

Technological Capability Factors For Creating Success Of E-Business And Customer Values

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Abstract

This study aimed at evaluating the technological capability factors for creating e-business success. The factors are critical position of technological capability to support the quality of accounting information systems (AIS) in hospitality sector in Indonesia for achieving a success of e-Business in delivering impacts on customer values. The unit of analysis investigated in this work included hotels in Bandung, which has been recognized as one of the country's major tourist destinations. During data gathering, collected samples consisted of 64 respondents and 36 star hotels. Data were analyzed and processed by applying Structural Equation Modeling (SEM) method with bootstrapping (sample < 100). Besides, this research utilized LISREL 9.1 for statistical analyses. Looking at the results, the "Technological Capability supporting the Quality of AIS" variable was discovered to impact the "e-Business Success" variable. In other words, technological capability in supporting AIS quality will result in the success of an e-Business. Meanwhile, technological capability in supporting AIS quality is possible to get enhanced through the integration of business processes, management of information technology and hotels' e-Business systems as well as infrastructure, in which both will then enhance the Success of e-Business-applying Hotels and increase Customer Values for hospitality industry in Bandung, Indonesia.

Keywords: *Technological Capability, e-Business Success, Customer Values, Hotels.*

1 Introduction

In today's digital business era, the number of active internet users have been growing in Indonesia. Despite offering new opportunities for e-Businesses, it has also raised emerging challenges threatening e-Business of the country's hospitality sector. Among others, major challenges encountering by the sector include the existence of Airbnb portal. In general, Airbnb is known as being a pioneering lodging marketplace that offers overnight stays in various kinds of places, including private houses, apartments, yachts, castles, private islands, igloo, cars, tree houses, etc. For example, it has been impacting Natour Hotel, which is experiencing an averaged 61% decline in 42 hotels within their business network, while existing hotels have started to oversupply. In fact, however, Airbnb has not been legally included as a registered business let alone paying taxes. According to its statistics, Airbnb has been offering accommodations in no less than 34,000 cities and 191 countries (Fadian, 2017)[1]. Therefore, it is a challenge for the e-Business of hospitality sector to succeed and compete with Airbnb.

The foundation of this study lies upon prior works by Eikebrokk and Olsen (2007)[2] and Saeed et al. (2005)[3]. Eikebrokk and Olsen (2007) have shown strategic factors of an e-business, including vision and strategy; technological capability supporting the quality of accounting information system (AIS); and e-Business knowledge influencing the success of e-Business of small and medium enterprises in the European region.

Meanwhile, Saeed et al. (2005) have shown e-Commerce competence to influence corporate performance on consumer values in a number of e-Commerce businesses in various countries, including Thailand, Pakistan, Denmark and the United States.

Looking at current phenomena, many hotel businesses have begun to transform their services to e-Business due to highly competitive hospitality service markets. In fact, it is supported by the results of previous studies by West (1997)[4], Wang et al. (2015)[5], Nahar et al. (2006)[6], and Marius and Alexandru (2007)[7]. West (1997) has suggested the use of both internet and intranet through an enhanced information technology (IT) infrastructure to increase the success of e-Business hotels. Meanwhile, Wang et al. (2015) have proven the quality of hotel websites to influence the intensity of online hotel booking and e-trust as mediating variables. Nahar et al. (2006) have shown IT to help achieve the success of an e-Business by improving its corporate performance. Then, Marius and Alexandru (2007)[7] have discovered IT to serve as an electronic integration tool for organizations that affects the success of e-Businesses. Therefore, it is necessary to empirically investigate technological capability in supporting AIS quality towards the success of e-Business and its impact on corporate performance on customer values.

2 Literature Review:

A. The Success of e-Business

In general, businesses relate directly to the corporate system of business partners. Those vendors may include office equipment providers, or service companies providing complete business processes to ensuring data availability for management, analysis of purchases, etc. (Gelinis et al., 2018) [8]. In particular, Mariga (2003)[9], Perera et al. (2017)[10], Lientz and Rea (2001)[11] and Manuela and Cunha (2011)[12] have defined e-Business as the implementation of business process activities that heavily use IT in the form of internet (or electronic media) to support transactions.

