

Assisting Tourism Supply Chain Performance in Thailand through Big Data Analytics: Moderating Role of IT Capability

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Abstract- Oxygen of Thailand's economy is its tourism industry which has also geared up all related sectors too. Country is making a lot of efforts to achieve sustainable tourism supply chain performance through Big Data Analytics (BDA) as without BDA, it was never possible to move towards sustainability for such a big industry. However, IT capability seems a missing piece in some cases which can decrease the effectiveness of BDA dimensions. Author has aimed to analyze the impact of BDA planning, investment, coordination and control on sustainable tourism development in moderating role of IT capability. Sample was consisted of those hotels and hospitality industry units which already have BDA system in operational phase and their employees were surveyed through questionnaire and responses were then analyzed on SPSS and AMOS for hypotheses testing. Results have enlightened that BDA dimensions have significant positive impact on sustainable tourism supply chain performance while IT capability was also found as positive and significant moderator too. None of the previous studies have taken IT capability as moderator but this originality in this study has long lasting implications for tourism and manufacturing industry to induce IT capability in their organizations to achieve sustainability.

Keywords: Big Data Analytics, BDA Planning, BDA Investment, BDA Coordination, BDA Intelligence, IT Capability and Sustainable Tourism Supply Chain Performance.

1. Background

Nowadays tourism became an industry for any country. Now countries are doing great investment in its tourism sector. Tourism sector enhances the positive image of any country. Countries advertise their beautiful scenes within their boundaries and attract international tourist to visit those scenes. Big data analytics helps a lot in increasing the tourism supply chain performance. With the help of big countries can solve the issues regarding market trends, customer preferences, and other things related to tourism [1]. Big Data analytics provide reliable information to its related people or authorities through they can do a reasonable arrangement for the improvement of their tourism industry. IT capabilities are now the backbone of any country [35]. Which country has better and advanced

IT capabilities, they can do more from the rest of others, IT helps a lot in enhancing the industry of tourism in Thailand [2]. Through IT Thailand has secured a good grade and image with respect to tourism that is why every year people in large numbers visits Thailand and its beautiful views which are being advertised every season through their strong IT capabilities around the world. This study focused on the relationship between big data analytics and tourism supply chain performance.

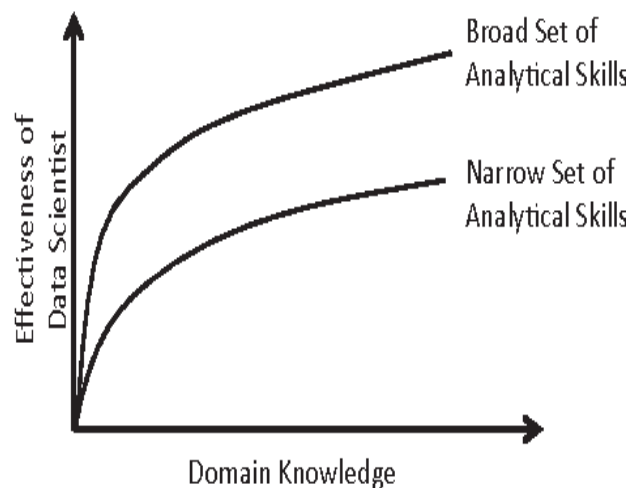


Figure 1. Improvement in data analytics with implementation of big data system.

As, figure no.1 is showing the betterment in the data maintaining systems using big data analytics. The focus is also to have knowledge about the moderating impact of the IT capabilities between big data analytics and supply chain performance. This study defined clearly the problems and gave solutions to the problems stated in the paper. In the past, there is a significant impact between these variables, now the study is going to happen to know that the impact was positive and significant or not. This problem is global. This is the problem for any country whose focus is to grow their economy and tourism helps a lot in growing the economy of any country. This problem is not relating to Thailand, this is the problem of today's world. Many developed countries are doing their best to maximize their tourism because they know without

