

# Integration of Cognitive-Social Competence and Business Risk of Tourism Support Services in Bali

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**Abstract**—Market competitiveness of the tourism support services sector that is very tight between business actors requires a pattern of integration of certain competencies. The purpose of this study is to analyze and find the integration model of cognitive-social competencies and the risks of tourism support services business. This research was designed with a qualitative-quantitative design. Data were collected by questionnaires and field surveys. Data were analyzed by multiple linear regression. The results of the study indicate that cognitive-social competence has a strong relationship with the risks of tourism support services business. Cognitive competence is formed from knowledge and experience, social competencies are generated by networks between individuals, business risks of tourism supporting services arise from the process of experience and social interaction between business people. The three elements of cognitive competence, social and business risk as an integrated model in the development of tourism business with a regression value of 99 percent. The results of this research are recommendations for tourism service sector business people, individuals, institutions and the government that the model of social-cognitive integration and the risk of tourism support services business is classified as very strong, so that it can potentially increase the value of opportunities/employment opportunities for people who are competitive and more professional.

**Keywords:** *integration; competency; cognitive; social; business risk; tourism support services.*

## I. INTRODUCTION

The tourism sector is currently faced with global market competition. Since the emergence of market competition in the ASEAN economic community in 2015, the development and improvement of the quality of human resources, not to mention the quality of tourism support services have become a serious concern of the government. The MEA market not only opens up the flow of trade in multi-country goods and services but also opens up the market flow of work opportunities and professional, skilled and productive workforce. On the employment side, every businessman is overcome by concerns that Indonesia's human resources have a much lower quality than other countries. Report from UNDP in 2014, viewed from the Human Development Index (HDI) or Human Development Index (HDI), Indonesia ranked 108th out of 187 countries.

Report from the Central Bureau of Statistics (BPS), as of February 2014 the workforce had reached 125, 3 million people. The number is 46.8% of elementary school graduates. The low quality of education in Indonesia will weaken Indonesia's competitiveness, especially the tourism services business in the face of global competition. Reporting from the Asian Productivity Organization (APO), Indonesia's workforce readiness shows that of every 1,000 Indonesian workers around 4.3% are skilled, while the Philippines is 8.3%, Malaysia is 32.6%, and Singapore is 34.7%. Some views related to Human Resources are categorized as skilled and qualified, when they have passed the learning process, forming behavior, and have the readiness to explore employment opportunities. [1]; [2]. Indonesian workers compared to countries in Asia still have several weaknesses including skills and productivity of workers who are considered to be still low, uncertainty in labor wages as a source of income, cognitive and social competence are still low. Some expert views that a person's skills can be formed by practical learning, quality attributes of education [3] which will influence attitudes, morals, and positive behavior [4]. Cognitive competence can be used as a determinant of the number and variety of jobs and attitudes of a person [5].

To boost national economic growth, the government is currently prioritizing the contribution of the service sector, especially tourism support services. The results of the World Travel and Tourism Council study stated that the economic growth of tourism's contribution to the Gross Domestic Product averaged 8%. This indicates that the tourism sector still has an important role to play in the future. Also, five provinces in Indonesia have the highest Forwards Linkage Index (IFL) in the hotel and restaurant sector, such as Bali, West Java, Yogyakarta, East Java, and DKI Jakarta. Thus this IFL indicates that the hotel and restaurant sector can attract output growth from the upstream sector. On the other hand, the role of tourism support services companies is around 9.60% in accessing information on the workforce. On the other hand, Indonesian workers compared to countries in Asia are considered to still have weaknesses in the fields of skills, productivity, cognitive and social competencies. For this reason, it is necessary to conduct research studies on the integration of cognitive-social competencies and business risks in tourism support services.

The purpose of this research study is to analyze and construct the integration model of social-cognitive competency and the risk of tourism support services business. The benefits of this research result as a recommendation to businesses, both individuals, institutions and the government that the social-cognitive integration model and the risk of tourism supporting services business can potentially increase the value of opportunities/employment opportunities, public welfare to be more professional.

