

# Chapter 14

## The Tourism Sector's Development and Popularization of Sharing Economy. The Impact on Cooperation



Dagmara Wójcik , Patrycja Klimas , Katarzyna Czernek-Marszałek  and Patrycja Juszczak 

**Abstract** The paper aims at analyzing the role of acceleration of tourism sector development (observable due to the popularization of SE) in intra-sectoral cooperation. To test the above assumption, we carried out the quantitative research on 368 randomly selected Polish tourism companies. The positive impact of acceleration of tourism sector's development on intra-sectoral cooperation was identified using two separate analytical approaches, i.e., regression analysis and structural equation modeling. The results show that the influence is significant and positive, however, rather weak. Furthermore, it seems that intra-sectoral cooperation is driven rather by the acceleration of tourism sector's development conditioned either by popularization of ICT or by tourism companies' development than by the acceleration of tourism sector conditioned either by popularization of experience tourism or by development of tourism companies' innovation outputs.

**Keywords** Sharing economy · Cooperation · ICT · Experience tourism

### 14.1 Introduction

The dynamic, technological, and digital changes create a completely new environment for business. Simultaneously, together with the development of information and communication technologies (ICT), a willingness to feel new experiences, emotions and the authenticity of meeting new people and places, so-called the experience

---

D. Wójcik (✉) · K. Czernek-Marszałek · P. Juszczak  
University of Economics in Katowice, Katowice, Poland  
e-mail: [dagmara.wojcik@uekat.pl](mailto:dagmara.wojcik@uekat.pl)

K. Czernek-Marszałek  
e-mail: [katarzyna.czernek@ue.katowice.pl](mailto:katarzyna.czernek@ue.katowice.pl)

P. Juszczak  
e-mail: [patrycja.juszczak@ue.katowice.pl](mailto:patrycja.juszczak@ue.katowice.pl)

P. Klimas  
Wrocław University of Economics, Wrocław, Poland  
e-mail: [patrycja.klimas@ue.wroc.pl](mailto:patrycja.klimas@ue.wroc.pl)

© Springer Nature Switzerland AG 2020

A. Zakrzewska-Bielawska and I. Staniec (eds.), *Contemporary Challenges in Cooperation and Cooperation in the Age of Industry 4.0*, Springer Proceedings in Business and Economics, [https://doi.org/10.1007/978-3-030-30549-9\\_14](https://doi.org/10.1007/978-3-030-30549-9_14)

economy, has begun to increase its role played in tourism sector. Moreover, a growing role of tourism as a sector of economy manifests in tourism companies' development. Also, the increase of innovations in tourism sector is a factor characterizing the changes visible on the modern market. All of the above-mentioned issues can be perceived as particularly important factors stimulating the new socio-economic phenomena called the sharing economy (SE) [3]. Indeed, currently, the sharing economy is a heavily-debated phenomenon, especially in the tourism sector.

The sharing economy has started to be more and more important in recent years and is said to be "the future of our world" [6]. Therefore, especially tourism enterprises have started to transform their businesses, and tourism researchers have started to analyze this phenomenon. Nevertheless, although SE has become an important issue, it is still relatively not enough explored in the literature. The current stock of knowledge lacks, for example, a clear answer if (and how) the popularization of SE triggering the development of tourism sector impacts intra-sectoral cooperation in tourism sector. Some researchers stress, for example, that SE has some positive (e.g., environmental or social) impacts on development of the tourism sector [6]. At the same time, other authors claim that development of tourism sector stimulates cooperation between and among tourism companies [26, 27].

Given the above, this paper targets the knowledge gaps related to the role of acceleration of tourism sector development (observable due to the popularization of SE) in intra-sectoral cooperation. In particular, the investigation of this role considers acceleration driven by different issues, for example, the popularization of ICT, popularization of the experience tourism, development of tourism companies, and increase of innovation outputs of tourism companies.

The empirical investigation was carried out on a random and representative sample of 368 Polish tourism companies associated in collaborative structures in a form of Local Tourism Organizations. As sharing economy is particularly observable in tourism sector, the focus was restricted to companies operating in tourism sector but only those experienced in inter-organizational cooperation. The data collected from owners and top managers using PAPI techniques and Likert-based measurement tool was analyzed using two quantitative methods—regression analysis and structural equation modeling.

Apart from the introduction, the paper consists of four parts. First—a section which provides theoretical background linking the concepts of tourism sector development, the sharing economy, development of SE stimulated by different factors, and intra-sectoral cooperation. Based on the results of literature review, the research hypothesis is set out at the end of this part. Next part outlines the research framework and provides evidence for methodological quality and appropriateness of empirical material used in analytical investigation. Later on—a section presenting the results of hypothesis testing using three regression models and one model developed based on the structural equation modeling. The last section briefly comments research findings, sheds light on the main contributions, and outlines some limitations of the study and future research directions.

## 14.2 Theoretical Background

### 14.2.1 *The Sharing Economy Phenomenon in the Tourism Sector*

Although the term sharing economy is frequently used, the literature lacks a commonly accepted definition [1]. In the literature, the boundaries between SE and other forms of access to goods and services are relatively blurred [28]. In the literature, the sharing economy term is used interchangeably or even synonymously with other popular ones [compare with 2, 6, 28], for example, collaborative economy, peer-to-peer economy to give a few.

The literature indicates a wide range of definitions highlighting quite different issues under the “sharing trend”. However, it must be stressed that for SE an utilization of underused assets facilitated by technologies, allowing people to use an item or service without obtaining any ownership, is crucial [2, 6]. What is more, in the light of SE also different kind of business models are considered, such as business to consumer (B2C), business to business (B2B), and peer-to-peer (P2P) [6]. Thus, for the purpose of research, SE is understood as a socio-economic model of bottom-up initiatives between individuals (P2P relationships) who utilize the idling capacity of assets based on sharing them via a digital platform for free or for a fee.

