involves the use of survey questionnaire, which will enable the interpretation

of the results based on the views expressed by the respondents.

The sources of data to employ for a research work depend on the kind of data to be collected. Sources of data can be in the form of primary or secondary data. The primary source of data is the data acquired in the field using various types of tool, such as questionnaire, structured or unstructured, and interview. This study used questionnaire to collect the data. Questionnaire is one of the instruments is best to collect the opinion and views of people. Therefore, by following the nature of study, this study used a survey questionnaire in which close ended questions were used to collect the data.

Population of the study is based on hospitality companies which facilitates tourists. Respondents of the study was the employees of these hospitality companies. Sample size of the study was based on 400 questionnaires. Area cluster sampling was preferred in this study as it has the ability to cover large area [38]. Therefore, 400 questionnaires were distributed among the employees of hospitality companies. From these questionnaires, 203 were returned and used in data analysis. Moreover, Table 1 highlights the preliminary data analysis.

Table 1. Preliminary Data Analysis

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
IK1	1	0	5.31	6	1	7	1.73	0.64	-1.174
IK2	2	0	5.73	6	1	7	1.59	1.634	-1.483
IK3	3	0	5.68	6	1	7	1.63	2.372	-1.685
IK4	4	0	5.36	6	1	7	1.67	0.446	-1.101
IK5	5	0	5.45	6	1	7	1.72	0.943	-1.261
IK6	6	0	5.25	6	1	7	1.62	0.014	-0.896
EK1	7	0	5.17	6	1	7	1.88	-0.221	-0.942
EK2	8	0	5.19	6	1	7	1.67	0.377	-1.05
EK3	9	0	5.09	5	1	7	1.73	-0.321	-0.681
EK4	10	0	5.38	6	1	7	1.75	0.262	-1.042
EK5	11	0	5.14	6	1	7	1.75	-0.348	-0.701
EK6	12	0	5.45	6	1	7	1.62	1.437	-1.375
SI1	13	0	5.34	6	1	7	1.68	0.118	-0.958
SI2	14	0	5.35	6	1	7	1.65	0.992	-1.251
SI3	15	0	5.35	6	1	7	1.66	0.977	-1.244
SI4	16	0	5.25	6	1	7	1.62	0.541	-1.09
SI5	17	0	3.96	4	1	7	1.95	-1.301	0.133
TSC1	18	0	5.59	6	1	7	1.67	1.79	-1.534
TSC2	19	0	5.53	6	1	7	1.63	0.855	-1.213
TSC3	20	0	5.52	6	1	7	1.67	1.519	-1.431
TSC4	21	0	5.59	6	1	7	1.6	1.297	-1.374
TSC5	22	0	5.57	6	1	7	1.67	1.474	-1.438
TSC6	23	0	5.47	6	1	7	1.6	0.956	-1.197

4. Data Analysis

Data analysis of this study is based on the “structural equation modeling (SEM)”. SEM was carried out through “Partial Least Square (PLS)”. It has two major steps according to [39]; 1) measurement model, and 2) structural model. Measurement model is based on to examine the factor loadings, composite reliability (CR), convergent validity, average variance extracted (AVE) and discriminant validity. Figure 4 shows the measurement model.