## II. LITERATURE REVIEW

### A. Cognitive competency

Cognitive competence is an ability that belongs to someone seen from their knowledge and experience in the process of activities that have taken place. Some research is carried out by experts regarding cognitive competencies that [2] cognitive competence can be formed through behavioral therapy and intensive training. Cognitive is stronger in forming trust than behavior because it will be able to create a brand image [6] the strength of ethics and norms in competition [7]; [4]. In business practice that cognitive influences in making business decisions [8].

### B. Social competency

Social competence is the ability of individuals to interact with the surrounding environment, both between individuals and to groups of people with specific goals. Some research results are disclosed [1]; [9]; [10] that the value of the business trust has an impact on changes in cognitive, social, emotional in network participation and entrepreneurship. Business progress is also determined from aspects of dimensions or social effects developed by individuals, groups in organizations [11] so that new skills and competitive advantage can be generated [12]; [13]. Every businessperson in building trust begins with self capital (internal motivation) [14] and satisfaction [15].

### C. Business Risk and Tourism Support Services

Every person in business activities will be faced with various risks, uncertainties, and changes in value in the future. The risk of tourism support services business is one of the risks faced by tourism service businesses. Changes in business values due to uncertainty in the future are problems that cannot be avoided. Research studies related to business risk and tourism service support services have been carried out by various experts. Every person who understands theory in a complex manner will be able to anticipate new risks [16], awareness to anticipate risk has an impact on financial management pressures and more leads to short-term business cycles [17]. To anticipate uncertainty and expectation of future results it is necessary to analyze the risk conditions [18]; [19]. The risk of tourism support services business as a business range that emphasizes the value of quality [19] and one's loyalty, if you expect high income. Therefore managing a tourism support services business is designed with a collective and participatory concept. [19]; [20]. The business was designed aimed at creating jobs and alleviating poverty in community groups [21].

The thought frame and concept of research can be shown in Figure 1 below.

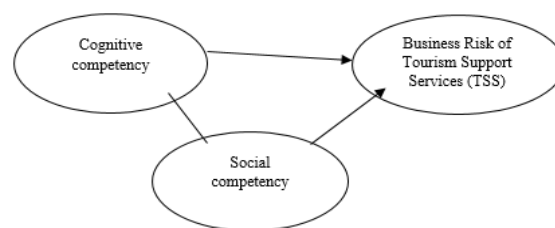


Fig.1. Research Concept

## III. RESEARCH METHODS

This research was designed with a qualitative-quantitative approach. The qualitative approach is carried out with field surveys and unstructured interviews focused on supporting service business actors in tourism development areas in regencies in Bali. After survey data and interviews are collected, the stages of analysis, synthesis, and conclusion results are carried out. The next stage is collecting data with questionnaires as a quantitative approach. The questionnaire was arranged with a rating scale (1-7). Questionnaire data was tested with Kolmogorov-Smirnov value greater than 0.05. Data were collected by purposive sampling assuming the minimum sampling is the number of variables multiplied by 10. If the minimum number of variables (three) multiplied by 10, then the observation (respondents) numbered 30 people. To avoid biased data, this study took respondents over 30 respondents. Data were analyzed by multivariate analysis, namely multiple linear regression. The model produced from multiple linear regression analysis has met the classical assumption test, including, data must be an interval, linearity test, normality test, heteroscedasticity test, and autocorrelation test.

## IV. RESULTS AND DISCUSSIONS

### A. Test Results on the Model Stages

#### (a) Factor Test for Variable constructs

This study begins with testing factors to form variables, namely by testing communalities which can be presented in Table I.

