

A Study of How the Organizational Culture of International Tourist Hotels Affects Organizational Performance: Using Intellectual Capital as the Mediating Variable

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ABSTRACT

The primary purpose of this study is mostly to explore the influence of organizational culture on organizational performance at Taiwan-based international tourist hotels, with Intellectual Capital (IC) being the mediating variable. The target population in this study consists of employees of the rooms, catering and management departments at the existing 105 Taiwan-based international tourist hotels, selected using convenience sampling. The linear Structural Equation Modelling (SEM) was adopted to verify the goodness-of-fit effects among the overall model, structural model and measurement model. This study focuses on the path coefficients between “implicit/latent variables” (a.k.a. unobservable variables) of the structural model, with the Bayesian Estimation used to test the significance of the model’s direct effect, mediating effect and total effect. Findings from this study include: (1) organizational culture has a positive, significant and direct influence on organizational performance; and (2) organizational culture has a significantly positive influence on IC, which in turn affects the organizational performance in a significant and positive manner. In summary, IC has a “partially” mediating effect.

Keywords: Organizational culture, Intellectual capital, Organizational performance

INTRODUCTION

According to the list of Top 1,000 Service Providers released by Business Weekly in 2005, the total output of Taiwanese service providers has doubled that of the country’s manufacturing industry. In other words, service providers are starting to play an important role in Taiwan’s economic development (Hu Zhao-Wei and Liu Cheng-Hsien, 2005). In 2004, the Executive Yuan approved a draft bill entitled “Guidelines and Action Plans for Service Industry Development” that includes twelve flagship projects and pillar measures pertaining to the service industry, hoping to build solid industries out of Taiwanese service providers that possess potential and competitiveness. The draft bill lists tourism and sports/leisure service providers alongside various other categories (Council for Economic Planning and Development, Executive Yuan, 2004). As more and more competitors entered the market, nevertheless, the intensifying competition forces each international tourist hotel to learn to stay competitive as an organization, to make good use of competitive advantages, and to subsequently improve the organizational performance, whether it is already in the business or plans to do so later. According to Peter F. Drucker, the intangible assets and value of knowledge creation will be the key to a company’s effort to remain competitive. He added that the sum of intangible values hidden in a company (i.e., the staff’s hidden gifts, the efficacy of operating mechanism, and the company’s relationship with consumers) becomes the Intellectual Capital, or IC, of the organization (*Post-Capitalist Society*, translated by Fu Zhen-Kun, 1994). In an era of information and virtual economy, companies are putting an increasing importance on IC management, with the focus of corporate development shifted to assets that may generate economic values for the company, such as the staff catering to customers, management procedures, and corporate image (Tsen Shu-Hsiao and Hu Hsiang-ling, 2010).

Given the growing popularity of tourism worldwide and the Taiwan government’s easing of tourism policies, travel and sightseeing industries have been thriving in Taiwan, where international tourist hotels are crucial locations that offer travellers accommodations and recreational/entertainment services (Wang Gao-Liang, 2011). After reviewing studies conducted by scholars worldwide in relevant fields, the author of this paper realized that currently the

organizational culture of Taiwan-based international tourist hotels affects the quality of services offered by internal employees, and a good service quality affects customer satisfaction and subsequently the organizational performance. In order to improve the quality of services offered by internal employees, a hotel must emphasize the human, structural and relationship capitals that constitute an organization's IC. Scholars and experts in relevant fields suggested that a good organizational culture is the crucial element of a company's attempt to implement IC and knowledge management, and a company's organizational culture also significantly affects organizational efficacy. As a result, how organizational culture affects a company's organizational performance has become a management issue that can never be ignored. That is why this study is intended to verify and understand, using IC as a mediating variable, how organizational culture at Taiwanese international tourist hotels affects organizational performance. The specific purposes of this study are listed as follows:

1. To verify and understand whether the organizational culture of Taiwan-based international tourist hotels affects organizational performance in a significantly positive way.
2. To verify and understand whether the organizational culture at Taiwan-based international tourist hotels has a significant and positive influence on IC, and whether IC has a significant and positive influence on organizational performance. That is, whether or not IC has a *partially* mediating effect if the above-mentioned hypothesis (H1) is substantiated.
3. To generate from an analytical study conclusions that may provide references for the management at Taiwanese international tourist hotels when making management decisions.

LITERATURE REVIEW

Organizational Culture

In a survey of 18 excellent U.S.-based companies (e.g., NCR, GE and IBM), Deal, McKinsey and Kennedy said organizational culture is displayed in the forms of corporate environment, corporate values, heroic figures, rituals/ceremonies, and communication networks (Deal & Kennedy, 1984).

Campbell et al. argued that organizational culture can be measured by observing how many autonomy the employees have, how structured an organization is, how much rewards an organization offers to its staff, how considerate the managers are about the employees, and how many conflicts there are among the organization members.

