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Abstract

In recent years, e-Business has emerged as a mainstream business practice. Engaged in highly-competitive Internet-enabled markets, many business organizations have turned to customer relationship management (CRM), a computer-based information system that allows them to gain greater insight into their customers' needs, to gain a competitive advantage. Consequently, CRM has risen to become a key e-business issue. Yet, many critical organizational factors underlie the success and performance of CRM. This study examines the impact of information technology (IT) intensity and organizational absorptive capacity on CRM practices and performance, and presents a research model. Data collected through a survey of Taiwan financial service institutions suggest that CRM practices mediate the effects of IT intensity and organizational absorptive capacity on CRM performance.

1. Introduction

As more businesses transition to e-business, competition in the Internet-enabled marketplace becomes keener. Many have turned to information technology (IT) for solutions that provide a competitive advantage. One such IT-based solution that has gained popularity in recent years is customer relationship management (CRM), frequently defined as an information system to assist the customer retention process or a methodology that extensively employs information technology (IT), particularly database and Internet technologies, to enhance the effectiveness of relationship marketing practices. Generally, greater investments in IT provide CRM with greater capabilities. As a formidable strategic weapon, CRM tunes the organization into listening to its customers, and allows it (organization) to develop customized products and services that cannot be easily duplicated, substituted or imitated by their competitors, and consequently more precisely fit their needs [29], [30], [34], [39]. Given this context, the primary objectives of CRM involve attracting, developing and maintaining successful customer relationships over time [2], [6], and building customer loyalty [20] through efficient and effective two-way dialogues [39]. As the customer-business relationship flourishes, both the customers and organization benefit [40].

An important factor that may critically affect CRM performance lies in the organization's ability to leverage and exploit its knowledge toward innovating new products and services. Past studies [4], [5], [16] suggest that an organization's ability to link its knowledge to its innovativeness (i.e., ability to innovate) depends upon its absorptive capacity, the ability to recognize and assimilate new information, and apply the ensuing knowledge to commercial ends (i.e., exploitation) [5]. Therefore, differences in CRM practices and performance may be attributed to differences in absorptive capacity. Greater investments in developing organizational learning may lead to more successful results of CRM.

The purpose of this paper is to examine the effects of IT intensity, an organization's commitment to its IT infrastructure and IT applications, and organizational absorptive capacity on CRM practices and performance. This study proposes that organizations with stronger IT intensity and greater absorptive capacity will reap greater benefits from CRM, and be inclined to develop and produce more innovative products and services for their customers and as a result deepen their relationships. Hence, IT intensity and absorptive capacity should affect the CRM practices (i.e., customer insight) and CRM performance (i.e., organization and customer benefits). This study expands upon earlier research that examined the relationship between organizational absorptive capacity and CRM performance, and seeks to conceptually and empirically validate the relationship through a review of supporting studies and survey data collected from Taiwanese financial institutions, respectively.

2. The Impact of IT Intensity on Marketing Practices and Customer Services

Because CRM is an IT-enabled system, its performance hinges on the resources and investments an organization commits to it. IT intensity refers to the IT infrastructure and applications that allow the organization to benefit from its IT investments and apply them toward their best interests. The

infrastructure ensures access to and the availability of computing resources (i.e., hardware, software, data), and facilitates information sharing and communication throughout the organization. Henderson and Venkatraman [13] suggest that an organization's IT infrastructure has two components: (1) a technical IT infrastructure, and (2) a human IT infrastructure. Duncan [10] sees the technical IT infrastructure as a set of tangible, shared, physical IT resources that form a foundation for various business applications. Tangible IT resources include hardware and operating systems, network and telecommunications technologies, data, and core software applications.

In contrast, the human IT infrastructure addresses the necessary individual skills and knowledge required to develop, maintain, manipulate and support end-users in their abilities to leverage the technical infrastructure. Osterman [28] discusses the importance of developing and acquiring individual skills and roles to enable an organization's investments in IT. Without an adequate human IT infrastructure, the organization will realize very little benefit from its IT infrastructure and investments. In essence, the human IT infrastructure must shadow the development of a technical IT infrastructure.