In the literature, different SE drivers are indicated and acknowledged as contributing to this phenomenon, implying that a multitude of drivers have pushed sharing as one of the mainstream practices in tourism, for example, tourists' increased feelings of financial constraint, visitors being in pursuit of a better value for money, lower costs of traveling [39, 43], etc. Besides the above, customer-focused factors, it is possible to indicate a few more managerial SE drivers:

- the development of ICT [29];
- the experience tourism—[38];
- tourism companies' development [34];
- innovations development [22].

Therefore, we claim that in the context of development of tourism sector, the following assumptions considering the triggering role of SE in acceleration of tourism sector are theoretically justified:

- acceleration of tourism sector—triggered by SE—is conditioned by both popularization of ICT and experience tourism;
- acceleration of tourism sector—triggered by SE—is conditioned by both tourism companies' development and development of tourism companies' innovation outputs.

### ***14.2.2 The Popularization of ICT and Growing Interest in the Experience Tourism***

The technological changes have become one of the most important in the twenty-first century [18] as creating a wide range of totally new possibilities. The global trend toward the development of new technologies, including ICT, together with the growing expectations of tourists, leads further to the digitization of the tourism sector. Therefore, new technologies entail changes in the functioning of modern enterprises. Those changes appear especially in the distribution and promotion methods of the tourist offer, wider usage of online sale channels and the use of new media, increasing personalization of offers [4]. In particular, the growing popularity of mobile solutions and social media has modified or even revolutionized tourists' behaviors [29], preferences, and expectations about the services offered to them.

ICT in tourism sector affects the change of internal strategies, rendering them more flexible to changes, helping them to adapt to the new needs of the market [17]. Moreover, most of the researchers underline that development of ICT among tourism sector entities leads to their greater efficiency and reorganization of business [17]. What is important, new technologies create also a proper basis for undertaking joint activities, using digital platforms—arousing growing interest of SE, both in management and research practice [39].

As mentioned earlier, nowadays when buying goods and services, tourists look for sensations and experiences. The new component—experience—adds an element of adventure and/or sensations to the time the tourist spends in a destination. The novelty lies in the fact that “experience” is designed, intentionally produced (staged), organized, foreseen, calculated, priced, and (often explicitly) charged for; it is a core strategic concern as a new value attribute [32]. Experiencing should also be associated with the desire to participate and combined with the uniqueness of the place. Moreover, the sensations should be accompanied by the feeling of the authenticity. Thus, it can be argued that the tourist offer should be characterized by an original character, based on creativity, including the elements of the given place identity, for example, culture elements, not distorted by general consumerism or the desire to generate quick profits [40].

Thus, the experience tourism can be referred to the creation of experiences, perpetuated in the memory of the tourist as individual emotions and impressions associated with a visit to a given place [40]. Tourists not only report the willingness and desire for experiences but also claim that they are ready to pay for them. Furthermore, they are eager to pay more if there is an opportunity to explore and learn new things or experience new adventures [35].

Most of the existing contributions acknowledge the willingness to feel new experiences, emotions and sensations, or the authenticity of meeting new people and places, for example, from the perspective of local residents, it is one of the motives of using digital platforms in SE [43]. The adherents of SE recognize the possibility of staying in someone's home, for a completely different—better and more authentic—way of exploring a new place. This fact, therefore, clearly shows the connection of the SE

concept with the experience tourism. Given the above, efforts are made to multiply and intensify impressions and emotions, trying to surprise, delight, and sometimes even shock tourists. Consequently, tourism enterprises may transform their tourist activities into unique tourist attractions, enriching traditional service packages with elements that provide emotions, or intensify the use of new technologies.

### ***14.2.3 The Development of Tourism Companies' Innovation Outputs***

Tourism development as well as the development of SE can be linked also with the development of tourism companies. It is so, as not only the technological pressure forcing ICT adaptation and customer pressure forcing delivery of more experience-based products allows (or pushes) tourism companies to develop. Also, quite significant is the fact that, as the global tourism sector develops (especially in terms of turnovers), its members namely tourism companies do develop as well. Tourism as a sector plays an important role in the economy thanks to transportation development, people higher awareness of a need to take care of their health and quality of free time, a society getting rich, etc., tourism companies can develop and broaden their forms of activity. The same trends lead to the development of other forms of goods and services provided on the market by new entities, i.e., those representing sharing trend. Those new actors on the market do notice potential benefits coming from serving tourists and provide them with accommodation, transport, food, and other goods and services, but not as formally existing tourism companies, but as SE representatives.

The cases of SE icons, such as Airbnb, which are the most explored in the literature, clearly indicate the way the “sharing trend” has started to transform the tourism sector [34], also implying its development. According to some studies, between 2013 and 2025, at a global level, revenues generated by activities belonging to SE will increase about 8.5 times [5]. It shows that SE representatives can complement the development of the whole tourism sector, as the SE activities enable destinations to better respond to peak demand in season by offering alternative tourism services [15]. It means that the entire tourism sector develops, stimulating further SE activities, for example, some visitors choose Airbnb as accommodation, but they spend time in a given region on traveling, using, for instance, other tourist services delivered by tourist entrepreneurs, or more restaurants are required to satisfy the increase in food demand by the tourist influx. Consequently, the tourism sector expands, and SE develops increasing the number of visitors, at the same time, generating new job positions as more tourists would come to a destination due to the lower accommodation cost.

Last but not least, in the context of the acceleration of tourism sector development is an innovation pressure. Currently, the tourism companies as well as all other types of business operate under growing innovation pressure. This pressure forces modern organization to provide innovation outputs. Moreover, it becomes required to

provide those innovation outputs faster, hence simultaneously at significantly much more sophisticated, complex, customized, and technologically advanced levels. This innovation pressure results in more intensive innovation behaviors and activities of tourism enterprises, hence further contributes to offering innovation to more requiring tourists. In tourism, we can point out, for example, product or service, process, managerial, marketing, and institutional innovations [22]. Some of them can be connected to ICT, since as Buhalis and Deimezi [7] claim, ICT presents a major opportunity for tourism entities having the potential to be innovative. However, some of the innovations can be a result of different changes, for example, in a process of delivering goods and services (process innovations), organizational changes in a company (organizational innovation), or marketing new activities (marketing innovation). All of them may stimulate SE development in a different way, for example, offering more individualized tourist services in general, offering better quality tourist services, taking care of good promotion and marketing, and using new technologies to fill the expectations of digitalized.