According to the organization members' cognitive and data-processing processes, Quinn & McGrath (1985) divided the dimensions of organizational culture into four sub-dimensions, as stated below:

1. Rational culture: Built on the hypotheses of "pursuit of efficiency", "pursuit of objectivity" and "work-oriented", the rational culture contains such core values as efficiency, productivity and profitability. Because an organization with rational culture seeks scientific efficiency and believes the only way to aggressively improve the environment is through rational choices made by man, it is eager to make cost-effectiveness analyses, using specified goals and personal judgment/decisions to maximize organizational performance. The rational culture of organization has a distinctive goal-oriented quality and is observed mostly in commercial organizations and interest groups. In this present study, the operational definition of rational culture as a sub-dimension of organizational culture is "the culture of an agency/organization that has centralized power and is capable of integrating various initiatives, with the core values being efficiency, efficacy, goal-orientation, and an emphasis on developing competencies".
2. Developmental culture: Built on the hypotheses of "creating the future", "rising above circumstances" and "idealism", the developmental culture is intended to seek innovations, adventures and growth. Organizations with a developmental culture mostly comprise members who strive for their own ideals. While the organization's performance depends on external support and resources obtained, innovation and reforms are the major approaches to expanding organizational resources and obtaining support from the outside world, hence the innovation-oriented, improvement-hungry quality of developmental culture. Organizational culture is observed mostly in emerging organizations or organizations on the verge of an upgrade/expansion. In this present study, the operational definition of developmental culture as a sub-dimension of organizational culture is "a culture that facilitates the division of organizational power with an emphasis on external competition, growth, as well as the organization's charismatic

leadership and innovative development”.

3. Consensual culture: Built on the hypotheses of “human relation”, “care and support” and “co-existence in peace”, the consensual culture seeks as many opinions as possible and the participation by a diversified group of people. An organization with a consensual culture focuses on its internal harmony, with the foundation of power distributed among all members and the organizational performance depending on its morale, adhesive bonding and team spirit. Achieving information exchange through discussions, participation and consensus building, the organization members interact with one another during a friendly and cooperative process that helps boost morale and trust regarding the organization’s tasks. Consequently, the consensual culture tends to support organization members and is often observed in small-sized organizations of family businesses. In this present study, the operational definition of consensual culture as a sub-dimension of organizational culture is “a culture characterized by adequate authorization and participation by employees, with an emphasis on teamwork and collective counselling”.
4. Hierarchical culture: Built on the hypotheses of “compliance with laws”, “hierarchical control” and “seeking stability”, the hierarchical culture focuses on the centralized power as well as the maintenance of internal system. Official regulations and administrative procedures are what result in the organization members’ behaviour. Because the hierarchical control involves such distinctive values as stability, controllability, predictability, coordination and obligations, the hierarchical culture appears rule-oriented and basically tends to occur in a hierarchical organization. In this present study, the operational definition of hierarchical culture as a sub-dimension of organizational culture is “a culture that has centralized power and an emphasis on the internal integration process, with the organizational behaviour controlled by means of hierarchy, stability and laws/regulations; hierarchical culture serves as the cultural background of a typical organization that has a hierarchical structure”.

Given the ongoing trend in organization design, most of the corporate and non-profit organizations tend to have a developmental or consensual culture. On the other hand, government organizations remain dominated by rational and hierarchical cultures (Zeng Hua-Zheng, 2006; Xu Nan-Xiong, 2007).

The impressive amount of literature mentioned above show that quite a few studies concerning organizational culture mentioned the four concepts of “consensual culture”, “developmental culture”, “rational culture” and “hierarchical culture”, a fact that exactly matches the model of organizational-culture dimensions proposed by Quinn & McGrath (1985), which remains widely accepted till this day. Therefore this present study determined some of the dimensions in confirmatory analysis according to the categorization approach adopted by Quinn & McGrath.

Intellectual Capital (IC)

The term “Intellectual Capital” was first seen in a letter date 1969 from J. K. Galbraith to Michael Kaleeki, editor-in-chief of *The Economist*. IC is the ability to use knowledge, industrial experiences, organizational structure/processes, customer relationship and professional skills to give a company certain competitive advantages in the market (Masoulas, 1998). In 1991, Stewart clearly defined IC in an article published in Fortune 500. In 1993, Hudson released an IC-themed book and specified the meaning of IC. In 1996 the Organisation for Economic Co-operation and Development (OECD) showed approval for how Scandia Inc. and Edvinsson handled IC, noting in an annual Intellectual Capital Report that IC is a value-creating process. In 1997 Stewart published *Intellectual Capital: The New Wealth of Organizations*, a book that mentioned numerous case studies of companies in a bid to explain the three elements of IC: human capital, structural capital and customer capital. In his book *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, Edvinsson & Malone (1997) explained the IC implementation process and measurement indicators adopted by Scandia Inc. Edvinsson (2003) gave a simple description of IC, saying it would become what supports any company in the future, as well as an indicator of how a company is able to engage in effective operations. It is furthermore impossible for a company to gain momentum for reforms unless it invests in intangible assets (Tsen Shu-Hsiao and Hu Hsiang-ling, 2010). Chen Mei-Chun (2001) said not only is intangible IC an important reference indicator for evaluating the corporate values; it also consists of human capital, structural capital and relationship capital. Chen consequently defined IC as “all the skills, knowledge, information, experiences, problem-solving ability and wisdom displayed by a company as a whole and incorporated into the human capital, structural capital and relationship capital”. According to Edvinsson & Malone (1997), IC consists of