tourism, they are none[3]. Tourism enhances the beauty of their country. This problem must be solved, and the tourism industry must be flourished. A great investment is being done to attract people to visit different countries. This study will help the people to know about the relationship and impact of big data analytics on tourism supply chain performance and the moderating IT role between these two variables. This study is completed with the aim to know about the significant relationship between big data analytics and tourism supply chain performance[4]. The study has the aim to know the, moderating impact of information technology capabilities between big data analytics and tourism supply chain performance. This study is going to conduct in Thailand by selecting and gathering data from some hotel, and restaurant of Thailand. This study is very important for the countries and authorities who want to increase their tourism and build an industry for tourism. This study will help them to have knowledge about the different variations which may cause the betterment of the tourism industry and which can be proved beneficial for the country [5]. This study will significantly and in a good way contribute to the literature. This study will also enhance the literature material on the internet. This study will help the countries who have a concern regarding this problem, and they can get benefits through this study and enhance the capabilities of IT and they can also use the big data analytics in order to improve the tourism industry. This study will significantly contribute to the government level. The authorities can make policies after analyzing this paper and they can take positive steps in order to improve tourism [6]. In the past, such types of study have no longer positive impacts between tourism supply chain performance and big data analytics and they did not use mediating or moderator variable to know the impact on these two variables. This study will see the moderating effect of IT on supply chain performance and big data analytics. This study is different from others. This study clearly defined the problem statement first and then gave its solution and stated different relationship which affects the tourism supply chain performance in positive ways [7].

2. Literature review

2.1 Social Network Theory

Rosenberger, et al. [8], explain the implications of Social Network Theory (SNT) under the prominent conditions of supply chain management, integration and performance. Social network usually corresponds with the changing social behavior and changing environmental conditions that benefit the change in organization performance [36]. Social network is based on the network that connects one variable to another or one object to another under the changing perspectives and changing capabilities. Liu, et al. [9] Social network basically looks forward to behavioral and social aspects of many different developing or existing relationships types that includes, firm-firm, individual firm, and individual-individual relationship. Social network also includes individual and society relationship that also includes many societal activities, participations, discussions and different societal

based programs. This theory [10] helps to analyze these relationships that form a whole combination of a network including different perspectives, thoughts, feelings, behavior, attitude and departments of interest. These relationships depend upon technical, financial and social elements that consider the value of individual belief as well as societal beliefs.

2.2 BDA planning and its impact on sustainable tourism supply chain performance

According to Carr, et al. [11], related to supply chain performance (SCP) or sustainable tourism, it is investigated that tourism and its researches has been extended to include supply chains management along with the function of dynamic capabilities. However, sustainable tourism has grasped the attention of many cross borders trade or trade inside the countries. Tourism supply chain value and rate both are increasing day by day with the increase in global trade performance and other dynamic capabilities [35]. Din [12], explains the struggle behind the development of tourism supply chains which further needs to improve with time and become more sustainable with the supply chain performance. Therefore, to confirm the sustainability of tourism SCP, authors [13] have suggested about the dynamics of BDA planning in the field of tourism. BDA planning enhances the price competitions and customer attraction along with reasonable price discounts and quantity flexibility contract which further enhances tourism SCP. Theorists [14], involves the role of social network theory that majorly defines the capabilities of BDA planning which directly influences the stages of making tourism SCP more sustainable. Thus, the following hypothesis is proposed:

H1: BDA planning has a significant impact on sustainable tourism supply chain performance.

2.4 BDA investment and its impact on sustainable tourism supply chain performance

Big data Analytics deals with the sustainable tourism supply chain performance with the help of dynamic capabilities and supply chain management. Researchers like Edgell Sr [15], believe that studies that were conducted in various Asian Countries that explores the current state of sustainability tourism supply chain management using social network and contingency approach, to develop a framework of sustainable strategies and dynamic approaches regarding the financial investment made by different organizations and companies. However, these strategies and approaches explore and confines several ways to develop sustainability tourism along with SCP. According to a research study [16], tourism arrivals to reach 1.8 billion by 2030 in different countries of the world. For that purpose tourism industry has to grow with full speed to accommodate huge number of tourists, they need to renew or regularize their policies on regular basis because of which tourism sustainability can be attained. Due to increase in tourism industry BDA investment attracts more and more tourists because it provides a financial

support to the relevant industry. Though, studies [17] consider that BDA investment has a potential to create long term values and achievements for sustainable tourism SCP. Thus, the following hypothesis is proposed:

H2: BDA investment has a significant impact on sustainable tourism supply chain performance.