#### ***14.2.4 The Intra-sectoral Cooperation Within the Tourism Sector Development***

Cooperation in the tourism sector is understood as a form of voluntary joint actions in which autonomous stakeholders engage in an interactive process, using shared rules, norms, and structures, to act and decide on issues related to tourism development in a region [12].

Such cooperation may occur between two partners or more, i.e., in dyads (bilateral cooperation) and networks (cooperation between three or more entities, often in a form of partnership structures). Currently, both forms of cooperation are required. In a tourist destination, tourists buy different goods and services provided by many entities (e.g., accommodation, gastronomy, tourist attractions, and recreation). Cooperation between those entities is significant and desired [27], since tourists assess their stay in a destination by considering a satisfaction from a bunch of goods and services bought in a destination and by the level of a coherence of a destination offer. Thus, each entity which serves a tourist is partly responsible for the overall tourists' satisfaction and for their decisions whether to come back to the destination in the future. Indeed, intra-sectoral cooperation enables to assure such a positive decision stemming from tourist's satisfaction [20]. Thus, cooperation in the tourism sector is perceived as critical not only for tourism companies' development, but also for destination management [26], including regional development [9].

There are a lot of potential motives of cooperation in tourism sector, for example, a desire to get unavailable resources owned by other entities, enter new markets through joint promotion, enriching a tourist offer by joint creation of products/provision of services, financing expensive investments by obtaining external funds, etc. [26, 37].

Those motives of intra-sectoral cooperation result from perceived opportunities for the whole tourism sector development, as well as own business activity. Potentially, the development may result from various factors, including the popularization of SE (among different factors) stimulated by the increase of ICT, the experience tourism, general development of tourism companies, and development of tourism companies' innovation outputs. Those factors, in turn, can stimulate inter-sectoral cooperation.

As Buhalis and O'Connor [8] claim, the use of ICT by traditional tourism entities can link up and bring together the core competence of independent firms. Thus, ICT development may stimulate the cooperation of various entities, for example, in the creation of common e-booking platforms, telephone applications (with the offer of various types of entrepreneurs), and other (including innovation) more and more important solutions regarding technology.

A factor that can also encourage tourism enterprises to cooperation is the increase of the experience tourism. It makes that traditional tourism enterprises notice the changing expectations of tourists—their desire to look for something new, unique, personal, and natural. Thus, they begin to adapt their offer to customers' experience-based needs. Because they are not able to satisfy all the needs of tourists, they have to cooperate with one another [40]. This may be, for example, a cooperation related to providing tourists with access to local cuisine (e.g., organizing meals with local hosts), arranging meetings with representatives of local culture, cooperation with local guides, and showing a tourist destination from a different perspective than offered by traditional travel agencies.

Cooperation is also stimulated by the development of tourism companies. Thanks to the fact that they generate higher benefits of their business, they get new clients—expand the market, invest in new solutions in their businesses, they are able to satisfy tourists' needs on a higher level and are able to suit the offer to a particular tourists' expectations. This makes them even more engaged in business activity which is reflected, among other factors, by establishing new forms of business cooperation [12].

Cooperation in tourism is also stimulated by innovations. When entities see an opportunity to develop product or process innovations, or any other type, and are not able to provide them alone, they usually need to join their forces with other entities in tourism sector [22]. To sum up, the recognition of current literature allowed us to claim that tourism sector development can be a result of popularization of SE driven by different factors, including for instance: an increase of ICT, the experience economy, innovations, and tourism companies' development. This in turn stimulates cooperation in tourism sector. Thus, we assume that SE can encourage, push, or force companies to intra-sectoral cooperation. Given the above, we see it justified to set and test the following research hypothesis: **acceleration of tourism sector development—conditioned by popularization of sharing economy—stimulates intra-sectoral cooperation.**

### 14.3 Research Methodology and Design

The study was conducted among tourism companies actively operating in one out of 124 Local Tourism Organizations (LTOs) in Poland. As a sampling frame, we took the total number of 1647 tourism companies associated with LTOs. In the final, representative sample consisted of 368 companies which were selected using computer software to draw a sample randomly.<sup>1</sup>

The data was collected in May and June 2016 from top managers and owners seen as the key informants in case of investigating organizational and managerial issues including inter-organizational ones [25]. To gather the data, a PAPI technique has been used. The interview questionnaire contained both open and closed questions, hence the latter was based on Likert-type scale seen as the most adequate to collect information about managers' perception on organizational issues investigated in tourism management. We decided to use a 5-point measurement (labels from 1 "strongly disagree" to 5 "strongly agree") as it suits the chosen methods of data analysis [21], may increase the response rate, is seen as less confusing for respondents, and does not distort the basic descriptives and normality measures [13].

The hypothesis testing followed two analytical approaches. First, regression analyses including linear regression and multivariate regression. Second, structural equation modeling (SEM) and structural regression method in particular [24]. Application of two separate analytical approaches allowed us to test the hypothesis following different measurement perspectives on our variables, namely observable in case of regressions and unobservable in case of SEM. Moreover, as the investigation was computed separately, it was possible to compare the findings and provide sounder conclusions.

As the measurement was based on Likert-type scale, the multivariate regression analyses could not be performed using directly measurable items. Thus, to investigate a causal relationship between considered constructs the six interval-level and mean-based variables were computed.

