

Innovation Management and Usage of Knowledge Transfer in Tourism Enterprises

Zbigniew Zontek and Ewa Lipianin-Zontek

University of Bielsko-Biala, Faculty of Management and Transport, Department of Management, Bielsko-Biala, Poland

zzontek.ath@gmail.com

ezontek.ath@gmail.com

Abstract: This paper presents an overview of issues related to the role of the chosen aspects of knowledge management in tourism enterprises. The development of tourism and achieving positive effects from it is primarily supported by the possession of tourism assets and attractions. However, to fully absorb them, it is necessary to create innovations in tourism enterprises and regions. Undertaking this subject is justified by the need to transfer the current knowledge in the field of innovation to the tourism sector. The paper aims to demonstrate the determinants of tourism enterprises' innovation, with particular emphasis on the importance of knowledge and its transfer. The primary, quantitative research presented in the paper was conducted in Poland among tourism enterprises. 1200 tourism enterprises were tested, extracted from the population of over 12000 units placed in official databases. The main scientific goals of the study were: to recognise and empirically verify the conditions of innovation management in Polish tourism enterprises, to identify external and internal determinants affecting the formation of innovation in these enterprises and to assess the effects of introduced innovations. The study established a research hypothesis: Internal factors such as the involvement and creativity of employees in the creation and transfer of knowledge have a significant impact on the innovation of tourism enterprises. The presented results indicate that the main drivers of innovation are exogenous factors and come especially from customers' expectations, willingness to use external sources of financing and benchmarking focused primarily on foreign enterprises. The impact of human resources and knowledge management processes on these processes is varied, and in the case of these determinants of innovation, the relatively largest impact was noted in the case of: knowledge transfer within the enterprise, efficient human resources management, creativity of employees and the creation of new knowledge resources in the company. The paper points to the need to change the approach of managers of tourism enterprises, to include roles attributed to employees in finding innovative solutions and transfer of the new knowledge. For this purpose, companies should develop these resources in terms of their quantity and quality.

Keywords: tourism enterprises, determinants of innovation, knowledge transfer

1. Introduction

Creating innovation in tourism means creating new tourism products, processes, information systems and other forms of innovation. In order to achieve the effects of innovation processes in tourism, it becomes necessary to support, which should concern new knowledge, increase the effectiveness of innovation and links between the main market players. In order to stimulate the transfer, commercialization and diffusion of new knowledge to the tourism economy, important tasks are also attributed to institutions supporting the development of innovation in tourism. These tasks include mainly: research and development activities, consulting, training, information and promotional activities.

The ability to create knowledge and to transfer it and transform into innovative products and technologies is an important source for the well-being of societies. The main subject of influence are tourism enterprises, especially small and medium-sized (Buhalis and Cooper 1998), which bear the risk of innovation. The factor conditioning the innovation of these enterprises is primarily the creation in their environment a climate favourable to innovation. It is important to support the development of their internal resources, because there is a close relationship between entrepreneurs and their creativity and innovation, as a result of their entrepreneurial features.

The subject of this paper are considerations on the endogenous determinants of innovation management in tourism enterprises. Internal conditions are material, capital and human resources of the enterprise, as well as knowledge and its internal transfer focusing on experience, skills and the ability to apply innovations (Horng et al, 2016; Tsai et al, 2015; García-Villaverde et al, 2017). Appropriate management systems (Sigala, 2018), motivations (Horng et al, 2016), organizational culture (Hjalager, 2010) and institutional solutions (Trott, 2008) favour the usefulness of these innovative sources. The effect of the analysis of all determinant, should be the knowledge and processes of its accumulation in the enterprise (Qinxuan et al, 2016; Nieves et al, 2014; Nieves and Diaz-Meneses, 2016).

Tidd, J. and J. Bessant (2013) suggest that innovation is a management concept, in the sense that it obliges managers to choose the right forces and resources and decide how to distribute and coordinate them. Thus the innovation process should be organized and managed in an integrated manner. Innovation management issues devote much attention.

2. Knowledge and innovation

The activity of modern tourism enterprises is characterized by their striving for innovation in the area of creating value for the client. This activity results in the need to search for and implement new solutions, that enable enterprises to maintain or improve their market position. Innovation applies to all areas of life – from new solutions for economic or social life to new currents of thought and culture. The key role of innovations in economic development is to drive force of modern economies, which gives the opportunity to achieve better competitive ability.