human capital, structural capital and customer capital, with the *human capital* being the sum of personal competencies, knowledge, technologies, and experiences of a company's entire and managers, including the creativity and innovation capability of the organization/company. The *structural capital*, as they noted, is a supportive framework that gives human capital a physical form and power, as well as an organized capacity that includes the tangible system used to communicate/store intellectual materials. They also defined *customer capital* as the sum of customer satisfaction, durability, price sensitivity, and the long-term customers' financial conditions. Johnson (1999) argued that wisdom is made of human capital, structural capital and relationship capital, with *human capital* being the idea capital (i.e., the human resources for knowledge-based duties and employees' gifts/attitude) combined with leadership capital (i.e., the qualities of an expert and manager); *structural capital* being the innovation capital (i.e., patents, trademark, copyright and knowledge database) combined with process capital (i.e., work procedures and trade secrets); *relationship capital* being the sum of relationships with customers, suppliers and network-community members. As defined by Knight (1999), IC is made of human capital, structural capital, external capital and financial performance, with *human capital* involving the employee turnover rate, employee satisfaction, the quantity of new products/ideas, and the recommended quantity of delivery/reception; *structural capital* being the turnover rate of operating capital, the ratio of sales staff to general and administrative staff, and the launch time of a new product; *external capital* being the customer persistency, customer satisfaction, the most lucrative customer list, the indicators of suppliers' quality/ reliability; *financial performance* being the sum of Economic Value Added (EVA), 90-day accounts receivable, and the value added by each employee. Stewart (1997) argued that IC should include human capital, structural capital and customer capital, with *human capital* being the sum of innovations, employees' mindset, seniority, turnover rate, experiences, and status of learning; *structural capital* being the existing knowledge collected using a highly efficient method and tested, organized, integrated, with the irrelevant part sifted out for diffusion; *customer capital* being the relationships a specific organization forges with all those who deal with it, which involves customer satisfaction, customer retention rate, and customer loyalty. Sveiby (1998) noted IC comprises individual competence, internal structure and external structure, with the *individual competence* being an employee's ability to take actions under various situations, which involves explicit knowledge, skills, experiences, value-related judgments, and social network; *internal structure* being the sum of patents, concepts, patterns, computer and management systems; *external structure* being the relations with customers and suppliers, which involves the brand, reputation and trademark. To summarize the afore-mentioned arguments, this present study adopted the conceptual definition of IC proposed by Chen Mei-Chun (2001): "all the skills, knowledge, information, experiences, problem-solving ability and wisdom displayed by a company as a whole and incorporated into the human capital, structural capital and relationship capital". The operational definition is briefly described as below:

- A. Human capital: The knowledge, skills and experiences of a company's entire staff and management;
- B. Structural capital: The overall system and procedures adopted by a company to solve problems and create values;
- C. Relationship capital: The initiation, maintenance and development of an organization's external relationships, including the relationships with customers, suppliers and business partners.

Organizational Performance

There is a massive amount of previous studies addressing the measurement dimensions of organizational performance. Since the benefits of organizational performance will eventually be fed back to the financial dimension, most scholars in this field adopt financial performance as one of the measurement indicators. In an environment characterised by convenient ways of information delivery and rapid-changing markets, nevertheless, a company nowadays should never solely rely on financial performance to achieve survival and competitiveness. That is to say, it is impossible to sufficiently gauge the organizational performance using financial performance as the single indicator (Ya-Hui Ling and Ling Hong, 2010).

Moreover, Ya-Hui Ling and Ling Hong (2010) argued that organizational performance is the sum of accomplishments attained by all businesses/departments involved with an organizational goal during a determined period of time, with the goal either meant for a specific stage or the overall extent.