With increasing emphasis being placed on organizational IT, the impact of IT on marketing practices and customer services has become more apparent over the past several years. As a major driving force, IT has permitted organizations to introduce continual improvements to their marketing practices in their quest to secure competitive advantages. These improvements fall into two general categories: (1) marketing process automation and (2) marketing intelligence. While marketing process automation helps link marketing activities to facilitate information sharing (i.e., efficiencies), marketing intelligence aims to enhance decision making through tools that provide greater insights. In many cases, the continual advances in IT have led to more sophisticated applications of IT. For example, the results of a survey conducted by Stone and Good [37] on computerization aids in the assimilation of tactical and strategic marketing activities strongly indicate that marketers are applying IT in new ventures, including tactical and strategic marketing activities such as the application of EDI to strategic supply chain [24]. Li et al. [23] found that many marketers are becoming more familiar with information and Internet technologies, and actively engaging in the development of computer applications that meet their specific information needs. The impact of IT on marketing practices has been an enabler of greater efficiencies (i.e., faster responses to satisfy information needs) and market intelligence.

IT also opens many new business opportunities in the customization of products and services, and development of customer loyalty. In particular, the migration of many businesses from traditional *bricks and mortar* operations to e-business has refocused the market's competitive orientation from product-centric to customer-centric. Thus, the emphasis now lies in understanding each customer's needs in contrast to targeting a group or market segment with similar needs. In their discussion of IT enhancement to customer service, Walsh and Godfrey [38] suggest that e-tailers hold greater opportunities to offer better customer service than their *bricks and mortar* counterparts through customization, and add greater value to their products and services through personalized sites.

Along with the ability to gain greater insights into their customers' needs, organizations also now possess the capability to leverage their knowledge toward developing customer loyalty. Past studies reveal that the greatest leverage comes from investments in the retention rather than the generation of new customers [35], [32], [36], [39]. In their examination of e-loyalty and the unique economics of e-business customer loyalty, Reichheld and Schefter [34] state that building loyalty involves first gaining the customer's trust, and not the application of technology and the Internet. Even though the Internet is a powerful tool for strengthening relationships, the basic laws and rewards of building loyalty have not changed. A study of Karimi et al. [19] that gauged IT management practices to determine whether they differed among firms seeking a competitive advantage with IT when it was linked to their customer service lends further support to this. The proposed relationship between customer value and positions on the product and process structure of Heim and Sinha [12] also reflects the value of developing customer loyalty.

3. Organizational Absorptive Capacity

Another organization factor with significant influence on CRM performance is organizational absorptive capacity. The absorptive capacity of an organization results from the cumulative learning activities of its individuals and the transfer of knowledge within the organization through a common language [5]. Learning activities occur with new experiences directed toward exploration (i.e., research), routine experiences and training. These activities help develop knowledge that can be used to recognize, acquire, assimilate and apply new knowledge. The more frequent learning occurs, the greater the accumulation process, which in turn reinforces prior knowledge, increases the capacity to retain new knowledge and yields the application of knowledge to new scenarios [3]. Thus, continuous learning builds over time a repository of knowledge that allows the organization to recognize and solve new problems with innovative solutions. The knowledge structures resulting from learning form a wealth of knowledge that eventually becomes available to the entire organization as a shared resource.

Absorption capacity allows organizations to leverage this knowledge (i.e., recognize and assimilate new information, and apply knowledge) in the form of innovative responses to benefit from their insights

garnered through their customer relationships. The greater the knowledge possessed and shared throughout the organization, the more the organization will be inclined to *absorb* new knowledge, and apply it toward innovative, creative and effective products and services. Thus, leveraging becomes greater as knowledge becomes pervasive in the organization.

