Full Length Research Paper

The influence of intellectual capital and marketing innovation strategies upon marketing performance: Taking Taiwan-listed life insurance firms as an example

Yu-Je Lee[1]*, Gao-Liang Wang[2] and Lung-Yu Chang[3]

[1]Department of Marketing Management, Takming University of Science and Technology, Taiwan, R.O.C.
[2]Department of Business Administration, Takming University of Science and Technology, Taiwan, R.O.C.
[3]Department of Insurance and Financial Management, Takming University of Science and Technology, Taiwan, R.O.C.

This study is primarily aimed at examining the impact of intellectual capital and marketing innovation strategies of life insurance companies listed in Taiwan upon marketing performance. This study also implemented an empirical survey with convenience sampling and adopted structural equation modeling (SEM) including the structural model and measurement model to confirm goodness-of-fit of the overall model. The findings from this study include: 1) intellectual capital casts a significantly positive impact upon the performance of an organization; and 2) marketing innovation strategies cast a significantly positive impact upon the performance of an organization as well.

Key words: Intellectual capital, marketing innovation strategies, marketing performance.

INTRODUCTION

The Taiwan government opened up the domestic life insurance market to foreign companies in 1987. The growing markets and expanded business ranges of life insurers have yielded significantly more opportunities and also lured banks to operate life insurance services. In Taiwan, the environment for insurance businesses has been transformed by leaps and bounds, leading to an increasing variety of commercial insurance policies available. Meanwhile, the integration of financial institutions and emerging cross-bank marketing forced life insurance sale staff to face challenges from diversified, professional service providers besides the direct impact of banking channels.

Rapidly, thriving high-technology and service business have ushered in the era of a knowledge-based economy since some time ago, making intangible assets a major competitive advantage for most industries. As customers find it easier to gain access to information, they change preferences and demands at an increasingly rapid pace. As a result, the issue of intellectual capital has received mounting attention from all fields. Peter Ferdinand Drucker, a renowned management scholar, mentioned in his book "Post-Capitalist Society" that knowledge will replace machinery/equipment, capital, raw materials or labor as the most important element of business management. To put it in more understandable terms, the intangible assets and the value created by knowledge will be the very key to tell which companies can survive. In the life insurance industry, the term "intangible assets and the value created by knowledge" denotes the so-called "intellectual capital". In this study therefore, we simply try to look into how important intellectual capital is to a life insurer, and the actual benefits it brings about (Durcker, 1998).

At the moment, there are about twenty insurance companies in the highly competitive Taiwan market (notably ING Antai, Shinkong and Nanshan), providing similar insurance commodities. Currently, Taiwan is plagued by such social problems as a significant decrease in birth rate and a widening gap between the rich and the poor, posing a great challenge to life insurers. Therefore, this study primarily probes the influence of intellectual capital and market innovation on marketing performance of insurance companies listed in Taiwan. The outcome yielded by this study will hopefully,

*Corresponding author. E-mail: pyj@takming.edu.tw Tel: 0928743660, 886-2-26585801.

offer guidelines for insurance companies' improvement efforts.

In an environment that changes virtually every minute, an enterprise must put forth the maximum effort to assure sound internal intellectual capital management before it can possibly harness any competitive advantage. It should also upgrade marketing performance by means of marketing innovation strategies. Therefore, this study was conducted primarily with the following three objectives:

1. To confirm the impact of the insurance business's intellectual capital upon marketing performance;
2. To confirm the impact of the insurance business's marketing innovation strategies upon marketing performance;
3. To determine whether the findings from this study may function as a handy reference for insurance business when drafting marketing strategies.

LITERATURE REVIEW

The major dimensions of the literature review part of this study include intellectual capital, marketing innovation strategies and marketing performance, which are analyzed further.

Definition of intellectual capital

The term "intellectual capital" was proposed by the economist John Kenneth Galbraith in a letter to economist Michael Kalecki in 1969. Galbraith believed that intellectual capital calls for brainstorming instead of knowledge and pure intelligence alone. This paper defines intellectual capital as an intangible asset that may be used to create fortunes and competitive edge and is closely linked to the value creation and future of an organization. The essence of intellectual capital covers employees' expertise and skills, teamwork capability of employees, a company's sound and comprehensive internal information system, efficient internal operations and administrative management procedures.