This present study is patterned after the research projects conducted by Daft (1978), Delaney & Huselid (1996), Johns & Johns (1993), Wu Se-Hwa (1998) and Ya-Hui Ling and Ling Hong (2010). In order to measure both the

financial and non-financial aspects of organizational performance and to correctly gauge the influence of job satisfaction and internal-service quality on organizational performance, this paper defines financial performance as the output in terms of financial accounting that can be measured by indices regarding growth and profitability. For example, a company with satisfying financial performance is expected to exceed the average in the same sector regarding the Earnings per Share (EPS) and Return on Sales (ROS) as well. The non-financial aspect of organizational performance, on the other hand, is measured by means of innovation-related performance, which in turn is gauged from the multiple perspectives of organizational innovation that involves both technological and managerial innovations. The technological innovation here refers to technologies required by an organization for manufacturing products or providing services, while a managerial innovation occurs in the organization's social system and is related to the hiring/management processes and the organizational structure (Daft, 1978; Damanpour & Evan, 1984; Johns, 1993; Kimberly & Evanisko, 1981; Ya-Hui Ling and Ling Hong, 2010).

Relationship between Organizational Culture and Organizational Performance

Mitchell and Yate (2002) said organizational culture is the sum of values, beliefs and understandings shared among organization members. Organizational culture is a crucial factor in the evaluation of corporate competitiveness and is able to reflect a company's uniqueness or distinctive qualities, which explains its close connection to the core corporate competitiveness (Huang Li-Hui, 2009). A term frequently mentioned during discussions of organizational behaviour, organizational culture is shaped and evolved over a long period of time. Definition and opinions of organizational culture vary among scholars worldwide. For instance, some argue that organizational culture is a *code of conduct* designed for employees and hopefully would slowly and discreetly change the employees' behavioural inclinations. The term "organizational culture" means the perception of organizational consistency that differentiates an organization from the others: it consequently covers such dimension as the individual, group, and organizational system (Wu Bing-Eng, 1986).

According to Li Ying-Zong (2002), organizational culture results an organization operating its internal system and interacting with external circumstances over a long period of time; it is a combination of all the values, beliefs, senses and actions within an organization. The intangible existence of organizational culture, nevertheless, offers substantial guidance for the behaviours/conduct of organization and its members to be displayed in everyday life.

In his study Zeng Hua-Zheng (2006) defines organizational culture as a demonstrated pattern of beliefs and expectations shared among all organization members, while Daft (2006) holds the definition that organizational culture is the significant values, beliefs, ways of thinking, and code of conduct shared among all members of an organization. Liu Yong-Fu (2004) mentioned in his paper that a good organizational culture may enhance both the efficacy and productivity of an organization. We may derive the following hypothesis from the aforementioned analyses even if they do not address international tourist hotels:

H1: Organizational culture has a positive and significant influence on organizational performance.

Relationship between Organizational Culture and IC

Among the previous literature pertaining to how organizational culture is linked to IC, a study authored by Lai Guan-Yu (2002) argued that, compared to a low-innovation bureaucratic corporate culture, a high-efficiency, supportive corporate culture attaches greater importance to such capital components as the human capital, innovation capital and process capital. Lai also found a significant correlation between corporate culture and knowledge management, with the type of corporate culture and knowledge management significantly affecting how important the dimensions and components of IC are, respectively. Liu Bo-Yan (2005) used SEM to thoroughly examine the organizational culture, human capital, relationship capital, structural capital and organizational performance. He found a model where the organizational culture exerts a full mediation effect in the relationship between IC and organizational performance. The major finding in his study is that organizational culture, human capital, relationship capital and structural capital have a significantly positive influence on human capital, relationship capital, structural capital and organizational performance respectively. To sum up, Liu proved that the aforementioned full mediating effect is substantiated, and that organizational culture does affect the accumulation of human capital, which in turn affects the accumulation of

relationship capital and subsequently the structural capital accumulation. Eventually, the accumulated structural capital influences how the organization performs. We can boldly derive the following hypothesis from the aforementioned analyses even if they do not address international tourist hotels:

H2: Organizational culture has a positive and significant influence on IC.

Relationship between IC and Organizational Performance

Young Chaur-Shiuh (2006) examined 211 listed companies (including OTC-listed ones) and found that IC contributes substantially to an organization's attempt to create values as well as competitive advantages. That contribution, he noted, becomes more noticeable through the interactions among human, structure and customer capital. In their study Rudez and Mihalic (2007) said it is imperative that the hotel industry enhance its IC development in order to stay competitive. They also mentioned that the interaction between human capital and Information Technology (IT) has the potential of bolstering the organization's financial performance. IC significantly influences the performance of organizations in IT, bio-tech, high-tech, or emerging industries (Chang, Chen & Lai, 2008). Among others, international tourist hotels and the other service providers offer both tangible products and intangible services that constitute organizational IC, including the employees' knowledge and the organization's management procedures. According to Tsen Shu-Hsiao et al. (2010), IC is made of "human capital", "structural capital" and "social capital". Therefore it is imperative that an organization develop a *human capital* hardly replicable by competitors, transform the accumulated wisdom and capacity into its core capability, utilize the functions of *structural capital* to establish its distinctiveness, and forge irreplaceable external relationships to reinforce its *social capital*. Moreover, Tsen noted that the synergy resulted from interactions among human, structural and social capitals is crucial to an organization's effort to build competitiveness. According to Chen Mei-Chun (2001), the IC of an organization exerts a significantly positive influence on organizational performance. We may derive the following hypothesis from the aforementioned analyses even if they do not address international tourist hotels:

H3: IC has a positive and significant influence on organizational performance.