4. CRM Practices: Market Orientation and Customer Service

4.1 Market Orientation

Various issues of market orientation have been widely discussed since the 1990s, including performance implications [17], [21], [25], [26], [27], measurement [7], [14], [22], and antecedents and performance outcomes [17], [27]. Market orientation can be defined as the organization-wide generation, dissemination and responsiveness to market intelligence, and involves information sharing among multiple departments engaged in activities directed toward meeting customer needs. In contrast to product-driven marketing, which focuses on pushing end products into markets while promoting lower prices and good quality, market-orientation concentrates on detecting customer needs and quickly fulfilling them. Market-orientation practices have positive impacts on an organization's performance and new products, and promote customer-centric values.

4.2 Customization and Loyalty Programs

The objective of customization is to provide tailor-made products/services that appeal to and more precisely fit the individual customer's needs. This requires soliciting customers for their feedback and integrating this information into production processes such that it provides the organization with its greatest competitive advantage [31]. However, customization incurs costs, and sacrifices flexibility and speed [8]. Mass customization attempts to customize products and services for the individual customers to reach a one-to-one marketing level. It can be seen as an extension of traditional product differentiation which strives toward changing the product's characteristics to competitively distinguish it from another business' offering. In contrast, mass customization achieves differentiation through targeting the product's or service's benefits toward satisfying the customer's specific needs. The advances in IT makes mass customization more feasible as it allows individual customer behavior to be traced and analyzed through data warehouses and data mining techniques, all of which make customer service easier and solution-oriented [18].

Through the analysis of their collected data, organizations can capitalize on future opportunities through the development of loyal programs. Loyalty programs behoove organizations to develop since they often lead to increases in repeat-purchase rates and usage frequency, and raise barriers of entry into the market by making it difficult for new entrants to court customers away from existing businesses [36]. The market research studies of Hughes [15], and Reichheld and Sasser [33] strongly suggest that loyalty programs can increase business revenue and total customer market share. Similarly, Dowling and Uncles [9] conclude that loyalty programs can introduce many benefits to their promoters.

5. Research Model and Test of Hypotheses

Figure 1 illustrates this study's research model. The model proposes the impact of IT intensity and organizational absorptive capacity on CRM practices and performance. IT intensity and organizational absorptive capacity represent the independent variables, while CRM practices a mediator variable, and CRM performance represented by business benefits and customer benefits the two dependent variables. Based on a review of the literature, previous related case studies and field experiences shared by industrial experts, the following hypotheses and sub-hypotheses are presented:

H1: There is a positive relation between IT intensity and CRM practices
   H1a: There is a positive relation between IT intensity and market orientation
   H1b: There is a positive relation between IT intensity and customer service

H2: There is a positive relation between absorptive capacity and CRM practices.
   H2a: There is a positive relation between absorptive capacity and market orientation.
   H2b: There is a positive relation between absorptive capacity and customer service

H3: There is a positive relation between CRM practices and CRM performance.
   H3a: There is a positive relation between market orientation and firm benefits.
   H3b: There is a positive relation between market orientation and customer benefits.
   H3c: There is a positive relation between customer service and firm benefits.
   H3d: There is a positive relation between customer service and customer benefits.

H4: There is a mediating effect of market orientation on IT intensity, absorptive capacity to CRM performance.
   H4a: There is a mediating effect of market orientation on IT intensity, absorptive capacity to firm benefits.
   H4b: There is a mediating effect of market orientation on IT intensity, absorptive capacity to customer benefits.

H5: There is a mediating effect of customer service on IT intensity, absorptive capacity to CRM performance.

H5a: There is a mediating effect of customer service on IT intensity, absorptive capacity to firm benefits.

H5b: There is a mediating effect of customer service on IT intensity, absorptive capacity to customer benefits.

6. Research Methodology

6.1 Data Collection and Sample

Survey questionnaires with accompanying cover letters were mailed to 542 Taiwanese financial service companies. The cover letter briefly explained the purpose of this research project, which received funding from the National Science Consul (NSC) of Taiwan, and contained general instructions for completing the survey. The recipients were restricted to CRM and marketing managers, and customer service department heads. Two weeks after the initial mailing, 99 responses were received. Follow-up telephone calls were made a week later, urging non-response recipients to complete and return their surveys by either mail or fax. In total, 173 responses were returned for a response rate of 30 percent. Among the returned surveys, nine were incomplete and discarded; this reduced the sample size to 164. The final sample covers a broad cross-section of firms in the banking, insurance and trading industries as well as many others.