First, we calculated two independent variables referring to the acceleration of tourism sector triggered by the growing popularity of SE conditioned by the development of both ICT technologies (ACC\_NT) and the experience tourism (ACC\_ET). Second, we created two independent variables referring to the acceleration of tourism sector driven by the growing popularity of SE conditioning the development of tourism companies (ACC\_FD) and the increase of tourism companies' innovation outputs (ACC\_IN). Each of the above variables was computed as the means of two specific items, given the semantic content of particular questions. Third, we calculated two general variables as the overall means of all items related to acceleration

---

<sup>1</sup>The final sample was randomly selected using simple random selection technique as due to the clearly defined target group (members of LTOs) and the current list of members of all LTOs the probability of participation in the survey for all of the targeted organizations from the target group was the same. The sampling was done using computer software for simple random sampling setting out the measurement error as lower than 5% and significance level of  $\alpha = 0.05$ .



**Table 14.1** Main descriptives of items and variables used in the study

Parameter	Mean	SD	Skewness	Kurtosis
<i>Items</i>				
ACC_1	3.77	0.937	-0.675	0.333
ACC_2	3.89	0.949	-0.526	-0.369
ACC_3	4.04	0.885	-1.094	1.542
ACC_4	4.08	0.883	-0.952	0.730
COOP_1	3.79	0.928	-0.918	1.064
COOP_2	3.31	1.288	-0.409	-0.909
COOP_3	3.68	1.073	-0.746	0.050
COOP_4	3.79	0.858	-0.640	0.663
COOP_5	3.33	1.241	-0.309	-0.921
COOP_6	3.66	1.029	-0.723	0.230
<i>Variables</i>				
ACC	3.9463	0.72071	-0.796	0.313
ACC_NT	3.8315	0.86177	-0.663	0.044
ACC_EE	4.0611	0.80169	-1.070	1.188
ACC_FD	3.9063	0.75377	-0.801	0.729
ACC_IN	3.9864	0.79411	-0.694	-0.070
COOP	3.5910	0.74967	-0.579	0.615
COOP_SE	3.5915	0.86305	-0.600	0.229
COOP_TE	3.5906	0.81961	-0.384	0.217

Source Own elaboration, using IBM SPSS ver. 25

of tourism sector triggered by the growing popularity of sharing economy (ACC—four items) and related to intra-sectoral cooperation (COOP—six items). The basic statistics for both the items and variables are presented in Table 14.1.

Furthermore, as the analytical part of the study assumed an application of SEM, the two latent variables were developed. Namely, independent one related to the accelerating development of tourism sector due to the growing popularity of SE and dependent variable related to intra-sectoral cooperation. These variables were developed using factor analysis carried out on our raw items.

To ensure that the empirical material suits the chosen analytical approaches, the raw data has been tested in terms of basic methodological requirements.<sup>2</sup> First, normal distribution of data was verified using Kolmogorov-Smirnov normality test, the levels of skewness and kurtosis. Even though the data was not positively tested using K-S

<sup>2</sup>It was possible to test the data in terms of common method bias, composite reliability, and convergent validity as the interviewing questionnaire covered more items than those discussed in this paper—the scope of the study was quite broader than focus on the influence of accelerating effect of popularization of sharing economy on intra-industry cooperation. For instance, our focus has been also paid on more negative (i.e. slowdown of industry development) effects.

test, the ranges of both skewness (between  $-1$  and  $1$ ) and kurtosis (between  $-3$  to  $3$ ) show the distributions of items as quite close to normal, hence slightly left-slanted distributions [10].

Second, the internal consistency seen also as the reliability of scale was tested using Cronbach's alpha coefficients. As the results of tests exceeded  $0.7$  ( $\alpha_{\text{Cronb.ACC}} = 0.797$ ;  $\alpha_{\text{Cronb.COOP}} = 0.784$ ), the scales were considered as reliable [36].

Third, the adequacy of raw data was verified using Meyer-Olkin test for sampling adequacy. The results show our data as suitable for running factor analysis—KMO referring to data measuring independent variable =  $0.676$ , hence KMO referring to data measuring dependent variable =  $0.711$  (the threshold =  $0.5$  according to Osborne and Costello [31]).

Fourth, in order to additionally check appropriateness of data for factor analysis, the Bartlett's tests of sphericity were run. As for both set of items, the results are significant ( $p < 0.05$ ), probably the items are interrelated thus suitable to identify potential factors. In order to support these findings, we run correlation analyses on items and variables. As shown in Tables 14.2 and 14.3 the items and variables do correlate. Therefore, once again, the data has been shown as suitable for running factor analysis.

Fifth, as the interviewing questionnaire was newly developed, we saw it important to test the scale in terms of common method bias [33]. To do so, the Harman's single factor test and non-rotated exploratory factor analyses were run. The results show the single factors representing the highest eigenvector and accounting for the majority of covariance among measures as explaining:  $62,247\%$  of the total variance in case of items related to the acceleration of tourism sector,  $49,195\%$  of the total variance in case of intra-sectoral cooperation. As the results do not exceed the maximum value of  $70\%$  [19], there is no risk that the variance of our data results from the adopted measurement method rather than from the considered constructs [33].

Sixth, as we assumed to apply SEM, it was important to run confirmatory factor analysis (CFA) and validate the scale in terms of convergent validity and composite reliability. The convergent validity was assessed using an average variance extracted (AVE), hence composite reliability using the basic composite reliability indicator (CR)—see Costello and Osborne [11]. The results of calculations show the measurement model for independent variable as valid ( $\text{AVEACC} = 0.534 > 0.5$ ) and reliable ( $\text{CRACC} = 0.820 > 0.7$ ), however, the measurement model for dependent variable as reliable ( $\text{CRCOOP} = 0.814 > 0.7$ ), hence not fully valid ( $\text{AVECOOP} = 0.423 < 0.5$ ). Nevertheless, the 6-item measurement model for intra-sectoral cooperation has been used in further analysis applying SEM as measurement model might be accepted if AVE exceeds  $0.4$  and simultaneously CR exceeds  $0.6$ .