Based on the research purposes and literature reviews described above, we may obtain the research framework in Fig. 1.

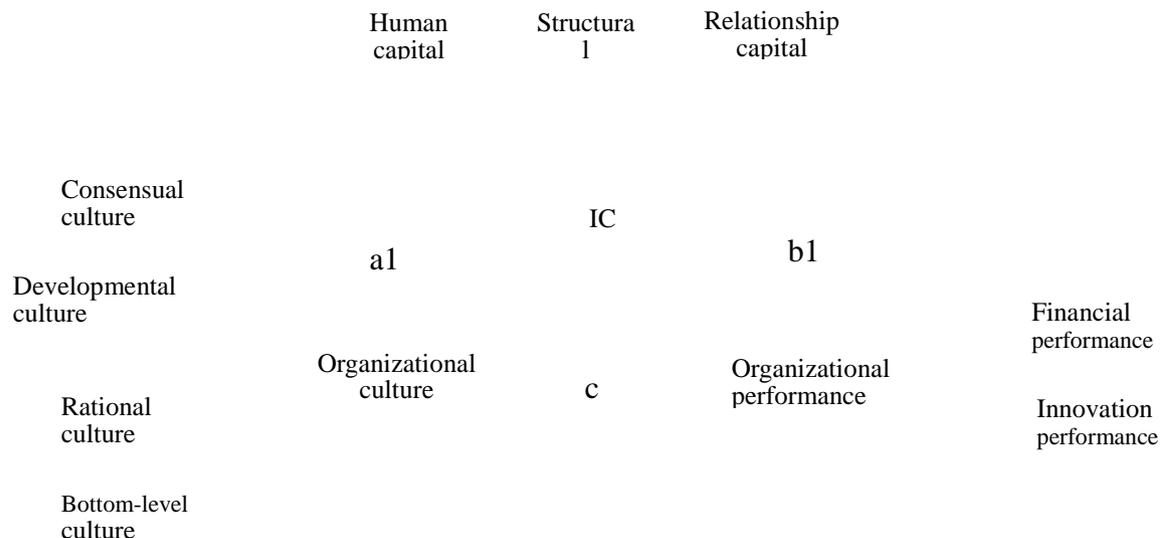


Figure 1: Research Framework

RESEARCH METHODOLOGY

Sampling Method

This study surveyed employees of the rooms, catering and management departments at the 105 existing Taiwan-based international tourist hotels, selected using convenience sampling according to statistics provided by Taiwan's Tourism Bureau (2010). 30 copies of expert questionnaire were given away in a pilot-test. A post-test was conducted after modifying the questionnaire in accordance with expert suggestions. 240 copies of the official questionnaire were given away, with 182 valid copies returned at a return rate of 75.8%.

Designing the Questionnaire

The questionnaire of this study was designed on the basis of Multi-Dimension Measurement. It uses a 7-point Likert Scale to measure each answer, with 7 being strongly agree and 1 being strongly disagree. A higher point represents a higher degree of agreement, and vice versa.

The questionnaire for the dimensions of organizational culture was patterned after the one presented by Cameron (1985), with "consensual culture", "developmental culture", "rational culture" and "hierarchical culture" being the four major dimensions. The questionnaire contains 16 items in total.

The questionnaire for Intellectual Capital (IC) was designed according to the argument of Tsen Shu-Hsiao and Hu Hsiang-ling (2010) concerning IC and consists of three dimensions (i.e., human capital, structural capital and relationship capital). The questionnaire contains 12 items in total.

The questionnaire for organizational performance was a summary of those proposed by Daft (1978), Delaney and Huselid (1996), Johns (1993), Wu Se-Hwa (1998), and Ya-Hui Ling and Ling Hong (2010). It uses the financial and innovation-related performances to measure the organizational performance. While a multiple-perspective measuring technique is used to gauge the innovation-related performance, the managerial innovations are believed to occur in an organization's social system and are related to the hiring/management processes and organizational structure (Daft, 1978; Kimberly & Evanisko, 1981; Damanpour & Evan, 1984; Ya-Hui Ling and Ling Hong, 2010). The questionnaire contains 8 items in total.