6.2 Measures

A standard psychometric scale development procedure [11] was followed to generate multiple-item scales based on a review of the literature and interviews with IT and marketing professionals. Measures with single- and multiple-item formats and conceptualized multiple-items scales as formative or reflective in nature were formulated. The questionnaire was pre-tested and refined following the comments of the IT and marketing managers. All items were operationalized using five-point Likert-type scales. Table 1 provides the operational definitions of each variable. Table 2 contains the results of the reliability test while Table 3 shows the summary statistics of all constructs and the variance-covariance matrix.

A comparison between respondents and the population on four variables (number of employees, capital, industries, and age of the firm) was conducted to examine the data for potential non-response bias. None of these four t-tests for differences between the sample and the population means was statistically significant at a 0.05 level. Moreover, no significant differences between earlier and later respondents on the scores of each question item were detected. The absence of differences supports the contention that no response bias is present in the sample [1].

7. Results

Eight hierarchical regression models were developed to test the hypotheses. Firm capital (CAPITAL) and the number of employee (EMPLOYEE) were set as the control variables. Tables 4 through 11 provide summaries of the statistical results. The p-values for IT-intensity (IT_NESS) and absorptive capacity (ABSRPTVE) (Tables 4 and 5) both indicate significance (p < .01). The VIF values show no sign of colinearity. The first model (Table 4) suggests that IT intensity and organizational absorptive capacity are positively related to market orientation (MK_ORNT), one of the elements of CRM practices. Therefore, H1a and H2a are supported. The second model (Table 5) also suggests that IT-intensity and absorptive capacity are positively related to customer service (CS), the second element of CRM practices, and thereby lends support to H1b and H2b.

The regression models shown in Tables 6 and 7 suggest that the relationships between customer service (CS) and firm benefits (F_BENEFI, Table 6), and customer service and customer benefits (C_BENEFI, Table 7) are both significant (p < 0.01) and positive, and support H3c and H3d. Market orientation practice is also positively related to firm benefits (Table 6, p < .01) and customer benefits (Table 7, p < .05). Therefore, both H3a and H3b are supported. The VIF values indicate the presence of no collinearity.

Several regression models were developed to test the mediating effects of CRM practices (market orientation and customer service). The results are summarized in Tables 8 through 13. Tables 8 and 9 reveal that both absorptive capacity and IT intensity have direct effects on CRM performance (p < .01 and .05, respectively) as measured against customer and firm benefits. When market orientation is included (Tables 10 and 12), the models suggest market orientation's mediating effect on customer benefits (market orientation, p < .01; IT-intensity, p > .05; absorptive capacity, p > .05), and a partial mediating effect on firm benefits (market orientation, p < .05; IT-intensity, p > .05; absorptive capacity, p < .05). Partial mediating effects were also found between customer service and firm (customer service, p < .01; IT-intensity, p > .05; absorptive capacity, p < .05) benefits (Table 11), but a mediating effect between customer service and customer benefits (customer service, p < .01; IT-intensity, p > .05; absorptive capacity, p > .05) (Tables 13). The models support H4b and H5b, but not H4a and H5a due to the partial mediating effects.

8. Conclusion

This paper investigated the impact of IT intensity and absorptive capacity on CRM practices and CRM performance, and the mediating effects of CRM practices. Based on the data collected through a survey of financial institutions in Taiwan, the analyses indicate that (1) IT intensity and absorptive capacity are

positively related to CRM practices (i.e., firm benefits, customer benefits), and (2) CRM practices (i.e., market orientation, customer service) are positively related to CRM performance. Furthermore, (3) CRM practices can be treated as mediators since they can influence the impact of IT intensity and organizational absorptive capacity on CRM performance.