Bontis et al. (2000) proposed three dimensions to measure intellectual capital:

1. Human resources capital: It refers to all the knowledge, skills and hands-on experiences accumulated by the entire staff and management of a corporation.
2. Structural capital: It refers to the overall system and programs a corporation uses to solve problems and create values.
3. Relationship capital: It refers to the establishment, maintenance and development of a company's external relationship, including those with customers, suppliers and strategic partners.

In terms of the relationship between intellectual capital

and business performance, Joshi et al. (2010) looked into the intellectual capital performance of National Australia Bank Ltd. (NAB) during 2005 to 2007 and studied the correlation among components of intellectual capital performance. The dimensions of intellectual capital are discussed further.

Human resources capital

Chen[b] (2007) conducted a study on the relationship among high-performance human resources management practices, human resources capital, knowledge sharing, and innovation performance. She took SEM to prove the relationship and influence of variables in the research. The results of her empirical study indicate that high-performance human resources management practices tend to build up human resources capital in a positive way and bolster knowledge sharing.

Chen[a] (2007) used SEM in "A Study on the Relationship among High-performance Human Resources Management Practices, Human Resources Capital, Entrepreneurship, and Entrepreneurship Performance of Small and Medium Businesses in Taiwan". The results of that empirical study indicate high-performance human resources management practices tend to positively build up human resources capital and trigger entrepreneurship.

Hsieh (2007) adopted SEM to implement CFA inspection variables in his study of "The Relation between Institutional Human Resources Management and Organizational Performance: the Intermediary Role of Human Resources Capital and Customer Capital". His empirical study proved that the factor loadings of all questionnaire items reached the positively significant level. Chao (2005) verified the interrelationship of variables using regression analysis in "The Interrelationship between Human Resources Management Performance and Organizational performance: Using Strategic Human Resources as The Extraneous Variable". The study results uphold the hypothesis that the more efficient the human resources management, the better the organizational performance. This study defines human resources capital as the knowledge, skills and hands-on experiences of the entire staff as well as the management of a corporation.

Structural capital

Pan (2007) adopted tracing regression analysis approach (Panel Data) in "The Interrelationship among Equity Structure, Capital Structure and Corporate Performance" to process the cross-section data and non-sequential data. The study results suggest a significant positive interrelationship between structural capital and marketing performance.

Lin and Lin (2005) adopted analytic hierarchy process

(AHP) in "A Study on the Influence of Intellectual Capital, Marketing Strategy and Risk Management Strategy upon Business Management Performance: Taking the Taiwan-based Financial Holding Corporations for Instance". They scrutinized the different influences of variables (that is, intellectual capital, marketing strategy and risk management strategy) upon a business' performance. The study results indicate that human resources capital is the dimension with the greatest influence on the performance of Financial Holding companies in Taiwan, followed by risk management strategies, customer capital, structural capital, and marketing strategies. This study defines "structural capital" as the overall systems and programs a corporation uses to solve problems and create values.

Relationship capital

In "A Study on The Influence of Relationship Marketing of Shipping Companies upon Relationship Quality and Marketing Performance", Chiu (2004) examined interrelationship of variables using correlation analysis and hierarchical regression analysis. She found that a sea freight forwarder offers timely support to a shipping company has the greatest influence upon the marketing performance. While a shipping company's implementation of relationship marketing makes it more reliable for the sea freighter, how much a sea freighter trusts the shipping firm has a significantly positive relation with the latter's marketing performance.

In "A Study on The Relationship between Intellectual Capital and Performance of Sea Freight Liner Operators", Hsu (2004) used Linear Structural Equation Modeling to discuss the various dimensions of a regular sea freight liner operator's intellectual capital, namely the human resources capital, structural capital and relationship capital. His study is further extended to prove the relationship between intellectual capital and organizational performance. And the findings suggest that among the various intellectual capitals of a sea freight liner operator, "relationship capital" possesses a significantly positive influence on both "organizational performance" and "structural capital".

This study, nevertheless, defines "human resources capital" as an organization's efforts to establish, maintain and develop external relationships, including those with customers, suppliers and strategic partners.