Data Obtained from Questionnaire and the Measurement Model

To verify the research framework proposed, this study applied linear SEM to a Confirmatory Factor Analysis (CFA) of the framework of research model. The questionnaire comprises three implicit/latent variables (i.e., organizational culture, IC and organizational performance), each containing some observable/explicit variables as stated below. The survey was conducted using these observable/explicit variables, with several questionnaire items categorized under them each. After processing data collected in the survey, files were created for the primary data. Although the questionnaire design was based on Multi-Dimension Measurement, the "Odd-Even Measurement" was adopted to make sure the computer software-aided data processing goes as expected (Chen Shun-Yu, 2010). Table 1 shows the total number of questionnaire items under each implicit/explicit variable in this study, along with their reference resources.

Table 1: Number of Questionnaire Items for "Implicit Variables" and "Observable Variables"

Implicit variables	Explicit variables	Number of items	References for Questionnaire
Organizational culture	Consensual culture	4	Cameron (1985)
	Developmental culture	4	
	Rational culture	4	
	Bottom-level culture	4	
Intellectual capital (IC)	Human capital	8	Tsen Shu-Hsiao and Hu Hsiang-ling (2010)
	Structural capital	8	
	Relationship capital	8	
Organizational performance	Financial performance	4	Wu Se-Hwa (1998), Ya-Hui Ling and Ling Hong (2010); Daft (1978), Delaney & Huselid (1996), Johns (1993)
	Innovation-related performance	4	

RESULTS AND ANALYSES

Linear Structure Model Analysis

The CFA is an analytical approach opposite to the Exploratory Factor Analysis (EFA). This study conducted a CFA of three unobservable/implicit variables (i.e., organizational culture, IC and organizational performance). Consisting of the Structural Model and Measurement Model, the SEM provides an effective solution to the cause-effect relation between implicit/latent variables. Besides, the models verified in this study has three parts: (1) verifying the goodness-of-fit of Measurement Model; (2) verifying the goodness-of-fit of Structural Model and (3) verifying the overall model's goodness-of-fit to make sure it conforms to the goodness-of-fit indices. That is, the goodness-of-fit of the overall SEM was judged with related goodness-of-fit indices (Diamantopoulos & Siguaw, 2000).

Analysing Fit of Measurement Model

The factor loading of latent/implicit variables and manifest/ explicit variables mainly measures the intensity of linear correlation between explicit and implicit variables. A factor loading close to 1 indicates the explicit variable is relatively capable of measuring the implicit one. In this study, all explicit variables' factor loading are between 0.7 and 0.9, hence the satisfying reliability. Consequently, all explicit/manifest variables in the model's measurement system are capable of appropriately measuring the implicit/latent variables. Moreover, the Average Variance Extracted (AVE) is used to calculate the explanatory power of variance between implicit/latent variables" versus explicit/manifest ones; the higher the VE value, the greater reliability and convergent validity of the latent/implicit variable. Usually, the VE value must be larger than 0.5 to indicate the explanatory variance of explicit variables is larger than measurement error (Fornell and Larcker, 1981). In this study, all AVEs are larger than 0.5, hence the explicit variables' excellent reliability and convergent validity (See Table 2 and Fig. 2).

Table 2: Judgment Indicators of Measurement System in the Model

Implicit Variables	Explicit Variables	Factor loading	Variance Extracted (VE)
Organizational culture (X)	X1	0.82	0.54
	X2	0.83	0.56
IC (ME)	ϵ_1	0.77	0.54
	ϵ_2	0.78	0.57
Organizational performance (Y)	Y1	0.79	0.56
	Y2	0.81	0.58

Analysing Fit of Structure Model

Path analysis results of structure model

After the overall model passed the goodness-of-fit test, Table 3 shows such results as the parameter estimates, S.E. and Critical Ratio (C.R.) between implicit variables.

Table 3: Path Analysis Results of the Structural Model

Path Coefficients between Implicit Variables	Estimate	S.E.	C.R.	P	Label
Organizational culture (X) – Organizational performance (Y)	.474	.031	15.290	***	c
Organizational culture (X) – IC (ME)	.531	.023	23.087	***	a1
IC (ME) – Organizational performance (Y)	.543	.038	14.289	***	b1

Note: * indicates $P < 0.05$; ** indicates $P < 0.01$; *** indicates $P < 0.001$

Coefficient of Determination

The R^2 value is the degree of explanatory power of "independent variable" regarding "dependent variable" under each implicit variable. Table 4 shows the Path Coefficient of Determination in this study:

Table 4: Path Coefficient of Determination

Coefficients of Determination	R ²
Organizational culture→ Organizational performance	0.72
Organizational culture→ IC	0.74
IC→ Organizational performance	0.78

The Indices of Fit of the Overall Model

After a literature review and factor analysis conducted on the collected sample data, we were able to construct a framework for the overall model. Following the advice of Hari et al (1998), the measurement of the fit of the overall model was divided into three aspects, namely the Measures of Absolute Fit, Incremental Fit Measures and Parsimonious Fit Measures. Table 5 shows the test results concerning fit of the overall model (Chen Fu-Chiang, Fang Hsien-Kuang, Chen Guo-Jia and Chien An-Jan, 2008).