The success of e-Business refers to the potential added values from the creation of an e-Business (Andersen et al., 2003 [13]; Eikebrokk and Olsen, 2007[14]). Then, Viehland (2000)[15] has suggested the success of e-Business in the form of being able to achieve several important things related to how a company uses e-Business.

B. Accounting Information System (AIS)

Mulyani (2017)[16], Romney et al. (2015)[17], Wilkinson et al. (2000)[11], Bodnar and Hopwood (2014)[18], Richardson et al. (2014) [19] and Hurt (2008)[20] have defined AIS as subsets of resources (e.g., human, equipment, hardware, software and networks) that interact harmoniously to process financial documents or data into financial information using IT as a tool for making relevant decisions. The ability of IT has hence become an inherent thing and a major supporter of AIS in various forms, including software, hardware and networks.

C. Technological Capability supporting AIS Quality

Technological Capability has been known to require considerably expensive cost to develop new products or technologies. To build competitiveness in the market, any company seeks to utilize shared resources and competencies they have had and combine them for accelerating the development of unique products or technologies. However, building competitiveness is not easy and typically involves high costs and risks (Gynawali and Park, 2009)[21]. Basically, technological innovation of a company is based on the capabilities of in-house technology and is supported by work training at home as an ongoing process

(Subrahmanyam, 2009)[22]. Fitriati and Mulyani (2015)[23] have stated several factors influencing the success of AIS, including organizational commitment and culture that support the use of IT to support strategic decision making. Then, Nurhayati and Mulyani (2015)[24] have suggested system development and commitment from top management to have a positive effect on the successful implementation of AIS.

D. The Effect of Technological Capability as Supporting AIS Quality on E-Business Success

The influence of IT capabilities supporting AIS quality has been suggested by West (1997)⁵. In particular, the work stated the use of the internet and intranets on well-implemented IT infrastructure to increase the success of e-Business-applying companies in the hospitality sector. Meanwhile, Wang et al. (2015)⁶ have noted the quality of hotel websites, which influences the intensity of online booking, and e-trust as mediating variables. Besides, Nahar et al. (2006) has proposed IT to help achieving the success of e-Business for improving corporate performance. Then, Marius and Alexandru (2007) have discovered IT to serve as an electronic integration tool for organizations, affecting the success of e-Business-implementing companies.

Hypothesis 1: Technological Capability supporting AIS Quality has a positive effect on e-Business success

E. Effect of e-Business Success on Company Performance at Customer Values

Artishchev and Weigand (2005)[25] have suggested e-Business transactions to be aiming at achieving certain business objectives that have been determined by internet-based trends and technology. Electronic transactions on business and goods/services payment exchanges (transactions in the economic sense), including their execution, are typically governed by several legal frameworks. Determination of transaction purpose, establishing business criteria, composition, etc. before execution of a transaction is outside the scope of the proposed model. Besides, analysis performance, function adjustments, etc. are not part of a transaction. In other words, this study took positioning of electronic transactions in a business as being in accordance with business objectives that are applied and enabled to improve corporate business performance. By implementing e-Business, more real time updates will reflect the success of electronic business transactions, improving overall company performance. Mulyani et al. (2016)[26] have shown that the success of using an e-Business-based AIS has a positive effect on a company's financial performance.

Looking at the results of previous studies shown by Artishchev and Weigand (2005)[25], the success of e-Business-based transactions will improve financial performance and corporate income. Meanwhile, Kobelsky, Hunter and Richardson (2008)[27] have suggested the success of e-Business supported by IT will improve the corporate financial performance. Besides, Koellinger (2008)[28] has suggested internet-based technology to improve business performance and corporate financial performance. Then, Saeed et al. (2005)[29] have discovered e-Commerce competencies to demonstrate the success of e-Business, affecting customer values and company performance.

Hypothesis 2 :e-Business Success has a positive effect on Company Performance at Customer Values

Hypothesis 3 :Technological Capability supporting AIS Quality has a positive effect on Company Performance at Customer Values

Hypothesis 4 :Technological Capability supporting AIS Quality has a positive effect on Company Performance at Customer Values through e-Business Success

3 Methodology:

A. Research Methodology

The object of research in this work was the Technological Capability to support AIS Quality, e-Business Success and Company Performance at Customer Values. This study employs Structural Equation Modeling (SEM) in LISREL 9.1 to test the model. In terms of approach, this study uses a quantitative approach, in which data analysis was calculated statistically to establish discussions and conclusions (Sugiyono, 2010)[30]. Meanwhile, descriptive and explanatory research methods were also employed to, as suggested by Sekaran and Bougie (2013[30], obtain a direct description, systematic description, factual, characteristics and relationships between variables being investigated.