The concept of innovativeness in personal approach indicates that it is the ability and motivation of entrepreneurs to constantly search for the results of research and development works, new concepts, ideas and inventions, and the ability to use them in innovations improving the functioning of the organization. The innovation of the organization is associated with participation in the innovation process, effective knowledge management and its practical application, as well as the ability to build network connections and exploit the synergistic effects of this cooperation (Dolińska, 2010; Gao et al, 2018).

Knowledge has special role in the creation of innovation, as the most important source of development, as well as an important factor of innovation dynamics and building a competitive advantage. Knowledge should be treated as a specific resource of the company, which, as it is being used, is growing, but is also rapidly becoming obsolete. Knowledge management should be focused on initiating and implementing innovative processes (Herrera, 2015).

An important aspect of knowledge management, from the point of view of innovation, is to minimize the gap between “static knowledge” and “active knowledge”. Companies can minimize the differences between knowledge learned and used, by encouraging knowledge sharing and transfer (He and Wong 2004; Inkinen et al, 2015). Appropriate use of knowledge is favoured by management based on leadership, in a creative environment and focused on adapting to change. The active use of knowledge in the enterprise leads to a higher level of its transformation and exploitation, and as a consequence to an increase in innovativeness. Knowledge and its proper use in an innovative enterprise becomes the key capital (Zahra and George 2002; Andreeva and Kianto (2012). The knowledge should be treated furthermore as the specific effect of innovation (Oslo Manual, 2005, p.22). Therefore knowledge is an important medium for the diffusion of innovation as part of the innovation process.

Nieves et al. (2014) suggest that enterprise developing innovation need at least three important knowledge-based resources: employee knowledge, organizational collective knowledge and ability of managers to build external social relationships in order to obtain external knowledge. Souto (2015) states that ‘human resources play a prominent role in knowledge generation, assimilation, and application’. That’s why employees with a high level of education and inter-organisational training program create an environment, which stimulates innovation. Also T. Tang (2016) points to two proactive managerial skills, important from the point of view of managing a knowledge in tourism enterprise: the ability to scan the environment in search of opportunities and to build social capital.

The advancement of emerging ICT technologies (information communication technology) has made significant impact on innovation and knowledge transfer in enterprises, including tourism enterprises. Huang et al (2021) researched qualitatively AI applications in the tourism and hospitality, and diffusion of innovations. They concluded that AI adoption susceptibility in this industry are varied depending on the type of AI. Search & booking engines, virtual agents and chatbots rank high in the adoption susceptibility. Tussyadiah (2020) has made a multi-faceted review of research works related with Intelligent automation in tourism industry, and indicated several forms of automation in tourism experiences. Some of them are dedicated to knowledge acquisition and transfer, like connected recommender systems, predictive analysis, information search and evaluation, smart environments activity and Machine learning and self-learning. Tsaih & Hsu (2018) connected the AI with the smart tourism concept. The rapid development of the ICT allowed to made several concepts

operational in tourism: artificial intelligent, cloud computing, mobile device, big data mining and social media cause computing.

Contemporary management of enterprises is based largely on the formal acquisition of knowledge, and its use in business, in current and strategic operations (Kianto et al, 2019). Formal departments and operational groups within many organisations seem not to be the only way to successfully create, spread and use the knowledge. However, informal communities - within the enterprise, with their informal knowledge management processes may expand the possibilities.

3. Methodology

This empirical study is based on primary sources and was carried out using a diagnostic survey, based on a questionnaire. The questionnaire consisted of eight tabular questions with a five-point scale of answers. The questions concerned: the types and number of implemented innovations, the sources and effects of innovation activity, the role of internal components of innovation, the areas of future activity, the success factors, and the barriers to innovation.

The spatial scope of research concerns the territory of Poland. All regions were selected for research, regardless of the rank of tourism functions in their economic activity. This is due to the fact that there are some potentially attractive tourism areas in Poland, but with poor tourism development. The study population was made up of enterprises providing tourist services in Poland and placed in online databases. The survey covered tourism enterprises conducting service activity in the field of: accommodation; restaurants and other forms of eating place; services related to culture, entertainment and recreation, tourist transport services, and tour agents, tour middlemen and tour operator activities. The population of 12073 tourism enterprises was identified, using a lists made on the basis of the following Polish databases: for accommodation base - Central List of Hotel Facilities; for enterprises providing tourist transport services – National Electronic Register of Road Transport Companies; for services related to culture, entertainment and recreation – Register of Sport Infrastructure, Registries of foundations and cultural institutions, and for tour agents, tour middlemen and tour operator activities – Central Register of Tourism Organizers and Entrepreneurs Facilitating the Purchase of Related Tourist Services. A representative research sample was selected randomly – a total of 1,200 test units were proportionally selected from the aforementioned company lists. This provided a similar structure of the research sample relative to the population. Questionnaires were sent via traditional mail, electronic mail or handed directly to the headquarters of the surveyed tourism enterprises. The data were collected in 2017. In the course of the research, 361 correctly filled questionnaires were returned, which accounted for 30.1% of the research sample.