Table 14.2 Inter-item correlations

Parameters	ACC_1	ACC_2	ACC_3	ACC_4	COOP_1	COOP_2	COOP_3	COOP_4	COOP_5	COOP_6
ACC_1	rho <sub>s</sub> 1.000									
	Sig.									
ACC_2	rho <sub>s</sub> 0.651**	1.000								
	Sig.	0.000								
ACC_3	rho <sub>s</sub> 0.356**	0.360**	1.000							
	Sig.	0.000	0.000							
ACC_4	rho <sub>s</sub> 0.422**	0.486**	0.601**	1.000						
	Sig.	0.000	0.000	0.000						
COOP_1	rho <sub>s</sub> 0.415**	0.389**	0.283**	0.325**	1.000					
	Sig.	0.000	0.000	0.000	0.000					
COOP_2	rho <sub>s</sub> 0.186**	0.201**	0.146**	0.161**	0.385**	1.000				
	Sig.	0.000	0.000	0.002	0.000	0.000				
COOP_3	rho <sub>s</sub> 0.494**	0.455**	0.306**	0.315**	0.592**	0.322**	1.000			
	Sig.	0.000	0.000	0.000	0.000	0.000	0.000			

(continued)

Table 14.2 (continued)

Parameters	ACC_1	ACC_2	ACC_3	ACC_4	COOP_1	COOP_2	COOP_3	COOP_4	COOP_5	COOP_6
COOP_4	rho <sub>s</sub> 0.333**	0.289**	0.308**	0.314**	0.353**	0.275**	0.425**	1.000		
	Sig.	0.000	0.000	0.000	0.000	0.000	0.000			
COOP_5	rho <sub>s</sub> 0.196**	0.142**	0.159**	0.190**	0.230**	0.583**	0.277**	0.382**	1.000	
	Sig.	0.000	0.006	0.002	0.000	0.000	0.000	0.000		
COOP_6	rho <sub>s</sub> 0.308**	0.331**	0.322**	0.407**	0.311**	0.163**	0.477**	0.538**	0.368**	1.000
	Sig.	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	
N	368									

Interdependencies estimated using Spearman correlation analysis as the scale was based on 5-point Likert scale being an ordinal scale of measurement

\*\* Significance at the level of 0.01 (two-tailed)

Source Own elaboration, using IBM SPSS ver. 25

**Table 14.3** Inter-variable correlations

Parameters		ACC	ACC_SE	ACC_TE	ACC_FD	ACC_IN	COOP
ACC	$r_{xy}$	1					
	Sig.						
ACC_NT	$r_{xy}$	0.877**	1				
	Sig.	0.000					
ACC_ET	$r_{xy}$	0.856**	0.501**	1			
	Sig.	0.000	0.000				
ACC_FD	$r_{xy}$	0.927**	0.805**	0.802**	1		
	Sig.	0.000	0.000	0.000			
ACC_IN	$r_{xy}$	0.935**	0.827**	0.792**	0.734**	1	
	Sig.	0.000	0.000	0.000	0.000		
COOP	$r_{xy}$	0.489**	0.452**	0.393**	0.461**	0.449**	1
	Sig.	0.000	0.000	0.000	0.000	0.000	
N		368					

Interdependencies estimated using Pearson correlation analysis as the variables were computed as means of reasoned pairs of items

\*\*Significance at the level of 0.01 (two-tailed)

Source Own elaboration, using IBM SPSS ver. 25

## 14.4 Empirical Findings

To analyze the directional relationships, three regression models were developed. The first model in independent part focuses on conditions under which SE develops so fast, i.e., popularization of ICT and the experience tourism. The second model in independent part pays attention to positive effects of growing popularity of SE thanks to firms' development and increase of innovation outputs. Finally, the third model takes the general perspective on independent variable. All of the developed models are statistically significant, thus acceptable as explaining cooperation in tourism sector—see Table 14.4.

The results of ANOVA show that all models are significant and represent quite similar explaining power. The first model  $F(2, 365) = 58.042$ ;  $p < 0.01$  explains 23.7% (adjusted  $R^2$ ) of the variance of the dependent variable. The second model  $F(2, 365) = 57.432$ ;  $p < 0.01$  presents slightly worse fit as it explains 23.5% (adjusted  $R^2$ ) of the variance of the intra-sectoral cooperation. The third model, the most general one,  $F(1, 366) = 114.898$ ;  $p < 0.01$  represents the best model fit as it explains 23.9% ( $R^2$ ) of the variance of the dependent variable. All in all, the model fits are quite similar, hence the explaining power of the models seems to be generally quite low (less than 25%). It may suggest, there exist other, significant factors positively influencing intra-sectoral cooperation among tourism companies.

**Table 14.4** Results of ANOVA and analysis of models fit

ANOVA		Model fit									
Models		Sum of squares	Df	Mean square	F	Sig.	R <sup>2</sup>	Adjusted R <sup>2</sup>	Durbin-Watson		
1	ACC_NT ACC_ET	Regression	49.769	2	24.884	58.042	0.000	0.241	0.237	1.491	
		Residual	156.487	365	0.429						
		Total	206.256	367							
2	ACC_IN ACC_FD	Regression	49.371	2	24.685	57.432	0.000	0.239	0.235	1.492	
		Residual	156.885	365	0.430						
		Total	206.256	367							
3	ACC	Regression	49.280	1	49.280	114.898	0.000	0.239	0.237	1.493	
		Residual	156.976	366	0.429						
		Total	206.256	367							

Source Own elaboration, using IBM SPSS ver. 25

In order to test hypothesis, the coefficients of considered variables were investigated as the general significance of model is not constitutive criterion to decide about the rejection/not rejection of the hypothesis—Table 14.5.