B. Population and Samples

The questionnaire was distributed to a total of 100 four- and five-star hotels in Bandung in between November-December 2019. The respondents included hotel front office, accounting department, hotel managers and IT department to represent the whole picture in assessing Technological Capability Supporting AIS Quality, e-Business Success and Company Performance at Customer Values. The responses included 64 respondents from 36 hotels in Bandung, covering 8 from accounting departments, 5 hotel managers, 49 front office respondents, and 2 IT departments. Because the responses were less than 100, this work applied a bootstrap technique to have a minimum of respondents, as suggested by Steven (2002) [31], of 15 times the number of variables. In this work, there were 3 variables, requiring 45 responses. Hence, the gathered data have met the requirements.

C. Operational Variables

Operational variables were conducted by looking at behavior, aspects or traits dimensions symbolized in a concept. According to Cooper and Schindler (2014 [32], operational variables are a collection of meanings or characteristics that are generally applicable related to certain objects or objects. Table 1 provides identification of the variables used in this study for data gathering and statistics

Table 1. Operationalization of Research Variables

Variable	Dimension	Indicator
X: <i>Technological Capability Supporting AIS</i>	a. Integration of IT and business processes	- Actively working with the impact of e-business - Good at reorganizing to use new IT
	b. IIT Management	-IT resources are managed effectively - Good at achieving benefits anticipated

Qualit y (Eikeb rokk, 2007)	a. System and Infrastructure	-infrastructure is very flexible - technology enables collaboration electronic
Y: e- Busin ess Succe ss (Eikeb rokk, 2007)	a. Complementarities	- Suppliers / competitors can complement the need for products / services - Consumers can copy the needs of products / services provided - Integrated value chain with work partners
	b. Lock In	- It takes effort and expensive value in lieu of products / services - Products / wishes given can meet consumer needs
	c. Novelty	- Pioneer companies in using E-Business - Companies work with consumers / suppliers in new ways
Z: Comp any Perfor mance at Custo mer Value (Sae d, 2005)	a. Requirement	- requires recognition, search information and evaluates alternatives (limit of sufficient number of searches: 500 <n <1,000, height 1,500 <n <2,500, very high> 3,000)
	b. Acquisition	- Online payment (sufficient value limit: 150% <n <250%, high: 300% <n <450%, very high:> 500%) above manual transactions
	c. Ownership	- Results (after purchase)
	d. Retirement	- Results in the form of replacement

4 Results And Discussion:

Data were gathered in 2 months (October- November 2018) . Of 300 questionnaires distributed in 100 hotels, 64 questionnaires were processed, suggesting a 21.33% return rate. Table 2 summarized demographic data of respondents.

Meanwhile, Table 3 lists hotel-origins of returning responses, showing a total of 64 respondents from 36 hotels in Bandung, 8 respondents to accounting section (12.5%), 6 hotel managers (9.375%), 48 front office staffs (75%) and 2 IT staffs (3,125%).

Table 2. Demographic Data of Respondents

Gender	Percentage (%)	Education	Percentage (%)
Male	15.63	High School	6.25

Female	84.37	Diploma	23.44
		Bachelor	65.63
		Master	4.68
Age		Experience	
<20	7.81	1-5	12.5
20-40	82.81	>5	87.5
>40	9.38		

Table 3. List of Hotels and Respondent

No	Respondent	Front Office	Acc	Mng	IT
1	1	√	√		
2	3	√			
3	1		√		
4	3	√			
5	3	√			
6	1	√			
7	3	√			
8	1	√			
9	3	√			
10	3	√			
11	3	√			
12	1	√			
13	1	√			
14	1	√			
15	1	√			
16	5	√	√	√	
17	3	√			
18	6	√	√	√	√
19	5	√	√	√	√
20	1	√			
21	3	√		√	
22	4	√	√	√	
23	1	√			
24	3	√			
25	1	√			
26	2	√			
27	1	√			
28	1	√			
29	1	√			

30	1	√			
31	1	√			
32	1	√			
33	1			√	
34	1	√			
35	1	√			
36	2	√			
	64				

Confirmatory Factor Analysis (CFA)

Looking at Table 4, the value of factor weight for each indicator was greater than 0.50, suggesting all research variables in this work to be valid as a measuring instrument. Besides, test results revealed the value of construct reliability at greater than 0.70 while the value of variance extracted at greater than 0.50. These numbers suggest the indicators to have a good reliability level.