Among the surveyed tourism enterprises, the majority were enterprises offering accommodation services (40%). The second largest group of enterprises was conducting food-related services (23%). Tour agents, tour middlemen and tour operators accounted for 18% of enterprises that correctly completed the survey, while tenderers of transport services - 10%. Services related to culture, entertainment and recreation were represented by 8% of respondents. In the case of six questionnaires, none of the above areas of activity was declared. The profile of the enterprises, which returned questionnaires is relatively similar to the research sample composition. From the point of view of the size of the enterprise, the largest group of respondents who returned the survey were microenterprises (44%). The next largest group were enterprises employing from 10-49 employees (36.5%). Medium-sized enterprises accounted for 16.9% of respondents. The study involved three large companies, and 6 respondents did not declared the size of their enterprises. Also in this case, the profile of enterprises that returned completed questionnaires was relatively similar to that of the research sample.

Table 1: Types of implemented innovations

Specification	yes		no	
	amount	in %	amount	in %
product innovations	175	48,48%	186	51,52%
process innovations	124	34,35%	237	65,65%
organizational innovations	98	27,15%	263	72,85%
marketing innovations	193	53,46%	168	46,54%
other innovations	11	3,05%	-	-

Source: Prepared on the basis of own research results

The key feature of the surveyed enterprises, significant from the point of view of the research objectives, is their innovative activity during the 3 years preceding the survey, according to the Oslo Manual (2005) methodology. From among the surveyed enterprises, 53.5% implemented marketing innovations in these period. 48.5% of respondents declared the implementation of product innovations. Every third respondent implemented process innovation, while 27% of respondents declared implementation of organizational innovations.

The research applied a large approach to innovation definition. Therefore, it is important to divide introduced innovations into radical innovations (which are a novelty on the market served by a tourism enterprise) and incremental innovations (regarding significant improvements of solutions already existing on the market and/or in the enterprise). The most often implemented innovations among new solutions were marketing innovation (27,7%), 19.8% of respondents implemented radical product innovations, while process and organizational innovations accounted for less than 7% of indications.

Table 2: Number of implemented innovations

Specification	new in the market			significant improvement			not implemented
	1-2	3-4	5 and more	1-2	3-4	5 and more	
product innovations	13,2%	5,4%	1,2%	36,0%	13,6%	2,9%	27,7%
process innovations	5,0%	1,7%	0,0%	33,9%	10,3%	0,4%	48,8%
organizational innovations	3,7%	2,9%	0,0%	24,0%	9,1%	0,8%	59,5%
marketing innovations	15,7%	8,7%	3,3%	31,0%	17,4%	3,7%	20,2%
other innovations	0,8%	0,0%	0,0%	3,7%	0,0%	0,0%	95,5%

Source: Prepared on the basis of own research results

In the case of incremental innovations, marketing and product innovations were also most frequently indicated. The percentage of enterprises implementing them is similar counted respectively at 52% and 52.5%. Processes were relatively often the subject of implemented innovations (44.6%), while implementation of significantly improved organizational innovations was less frequently declared (35%). Respondents most often declared the implementation of 1-2 innovations in all analysed categories.

Two main groups of respondents were distinguished among the surveyed tourism enterprises. Enterprises implementing innovations during the three years preceding the survey - constituted the first group. This group accounted for 242 enterprises. The second group (119 enterprises) were those enterprises which did not introduce any innovations in this period. This group included mainly young enterprises, only existing in the market for a few years, which, it may be assumed, implemented innovations in connection with the launch of operations and have relatively modern equipment and technologies. It can be assumed that this had a significant impact on the assessment of their own innovativeness. The surveyed group of respondents also included enterprises that didn't recognize introduced changes and implemented novelties as the innovations. The above-mentioned groups of respondents were respectively: 67% of enterprises introducing innovations during the 3 years preceding the survey, and 33% of respondents didn't declared that innovations were implemented in their companies during this period.