All of the considered variables, in all models, represent positive and quite similar level of standardized coefficients of influence on intra-sectoral cooperation. All of the predictors are significant. However, their influence is quite weak (the range of beta reaches from 0.223 to 0.489). Given a more detailed view, the highest impact can be identified for the general variable ACC (model 3, beta = 0.489). It is worth to note that in case of multivariate regression models there are no substantial differences between considered pairs of variables. Nevertheless, the development of tourism sector accelerated by popularization of SE conditioned by increase of ICT has stronger influence (beta = 0.340) on intra-sectoral cooperation than this conditioned by the popularization of experience tourism (beta = 0.223). Furthermore, the development of tourism sector accelerated by popularization of SE conditioned by the development of tourism companies has stronger influence (beta = 0.285) on intra-sectoral cooperation than this conditioned by the increase of innovation outputs (beta = 0.241). It is worth noting that for multivariate regression models, there is no risk of inaccurate estimation of contribution of particular predictors to the models as the variance inflation factors (VIF) for all variables in multivariate models are much below the critical value of 10 [30].

Summing up, the results of three developed regression models show that the rejection of the hypothesis would be unreasoned. To support the above conclusion and to provide the results taking the different measurement perspective, a structural equation modeling was applied.

SEM allows the researchers to investigate complex, directional links between and among variables which are directly unobservable [Kline, 2012]. It is recommended for studies exploring issues measured (indirectly) though proxies, especially if those proxies are rather subjective than objective indicators [21]. As our scale contains items based on subjective Likert-type scale, the data were collected as perceptions of our key informants; therefore, we saw it reasoned to apply SEM.<sup>3</sup> Before the analysis was run, our pre-defined structures of measurement models for both latent variables were verified using factor analysis. Its results supported our theory-based structure: (1) independent and latent variable consists of four observable items and (2) dependent and latent variable consists of six observable items.<sup>4</sup> Using the measurement models, it was possible to develop and test the structural model explaining the influence of the accelerating development of tourism sector conditioned by popularization of SE on intra-sectoral cooperation—Fig. 14.1.

---

<sup>3</sup>Note that the following, critical methodological requirements were also met: minimal sample size at the level of 200 or even 300 [41]; at least 3 items per latent variable [23], normal distribution of raw data (in terms of Byrne [10]).

<sup>4</sup>Rotation method: Promax (as the items were allowed to be interrelated—Byrne [2010]). Extraction method: generalized least square (recommended if the items and/or extracted factors may correlate—Fabrigar et al. [14]). All pre-defined items load the latent items at the levels exceeding critical point of 0.6 [16].

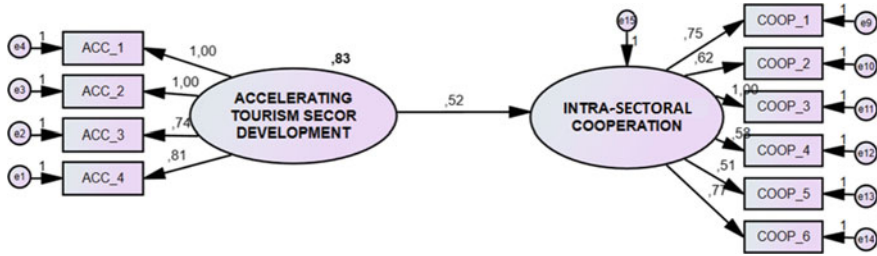
**Table 14.5** Regression models and coefficients for specific predictors of intra-sectoral cooperation

Models	Coefficients			T	Sig.	95% Confidence interval		Collinearity	
	Unstandard		Standard			Lower bound	Upper bound	Tolerance	VIF
	B	Stand. error	Beta						
1	(Constant)	1.611	0.192	8.397	0.000	1.234	1.989		
	ACC_NT	0.296	0.046	6.461	0.000	0.206	0.386	0.749	1.335
	ACC_ET	0.208	0.049	4.224	0.000	0.111	0.305	0.749	1.335
2	(Constant)	1.580	0.191	8.285	0.000	1.205	1.955		
	ACC_FD	0.283	0.067	4.232	0.000	0.152	0.415	0.461	2.169
	ACC_IN	0.227	0.063	3.578	0.000	0.102	0.352	0.461	2.169
3	(Constant)	1.585	0.190	8.328	0.000	1.210	1.959		
	ACC	0.508	0.047	10.719	0.000	0.415	0.602	NA	NA

NA—non-applicable

Source Own elaboration, using IBM SPSS ver. 25





**Fig. 14.1** Structural model for intra-sectoral cooperation. *Source* Own elaboration, using IBM SPSS Amos ver. 25

The structural regression method provided the result which shows significant, quite strong, and positive directional relationships. The evaluation of goodness of fit [21] shows the structural model as representing very good model fit as fit indicators exceed the thresholds, namely  $CMIN/DF = 2.180$ ,  $GFI = 0.980$ ,  $AGFI = 0.938$ ,  $NFI = 0.973$ ,  $CFI = 0.985$ ,  $TLI = 0.962$ , and  $RMSEA = 0.057$ .

To conclude, the findings of SEM support the results of regression analyses showing that—at least in case of Polish tourism sector—there is no justification for the rejection of the hypothesis about the positive influence of the accelerating development of tourism sector conditioned by popularization of SE on intra-sectoral cooperation.

## 14.5 Discussion and Conclusions

The conducted research allowed to present findings regarding the drivers of intra-sectoral cooperation in the tourism sector. Thus, it is possible to point out several implications for the following subgroups: (1) discussion of the research with former scientific works and presenting the research contribution, (2) formulating practical implications, (3) presenting research limitations, and (4) future research recommendations.

### 14.5.1 Discussion and Contribution of Research Results

The study contributes to the rapidly growing streams of research focused on determinants—i.e., drivers, triggers, factors, and antecedents of inter-organizational cooperation. Given the quite low exploratory power of presented regression models, we claim that research findings support and supplement prior results identifying other significant drivers of cooperation in the tourism sector, for example, communication, commitment, social embeddedness, or trust [12]. Secondly, research findings expand the existing knowledge on cooperation per se, however, in the context of

tourism sector. The scope of presented consideration was much broader in terms of types of cooperating tourism organizations than adopted in prior studies. Hence, the findings exceed the prior focus restricted only to formal cooperation [e.g., 41], cooperation [26], or partnerships [42]. Given the above, it seems that findings could be seen not only as supportive, but also as more holistic and broader than the previous in the literature.