SEM Analysis

In this study, three latent variables were employed, i.e. Technological Capability supporting AIS Quality (X), e-Business Success (Y) and Corporate Performance at Customer Values (Z).

Table 4. (Summary CFA)

Latent variable		Indicator	Factor Loading (>0.5)	Error	CR (>0.7)	VE (>0.5)	
Technological Capability	Integration	IT11	1.64	1.83	0.720	0.609	
		IT12	0.61	0.134			
	IT Management	MT11	0.75	0.047	0.964	0.930	
		MT12	0.80	0.0431			
	System and Infrastructure	SI1	0.73	0.0493	0.947	0.900	
		SI2	0.63	0.0539			
	Latent variable	Indicator	Factor	Error	CR (>0.7)	VE (>0.5)	Latent

		Loading (>0.5)				variable
E-Business Success	Complementarities	C1	0.49	0.025	0.967	0.912
		C2	0.65	0.0316		
		C3	0.91	0.0869		
	Lock In	L1	0.45	0.0684	0.905	0.864
		L2	1.72	0.428		
	Novelty	N1	1.16	0.127	0.947	0.904
N2		0.71	0.0695			
KPCV	Requirement	R1	1.011	0.322	0.937	0.787
		R2	1.011	0.322		
	Acquisition	AQ	0.909	0.173		
	Ownership	O	0.897	0.196		
	Retirement	RE	0.018	-0.02014		

Evaluation of the goodness of fit of SEM models by comparing the recommended fit index values is presented in Table 5.

Table 5. SEM Evaluation

Fit Index	Result	Reco value	Model Evaluation
Chi-Square Probability	0.000	> 0.05	Not good
Chi-Square DF	64.848	< 2	Not good
RMSEA	0.126	< 0.08	Marginal fit
RMSEA close fit	0.000	>0.50	Not good
ECVI	M=1.116	A small value and close to the Saturated ECVI	<i>Good fit</i>
	S=0.859		
	I=9.760		

GFI	0.878	> 0.90	Marginal fit
NNFI	0.922	> 0.90	Good fit
NFI	0.921	> 0.90	Good fit
AGFI	0.790	> 0.90	Marginal fit
RFI	0.888	> 0.90	Marginal fit
IFI	0.945	> 0.90	Good fit
CFI	0.945	> 0.90	Good fit
RMR	0.069	0.10<x<0.05	Good fit
Standardized RMR	0.065	0.10<x<0.05	Good fit

Furthermore, Table 5 provides the results of overall model matching tests based on ECVI, GFI, RMR, standardized RMR and the other indices.

In fact, most of these results meet the fit criteria, suggesting the analysis to continue to the next stage, i.e. testing the structural model hypothesis. Estimated relationships between latent variables through the path coefficient test in SEM model are presented in Table 4.

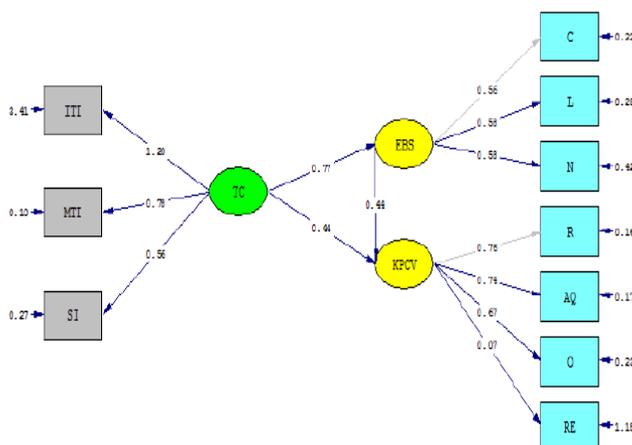


Figure 1: Full Structural Research Model

Table 6. Summary of SEM Results

Path Coefficient and Statistical Test

Sub	Variable		Direct Influence	Total / Indirect Influence		<i>R-Square</i>
	Cause	Cosequw		Path	T Statistic	
1	X	Y	0.771	0.771	7.25	0.595
2	Y	Z	0.441	0.441	2.96	0.693
	X	Z	0.443	0.783	3.17	

Source: Data Analysis

Next, Table 6 shows the most dominant direct influence between variables is the effect of Technological Ability Supporting AIS Quality on e-Business Success (path coefficient = 0.771). The second dominant direct influence is the effect of Technological Capability Supporting AIS Quality on Company Performance at Customer Values (path coefficient = 0.443).