2.5 BDA Coordination and its impact on sustainable tourism supply chain performance

As per studies by Singh and Trivedi [18], related to the performance and validity of BDA coordination that is developing different coordination between developed Countries and among different entities. However, BDA has a prominent role to play in ensuring sustainable performance of the tourism supply chain through the influence of enhanced coordination. Social network approaches and contingency strategies also play its role in the development of BDA coordination system that highly influences the value of sustainability including the factors behind supply chain performance of tourism. Recent researches [19], analyzes the analytic capabilities of big data in three specific areas like: infrastructure, flexibility, management and personal expertise. These key areas enhance the business performance related to different industries such as like, manufacturing, tourism, infrastructure and many others. Many studies [20] argue, about the sustainability of tourism that efficient tourism SC management and performance requires effective and efficient coordination, collaboration and maintenance that should be aided by BDA management or BDA coordination process. Thus, the following hypothesis is proposed:

H3: BDA coordination has a significant impact on sustainability tourism supply chain performance.

2.6 BDA Control and its impact on sustainable tourism supply chain performance

Babu, et al. [21] suggest the relationship between BDA control and sustainable tourism supply chain performance. However, studies believe that BDA control is necessary for controlling the amount of tourists present in an area. BDA control influences the role of sustainable tourism SCP that owes its performance to many working units like, hotels, restaurants, travel agents, insurance agents and many others. Previous studies [22], elaborated the effect of information system as well as performance capabilities that would further affect the role of tourism SCP. Therefore, BDA control is considered one of the key entities for ensuring the sustainability tourism SCP with the help of BDA control. Masa'deh, et al. [23], believe that BDA control capabilities aim to have suitable control over operations through suitable deployment of analytics. This type of deployment ensures the consistency of sustainability that is related to tourism SCP. However, BDA control has to figure out appropriate ways through which it can highly maintain the sustainability of tourism industry as well as its SCP. Thus, the following hypothesis is proposed:

H4: BDA control has a significant impact on sustainability tourism supply chain performance.

2.7 Moderating Role of IT capabilities between BDA planning and sustainable tourism supply chain performance

As per researchers like Jeble, et al. [24], IT capabilities play a role of the moderator between two important variables in this literature, BDA planning and sustainable tourism SCP. However, authors [25] suggest that BDA planning capability aims to create appropriate planning horizons, dimensions and dynamics for implementing the latest information technology (IT) infrastructure to support analytics capabilities across the application of SC. Technology orientations of tourism SCP would definitely play an important role ensuring the success of the implications by BDA planning [26] including BDA management capabilities. IT capabilities however, summarize the effect of BDA planning on the role of sustainable tourism SCP. Therefore, theoretical base implications also suggest the development of IT capabilities that can enhance both of its related variables. Thus, the following hypothesis is proposed:

H5: IT Capabilities has a significant moderating role between BDA planning and sustainable tourism supply chain performance.

2.8 Moderating Role of IT capabilities between BDA investment and sustainable tourism supply chain performance

IT capabilities play a moderator role between BDA investment and sustainable tourism SCP. Singh, et al. [27] demonstrates the value of BDA investment with the deployment of IT capabilities that further aims to influence SCP. However, technology interventions in different firms, organizations and industries usually determines the degree to which firms are motivated enough to adapt emerging technology to generate the operations of BDA investment [28] to further gain the desired outcomes as per perceived by installing latest technology in the tourism industry that would improve the efficiency of SCP and sustainability. Thus, the following hypothesis is proposed:

H6: IT capabilities have a significant moderating role between BDA investment and sustainable tourism SCP.

2.9 Moderating Role of IT capabilities between BDA coordination and sustainable tourism supply chain performance

Lipton, et al. [26], explain the theoretical and conceptual evidences regarding the formulation of IT capabilities within the field of different industries especially in the tourism industry. It further highlights the functions and practices regarding BDA coordination and collaboration that affects the sustainable performance of tourism. Analytics [29], explores the idea of business coordination and BDA management capabilities that aims to stabilize the effect of IT capabilities to enhance the domain related to tourism and supply chain performance. Therefore, to make IT capabilities a prominent unit in a business environment it has to connect itself with BDA coordination system and gaining of sustainability of performance for tourism industry. Thus, the following hypothesis is proposed:

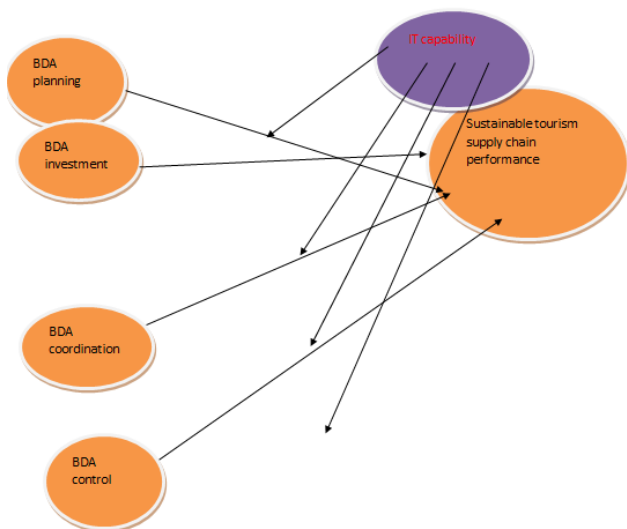
H7: IT capabilities have a significant moderating role between BDA coordination and sustainable tourism SCP.