TABLE I. VARIABLE CONSTRUCT OF FACTOR TESTING

Constructs	Communalities	Explained factor
X1 (cognitive competency).	0.99	99%
X2(social competency)	0.99	99%
Y1(provide transportation facilities)	0.99	99%
Y2 (SPA and salon)	0.97	97%
Y3 (souvenir shop)	0.96	96%
Y4(traditional market)	0.91	91%
Yr. (business risk and tourism support services)	0.96	96%

Sources: accounted data

Table I shows the communality value of each variable forming a factor exceeding 50%. Theoretically, it can be said that the factorial results of the variable construct have near perfect communalities. However, there are some expert views that the test value of 0.99 should be proved as an explanatory variable. The stages of research are continued with proof by multiple linear regression analysis from

regression factor score provided that classic assumptions have been fulfilled. Several testing stages are shown in the following process.

### B. Empirical Model Test Results with Classical Assumptions

Further testing of stage 1 is carried out by the linearity test on the Regression factor shown in the following Table II.

TABLE II. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.201	2	.100	.102	.904 <sup>a</sup>
	Residual	74.156	75	.989		
	Total	74.357	77			
2	Regression	74.076	7	10.582	2631.222	.000 <sup>b</sup>
	Residual	.282	70	.004		
	Total	74.357	77			

Sources: accounted data

Table II of model 2 shows the Sig. value  $<0.05$ , that means the distribution of data has met the linearity test. Thus it can be continued in the next phase 2 test. Testing stage 2 is carried out by the normality test on the Regression factor score indicated by the following Figure 2.

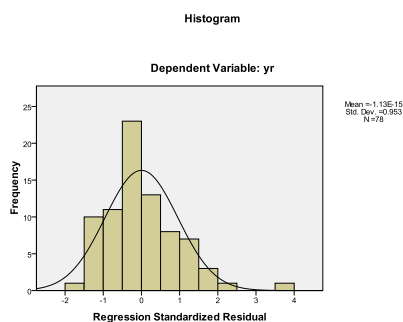


Fig 2. Normality testing

The results of the normality test in Fig.2 show that the factor score regression results have met the normal assumptions, because the value of the distribution of empirical data generated under the curve is normal. Thus the normality test has been fulfilled so that the third stage of the test can be continued. Testing the third stage of the heteroscedasticity test can be shown in Table III below.

TABLE III. COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.957	.878		3.369	.001
	x2	-.005	.141	-.005	-.037	.970
	X1	-.059	.148	-.050	-.400	.690
2	(Constant)	2.624	2.591		1.013	.315
	x2	-.060	.366	-.053	-.163	.871
	X1	.063	.126	.053	.499	.620
	REGR factor score 1 for analysis 1	.966	.014	.984	67.562	.000
	REGR factor score 2 for analysis 1	.010	.356	.010	.027	.979
	REGR factor score 3 for analysis 1	-.134	.061	-.137	-2.208	.031
	REGR factor score 4 for analysis 1	.126	.029	.128	4.268	.000
	REGR factor score 5 for analysis 1	.012	.009	.012	1.417	.161

Sources: accounted data

heteroscedasticity test criteria. The fourth stage was tested by autocorrelation with the Durbin-Watson test shown in Table IV below.

TABLE IV. MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson
					R Square Change	F Change	df1	df2	
1	.052 <sup>a</sup>	.003	-.024	.9944	.003	.102	2	75	.904
2	.998 <sup>b</sup>	.996	.996	.0634	.994	3673.720	5	70	.000

Sources: accounted data

The results of the Durbin-Watson autocorrelation test obtained the DW value of 1.918. If measured from the DW standard, namely:  $dU < d < dU$ ;  $n = 70$ ;  $k = 5$ , then the DW Table value is obtained = 1.4637;  $du = 1.7683$ . Furthermore, the results of the autocorrelation test obtained  $1.7683 < 1.918 < 1.7683 = 2.231$ , so that the conclusion there was no autocorrelation. For that the variables in the model can be further tested by multivariate analysis (multiple linear regression).

### C. Testing of Multiple Linear Regression Models

The results of testing the regression model with classical assumptions have met the testing standards, including interval data, linearity test, normality test, heteroscedasticity test, and autocorrelation test. Thus the results of model testing can be shown in Table IV on Model 2 obtained by the value of  $R^2$  0.996 (99.6%). This means that the resulting model is classified as very strong (significant).