Table 5: Analysis of Fit of the Overall Model

Goodness-of-fit Indices		Standards for Evaluation	Results Obtained
Measures of Absolute Fit	GFI	>0.9	.912
	AGFI	>0.8	.901
	RMR	<0.05	.021
Incremental Fit Measures	NFI	>0.9	.914
	CFI	>0.9	.913
Parsimonious Fit Measures	PNFI	>0.5	.623
	PGFI	>0.5	.684

Standardized Results of SEM Analysis

Fig. 2 indicates the result of computer-aided standardization of the model's overall framework (Lee, 2011):

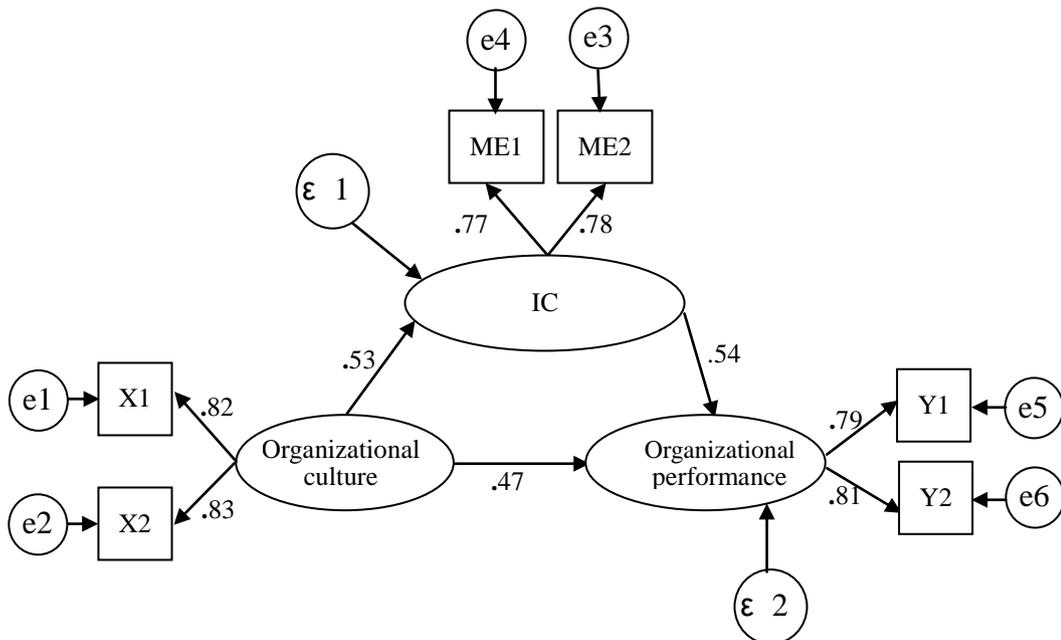


Figure 2: The result of computer-aided standardization of the model's overall framework

Analytical Testing of Path Effect for the Structural Model

Focused on the path coefficients between implicit/unobservable variables in the structural model, this study used Bayesian Estimation to conduct an analytical test to find out the path effect of structural model, with intellectual capital

as the mediating factor (ME), as shown in Table 6:

- (1) Since the path coefficient of organizational culture (X) versus IC (ME) is $a_1=0.531$, with a 95% confidence interval (3.834, 4.317), the two variables have a significant linkage and a significant first-order efficacy.
- (2) Since the path coefficient of IC (ME) versus organizational performance (Y) is $b_1=0.543$, with a 95% confidence interval (3.975, 4.614), the two variables have a significant linkage and a significant second-order efficacy.
- (3) Since the path coefficient of organizational culture (X) versus organizational performance (Y) is $c=0.474$, with a 95% confidence interval (3.233, 4.624), the two variables have a significant linkage and a significant, positive third-order influence.

Table 6: Bayesian Estimation

Regression weights	Mean	S.D.	95% Lower bound	95% Upper bound	Name
Organizational culture (X) → IC (ME)	4.131	0.317	3.814	4.448	a1
IC (ME) → Organizational performance (Y)	4.033	0.234	3.799	4.267	b1
Organizational culture (X) → Organizational performance (Y)	3.682	0.845	2.837	4.527	c

Table 7: Custom Estimates

Numeric Estimates	Mean	S.D.	95% Lower bound	95% Upper bound
Direct Efficacy (a1)	4.131	0.377	3.814	4.448
Direct Efficacy (b1)	4.033	0.234	3.799	4.267
Direct Efficacy (c)	3.682	0.845	3.837	4.527
Indirect Efficacy (a1*b1)	16.660	1.683	14.997	18.343
Total Efficacy (c+a1*b1)	20.342	1.997	18.345	22.339
The Ratio of Indirect Efficacy to Total Efficacy	0.819	0.127	0.692	0.946

We know from Table 7 that:

- (1) The estimate of Indirect Efficacy (a_1*b_1) is 16.660, with a 95% confidence interval (14.997, 18.343), indicating a significant linkage and significant indirect efficacy, which accounts for an estimated 81.9% of the total efficacy.
- (2) Due to the significant indirect efficacy as well as the positively significant influence of direct efficacy, IC has a *partially mediating* effect.