The results of quantitative analysis prove significant links between the popularization of SE and cooperation in the tourism sector, using a representative sample of tourist entities—such a significant link was proved in the literature. Moreover, the identification of positive influence of the popularization of SE on this cooperation suggests that tourism companies are more willing to cooperate due to the increase of ICT than the increase of experience tourism. The reason could be explained by the fact that respondents perceive this driver as more important in SE popularization and thus, in the tourism sector development. However, as the research was conducted among entities representing supply side of the market i.e., tourist entrepreneurs, tourist enterprises perceive ICT development more clearly (they use new technologies in a day-to-day activity) than the experience tourism (being a characteristic trend to the demand side of the market).

Furthermore, the research highlights that the development of tourism sector accelerated by popularization of SE conditioned by the development of tourism companies has stronger influence on intra-sectoral cooperation than the one conditioned by the increase of innovation outputs. This could be connected with a specificity of developing innovations in the tourism sector. Some difficulties connected with launching innovations in tourism can result of issues such as, for example, domination of SMSs (with limited resources for innovativeness development), using by tourist enterprises mainly a tacit knowledge and their reluctance to share it with others, a high level of employment fluctuation (mainly because of seasonality) in the tourism sector, etc. [22]. Nevertheless, the presented research is in line with works in which SE is perceived as accelerating tourism sector development [28], ICT is perceived as a stimulant of inter-sectoral cooperation [8], and the experience tourism is analyzed as such a stimulant too [40].

## ***14.5.2 Practical Recommendations***

With the reference to tourist entities and recommendations for companies in the sector, it would be important to inform entrepreneurs about possible forms of cooperation and their potential benefits, for example, by organizing various types of meetings—in the form of trainings or workshops. SE is a phenomenon that cannot be stopped; therefore, tourism entrepreneurs must adjust to it and learn how to run the business in a new reality. Since the research has shown that a hypothesis about the development of tourism sector driven by SE and stimulating intra-sectoral cooperation cannot be rejected, during such meetings some examples of this positive influence of SE on the sector development and intra-sectoral cooperation should be presented.

Moreover, they should be stressed together with a positive influence of cooperation on tourist companies' development and the sector development (some feedback effects) because this kind of link has already been proved in the literature [20]. During such meetings, it is important to pay attention to the specificity of tourism enterprises, i.e., different perception and opportunities of cooperation will concern entities that run different type of businesses (e.g., accommodation or catering facilities) of various sizes and (micro/large companies) in different locations (urban/rural). This perception is crucial regarding assessment of different phenomena in the tourism sector, including the ones analyzed in the research, i.e., ICT development, the experience tourism, or innovations.

Additionally, in Poland, some changes in the legislation regulating SE are required. The lack of legal arrangements in many areas intensifies the reluctance of tourism entrepreneurs to other entities on the market representing SE. Thus, such regulations regarding SE would certainly enable a more transparent and secured way of delivering goods and services to consumers. More and more countries have begun implementing various regulations in this area in the recent years and Poland also belongs to them. However, many issues still remain unregulated.

### ***14.5.3 Research Limitations***

Authors do believe that the empirical investigation contributes to the current stock of knowledge. Nevertheless, besides aforementioned positive insights, the study reveals some shortcomings. First and foremost, the study was purposefully embedded within the part of tourism sector, namely within tourism entities experienced in intra-sectoral cooperation (i.e., members of LTOs), thus the findings should not be seen as general. One should bear in mind, however, that due to the sectoral-dependent nature of managerial issues, running of research only in one sector is more often seen as methodologically reasoned [27]. Therefore, to test the findings and to provide supplementary knowledge, it is worth to run this investigation in other sectors and countries. Second, as the measurement approach was based on Likert-type scale, the results refer rather to the key informants' subjective perceptions than to the objective actual state of considered issues. Even though such measurement approach is the most common in management studies [e.g. 27], it is recommended to carry out similar investigation using objective indicators, for example, dynamics of sector turnovers (regarding independent variable) or a number of formally established alliances, clusters, networks, etc. (regarding dependent variable).

### ***14.5.4 Future Research***

In the context of future research, it would be worth to focus on three issues. First of all, it would be interesting to carry out research aimed at identification of possible forms

of cooperation between tourist entrepreneurs. They could be assessed and valued according to the criterion of their usefulness in operating on the market under SE development. In presented research, authors have not developed this issue. Secondly, it would be interesting to indicate—based on future qualitative research—whether and what forms of cooperation are possible to establish between tourism enterprises and other entities providing their services within SE. It seems that such cooperation is already taking place now, for example, between the owners of accommodation facilities renting them to tourists and tourist guides [34]—that issue has not been, however, examined in the literature, so far. Thirdly, it is worth to identify whether there are any tensions in undertaking such a cooperation, for example, between SE and established tourist entities.