4. Selected survey results and discussion

4.1 The impact of the studied business components on achieving positive results

Respondents regarded the aspects related to location as the most important factor of their success (Table 3 and Figure 1), because for 45% of the surveyed enterprises, the very favourable location of economic activity had a key impact on the success of their business ventures, with a mean of 3.96. On the other hand, the respondents have not ascribe the same importance to the uniqueness of the environment and natural and anthropogenic advantages (mean 3.27).

The increasing competitiveness of the tourism market, and high expectations of tourists in relation to the services offered, affect the perception of enterprises by the need to raise the standard and quality of services offered. Respondents indicated a large impact of this factor on achieving positive business results (mean 3.93). They also attributed high importance to prices appropriate to the quality of the services offered (3.58) and a diverse and permanent offer (3.48). High rankings attributed to these factors also result from the attachment of enterprises to traditional measures of attractiveness of their offer.

Table 3: The impact of the studied components on business results

What is the impact of the following components on achieving positive business results in your enterprise?	I strongly disagree				
	1	2	3	4	5
Location	6%	7%	16%	25%	45%
uniqueness of the environment and anthropogenic values	11%	16%	28%	25%	20%
varied but stable offer	3%	20%	24%	31%	22%
prices consistent with quality	5%	19%	16%	35%	26%
constant improvement of the standard, quality of services	5%	7%	17%	31%	40%
service innovations - constant improvement of the offer by introducing innovative services	9%	18%	22%	28%	24%
introduction of marketing innovations	13%	9%	32%	23%	23%
introduction of technological innovations (e.g. new devices, equipment, IT technologies)	12%	20%	31%	22%	14%
introduction of process innovations (changes in techniques, ways of providing services, software)	16%	16%	31%	23%	14%
introduction of organizational innovations - new management methods	15%	13%	27%	34%	11%
cooperation with other organizers of tourist stay	14%	27%	28%	20%	10%
efficient human resources management system	11%	12%	24%	37%	16%
the ability to acquire and transfer knowledge	11%	16%	28%	27%	17%
using the knowledge of external institutions (universities, associations, etc.)	22%	27%	33%	10%	9%
other factor?.....	0%	0%	0%	1%	1%

Source: Prepared on the basis of own research results.

Among particular types of innovations, respondents most often pointed to product innovations as those that contributed to their success - for 24% of respondents they were of key importance (mean 3.39). In the next place there were innovations in the field of marketing (3.33) and related information gathering skills (3.22). Organizational innovations (3.12) are slightly less significant for respondents. Respondents also attributed less importance to technological innovations (3.05). This is in some contradiction with the previously analysed responses to the question about the areas of future expected innovations, where respondents paid great attention to the use of internet and mobile communication techniques. Process innovations, usually associated with quite large financial outlays, have contributed to the achieved effects also in a relatively low degree (mean 3.03). Higher scores of this answer were attributed mainly by medium and large enterprises. This may indicate that larger business entities with a high degree of competitiveness are approaching issues related to the standardization of service processes. This outcome is also influenced by the fact that this group includes those entities which, as a source of innovative ideas provided the acquisition of patents, licenses and other forms of obtaining innovative solutions.

The level of enterprise innovation depends on the motivation of its management and employees, to look for opportunities to use the results of scientific research and inventions in order to implement them. Meanwhile, not many respondents attributed the effects of their activities, to the use of the knowledge of external institutions (mean 2.57). A relatively low impact on the results of operations, in the opinion of the surveyed enterprises, had interaction with other market players (2.84). An important direction of supporting innovation processes is to stimulate the relations of enterprises with the economic environment, institutions supporting the development of tourism and scientific and research units. Public entities and organizations should increase and diversify their offer addressed to tourism enterprises. The inclusion of appropriate innovation support institutions is a complex process, because these institutions act as a specific partner, creating a new quality of thinking and management. Where cooperation already exists, it should be ensured that it is focused on achieving real innovative effects.