The test results obtained from the analysis above are:

1. Organizational culture has a positively significant direct efficacy regarding organizational performance, with a 0.47 standardized path coefficient that supports H1 (Hypothesis substantiated);
2. Organizational culture has a significantly positive influence on IC, which in turn has a significant and positive influence on organizational performance. In other word, IC will have a “partially” mediating effect when H1 is partially supported (Hypothesis substantiated).

CONCLUSION AND RECOMMENDATIONS

Conclusion

The following conclusions are derived from the aforementioned data analyses and results:

- 1.1 As for SEM verification, the SEM established in this study has a satisfying goodness-of-fit in terms of the Measurement Model, Structural Model and the overall structure, hence a good model fit.
- 1.2 Conclusions with regard to the verification of business practices at Taiwanese hotels:
 1. Concerning the relationship dimension between organizational culture and organizational performance, the organizational culture of Taiwan-based international tourist hotels affects organizational performance in a positive and significant way;

2. Concerning the relationship dimension between organizational culture and IC, the organizational culture of Taiwan-based international tourist hotels has a positive and significant influence on IC.
3. Concerning the relationship dimension between IC and organizational performance, the IC of Taiwan-based international tourist hotels has a positive and significant influence on organizational performance.

In summary, the organizational culture of Taiwan-based international tourist hotels has a positively significant influence on organizational performance, with IC exerting a *partially* mediating effect. The finding matches the argument of Baron and Kenny (1986) that “the partially mediating effect means that, when a mediating variable is added, the relationship between independent and dependent variables becomes weaker or less significant”.

Contributions of this present study

1. Contributions to the business practices at Taiwanese hotels:

While the previous studies of international tourist hotels tend to focus on EFA, this present study performed modelling on the summarized results of previous literature in related fields. It also verified the model’s goodness-of-fit to find out if this model has satisfying fit-of-goodness effects. Consequently, this study is a CFA-based one that addresses a crucial topic regarding business practices. Not only is that topic worth further research in relevant fields, the research results also provide a reference for the management at Taiwan-based international tourist hotels when making management decisions. That explains why this present study serves as an extremely valuable reference.

2. Innovative applications of methodology:

The previous literature pertaining to international tourist hotels almost always conducted exploratory research using the multi-regression analysis and rarely used the CFA-based research framework that comprises “one cause, one effect, and one mediator”. But since the chief dimensions of this present study are implicit variables, CFA and linear SEM are adopted as the measurement tool and model framework respectively, rather than the inappropriate Multiple Regression Analysis. That explains why this study is relatively innovative in terms of methodology.

3. The underlying significance of management:

According to findings from this present study, the organizational culture, IC and financial performance of Taiwan-based international tourist hotels are significantly correlated. Moreover, a good organizational culture exerts a positive and significant influence on a business’s IC while directly or indirectly improving the performance of business operations. That is, a business should examine whether or not it has a good organizational culture before implementing an IC-bolstering plan. Meantime, it has to disclose the indicators for IC dimensions that have perceived significance, because those indicators might convey to investors the hidden values of a business along with the other information that expedites decision-making, so as to improve the performance of business operations.

Limitations and Suggestions

1. As this present study focuses solely on CFA of international tourist hotels, future studies may consider either extending the scope of research or verifying the goodness-of-fit of companies in various other industries, so as to find out if the goodness-of-fit varies among industries in the same model.
2. Given the limited amount of research resources, this study adopted the non-probability, convenience sampling method for convenience purposes, with the samples selected only on “proximity” and “easy-to-measure” bases. That resulted however, in a substantial sampling bias and a reduced reliability. Therefore future studies are advised to use simple random sampling or stratified random sampling instead.

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Organizational performance refers to the ability of organizations to meet its stakeholders'™ needs and its own needs for survival [49] . Organizations differ in performance due to the variance in organizational resources which include tangible and intangible resources [50] . Additionally, the mediating effect of knowledge sharing on the relationship between intellectual capital and organizational performance is explored. To the best of the authors'™ knowledge, no empirical studies have been conducted in Jordan to investigate the proposed relationships. One of the most important resources organizations rely on is human capital as it helps organizations respond to environmental changes innovatively [72] .