Looking at Table 6, the R2 for e-Business Success (Y) was 0.593, indicating the success of an e-Business (Y) to be explained by IT Ability supporting the Quality of AIS (X) of 59.3%. Meanwhile, R2 value for Company Performance at Customer Values (Z) was 0.693, suggesting Company Performance at Customer Values to be explained by Technological Capability variable supporting the Quality of AIS (X) and e-Business Success (Y) at 69.3%. According to Hair et al. (2014), there are 2 (two) types of influence, i.e. direct influence and indirect influence. Direct influence is stated as a relationship that connects 2 (two) constructs indicated by the direction of a single arrow, while indirect effect is relationships involving several interrelationships between constructs.

Table 6 indicates the most influential variable was the indirect effect of X on Z or the effect of supporting technological capabilities on AIS quality on corporate performance in customer values through e-Business success.

5 Discussion:

The Influence of IT supporting the Quality of AIS for e-Business Success

The success of hotel e-Business was discovered as being quite good with an average value of 3.233 with the highest average value in the lock in dimension of 3.453. These numbers indicate hotel e-Business in Bandung to require values and efforts in transforming their services to e-Business services. Besides, e-Business hotel in Bandung, who were the respondents of this work, concluded their e-Business services to have arguably met desired needs of their consumers. Those needs may include an ease of ordering, competitive prices and services according to customers' desired standards. Complementarities variable, on the other hand, has an average value of 3.260. Showing a fairly good value, e-Business services provided by hotels in Bandung at similar quality level (the same hotel category, the same star rating) may replace each other. For novelty dimension, interestingly, e-Business hotels heavily rely on the quality of booking merchants, including Traveloka, Pegi-peggi, Agoda and others. While an e-Business website may contain hotel information and bookings, payment and other transactions need to directly be completed at the hotel or through booking merchants.

The results of interviews with hotel managers showed hospitality sector to require IT in the form of e-Business for supporting their business. However, their high prices must compete with similar or lower

quality hotels that provide comfort at lower prices, providing clean, comfortable rooms with breakfast at strategic locations. In fact, normal demands from governmental agencies for meeting venues were quite high. However, the Government of Indonesia issued a banning of in-hotel meetings, hence significantly reducing hotel turnovers.

Practically, hotels provide economical group packages with buses, catering and other facilities needed at competitive prices. Four-star hotels and above, in fact, offer high quality services, causing high operational costs and making their standard prices to be quite high. To minimize their operational costs, they must improve the quality of human resources to deliver optimum contribution and high-quality work behavior. In fact, the HR ratio cannot be too high.

The results of this study confirm previous studies in showing the influence of IT capabilities supporting AIS quality. As indicated by West (1997), the use of the internet and intranets on good IT infrastructure may increase the success of e-Business hotels. Besides, Wang et al. (2015) have shown the quality of hotel websites to influence online booking intensity. Meanwhile, Nahar et al. (2006) have suggested IT to help achieving the success of e-Business for improving corporate performance. Then, Marius and Alexandru (2007) have noted IT to serve as an electronic integration tool for organizations, hence affecting the success of e-Business companies.

Furthermore, this work revealed e-Business Success to have a significant effect on the Company Performance at Customer Values. It is indicated by the average value of 3.285 for Company Performance at Customer Values, which is in fact quite good. The highest value of online transactions (payment) was at 3.375, which is well above 150-250% value range and below the 300-450% value range compared to offline orders. In the next position, room requests and online room searches on the requirement dimensions was discovered at an average value of 3.359, indicating online room search to be well above 150-250% value range and below 300-450% value range compared to offline bookings and room searches. Statistically, monthly records show the number to be above 500-1,000 and under 1,500-3,000.