2.10 Moderating Role of IT capabilities between BDA control and sustainable tourism supply chain performance

According to past studies by Jeble, et al. [24], that explains the performance of IT capabilities which has the capacity to adapt itself with the environmental changes through contingency planning and development of social network that bring changes in the environment with the help of latest technology that acts as a moderator and a modifier between BDA control and sustainable tourism SCP. Akter, et al. [25] IT capabilities deals with resources and capabilities that responds to the changing environment, but all these resources are due to the efficiency of control system of BDA that further influences the role sustainable performance of tourism SC. Thus, the following hypothesis is proposed:

H8: IT capabilities have a significant moderator role between BDA control and sustainable tourism SCP.

Model:



3. Methodology

3.1 Population and Sample Selection Criteria

This research study has been accompanied in order to observe the role of big data analytics such as big data planning, investment, coordination and big data control in tourism supply chain performance, in mediating role of IT capability. Researcher has been selected the Thailand as a population of this research study because Thailand is located in southern Asia and have many tourism spots due to which the tourism industry is very established in Thailand. Researcher collect the data from the hotels and resorts of three cities of Thailand such as Bangkok, Phuket and Chiang Mai. Moreover, managerial employees have been selected as responded in order to examined the role of big data analytics and IT capability in tourism SCs by using stratified random sampling technique in order to maintain the balance in the collected data from these three cities. Further, sample size has been selected by

implementing the formula suggested by (Klein, 2015) for the calculation of sample size which states that number of questions*10 provide with the accurate sample size. 350 questionnaires have been distributed among the respondents, after the whole data collection procedure 301 responses has been collected. After the deletion of invalid responses, researcher considered 301 responses valid.

3.2 Data Collection Procedure

Questionnaire has been used as data collection method in this quantitative research study. All the items of structured questionnaire must fully illustrate the purpose of research study. Pilot study has been accompanied in order to check whether respondents understood clearly all the research items or not understand. For this purpose, 30 respondents have been selected out of whole sample in order to collect the feedback. Afterwards, content validity of scale has to be checked as the researcher used previously administered scale in questionnaire. So, the content validity has been ensured by collecting feedback from industrial practitioners and from other authors. Moreover, questionnaire has to be in Thai language in order to collect the data from the employees of Thailand companies. Online questionnaire method has been used in order to administered questionnaire.

3.3 Measurement Model

Reliability has been analyzed by SPSS and criteria to examined that includes, one is Composite reliability and its threshold range is greater than 0.70 because satisfactory level of internal consistency has been achieved at above 0.70 (Hair et al., 2010). Second one is Cronbach's α which has to greater than 0.70, because desirable level of items reliability has been attained at above 0.70 (Hair et al., 2010). Coming towards validity, convergent validity has been assessed by observing the criterion which states that average variance extracted has to be greater than 0.50 because its values were stronger at above specified limit 0.50 (Fornell and Larcker, 1981). On the other hand, discriminant validity has been analyzed by observing the criterion which entails that when square root of AVE compared with all other correlated coefficients of remaining constructs, its values have to be greater (Fornell and Larcker, 1981).

Harman's single factor test has been accompanied in order the checked the presence or absence of common bias in the research study. If the same measures used by respondents that provided by common rater (Podsakoff et al., 2003) for explanatory and dependent variables then risk of common bias has been observed. All the variance of study such as IT capability, tourism supply chain performance and big data analytics have been included in the test. Researcher tested whether single factor used for accounting of 50% of variance or not used. According to test results, only 19% of variance accounted for by single factor and 92% of variance accounted for by factors solution. Hence, it has been proved that research study has not been observed common bias method.