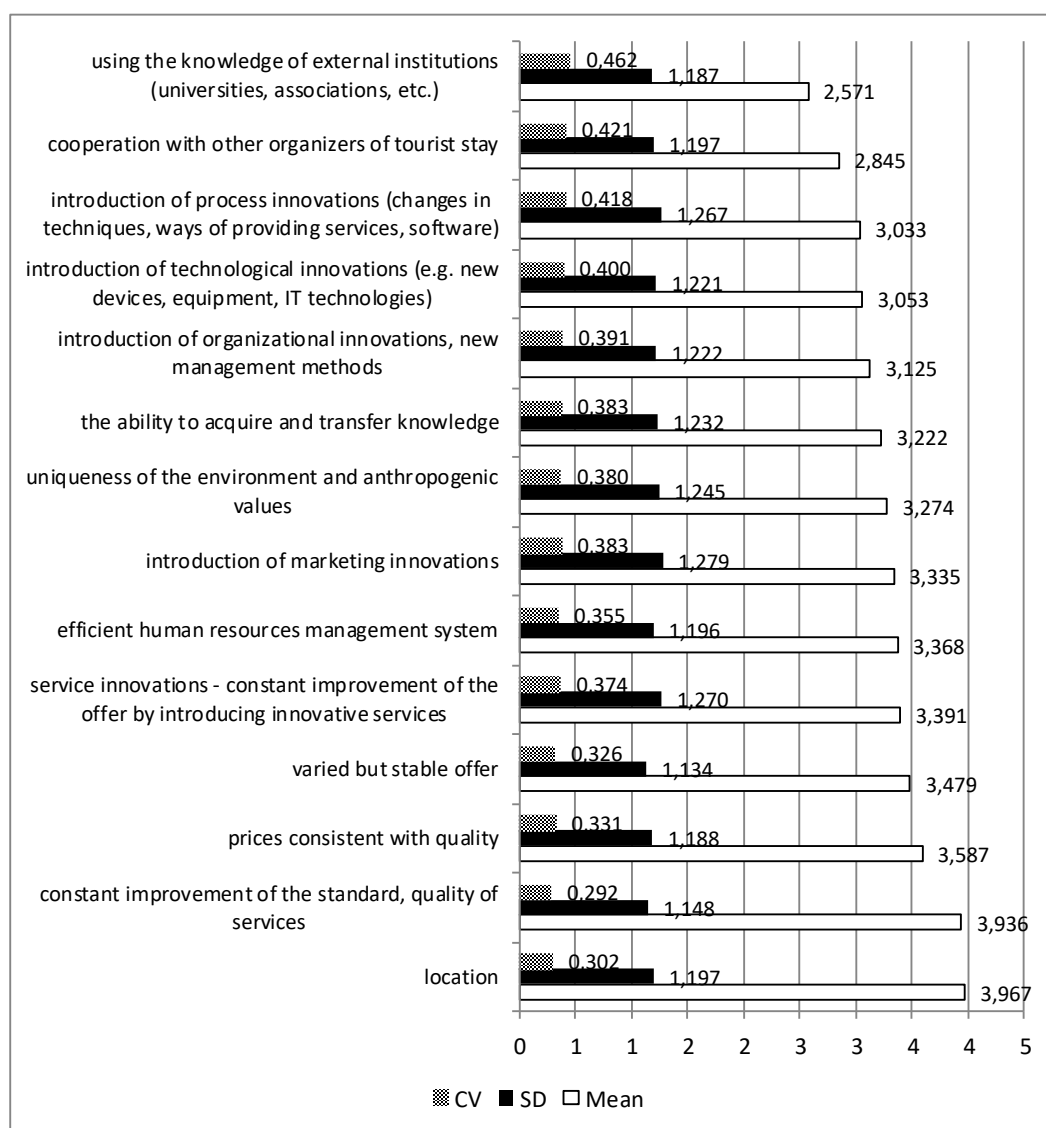


Figure 1: Mean, standard deviations (SD) and coefficient of variation (CV) values for the impact of the studied components on business results

Source: Prepared on the basis of own research results.

The degree of compliance of answers in the case of respondents' opinions on the impact of individual components on the effects of business activity is diversified. Compliance is higher in the case of issues assessed as more important (location, continuous improvement of the standard and quality of services, prices adequate to quality and a diverse but permanent offer). The coefficient of variation ranged from 0.29 to 0.33 for these factors. Compliance clearly decreases with the decrease in the assessment of the importance of individual factors, and the highest coefficient of variation occurred for assessments of "using the knowledge of external institutions". Indeed, this conditioning was indicated as significant mainly by larger enterprises.