Interview results with hotel managers revealed online ordering to actively occur at higher rates than direct ordering. IT development and increasing mobile internet users tend to increase the trend, while the ease of ordering via online merchants also offers a variety of payment methods (e.g., credit card, mobile banking, on-site payment) and variably cheaper prices for longer booking periods. Companies engaged in the hospitality sector compete to offer economical prices for various customer-desired facilities, including with-or-without breakfast, lunch or dinner packages for certain holidays (e.g., New Year's Eve dinner, personal/group celebrations), airport pick-up services, etc.

The results of this study confirm previous studies, discovering the effect of e-Business Success on Corporate Performance at Customer Values. As suggested by Artishchev and Weigand (2005), the success of e-transactions will improve financial performance and corporate earnings. Meanwhile, Kobelsky, Hunter and Richardson (2008) have noted the success of e-Business supported by IT will improve corporate financial performance. Besides, Koellinger (2008) has discovered internet-based technology to improve business performance and corporate financial performance. Then, Saeed et al. (2005) have shown e-commerce competencies to demonstrate the success of e-Business affecting customer values and company performance.

6 Conclusion:

Technological Capability supporting AIS Quality has a positive effect on e-Business Success. The better the Technology Capability supporting AIS Quality, the better e-Business Success will be. Enhancing Technological Capability supporting AIS Quality through the integration of hotel business processes

through e-Business, e-Business-supporting IT management, and well-presented information from well-implemented e-Business system and infrastructure would increase the success of an e-Business hotel. The positive influence of technological capability on e-Business success confirms West's work (1997), which stated the use of the internet and intranet on well-functioning IT infrastructure to increase the success of e-Business hotels. Besides, Wang et al. (2015) have discovered the quality of hotel websites to influence online booking intensity. Meanwhile, Nahar et al. (2006) have suggested IT to help achieving the success of e-Business, improving company performance. Then, Marius and Alexandru (2007) have suggested IT to serve as an electronic integration tool for organizations, affecting the success of e-Business companies. Furthermore, e-Business success has a positive effect on company performance on customer values. The better the success of e-Business, the better the Corporate Performance at Customer Values will be. The success of implementing e-Business system in a hotel company can be increased through the hotel's own e-Business website/portal or other booking merchants such as Traveloka, Agoda, Pegi-peggi, etc. The image building would hence make consumers to feel an e-Business-implementing hotel as being competitive with the nature of complementarities (mutually replacing hotel services that are equal and integrated with business chain providers), the nature of lock in (locking consumer expectations fulfilled on e-Business hotel services and services provided accordingly), novelty (as pioneers/foremost in providing e-Business hotel services at competitive pricing ideas and service variations such as with-or-without breakfast, on-the-spot payment, etc.).

Then, Company Performance at Customer Values of an e-Business hotel is quite high compared to manual or direct transactions. The increased e-transactions came from the number of hotel bookings (requirements), transaction execution (acquisition) processes, ownership processes (transaction payments and use of hotel rooms), and the relatively low cancellation rate.

References

1. Fadian, A.H., 2017, AirBnB Mulai Mengancam Bisnis Hotel di Indonesia. <https://katadata.co.id/berita/2017/10/12/airbnb-mulai-mengancam-bisnis-hotel-di-indonesia>
2. Eikebrokk, T. R., Olsen, D.H., 2007, An empirical investigation of competency factors affecting e-business success in European SMEs. *Information dan Management* 44 (2007) 364–383
3. Saeed K. A., Grover V. and Hwang Y., 2005, The Relationship of E-Commerce Competence to Customer Value and Firm Performance: An Empirical Investigation. *Journal of Management Information Systems* · June 2005
4. West E.J.W., 1997, Using the Internet for business - Web oriented routes to market and existing IT infrastructures. *Computer Networks and ISDN Systems* 29 (1997) 1769-1776
5. Wang L., Lawa R., Guilleta B.D., Hunga K. F, Ka Chio D., 2015, Impact of hotel website quality on online booking intentions: eTrustas a mediator. *International Journal of Hospitality Management* 47 (2015) 108–115
6. Nahar N., Lyytinen K., Huda N., Muravyov S., 2006, Success factors for information technology supported international technology transfer: Finding expert consensus. *Information dan Management* 43 (2006) 663–677.
7. Marius G., Alexandru S., 2007, Service-Oriented Architecture and Information Portal as Solutions for Enterprise Integration Applications.. IFAC MCPL 2007 The 4th International Federation of Automatic Control Conference on Management and Control of Production and Logistics September 27-30, Sibiu – Romania
8. Gelinas U. J., Dull R. B., Wheeler, Patrick., Hill, Mary Callahan, 2018, *Accounting Information Systems*. Cengage Learning 11 ed. pp. 131
9. Mariga J. R., 200, *Managing E-commerce and Mobile Computing Technologies*. IRM Press. pp. 3
10. Perera S., Ingirige B., Ruikar K., 2017, *Advances in Construction ICT and e-Business*. Routledge. pp.2
11. Lientz B., Rea B., 2001, *Start Right in E-Business*. Academic Press. pp.xx