Marketing innovation strategies

Shumpeter (1942) was the first economist to introduce the concept of innovation. Through the perspective of economics, he defined innovation as: "where an enterprise makes use of resources to change the means of production to build a new production function so as to

satisfy demands in the markets". Drucker (2007) held that "innovation" should be an economic or a social term, instead of a scientific or technology-oriented. Innovation is "changing the value and satisfaction offered to customers by the resources". From the marketing viewpoint, Slater and Narver (1995) argued, "Innovation originates in the gap between the provided products and demand in market, as noticed by the corporation. It guides the corporation's resources into satisfaction to demand". Therefore innovation as a marketing term shall be market-oriented with a focus on customer needs, which is exactly the key to marketing innovation. And yet, an innovative initiative is not only meant to "beat competitors to the market". Instead, it suggests that a brand-new product/ service should be launched before customers are even aware of their need for it. This study, therefore, divides marketing innovation strategies into two dimensions (that is, "product innovation" and "marketing innovation") for further discussions.

Product innovation

In the study on "The Interrelationship among Individual Creativity, Organizational Innovative Climate and Innovation Performance", Lee (2002) conducted analyses over the relationship among organizational innovative climate, product innovation categories and product innovation performance. Because fewer than 30 samples were selected from the population, the sample size is statistically small and consequently analyzed with the non-parametric statistical method of Mann-Whitney U test. The results of Mann-Whitney U test indicate that innovative, break-through products are most likely to be created by highly creative employees in a company that lacks the kind of innovative climate to support innovation.

Wang and Hsu (2006) adopted regression analysis in their study entitled "The Organizational Innovation and Organizational Performance: The Extraneous Effect of Human Resources Management System". Their study results suggest that organizational innovation and market performance have a significantly positive interrelationship. Among others, technology innovation shows the most significant impact upon market performance.

This study adopts the definition proposed by Hsu (1983), who argued that "product innovation" is any product/procedure capable of providing products that meet varying needs as well as more effective means to solve customer-related problems, with customer needs or consumption system in mind,.

Marketing innovation

McCarthy and Perreault (1990) proposed the concept of marketing portfolio, better known as "4P$_S$". According to
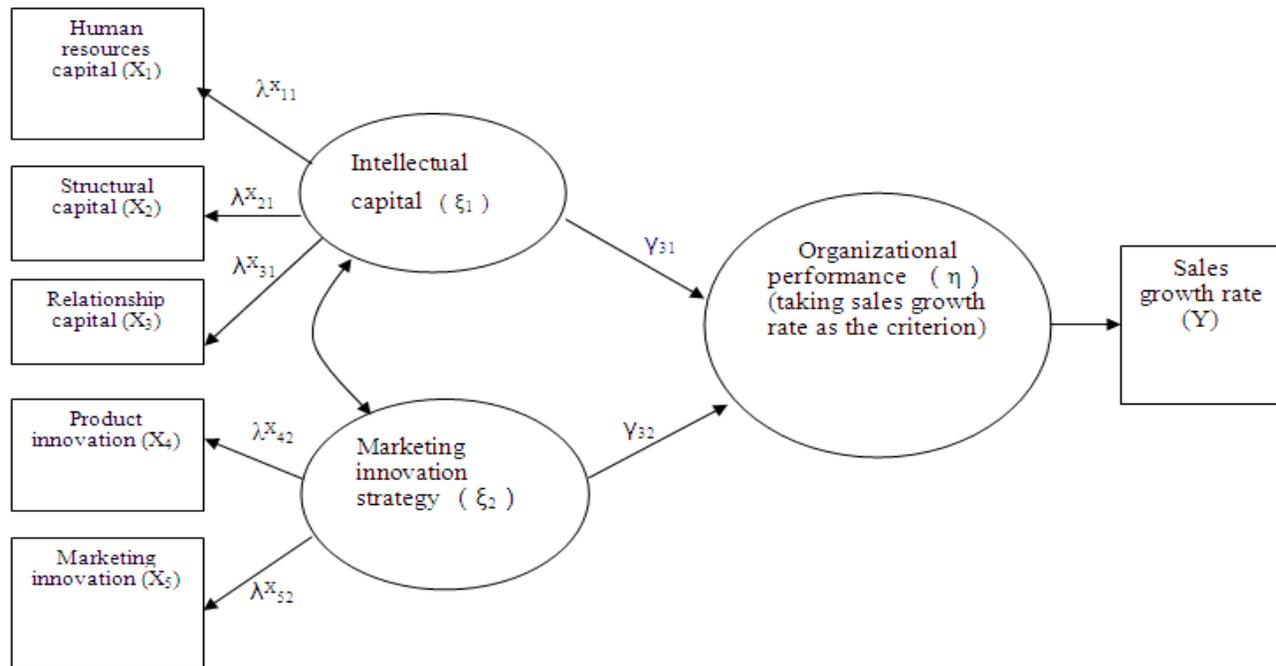
Figure 1. Research framework of this study.