Adopting CRM has been a top priority for many business organizations. To ensure a successful CRM implementation, the results of this study suggest that organizations need to enhance their IT intensity, such as investing in their IT infrastructure, and improving and fully utilizing their IT applications. More importantly, they need to develop their absorptive capacity through

enhanced training programs and knowledge transfer capabilities. Nevertheless, improving IT intensity and enlarging absorptive capacity are important for all organizations engaged in e-business and CRM. Organizations that maintain a market-oriented strategy, adopt customization approaches and place greater emphasis on customer service will promote customer benefits and eventually retain their customers and increase revenue and profits.
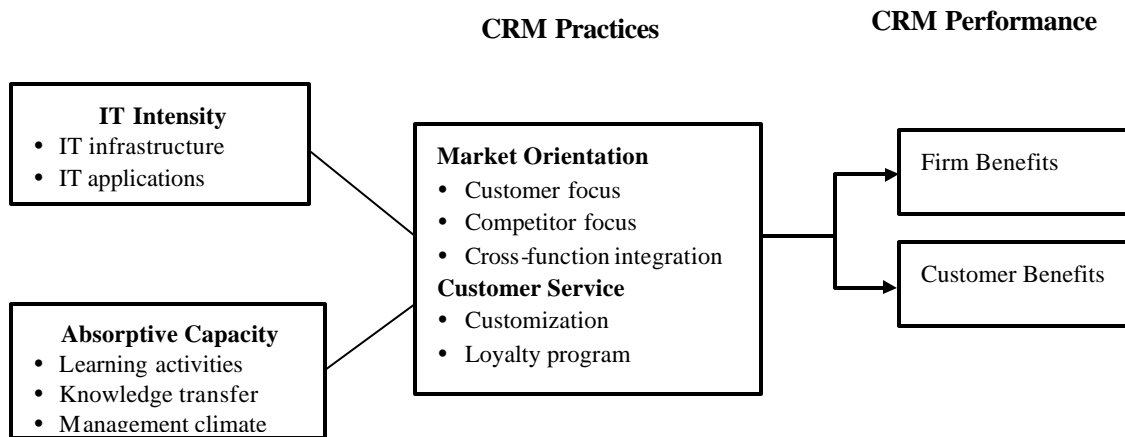
Figure 1. Research model

Table 1. Operational definitions

Variables	Operational definition	References
IT intensity	IT infrastructure IT applications	Sacha（1996）; Michael（1996）, Kalakota & Whinston（1996）
Absorptive capacity	Individuals cumulative learning activities Organization knowledge transfer Management climate	Cohen and Levinthal (1990); Boynton et al. (1994); Bower and Hilgrad (1981); Massey et al. (2001)
Market orientation	Customer focus Competitor focus Cross functional integration	Narver & Slates (1990); Han et al.（1998）; Slater and Narver（2000）
Customer service Customization Loyalty program	Customized services Customized capability Marketing campaigns Customer profitability Strategic alliance	Silveira et al.（2001）; Gilmore and Pine（1997）; Kotha（1995）; Pine (1993) Sharp and Sharp（1997）; Barnes,（2001）; Winer,（2001）; Griffin,（1995）; Hughes,（2001）
CRM performance Firm benefits Customer benefits	 Profit increase, Cost down, New opportunities Social benefits, Psychological benefits, Economic benefits, Customized benefits	 Storey and Easigwood（1999）; Swift（2001）; Winer（2001） Gwinner et al. (1998)

Table 2. Reliability test

Cronbach alpha = .9625

Dimensions	Coefficients
Absorptive capacity	0.9255
IT intensity	0.9152
Market orientation	0.9081
Customer service	0.7821
Firm benefits	0.8987
Customer benefits	0.9305