4.2 Human resources and knowledge management aspects as the antecedents of innovation

An important aspect of research into the innovation of an enterprise is the analysis of the antecedents of undertaken innovative activity. The results showed that the sources of innovation were, for the most part of respondents, selected elements of the market environment. The surveyed representatives of enterprises most often indicated the suggestions of clients as a source of innovative activities (34% of respondents totally agreed with this statement) and searching for inspiration among foreign enterprises (36%). In the case of internal innovation sources, 17% of respondents indicated full compliance with the impact of efficient human resources management on the formation of innovation (with a high percentage of "rather yes" answers - 38%). In the case of creativity and qualifications of employees, the respondents indicated primarily their average impact (43% and

39% respectively). The undoubted consequence of such a distribution of responses is the low role of creating new knowledge resources in the enterprise (only for 11% of respondents this factor was of the highest importance). Noteworthy is the importance assigned to another component of knowledge management - the transfer of knowledge in a tourism enterprise. For this determinant of innovation, 26% of respondents assigned the highest meanings, and for 34% it was a significant factor.

The results of research concerning particular aspects of the internal environment in the light of the emergence of innovations are presented in Table 4 and Figure 2. Respondents assigned the highest importance to the appropriate level of human resources, information and other means (mean amounted to 4.12), as well as the knowledge of employees (4.02) and efficient transfer of knowledge in the enterprise (3.81). The remaining components of knowledge gathering and it's management, as respondent declared, had a smaller impact on innovative activity: for knowledge gathering and conducting the research, the mean was 3.49, and the importance of an efficient storage, sharing and information system was the component with the lowest impact on innovation (2.85).

Table 4: The impact of internal environment components on the innovation of enterprises

Which of the following internal environment components affects the innovation of your enterprise?	I strongly disagree				
	I strongly agree				
	1	2	3	4	5
the proper climate for innovation (incentives, acceptance, tolerance of failures, etc.)	0%	12%	39%	33%	16%
pro-innovative incentive system	5%	8%	27%	41%	19%
sharing of responsibilities	13%	23%	36%	20%	8%
clear, transparent communication	7%	17%	26%	33%	17%
the ability to use knowledge, skills and personal characteristics of employees	9%	14%	30%	34%	14%
building good relationships at work	10%	20%	31%	26%	12%
employees' knowledge	5%	7%	13%	31%	45%
honesty, keeping promises	6%	11%	28%	31%	24%
respect for otherness / acceptance of new ideas	10%	20%	22%	24%	24%
creative employees, open to new products	7%	11%	20%	32%	30%
adequate level of human resources, information and other resources	3%	8%	9%	36%	45%
the ability to gather knowledge and conduct research	2%	7%	36%	47%	7%
efficient system of information storage, sharing and usage	6%	24%	52%	14%	3%
efficient transfer of knowledge within the enterprise	5%	16%	8%	34%	37%
other factor?.....	0%	0%	1%	2%	0%

Source: Prepared on the basis of own research results.

The creativity of employees (mean 3.69) and the pro-innovation incentive system (3.63) had a relatively high significance for the innovation of the surveyed enterprises. However, the analysis of other components related to the incentive system indicates that the respondents believed their impact on innovation was lower. This situation is particularly visible in the case of: building good relationships at work (3.1) and sharing responsibilities (2.87). Such a distribution of responses indicates that the surveyed enterprises that implemented innovations paid a higher attention to the state of human resources and their quality than to the human resources management. Such a situation may in the long term disturb the internal sources of innovation, in the face of recently observed difficulties of enterprises in acquiring qualified employees.