the American Marketing Society, marketing "is a sort of commercial activity that is primarily intended to guide the products or services provided by producers into customers' hands."

In " A Study on The Relationship among Customer Knowledge Management, Marketing Expertise Creation Capability, Marketing Innovation and Market Performance", Chen (2008) tested the interactive relationship among various dimensions and factors by means of canonical correlation analysis and multiple regression analysis. He also adopted ANOVA to examine the varied relationship of dimensions and control variables, and then used path analysis and linear structural model to verify the interrelationship among variables in the overall research framework. The results of his empirical study indicate that marketing innovation has a significantly positive impact upon the performance in the market.

In this study, the term "marketing innovation" denotes any innovative marketing approach/ strategy in commercial activities.

Organizational performance

The term "performance" indicates a comparison of result or yield, or more specifically, a comparison between the actual and projected yields. The comparison serves as a criterion to measure how an organization uses resources and satisfies customer needs with effectiveness and efficiency in an attempt to attain the organizational goal.

The ultimate goal of a marketing activity implemented by any enterprise bodies is to increase profits by minimizing the costs. When an enterprise body has carried out a marketing activity for a certain period of time, it must assess the marketing performance to verify whether that activity is appropriate enough.

Clark (1999) offered expanded measurements of marketing performance, which include the financial aspect (that is, profitability, salability and cash flow) and non-financial aspect (that is, customer satisfaction, customer loyalty and brand equity).

Bonoma and Clark (1988) noticed that financial performance is often measured with profitability, sales growth rate, market share and cash flow. Clark (2001) found in his study that sales growth rate, profitability and market share are the criteria most commonly adopted by enterprises. This study, however, adopts "sales growth rate" as the criterion from the financial perspective.

After the literature review and an analysis of previous studies in related areas, this study established hypotheses as follows:

H_1: Intellectual capital has a significantly positive influence on marketing performance.
H_2: Marketing innovation strategies has a significantly positive influence on marketing performance.

RESEARCH FRAMEWORK

On the grounds of the aforementioned purposes, we may obtain the research framework as illustrated in Figure 1.

Table 1. Questionnaire structure.

Primary dimensions	Secondary dimensions	Total questions	References
Intellectual capital	Human resources capital	6	Revised from:
	Structural capital	6	Peng (Peng, 2008), "A Study on the
	Relationship capital	6	Relationship among Knowledge Management Promoting Factor, Intellectual Capital and Organizational Performance" , Taiwan: Master
Marketing strategy innovation	Product innovation	6	Degree Thesis, Graduate School of Business
	Marketing innovation method	4	Administration, Chungcheng University
Marketing performance	Sales growth rate	8	Revised from:
			Chen (Chen, 2008) , "A Study on the Relationship among Customer Knowledge Management, Marketing Expertise Creation Capability, Marketing Innovation and Market Performance", Master Degree Thesis, Graduate School of Industry Management, National Cheng Kung University.

Research approaches

This study is primarily intended to probe the influence of introducing intellectual capital and marketing innovation strategies into an enterprise upon marketing performance. Through the literature review, we can tell that both the intangible intellectual capital and marketing innovation are closely linked to marketing performance. Therefore, this introduces the research design and method, including the research structure, how the variables are defined/measured, the hypotheses of research, questionnaire design, statistics about subjects, and data analysis methods.