### D. Discussion

The results of the test construct with factorial variables show that the overall cumulative value exceeds 50%. The results of Table I can be explained that factorial test results empirically show cumulative X1 value (cognitive competency) 0.99, which means that X1 variable can explain a factor of 99%, such as critical thinking, problem solving ability, decision making ability. The value of communalities X2 (social competence) is 0.99, which means that X2 variables can explain a factor of 99%, from good social interaction factors, love to create communication with the environment, personal relationships, intensity of communication, information, easy communication with new people. The value of communalities Y1 (providing transportation facilities) 0.99 means that variable Y1 can explain a factor of 99%, from the factors of modernization of facilities, speed of information services, rapid response to customer service, and skilled use of facilities. The value of communalities Y2 (SPA and Salon) is 0.97, which means that the Y2 variable can explain 97% factor, from the factors of comfort, satisfaction, quality of creative products, and consumer cost information. The value of communalities Y3 (souvenir shop) is 0.96, which means that the Y3 variable can account for a factor of 96%, formed from the factors of variation in creative products sold, the quality of creative products, information on prices, information and intensity of visitors. The value of communalities Y4 (traditional market) is 0.91, which means that the Y4 variable can factor 91%, its form factor, such as variations in creative products offered, types of creative products, and price information. The value of communalities Yr. (risk of tourism support services business) 0.96, meaning that the Yr. variable can explain by 96%, from the forming factors of providing transportation



facilities, SPA and Salon), souvenir shops, and traditional markets.

The results of testing the regression model with classical assumptions have been made on the constructs of the cognitive-social competencies and risks of the district tourism support services business in Bali. The model formed has met the test standards, so that multiple linear regression models can be produced in very strong categories. Therefore, social-cognitive competencies and the risks of tourism supporting services are classified as integration models. This is evidenced by the formation of the variable by factor and testing the regression factor score model, where the value of communalities from the construct variable and the strength value of the relationship between variables is very high ( $R^2 = 99\%$ ). Figure 3 is a model of the results of testing the social-cognitive competency interruption model and the business risk of supporting services in districts in Bali, shown in the following Figure 3.

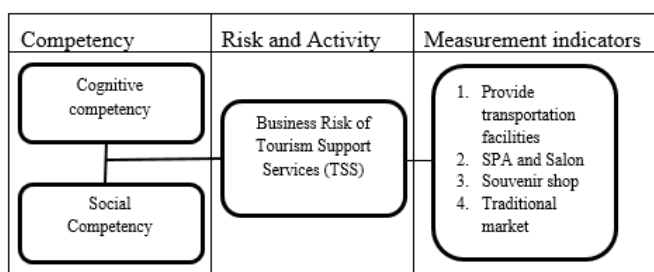


Fig.3 Integrated Model of Cognitive-Social Competencies And Business Risk of Tourism Support Services

Fig.3 shows that cognitive and social competency is the basis for controlling business risks related to tourism support service activities as seen from the four indicators that shape activities. The basis of cognitive and social competence cannot be viewed partially, in controlling business to be more focused. Both constructs are used in an integrated manner in handling tourism support business service activities in four districts in Bali. Critical thinking and sharp analysis in overcoming business problems, while information on business relationships / partners as a basis for consideration of decisions on solutions to these problems. Therefore cognitive competence formed by the basis of knowledge and experience and social competence formed by the social environment becomes an important basis in the development of tourism support business services.

## V. CONCLUSIONS

Variable Constructs of cognitive-social competencies and business risks of tourism support services with factorial shows that the overall communalities value exceeds 50%, so the variable construct is very good. Testing multiple linear regression models with several assumptions, such as interval data, linearity test, normality test, heteroscedasticity test and requirements autocorrelation test build an integration model, so that the formed model is very good (strong). Thus the competitiveness of socio-cognitive and business risks in tourism support services as an integrated model. This model can be implemented in the study of the quality of human resources in the district government.

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