3.4 Hypothesis Testing

Hypothesis testing has been performed by structure equation modeling and it has been runs on AMOS. Path

analysis of structure model has been performed under SEM. Hypotheses have been tested under this approach are role of big data analytics in tourism supply chain performance, in mediating role of IT capabilities. In path analysis, two steps have been performed, first one is to check standardization of the path and second step is to checked significance of influenced path. Afterwards, researcher reported that which hypothesis has been accepted or which has been rejected.

3.5 Measures

BDAP, BDAI, BDACo, BDACon were assessed by the scales developed by Monique (1999), T. Vallerie (1999) and Diyako (1993) respectively, four items were taken for all of these and measured on a five-point Likert scale. ITC was measured by the scale developed by Cheng in 1998 on IT and five items were taken on a five-point Likert Scale. STSCP was measured taking 4 items on five-point Likert scale using scale developed by Xuejun Cui (1998).

4. Empirical results

4.1 Demographical Results

The purpose of the study was to know the impact of BDA planning, BDA investment, BDA coordination and BDA control on Sustainable tourism supply chain performance with the moderating role of IT capability. A self-administered questionnaire was used to collect data from 350 respondents out of which 301 responses were adequate for analysis. In this study 124 males and 177 females participated. 23 of respondents were graduates, 146 respondents were post graduated, 122 respondents had done masters and only 10 respondents had other degrees. 248 respondents were of age range of 21 to 30 years, 42 of respondents were of age range of 31 to 40 years, 9 respondents were of age range 41 to 50 years and only 2 respondents were of age more than 50 years.

4.2 Suitability of the data

Suitability is tested by the KMO test by using SPSS:

Table 1. KMO and Bartlett's Test

More than .60 the value of KMO is considered a good fit for data suitability of data for major analysis, now the current value is .942 is more reliable and good fit.

4.3 Convergent and Discriminant Validity

Discriminant validation of the data is required to judge the multicollinearity of the data, while convergent validity is required to analyze the internal consistency of the constructs.

Table 2. Convergent and Discriminant Validity

	C	A	M	Max	S	L	C	C	I	IT
	R	V	S	R(H	T	E	O	O	N	C
		E	V)	P	A	O	N	V	
S	0.	0.	0.	0.95	0.					
T	95	74	36	5	86					
P	2	1	5		1					
L	0.	0.	0.	0.97	0.	0.				
E	93	79	37	4	60	89				
A	8	2	2		4	0				

C	0.	0.	0.	0.97	0.	0.	0.			
O	89	68	50	9	55	39	83			
O	9	9	1		6	0	0			
C	0.	0.	0.	0.98	0.	0.	0.	0.		
O	93	73	37	4	57	61	50	85		
N	3	5	2		1	0	8	7		
I	0.	0.	0.	0.98	0.	0.	0.	0.	0.	
N	94	76	37	7	52	61	43	52	87	
V	3	8	2		1	0	8	6	6	
IT	0.	0.	0.	0.98	0.	0.	0.	0.	0.	0.
C	89	74	50	9	49	37	70	49	44	86
	9	8	1		8	7	8	5	2	5

Discriminant validity is checked by seeing the CR and AVE value. If the CR is greater than .70 and AVE is more than .50 then, the validation is confirmed. The current findings show that all variables have CR more than, 0.70 and value of AVE is also greater than .50 for all constructs. Other remaining parts of the table prove the convergent validity of each construct because all variables have more value for themselves as compared to others.

4.4 Confirmatory Factor Analysis

CFA is the test which provides the ultimate indicators to assess the fitness of the research model. The following are the outputs and threshold values of test assessing the model fitness:

Table 3. CFA

Indicators	Threshold range	Current values
CMIN/DF	Less or equal 3	1.896
GFI	Equal or greater .80	.870
CFI	Equal or greater .90	.961

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.942
Bartlett's Test of Sphericity	Approx. Chi-Square	7876.512
	df	378
	Sig.	.000

IFI	Equal or greater .90	.962
RMSEA	Less or equal .08	.055

Here, CMIN is less than 3, GFI is greater than .924, CFI is greater than .90, IFI is greater than .981 and RMSEA is less than .80. So, the table 4 is showing that the indicators lie in the valid range so the data is good to go. Screenshot of CFA is given below:

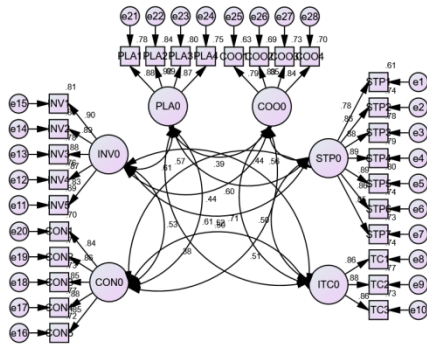


Figure 2: CFA

4.5 Structural Equation Modeling

Table 4. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
SusTS	<-	BDA_	.322	.0	5.6	**	par_7
CPer	--	Plan		53	38	*	
SusTS	<-	BDA_I	.111	.0	2.0	.0	par_8
CPer	--	NV		53	89	37	
SusTS	<-	BDA_	.285	.0	5.7	**	par_9
CPer	--	Coo		49	97	*	
SusTS	<-	BDA_	.172	.0	3.1	.0	par_10
CPer	--	Con		55	09	02	

According to SEM, BDA_Plan has a 32% impact on SusTSCPer, this means that with every 1 unit increase in BDA_Plan there will be a 32% increase in SusTSCPer. According to SEM, BDA_INV has a 11% impact on SusTSCPer, this means that with every 1 unit increase in BDA_INV there will be a 11% increase in SusTSCPer. BDA_Coo has a 28% impact on SusTSCPer, this means that with every 1 unit increase in BDA_Coo there will be a 28% increase in SusTSCPer. BDA_Con has a 17% impact on SusTSCPer, this means that with every 1 unit increase in BDA_Con there will be a 17% increase in SusTSCPer.

4.6 Moderation Analysis

With the help of structural equation modeling, two-way interaction was obtained to check out the moderating effect of IT capability on the relation of BDA planning, BDA investment, BDA coordination and BDA control with Sustainable tourism supply chain performance. Results are showing that IT capability significantly moderates the relationship between BDA planning, BDA investment, BDA coordination and BDA control and Sustainable tourism supply chain performance which can be seen in the following figure:

Moderation 1

Table 5. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
ZSusTS	<-	ZBDA_	.484	.0	10.2	**	par_1
CPer	--	Plan		47	82	*	
ZSusTS	<-	IT_Cap	.281	.0	6.48	**	par_2
CPer	--			43	5	*	
ZSusTS	<-	PlanITC	.067	.0	1.65	.0	par_3
CPer	--	_int1		40	1	99	

ZBDA_Plan has 48% impact on ZSusTSCPer, IT_Cap has 32% impact on ZSusTSCPer and PlanITC_int1 has 8% impact on ZSusTSCPer.

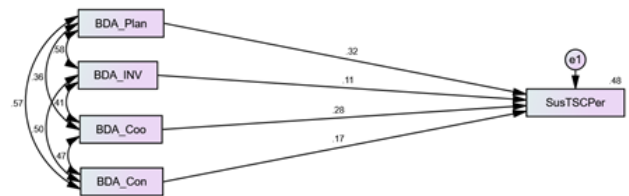


Figure 3. SEM

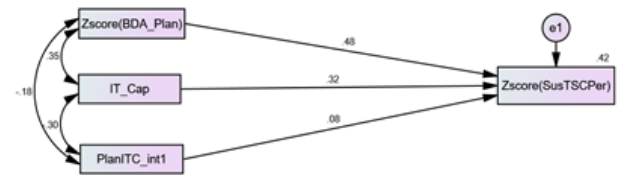


Figure 4. Moderation 1

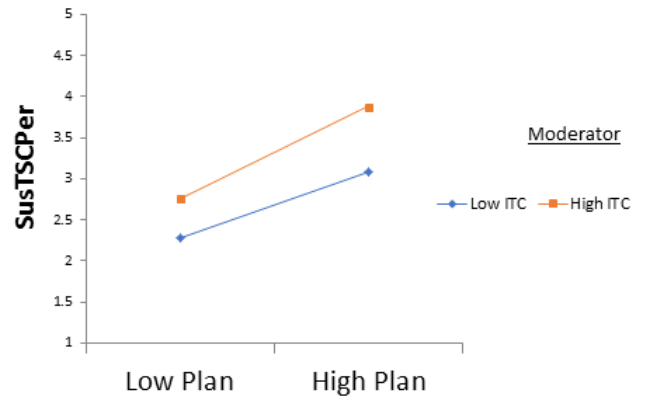


Figure 5. moderating relationship between BDA planning and Sustainable tourism supply chain performance

Moderation 2

ZBDA_INV has a 35% impact on ZSusTSCPer, ZIT_Cap has a 28% impact on ZSusTSCPer, InvITC_int1 has a 10% insignificant impact on ZSusTSCPer according to the table below:

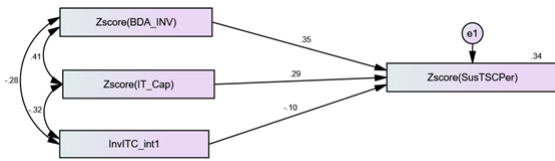


Figure 6. Moderation 2

Table 6. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
ZSusTS CPer	<-	ZBDA_INV	.350	.052	6.689	**	par_3
ZSusTS CPer	<-	ZIT_Cap	.285	.053	5.382	**	par_4
ZSusTS CPer	<-	InvITC_int1	-.091	.044	-2.077	.038	par_5

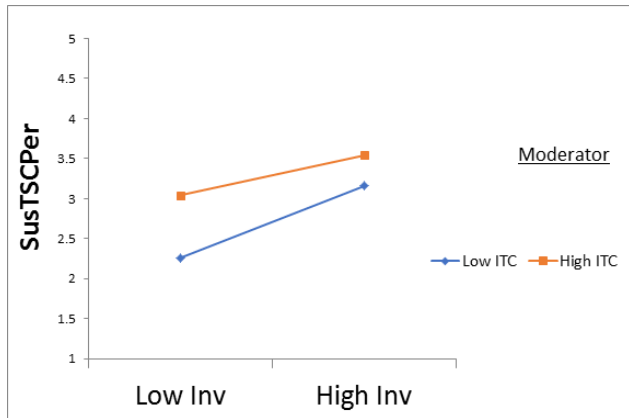


Figure 7. moderating relationship between BDA investment and Sustainable tourism supply chain performance

Moderation 3

ZBDA_Coo has a 37% significant and positive impact on ZSusTSCPer, ZIT_Cap has a significant impact of 17% on ZSusTSCPer and CooITC_int1 has a 12% negative and significant impact on ZSusTSCPer

Table 7. Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
ZSusTS CPer	<-	ZBDA_Coo	.366	.063	5.832	**	par_1
ZSusTS CPer	<-	ZIT_Cap	.171	.066	2.609	.009	par_2
ZSusTS CPer	<-	CooITC_int1	-.112	.052	-2.137	.033	par_3

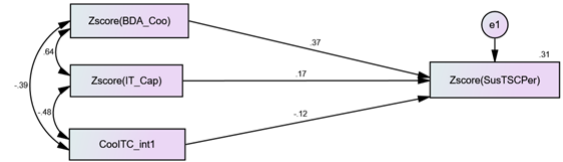


Figure 8. Moderation 3

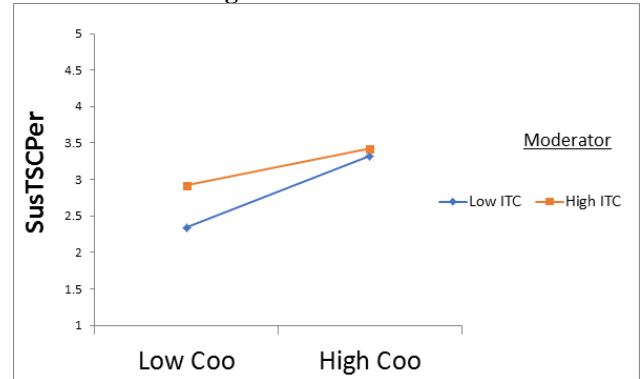


Figure 9. Moderating relationship between BDA coordination and Sustainable tourism supply chain performance

Moderation 4

ZBDA_Con has a 46% significant impact on ZSusTSCPer, ZIT_Cap has a 37% significant impact on ZSusTSCPer, ConITC_int1 has a 27% significant impact on ZSusTSCPer.