Subjects of research and questionnaire design

This study is focused on managers and salespersons of Taiwan-listed life insurance firms. Tests (pre-tests and post-tests) were conducted using convenience sampling, with the samples selected within Taiwan. Totally, 312 (89.14%) of the 350 copies of questionnaire given away were received valid. The post-retrieval statistics in the "gender" category indicates that the female respondents (55%) outnumbered their male counterparts (45%). As for "age", the 31 to 40 years-olds accounted for the largest portion of respondents (41%). In the category of "number of years in service", those with 1 to 3 years' of experiences made up the largest part of respondents (26%). When it comes to "department", those in the sales department represent the largest portion of respondents (42%). The total questionnaire items dedicated to each primary dimension and secondary dimension (variable) are listed in Table 1.

ANALYSIS AND RESULTS

Linear structure model analysis

The confirmatory factor analysis (CFA) is an analytical method opposite to exploratory factor analysis. In this study, CFA was conducted on three major dimensions of "intellectual capital", "marketing innovation strategies" and "organizational performance". Consisting of the structural

model and measurement model, the structural equation modeling (SEM) could effectively address the cause-and-effect relationship of latent variables. This paper also utilized the AMOS software for an empirical analysis. AMOS is a statistical program used for SEM testing. The CFA includes three parts, 1) to confirm the fit of measurement model; 2) to confirm the fit of structural model; 3) to verify whether the overall model fit meets the criteria.

Structure equation matrix of this study

The structure equation matrix adopted for this study is illustrated thus:

1. Exogenous variable measuring matrix:

2. Endogenous variable measuring matrix:

$$Y = \lambda_Y \eta + \varepsilon$$

3. Structural equation modeling (SEM):

$$\eta = \gamma_{31}\xi_1 + \gamma_{32}\xi_2 + \zeta$$

The linear structure is adopted in this study in order to confirm the relationship among different dimensions. The indices of fit-of-goodness shall reach GFI > 0.9; NFI > 0.9; CFI > 0.9; RMR < 0.05; RMSEA < 0.05 (Bagozzi and Yi, 1988). The GFI and AGFI of this study fall between 0.90 and 0.96, with a RMR value of 0.023, which proves that the questionnaire is consistent and fits the model, as shown in Table 2.

Table 2. The indices of fit of the overall model.

Criteria index	χ^2	DF	GFI	NFI	AGFI	CFI	RMR	RMSEA
Fitted value	20.125	7	0.912	0.924	0.906	0.931	0.023	0.035

Table 3. Confirmatory criteria for the measurement model.

Primary dimensions	Secondary dimensions	Factor loading	C.R.	Cronbach's α	Average variance extracted
Intellectual capital	Human resources capital	0.91	11.253		
	Structural capital	0.86	9.853	0.865	0.737
	Relationship capital	0.81	10.413		
Marketing innovation strategies	Product innovation	0.84	12.265	0.845	0.731
	Marketing innovation	0.87	13.298		
Organizational performance	Sales growth rate	0.85	12.286	0.851	0.732

Table 4. The parameter of estimated latent variables (structure model).

Models	Estimate	S.E.	C.R.	P-value
Intellectual capital ⟶ Organizational performance	0.461	0.043	10.725	*
Marketing innovation strategies ⟶ organizational performance	0.412	0.042	9.714	*
Intellectual capital ⟷ marketing innovation strategies	0.386	0.041	9.392	*

* indicates that C.R. value reaches the significant level (α=0.05).

Analyzing fit of measurement model

The factor loading of each questionnaire item under every latent/implicit variable (primary dimensions) and manifest/explicit variable (secondary dimensions) is mostly intended to measure the linear correlation between each questionnaire items under a manifest/explicit variable and latent /implicit variable. The closer a factor loading is to 0.91, the more effective a variable measures the primary dimensions. The factor loading, t-value of secondary dimensions and Cronbach's α and AVE (average variance extracted) of primary dimensions of this study are listed in Table 3, which suggests that all factor loadings are larger than 0.7 with a significant t-value. That is to say, the convergent validity is high enough in every primary dimension. The AVE is larger than 0.5 in all primary dimensions, a sign of the model's high discriminant validity. All in all, the model presented in this study possesses satisfying construct validity. Besides, the Cronbach's α is larger than 0.7 in all primary dimensions, which suggests that the model is high in reliability.