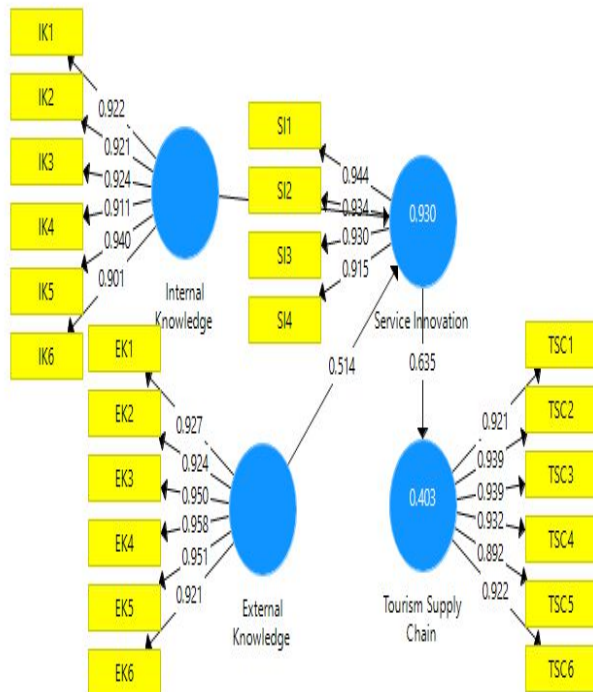


Figure 4. Measurement Model

Table 2. Alpha, AVE and CR

	Alpha	rho_A	CR	AVE
External Knowledge	0.973	0.973	0.978	0.881
Internal Knowledge	0.964	0.964	0.971	0.846
Service Innovation	0.949	0.949	0.963	0.867
Tourism Supply Chain	0.966	0.968	0.972	0.855

From Figure 4, it is clear that all the constructs; internal knowledge, eternal knowledge, service innovation and tourism supply chain have factor loadings above 0.7 for all items [40]. Moreover, internal knowledge, eternal knowledge, service innovation and tourism supply chain have CR and AVE above 0.7 and 0.5 respectively [40]. These results are highlighted in Table 2. Moreover, AVE above 0.5 justifies the convergent validity which is shown in Table 2. Finally, Table 3 shows the discriminant validity by using [41] instructions

Table 3. Discriminant Validity

	External Knowledge	Internal Knowledge	Service Innovation	Tourism Supply Chain
External Knowledge	0.939			
Internal Knowledge	0.919	0.92		
Service Innovation	0.846	0.843	0.931	
Tourism Supply Chain	0.594	0.623	0.635	0.924

After measurement model evaluation, structural model was used for hypotheses testing. In this study, three hypotheses were developed to examine the direct effect of

internal knowledge and external knowledge. Two hypotheses were developed to analyse the indirect effect of service innovation. Structural model is highlighted in Figure 5.

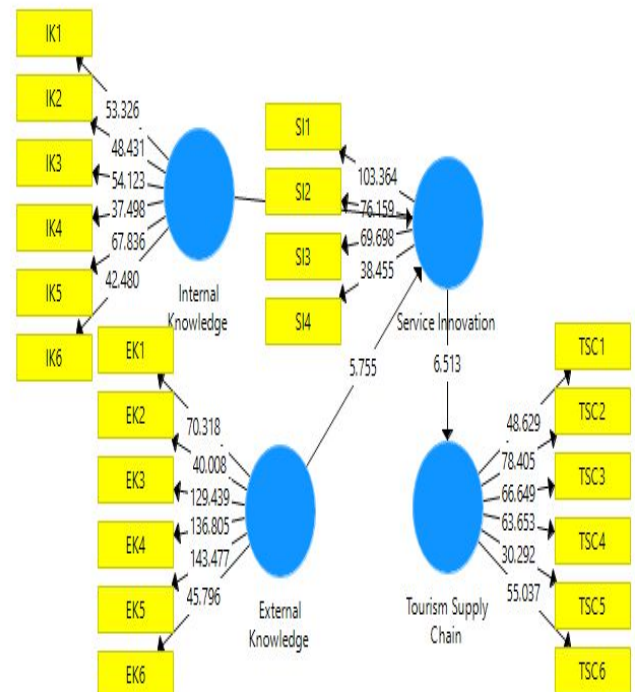


Figure 5. Structural Model

Table 4. Direct Effect Results

	(O)	(M)	(STDEV)	T Statistics	P Values
External Knowledge -> Service Innovation	0.514	0.508	0.089	5.755	0
Internal Knowledge -> Service Innovation	0.471	0.475	0.089	5.315	0
Service Innovation -> Tourism Supply Chain	0.635	0.642	0.098	6.513	0

According to the results of structural model, it is found that all three direct hypotheses (H1, H2, H3) are supported. It shows that internal knowledge and external knowledge has positive effect on service innovation. Increase in internal knowledge and external knowledge increases the service innovation. Moreover, it is found that all the indirect effect hypotheses (H4, H5) are also supported. It indicates that service innovation is a mediating variable between internal knowledge and tourism supply chain. It is also a mediating variable between external knowledge and tourism supply chain. Results of direct effect are shown in Table 4. Moreover, the results of indirect effect are shown in Table 5. Finally, r-square value is 0.403 which is highlighted in Figure 4. It shows that internal knowledge, external knowledge and service innovation are expected to bring 40.3% change in tourism supply chain which is weak [42].