Table 3. Mean, standard deviation, and correlations between variables

	Mean	S.D.	1	2	3	4	5	6
1. Absorptive capacity	3.1715	0.7243	1.000					
2. IT intensity	3.7936	0.7022	0.528**	1.000				
3 Market orientation	4.0027	0.5993	0.502**	0.587**	1.000			
4. Customer service	3.5015	0.6706	0.465**	0.513**	0.598**	1.000		
5. Firm Benefits	3.8486	0.6044	0.384**	0.351**	0.376**	0.440**	1.000	
6. Customer Benefits	4.0071	0.6074	0.347**	0.325**	0.399**	0.417**	0.814**	1.000

** correlation is significant at the .01 level

Table 4. Regression analysis result for H1a and H2a

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	4.097	.098		41.856	.000		
	CAPITAL	-3.21E-02	.040	-.107	-.801	.424	.348	2.878
	EMPLOYEE	6.339E-03	.056	.015	.114	.910	.348	2.878
2	(Constant)	1.968	.214		9.211	.000		
	CAPITAL	-1.96E-02	.031	-.065	-.637	.525	.346	2.889
	EMPLOYEE	-4.74E-02	.043	-.113	-1.096	.275	.341	2.933
	IT_NESS	.399	.061	.468	6.513	.000	.706	1.417
	ABSRPTVE	.222	.059	.268	3.768	.000	.721	1.387

a. Dependent Variable: MK_ORNT

Table 5. Regression analysis result for H1b and H2b

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	3.497	.110		31.874	.000		
	CAPITAL	-2.38E-02	.045	-.071	-.529	.597	.348	2.878
	EMPLOYEE	3.442E-02	.062	.074	.551	.583	.348	2.878
2	(Constant)	1.424	.259		5.492	.000		
	CAPITAL	-1.25E-02	.037	-.037	-.335	.738	.346	2.889
	EMPLOYEE	-1.61E-02	.052	-.034	-.306	.760	.341	2.933
	IT_NESS	.359	.074	.378	4.839	.000	.706	1.417
	ABSRPTVE	.250	.071	.271	3.499	.001	.721	1.387

a. Dependent Variable: CS

Table 6. Regression analysis result for H3a and H3c

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.765	.098		38.303	.000		
	CAPITAL	-2.89E-02	.040	-.096	-.717	.474	.345	2.902
	EMPLOYEE	7.683E-02	.056	.184	1.377	.170	.345	2.902
2	(Constant)	1.977	.307		6.431	.000		
	CAPITAL	-1.51E-02	.036	-.050	-.420	.675	.343	2.915
	EMPLOYEE	6.175E-02	.050	.148	1.239	.217	.343	2.911
	MK_ORNT	.188	.088	.187	2.134	.034	.635	1.574
	CS	.292	.079	.324	3.705	.000	.639	1.566

a. Dependent Variable: F_BENEFI

Table 7. Regression analysis result for H3b and H3d

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.975	.099		40.053	.000		
	CAPITAL	-2.55E-02	.041	-.084	-.627	.531	.345	2.902
	EMPLOYEE	5.068E-02	.056	.121	.900	.370	.345	2.902
2	(Constant)	2.128	.312		6.829	.000		
	CAPITAL	-1.11E-02	.037	-.037	-.305	.761	.343	2.915
	EMPLOYEE	3.686E-02	.051	.088	.730	.467	.343	2.911
	MK_ORNT	.242	.089	.239	2.709	.007	.635	1.574
	CS	.245	.080	.271	3.077	.002	.639	1.566

a. Dependent Variable: C_BENEFI

Table 8. Regression analysis result for testing mediating effects (I)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.757	.098		38.231	.000		
	CAPITAL	-3.06E-02	.040	-.101	-.759	.449	.348	2.878
	EMPLOYEE	8.498E-02	.056	.202	1.519	.131	.348	2.878
2	(Constant)	2.435	.256		9.522	.000		
	CAPITAL	-2.52E-02	.037	-.083	-.683	.496	.346	2.889
	EMPLOYEE	5.656E-02	.052	.134	1.094	.276	.341	2.933
	IT_NESS	.170	.073	.198	2.321	.022	.706	1.417
	ABSRPTVE	.229	.070	.274	3.249	.001	.721	1.387

a. Dependent Variable: F_BENEFI

Table 9. Regression analysis result for testing mediating effects (II)