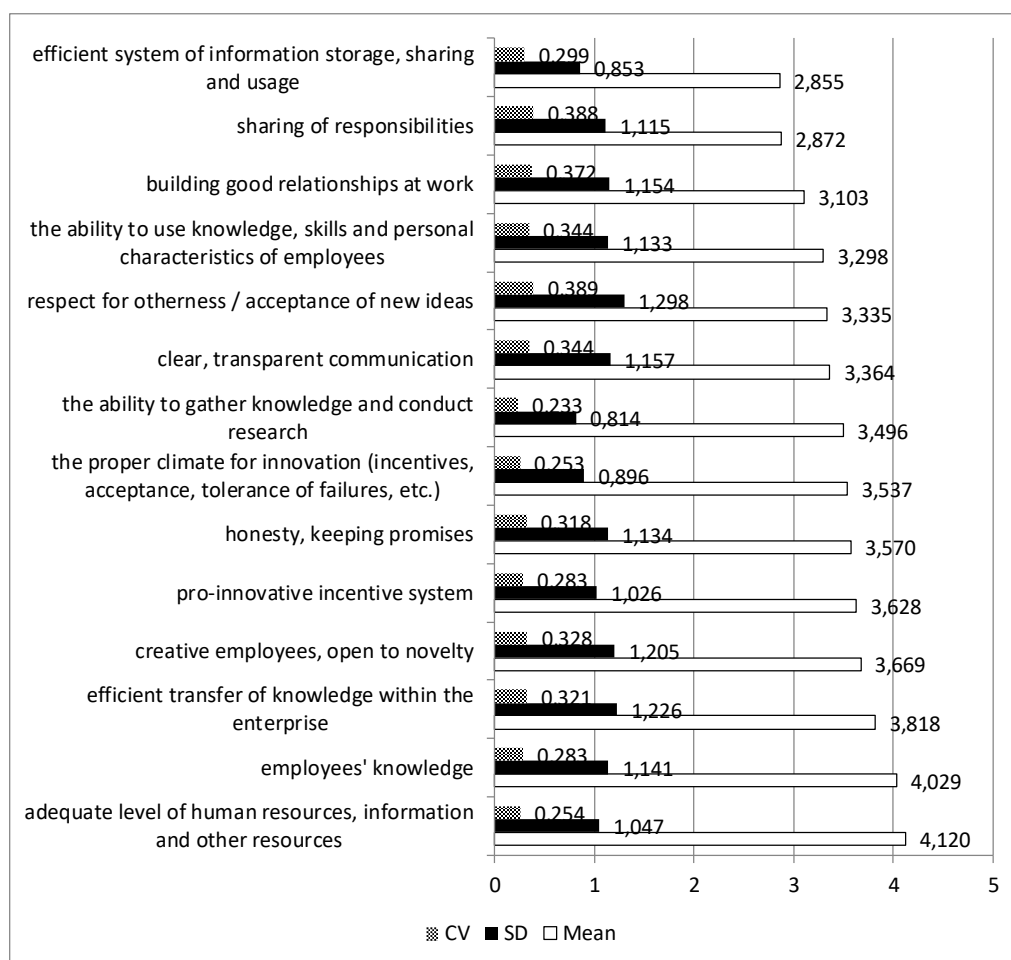


Figure 2: Mean, standard deviations (SD) and coefficient of variation (CV) values for the impact of internal environment components on the innovation of enterprises

Source: Prepared on the basis of own research results.

The degree of compliance of respondents' answers in the case of individual environmental components is variable. In the case of answers regarding: adequate level of human resources; knowledge gathering skills; an appropriate climate for innovation high compliance has been noted (CV below 0.3). The other parameters tested were moderate compliance.

5. Conclusions

Endogenous antecedents of creativity and innovation can be observed via a combination of two main factors: the personal qualities and skills of managers and employees, as well as the knowledge resources and the efficient management of them. Human resources fundamentally influence innovation. It can be treated both as a factor of creating innovation, and as a factor of dissemination of knowledge. Every employee whose creative abilities are accepted and motivated to creativity contributes to the development through innovation. This assumption focuses on the fact that human capital can not only be treated as accumulating knowledge, because innovation is the result of creation, dissemination and acceptance of new values.

The results allowed to verify the hypothesis partially, because internal antecedents of innovation influenced the innovation of researched enterprises in certain respects. The results of the conducted research have shown that the main sources of innovation are exogenous factors - obtaining customers' opinions and conducting marketing research, seeking inspiration among foreign enterprises, and the attention of residents gathered in the place of operation of the surveyed enterprises, are the key sources of innovation for the surveyed tourism enterprises. The majority of respondents do not approach the human resources in their organizations responsibly enough, treating them through the prism of operating activities. Respondents paid significant attention to the quality of

human resources, personal characteristics that favour innovation, while less important for them were activities developing them, such as: creating a climate for innovation, pro-innovative motivational system, etc.

Therefore, it is necessary to transform social awareness, especially entrepreneurs, towards the preparation of human capital capable of functioning in a knowledge-based economy. The area requiring support should be training, exchange of personnel between enterprises and the R&D sphere, joint creation of education programs and promotion of entrepreneurship. Recommendations for tourism enterprises should emphasize the need to increase the role of employees in the creation of innovations, in the use of their qualifications and creativity.