Table 5. Indirect Effect of Service Innovation

	(O)	(M)	(STDEV)	T Statistics	P Values
External Knowledge -> Service Innovation -> Tourism Supply Chain	0.326	0.326	0.075	4.349	0
Internal Knowledge -> Service Innovation -> Tourism Supply Chain	0.299	0.306	0.074	4.03	0

5. Conclusion

Statistics shows that hospitality and tourism industry of Indonesia has low contribution in GDP. In this direction, this study investigated various factors which may lead to increase in contribution of this industry by increasing tourism supply chain activities. Consequently, the current study is one of the attempts to examine the role of internal as well as external knowledge to expediate service innovation and tourism supply chain in Indonesia. Population of the study is grounded on the hospitality companies which facilitates tourists. Outcomes of the study shows that service innovation is one of the key factors which may lead to higher supply chain performance in tourism. It can foster the tourism supply chain by increasing the service quality level. However, it is needed to promote service innovation, which is possible with the help of internal knowledge as well as external knowledge sharing. It is found that internal knowledge and external knowledge are the major elements of service quality in tourism and hospitality industry. Increase in service innovation, increases the tourism supply chain. Both the internal knowledge and external knowledge has positive influence on service innovation which has positive contribution to tourism supply chain. Therefore, it is recommended to the Indonesian tourism companies to promote the internal knowledge as well as external knowledge to promote service innovation and tourism supply chain.

References

- [1] M. Arifin, A. Ibrahim, and M. Nur, "Integration of supply chain management and tourism: An empirical study from the hotel industry of Indonesia," *Management Science Letters*, Vol. 9, pp. 261-270, 2019.
- [2] M. E. Civelek, N. Uca and M. Cemberci, "The mediator effect of logistics performance index on the relation between global competitiveness index and gross domestic product," *European Scientific Journal*, ESJ, Vol. 11, 2015.
- [3] E. D. K. Havi and P. Enu, "The impact of tourism on economic performance in Ghana," *European Scientific Journal*, ESJ, Vol. 9, 2013.
- [4] Č. Slobodan, M. Vladimir, and B. Ivana, "The contribution of tourism industry on the GDP growth of Western Balkan countries," *Industrija*, Vol. 43, pp. 159-170, 2015.
- [5] Statista. *Direct contribution of travel and tourism to GDP in selected Asia Pacific countries in 2017* [Online]. Available: <https://www.statista.com/statistics/313589/travel-and-tourisms-direct-contribution-to-gdp-in-asia-pacific-countries/, 2017>
- [6] H. W. Chesbrough, *Open innovation: The new imperative for creating and profiting from technology*: Harvard Business Press, 2006.
- [7] J. C. Crofts, P. R. Mason and B. Davis, "Measuring guest satisfaction and competitive position in the hospitality and tourism industry: An application of stance-shift analysis to travel blog narratives," *Journal of Travel Research*, Vol. 48, pp. 139-151, 2009.
- [8] M. Riley, *Human resource management in the hospitality and tourism industry*: Routledge, 2014.
- [9] J. F. Preble, A. Reichel and R. C. Hoffman, "Strategic alliances for competitive advantage: evidence from Israel's hospitality and tourism industry," *International Journal of Hospitality Management*, Vol. 19, pp. 327-341, 2000.
- [10] H. Köşker, K. Unur and D. Gursoy, "The effect of basic personality traits on service orientation and tendency to work in the hospitality and tourism industry," *Journal of Teaching in Travel & Tourism*, pp. 1-23, 2018.
- [11] J. Zhao, *The Hospitality and Tourism Industry in China: New Growth, Trends, and Developments*: CRC Press, 2018.
- [12] P. M. García-Villaverde, D. Elche, Á. Martínez-Pérez and M. J. Ruiz-Ortega, "Determinants of radical innovation in clustered firms of the hospitality and tourism industry," *International Journal of Hospitality Management*, Vol. 61, pp. 45-58, 2017.
- [13] R. Eid and H. El-Gohary, "Muslim tourist perceived value in the hospitality and tourism industry," *Journal of Travel Research*, Vol. 54, pp. 774-787, 2015.
- [14] S. J. Grawe, H. Chen and P. J. Daugherty, "The relationship between strategic orientation, service innovation, and performance," *International Journal of Physical Distribution & Logistics Management*, Vol. 39, pp. 282-300, 2009.
- [15] C. M. McDermott and D. I. Prajogo, "Service innovation and performance in SMEs," *International Journal of Operations & Production Management*, Vol. 32, pp. 216-237, 2012.
- [16] S. Mandal and D. Saravanan, "Exploring the influence of strategic orientations on tourism supply chain agility and resilience: An empirical investigation," *Tourism Planning & Development*, pp. 1-25, 2019.
- [17] E. Malihah and H. P. D. Setiyorini, "Industry Revolution 4.0: The Challenge for Secondary Education on Tourism and Hospitality in Indonesia," in 5th UPI International Conference on Technical and Vocational Education and Training (ICTVET 2018), 2019.
- [18] D. M. Soeswoyo, S. Rahardjo, and P. S. Asparini, "Tourism components and the perspective of hospitality industry in supporting sustainable urban