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.973	.100		39.835	.000		
	CAPITAL	-2.60E-02	.041	-.085	-.637	.525	.348	2.878
	EMPLOYEE	5.312E-02	.057	.125	.935	.351	.348	2.878
2	(Constant)	2.730	.264		10.352	.000		
	CAPITAL	-2.07E-02	.038	-.068	-.544	.587	.346	2.889
	EMPLOYEE	2.582E-02	.053	.061	.484	.629	.341	2.933
	IT_NESS	.169	.076	.195	2.237	.027	.706	1.417
	ABSRPTVE	.205	.073	.243	2.817	.005	.721	1.387

a. Dependent Variable: C_BENEFI

Table 10. Regression analysis result for testing mediating effects (III)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.757	.098		38.231	.000		
	CAPITAL	-3.06E-02	.040	-.101	-.759	.449	.348	2.878
	EMPLOYEE	8.498E-02	.056	.202	1.519	.131	.348	2.878
2	(Constant)	1.973	.312		6.325	.000		
	CAPITAL	-2.06E-02	.036	-.068	-.566	.572	.345	2.896
	EMPLOYEE	6.770E-02	.051	.161	1.326	.187	.338	2.956
	IT_NESS	7.633E-02	.081	.089	.941	.348	.556	1.797
	ABSRPTVE	.177	.072	.212	2.443	.016	.661	1.512
	MK_ORNT	.235	.094	.233	2.510	.013	.577	1.734

a. Dependent Variable: F_BENEFI

Table 11. Regression analysis result for testing mediating effects (IV)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.757	.098		38.231	.000		
	CAPITAL	-3.06E-02	.040	-.101	-.759	.449	.348	2.878
	EMPLOYEE	8.498E-02	.056	.202	1.519	.131	.348	2.878
2	(Constant)	2.018	.267		7.547	.000		
	CAPITAL	-2.15E-02	.035	-.071	-.609	.544	.346	2.891
	EMPLOYEE	6.128E-02	.050	.146	1.237	.218	.341	2.935
	IT_NESS	6.459E-02	.075	.075	.859	.392	.615	1.627
	ABSRPTVE	.155	.070	.187	2.221	.028	.669	1.495
	CS	.293	.075	.325	3.905	.000	.681	1.469

a. Dependent Variable: F_BENEFI

Table 12. Regression analysis result for testing mediating effects (V)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.973	.100		39.835	.000		
	CAPITAL	-2.60E-02	.041	-.085	-.637	.525	.348	2.878
	EMPLOYEE	5.312E-02	.057	.125	.935	.351	.348	2.878
2	(Constant)	2.160	.319		6.775	.000		
	CAPITAL	-1.50E-02	.037	-.049	-.404	.686	.345	2.896
	EMPLOYEE	3.953E-02	.052	.093	.757	.450	.338	2.956
	IT_NESS	5.355E-02	.083	.062	.646	.520	.556	1.797
	ABSRPTVE	.140	.074	.167	1.899	.059	.661	1.512
	MK_ORNT	.290	.096	.285	3.023	.003	.577	1.734

a. Dependent Variable: C_BENEFI

Table 13. Regression analysis result for testing mediating effects (VI)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.973	.100		39.835	.000		
	CAPITAL	-2.60E-02	.041	-.085	-.637	.525	.348	2.878
	EMPLOYEE	5.312E-02	.057	.125	.935	.351	.348	2.878
2	(Constant)	2.336	.278		8.409	.000		
	CAPITAL	-1.73E-02	.037	-.056	-.469	.639	.346	2.891
	EMPLOYEE	3.026E-02	.052	.071	.587	.558	.341	2.935
	IT_NESS	6.959E-02	.078	.080	.891	.374	.615	1.627
	ABSRPTVE	.136	.073	.161	1.862	.064	.669	1.495
	CS	.276	.078	.304	3.539	.001	.681	1.469

a. Dependent Variable: C_BENEFI

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