12. Manuela M., Cunha C. ,2010, E-Business Managerial Aspects, solutions and Case Studies. IGI Global pp.131
13. Andersen K. V., Elliot S. P., Swatman M.C., Trauth E.M., Anderse N. B., 2003, Seeking Success in E-Business: A Multidisciplinary Approach. Springer Science, Business Media, LLC. pp. 587
14. Viehland D.W. ,2000, Principles for E-Business Success. PACIS 2000 Proceeding.
15. Mulyani S. NS.,2017, Analisis dan Perancangan Sistem Informasi Manajemen Keuangan Daerah. Abdi Sistematika
16. Romney M. B., and Steinbart P.J. ,2015, Accounting Information Systems. Thirteenth Edition.. Pearson Education
17. Wilkinson, Joseph W.; Cerullo, Michael J.; Raval, Vasant; Wong-On-Wing, Bernard. 2000. Accounting Information Systems. Fourth Edition.
18. Bodnar G.H., Hopwood W.S.,2014, Accounting Information systems. Elleveth Edition. Pearson New International Edition. Always Learning
19. Richardson V., Chang J. and Smith R. ,2014, Accounting and Information Systems. Mcgraw Hill Education
20. Hurt R.L. ,2008, Accounting Information Systems Basic Concept and Current Issues. Mcgraw-Hill Education
21. Gnyawali, D., Park, B.. ,2009, Co-opetition and Technological Innovation in Small and Medium-Sized Enterprises: A Multilevel Conceptual Model, Journal of Small Business Management, Volume 47, pp. 308-330.
22. Subrahmanyam B. M.H. ,2009, Nature and strategy of product innovations in SMEs: A case study-based comparative perspective of Japan and India, Innovation: management, policy dan practice, Volume 11, pp. 104-113.
23. Fitriani, Azmi and Mulyani, Sri. 2015. Factors That Affect Accounting information System Success and Its Implication on Accounting Information Quality. Asian Journal of Information Technology. Medwell Journals
24. Nurhayati, N. and Mulyani, S. 2015. User Participation on system Development, User Competence, and Top Management Commitment and Their Effect on The Success of The Impelemnation of Accounting Informaton System. European Journal of Business and Innovation Researc 3 (2), 56-68
25. Artishchev S., Weigand H, 2005, Interoplerable Transactions for e-Business Copyright (c) 2005 IFAC. All rights reserved 16th Triennial World Congress, Prague, Czech Republic
26. Mulyani S., Hassan, Rohail and Anugrah, Fajar. 2016. The Critical Success Factors for The Use of Information systems and Its Impact on The Organizational Performance. Asian Journal of Information Technology. Medwell Journals.
27. Kobelsky K., Hunter S., Richardson, Vernon J. ,2008, Information technology, contextual factors and the volatility of firm performance. International Journal of Accounting Information Systems 9 (2008) 154–174
28. Koellinger, P. ,2008, The relationship between technology, innovation, and firm performance— Empirical evidence from e-business in Europe. Research Policy 37 (2008) 1317–1328.
29. Sugiyono, ,2011, Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitastif dan Rdan D. Penerbit:Alfabeta
30. Sekaran U. and Bougie R. ,2013, Research Methods for Business A skill-Buiding Approach. Sixth Edition. Wiley.
31. Steven, J. (2002). Applied Multivariate Statistics in Social Sciences, 4th ed. Lawrence Erbaum Associates, Mahwah, New Jersey
32. Cooper, D.R., and Schindler, P/S. 2014. Business research Methods. New York: Mcgraw-Hill Education.