- tourism development*," in 3rd International Seminar on Tourism (ISOT 2018), 2019.
- [19] F. L. Gaol, N. Filimonova and V. Maslennikov, *Financial and economic tools used in the world hospitality industry: Proceedings of the 5th International Conference on Management and Technology in Knowledge, Service, Tourism & Hospitality 2017 (SERVE 2017)*, 21-22 October 2017 & 30 November 2017, Bali, Indonesia & Moscow, Russia: CRC Press, 2018.
- [20] M. L. Santos-Vijande, J. Á. López-Sánchez, and J. Rudd, "Frontline employees' collaboration in industrial service innovation: routes of co-creation's effects on new service performance," *Journal of the Academy of Marketing Science*, Vol. 44, pp. 350-375, 2016.
- [21] C. Heng, H. Jian, and C. Wei, "A Spatial Econometric Analysis of Impact of Internal and External Knowledge Sourcing and Non-R&D on Innovation Performance: Evidence from High-tech Industry," *Science & Technology Progress and Policy*, p. 10, 2018.
- [22] M. G. Martinez, F. Zouaghi, T. G. Marco, and C. Robinson, "What drives business failure? Exploring the role of internal and external knowledge capabilities during the global financial crisis," *Journal of Business Research*, Vol. 98, pp. 441-449, 2019.
- [23] I. Estrada, D. Faems, and P. de Faria, "Coopetition and product innovation performance: The role of internal knowledge sharing mechanisms and formal knowledge protection mechanisms," *Industrial Marketing Management*, Vol. 53, pp. 56-65, 2016.
- [24] T. Cadden, D. Marshall, P. Humphreys, and Y. Yang, "Old habits die hard: exploring the effect of supply chain dependency and culture on performance outcomes and relationship satisfaction," *Production Planning & Control*, Vol. 26, pp. 53-77, 2015.
- [25] S. Hussain, M. Rizwan, M. S. Nawaz, and W. ul Hameed, "Impact of effective training program, job satisfaction and reward management system on the employee motivation with mediating role of employee commitment," *Journal of Public Administration and Governance*, Vol. 3, pp. 278-293, 2013.
- [26] W. Hameed and F. Naveed, "Coopetition-Based Open-Innovation and Innovation Performance: Role of Trust and Dependency Evidence from Malaysian High-Tech SMEs," *Pakistan Journal of Commerce and Social Sciences*, Vol. 13, pp. 209-230, 2019.
- [27] R. M. B. Zaied, H. Louati, and H. Affes, "The relationship between organizational innovations, internal sources of knowledge and organizational performance," *International Journal of Managing Value and Supply Chains*, Vol. 6, pp. 53-67, 2015.
- [28] W. U. Hameed, M. Altaf, and A. Ahmed, "Open Innovation Challenges: Empirical Evidence from Malaysian Small and Medium-Sized Enterprises (SME's)," *Journal of Management and Research*, Vol. 6, pp. 28-53, 2019.
- [29] L. Simao and M. Franco, "External knowledge sources as antecedents of organizational innovation in firm workplaces: a knowledge-based perspective," *Journal of Knowledge Management*, Vol. 22, pp. 237-256, 2018.
- [30] S. Arvanitis, B. Lokshin, P. Mohnen, and M. Wörter, "Impact of external knowledge acquisition strategies on innovation: A comparative study based on Dutch and Swiss panel data," *Review of Industrial Organization*, Vol. 46, pp. 359-382, 2015.