Table 8. Moderation 4

			Estimate	S.E.	C.R.	P	Label
ZSusTS CPer	<-	ZBDA_Con	.457	.050	9.082	*	par_4
ZSusTS CPer	<-	ZIT_Cap	.364	.053	6.931	*	par_5
ZSusTS CPer	<-	ConITC_int1	.274	.041	5.513	*	par_6

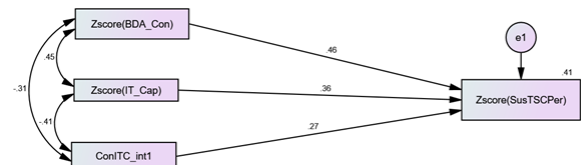


Figure 10: Moderation 4

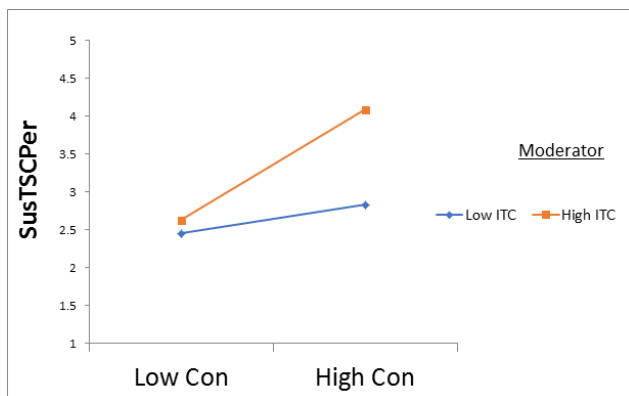


Figure 11: Moderating relationship between BDA control and Sustainable tourism supply chain performance

5. Discussion and Conclusion

5.1 Discussion

The key propose of this study was to know about the connection between BDA Planning (BDAP) and Sustainable Tourism Supply Chain Performance (STSCP) [30]. The purpose was also to know about the relationship between BDA Investments (BDAI) and STSCP. Another determination was also to know about the impacts of BDA coordination (BDAC) on STSCP. Another objective was to know about the association between BDA Control (BDACL) and STSCP. The aim was to know about the moderating role of IT Capability (ITC) between BDAP and STSCP. The aim was also to know about the moderating role of ITC between BDAI and STSCP. This study has the aim to know about the moderating role of ITC between BDAC and STSCP. Another aim of this study was to know about the moderating role of ITC between BDACL and STSCP. This study also suggested some hypothesis the first hypothesis suggested that BDAP has a significant and positive impact on STSCP. This hypothesis was accepted. According to the study "Samuel Fossa," it is proved that there is a significant impact of BDAP on STSCP[31]. The second hypothesis stated that the impact of BDAI on STSCP is significant. This hypothesis was also accepted. "Angappa Gunasekaran" in his study suggested that the relationship between BDAI and STSCP is positive. The hypothesis number third suggested that the impact of BDAC on STSCP is significant. This hypothesis was accepted as well. "Shahir Akter" stated that in the research that the impact is positive between BDAC and STSCP. The fourth hypothesis stated that the impact of BDACL on STSCP is positive. This hypothesis is accepted as well. Researchers recommended that due to the BDAC is performance agility is increased. The fifth hypothesis recommended that ITC significantly and positively moderates between BDAP and STSCP. This hypothesis was accepted as well. As per the study of "Rameshwar Dubey," the role is moderating of ITC between BDAP and STSCP. The hypothesis number sixth suggested that ITC significantly moderates between BDAI and STSCP. The hypothesis is accepted. "Anagappa Gunasekaran" recommended that the ITC enhanced the performance of the relevancy and collaboratively improved the sustainability[32]. The seventh hypothesis stated that the moderating role of ITC is positive between BDAC and STSCP. This hypothesis is

accepted. "Stephen J Child" ITC increased the supply chain performance and resulted in a positive relationship between BDAC and STSCP. The last hypothesis stated that the moderating role is positive between BDACL and STSCP. This hypothesis is accepted as well. According to the "Omer Anfalo" the moderating role positive and significant[33].

5.2 Conclusion

This study is completed with the aim to have a deep insight into the association between BDAP and Scopate aim was also to know about the relationship between BDAI and STSCP, to know about the BDAC and STSCP, and between BDACL and STSCP. This study was conducted with the aim to have knowledge about the moderating role of ITC between BDAP and STSCP, between BDAI and STSCP, between BDAC and STSCP, and between BDACL and STSCP. This study was conducted in Thailand. The data for the study was collected from the hotels, tour operators, and restaurants in Thailand. 350 people were selected from these sectors as a sample and 301 responses were valid.

5.3 Implications of this Study

This study contributed to literature. It enhanced the literature material. The students can have deep insight into this research about the problem discussed above. This study has significantly contributed to practically. People related to the field of tourism can get beneficial ideas and suggestion for the betterment.

5.4 Limitations and Future Research Indications

The sample size was small future researchers can enhance the sample size. This study is completed within Thailand this study can be conducted outside Thailand. More than one data collection tools can be used for gathering the data.

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