References

- Andreeva, T., Kianto, A. (2012) "Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance", *Journal of Knowledge Management*, Vol 16, No. 4, pp 617-636.
- Buhalis, D., Cooper, C. (1998) "Small and medium sized tourism enterprises at the destination", in: E. Laws, H. W. Faulkner, G. Moscardo (Ed.), *Embracing and managing change in tourism: International case studies*, pp 329-351.
- Dolińska, M. (2010) *Innowacje w gospodarce opartej na wiedzy*, Warszawa, PWE.
- Gao, T., Chai, Y. and Liu, Y. (2018) "A review of knowledge management about theoretical conception and designing approaches", *International Journal of Crowd Science*, Vol. 2 No. 1, pp 42-51.
- García-Villaverde, P. M., Elche, D., Martínez-Pérez, Á., & Ruiz-Ortega, M. J. (2017), "Determinants of radical innovation in clustered firms of the hospitality and tourism industry", *International Journal of Hospitality Management*, No. 61, pp 45-58.
- He, Z. L., & Wong, P. K. (2004) "Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis", *Organization Science*, Vol 15, No., pp 481-494.
- Herrera, M. E. B. (2015) "Creating competitive advantage by institutionalizing corporate social innovation". *Journal of Business Research*, 68(7), pp 1468-1474.
- Hjalager, A. M. (2010) "A review of innovation research in tourism", *Tourism Management*, Vol 31, No. 1, pp 1-12.
- Hong, J. S., Tsai, C. Y., Yang, T. C., & Liu, C. H. (2016) "Exploring the relationship between proactive personality, work environment and employee creativity among tourism and hospitality employees", *International Journal of Hospitality Management*, No. 54, pp 25-34.
- Huang, A., Chao, Y., de la Mora Velasco, E., Bilgihan, A. and Wei, W. (2021) "When artificial intelligence meets the hospitality and tourism industry: an assessment framework to inform theory and management", *Journal of Hospitality and Tourism Insights*, Vol. ahead-of-print No. ahead-of-print.
- Inkinen, H. T., Kianto, A., Vanhala, M. (2015) "Knowledge management practices and innovation performance in Finland", *Baltic Journal of Management*, Vol 10, No. 4, pp 432-455.
- Kianto, A., Shujahat, M., Hussain, S., Nawaz, F., Ali, M. (2019) "The impact of knowledge management on knowledge worker productivity", *Baltic Journal of Management*, Vol 14, No. 2, pp 178-197.
- Nieves, J., Diaz-Meneses, G. (2016) "Antecedents and outcomes of marketing innovation: An empirical analysis in the hotel industry", *International Journal of Contemporary Hospitality Management*, Vol 28, No. 8, pp 1554-1576.
- Nieves, J., Quintana, A., Osorio, J. (2014) "Knowledge-based resources and innovation in the hotel industry", *International Journal of Hospitality Management*, No. 38, pp 65-73.
- Oslo Manual (2005) *The Measurement of Scientific and Technological Activities. Guidelines For Collecting and Interpreting Innovation Data*, OECD and Eurostat.
- Qinxuan G., Jiang W., Wang G. G. (2016) "Effects of external and internal sources on innovation performance in Chinese high-tech SMEs: A resource-based perspective", *Journal of Engineering and Technology Management*, Vol 40, pp 76-86.
- Sigala, M. (2018) "Implementing social customer relationship management: A process framework and implications in tourism and hospitality", *International Journal of Contemporary Hospitality Management*, Vol. 30, No 7, pp 2698-2726.
- Souto, J. E. (2015) "Business Model Innovation and Business Concept Innovation as the Context of Incremental Innovation and Radical Innovation", *Tourism Management*, Vol 51, pp 142-155.
- Tang, T. W. (2016) "Making innovation happen through building social capital and scanning environment", *International Journal of Hospitality Management*, Vol 56, pp 56-65.
- Tidd, J., Bessant, J. (2013) *Managing Innovation: Integrating Technological, Market and Organizational Change*, Chichester, Wiley.
- Trott, P. (2008). *Innovation management and new product development*, Prentice Hall, Pearson Education, Harlow.
- Tsai, C. Y., Hong, J. S., Liu, C. H., & Hu, D. C. (2015) "Work environment and atmosphere: The role of organizational support in the creativity performance of tourism and hospitality organizations", *International Journal of Hospitality Management*, No. 46, pp 26-35.
- Tsaih R.-H., Hsu, C. C. (2018) "Artificial intelligence in smart tourism: A conceptual framework", in "Proceedings of The 18th International Conference on Electronic Business" ICEB, Guilin, China, December 2-6, pp. 124-133.
- Tussyadiah, I. (2020), "A review of research into automation in tourism: Launching the Intelligence and Robotics in Tourism Annals of Tourism Research Curated Collection on Artificial", *Annals of Tourism Research*, No 81, 102883.
- Zahra, S. A., George, G. (2002) "Absorptive capacity: A review, reconceptualization, and extension", *Academy of Management Review*, Vol 27, No. 2, pp 185-203.