- [31] S. Brunswicker and W. Vanhaverbeke, "Open innovation in small and medium-sized enterprises (SMEs): External knowledge sourcing strategies and internal organizational facilitators," *Journal of Small Business Management*, Vol. 53, pp. 1241-1263, 2015.
- [32] K. H. Kang and J. Kang, "Do external knowledge sourcing modes matter for service innovation? empirical evidence from South Korean service firms," *Journal of Product Innovation Management*, Vol. 31, pp. 176-191, 2014.
- [33] K. Hussain, R. Konar, and F. Ali, "Measuring service innovation performance through team culture and knowledge sharing behaviour in hotel services: a PLS approach," *Procedia-Social and Behavioral Sciences*, Vol. 224, pp. 35-43, 2016.
- [34] J. A. Giroto, N. S. Adams, J. E. Janis, K. E. Brandt, and S. S. Slezak, "Performance on the Plastic Surgery In-Service Examination Can Predict Success on the American Board of Plastic Surgery Written Examination," *Plastic and Reconstructive Surgery*, Vol. 143, pp. 1099e-1105e, 2019.
- [35] D. M. Flynn, H. McQuinn, A. Fairchok, L. H. Eaton, D. J. Langford, T. Snow, and A. Z. Doorenbos, "Enhancing the success of functional restoration using complementary and integrative therapies: Protocol and challenges of a comparative effectiveness study in active duty service members with chronic pain," *Contemporary Clinical Trials Communications*, Vol. 13, p. 100311, 2019.
- [36] M. Johar, M. T. Hidayat and R. A. Latif, "An invention of baton dance? Exercise regime on obesity diagnosis among sedentary adults," *International Journal of Asian Social Science*, Vol. 7, No. 1, pp. 54-62, 2017.
- [37] S. Nadeem, A. K. Alvi, and J. Iqbal, "Performance Indicators of E-Logistic System with mediating role of Information and Communication Technology (ICT)," *Journal of Applied Economics & Business Research*, Vol. 8, 2018.
- [38] M. Altaf, W. Hameed, S. Nadeem, and S. Arfan, "Successful Entrepreneurial Process as Contributor towards Business Performance in Banking: Moderating Role of Passion for Inventing," *South Asian Journal of Management Sciences*, Vol. 13, 2019.
- [39] J. Henseler, C. M. Ringle, and R. R. Sinkovics, *The use of partial least squares path modeling in international marketing*, in *New challenges to international marketing*, ed: Emerald Group Publishing Limited, pp. 277-319, 2009.
- [40] J. Hair, C. L. Hollingsworth, A. B. Randolph, and A. Y. L. Chong, "An updated and expanded assessment of PLS-SEM in information systems research," *Industrial Management & Data Systems*, Vol. 117, pp. 442-458, 2017.

- [41] M. Jalloh and Y. Guevera, "*Financial deepening, interest rate spread and economic growth: New evidence from Sub-Sahara Africa*," International Journal of Business, Economics and Management, Vol. 4, No. 3, pp. 52-64, 2017.
- [42] M. S. Islam and M. Al Amin, "*Understanding domestic workers protection and welfare policy and evaluating its applications to managing human resources of informal sector in Bangladesh*," Journal of Asian Business Strategy, Vol. 6, No. 12, pp. 246-266, 2016.