## References

1. Allen, D., Berg, C.: *The Sharing Economy. How Over-regulation Could Destroy an Economic Revolution*. Institute of Public Affairs, Australia (2014)
2. Bardhi, F., Eckhardt, G.M.: Access-based consumption: the case of car sharing. *J. Consum. Res.* **39**(4), 881–898 (2012)
3. Belk, R.: Sharing. *J. Consum. Res.* **36**(5), 715–734 (2010)
4. Bloch, M., Segev, A.: The impact of electronic commerce on the travel industry an analysis methodology and case study. In: *Thirtieth Hawaii International Conference on IEEE*, Hawaii (1997)
5. Bonciu, F.: Impact of the sharing economy on the labor market. *Rom. Econ. Bus. Rev.* **11**(2), 43–51 (2016)
6. Botsman, R., Rogers, R.: *What's mine is yours. How collaborative consumption is changing the way we live*. Collins, London (2011)
7. Buhalis, D., Deimezi, O.: E-tourism developments in Greece: information communication technologies adoption for the strategic management of the Greek tourism industry. *Tour. Hosp. Res.* **5**(2), 103–130 (2004)
8. Buhalis, D., O'Connor, P.: Information communication technology revolutionizing tourism. *Tour. Recreat. Res.* **30**(3), 7–16 (2005)
9. Buhalis, D.: Marketing the competitive destination of the future. *Tour. Manag.* **21** (2000)
10. Byrne, B.M.: *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd edn. Routledge-Taylor and Francis Group, London (2010)
11. Costello, A.B., Osborne, J.W.: Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Pract. Assess. Res. Eval.* **10**(7), 1–9 (2005)
12. Czernek, K.: Determinants of cooperation in a tourist region. *Ann. Tour. Res.* **40**, 83–104 (2013)
13. Dawes, J.: Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *Int. J. Mark. Res.* **50**(1), 18–22 (2008)
14. Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., Strahan, E. J.: Evaluating the use of exploratory factor analysis in psychological research. *Psychol. Methods* **4**(3), (1999)
15. Fang, B., Ye, Q., Law, R.: Effect of sharing economy on tourism industry employment. *Ann. Tour. Res.* **57**, 264–267 (2016)
16. Fornell, C., Larcker, D. F.: Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **18**(1), (1981)
17. Frías, M., Rodríguez, M.A., Castañeda, J.A.: Internet vs. travel agencies on pre-visit destination image formation: an information processing view. *Tour. Manag.* **29**(1), 163–179 (2008)
18. Fritz, F., Susperregui, A., Linaza, M.T.: In *Enhancing Cultural Tourism Experiences with Augmented Reality Technologies*, 6th International Symposium on Virtual Reality, Archaeology and Cultural Heritage, VAST (2005)

19. Fuller, C.M., Simmering, M.J., Atinc, G., Atinc, Y., Babin, B.J.: Common methods variance detection in business research. *J. Bus. Res.* **69**(8), 3192–3198 (2016)
20. Fyall, A., Garrod, B.: *Tourism Marketing: A Collaborative Approach*, vol. 18. Channel View Publications (2005)
21. Hair, J.F., Jr, Hult, G.T.M.: *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage Publications (2016)
22. Hjalager, A.M.: A review of innovation research in tourism. *Tour. Manag.* **31**(1), (2010)
23. Iacobucci, D.: Structural equations modeling: fit Indices, sample size, and advanced topics. *J. Consum. Psychol.* **20**(1), (2010)
24. Kline, R.B.: Assumptions in structural equation modeling. In: Hoyle, R.H. (eds.) *Handbook of Structural Equation Modeling*. Guilford Press, NY (2012)
25. Kumar, N., Stern, L.W., Anderson, J.C.: Conducting interorganizational research using key informants. *Acad. Manag. J.* **36**(6), 1633–1651 (1993)
26. Kylänen, M., Rusko, R.: Unintentional cooptation in the service industries: the case of Pyhä-Luosto tourism destination in the Finnish Lapland. *Eur. Manag. J.* **29**(3), 193–205 (2011)
27. Mariani, M.M.: Cooptation as an emergent strategy: Empirical evidence from an Italian consortium of opera houses. *Int. Stud. Manag. Org.* **37**(2), 97–126 (2007)
28. Martin, C.J., Upham, P., Budd, L.: Commercial orientation in grassroots social innovation: insights from the sharing economy. *Ecol. Econ.* **118**, 240–251 (2015)
29. Muner, A.M., Jacobsen, J.K.S.: Motivations for sharing tourist experience through social media. *Tour. Manag.* **4**, 46–54 (2014)
30. O'Brien, R.M.: A caution regarding rules of thumb for variance inflation factors. *Qual. Quant.* **41**(5) (2007)
31. Osborne, J.W., Costello, A.B.: Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Pan-Pac. Manag. Rev.* **12**(2), 131–146 (2009)
32. Pine II, B.J., Gilmore, J.H.: *Welcome to the Experience Economy*. Harvard Business Review, Boston (1998)
33. Podsakoff, P.M., MacKenzie, S.B., Lee J.Y., Podsakoff, N.P.: Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J. Appl. Psychol.* **88**(5) (2003)
34. Sigala, M.: Collaborative commerce in tourism: implications for research and industry. *Curr. Issues Tour.* **20**(4), 346–355 (2017)
35. Szultka, S.: *Klastry w sektorach kreatywnych – motory rozwoju miast i regionów*. Polska Agencja Przedsiębiorczości, Warszawa (2012)
36. Tavakol, M., Dennick, R.: Making sense of Cronbach's alpha. *Int. J. Med. Educ.* **2** (2011)
37. Tsaur, S.H., Wang, C.H.: Personal ties, reciprocity, competitive intensity, and performance of the strategic alliances in Taiwan's travel industry. *Serv. Ind. J.* **31**(6), 911–928 (2011)
38. Tussyadiah, I.P., Pesonen, J.: Impacts of peer-to-peer accommodation use on travel patterns. *J. Travel Res.* **55**(8), 1022–1040 (2016)
39. Winterhalter, S., Wecht, C., Krieg, L.: Keeping reins on the sharing economy: strategies and business models for incumbents. *Mark. Rev. St. Gallen* **32**(4), 2–39 (2015)
40. Wójcik, D., Czernek, K.: Kreatywność i twórcze współdziałanie w sektorze turystycznym. *Stud. Prace Kol. Zarz. Finans./Szk. Gł. Handl.* **161**, 187–197 (2018)
41. Yong, A. G., Pearce, S.: A beginner's guide to factor analysis: focusing on exploratory factor analysis. *Tutorials Quant. Methods Psychol.* **9**(2), (2013)
42. Zapata, M.J., Hall, C.M.: Public-private collaboration in the tourism sector: balancing legitimacy and effectiveness in local tourism partnerships. The Spanish case. *J. Policy Res. Tour. Leis. Events* **4**(1), 61–83 (2012)
43. Zervas, G., Proserpio, D., Byers, J.: The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *J. Mark. Res.* **54**(5), 687–705 (2017)