Path analysis results of structure model

Now that the model has passed the fit test, the standardized coefficient estimates among various latent/implicit variables, in this study, along with the C.R. values, are shown in Table 4 and Figure 2 (standardized results of SEM analysis). The R^2 value is 0.73 showing that the two implicit independent variables have adequate explaining ability on the implicit dependent variable.

On the grounds of the aforementioned results, this study has the following findings:

1. The intellectual capital of Taiwan-listed life insurance firms has a significantly positive influence upon marketing performance. The standardized estimated parameter value is 0.461, which means H_1 is upheld.
2. The marketing innovation strategies of Taiwan's listed life insurance have a significantly positive influence upon marketing performance. The standardized estimated parameter value is 0.412, which means H_2 is upheld.

Conclusions

This study is focused on managers and salespersons of Taiwan's listed life insurance firms. The SEM model was used to confirm the influence of intellectual capital, marketing innovation strategies and marketing performance, in an effort to look into the cause-and-consequence relationship among variables adopted in
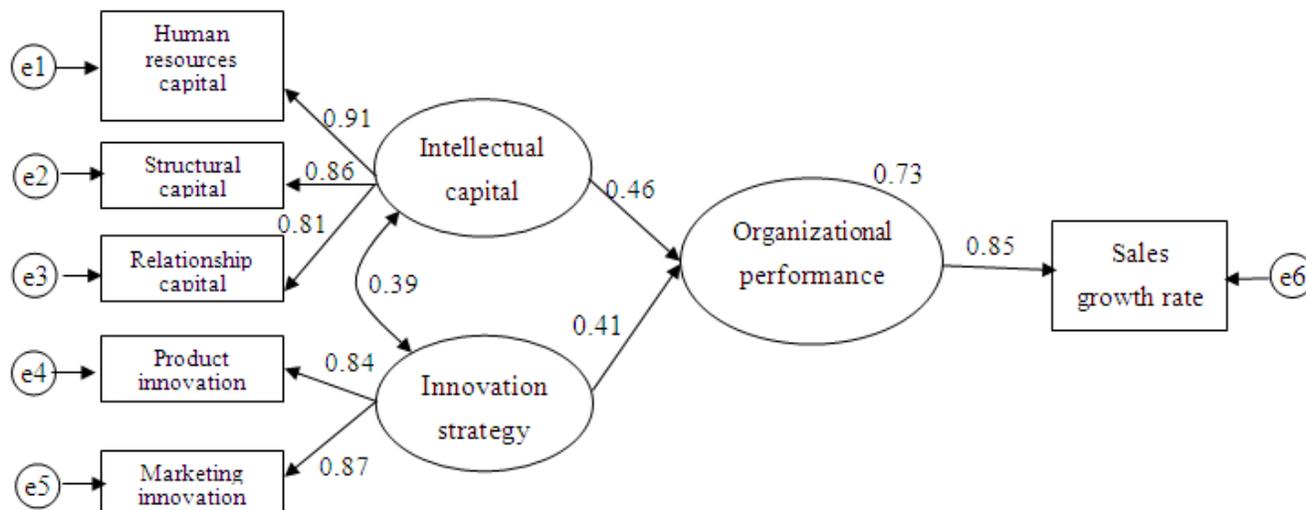
Figure 2. Standardized results of SEM analysis.

the study. The overall research framework was also examined for its model fit. The data analysis proved that the model's hypothesis paths are both tenable. Based on the empirical analysis results, we could confirm a theoretical model with satisfactory overall model fit.

In summary, we have come to the following conclusions concerning the respects in this study:

1. The influence of intellectual capital upon marketing performance: according to the results of this study, intellectual capital has a significantly positive influence upon marketing performance. These findings prove to be consistent with those from "A Study on The Relationship between Intellectual Capital Management and Organizational Performance" by Hung (2009) and "An Integrated Analysis On Intellectual Capital, Added Values Of Intellectual Capital and Enterprise Performance" by Shih CC (2005).

2. The influence of marketing innovation strategies upon marketing performance: the "Innovation Strategy" has a significantly positive influence upon organizational marketing performance. Such results prove to be consistent with the findings of "The Relationship among Customer Knowledge Management, Marketing Expertise Creation Capability, Marketing Innovation and Market Performance" by Chen (2008).

Although the two dimensions of intellectual capital and marketing innovation strategies are correlated, they show no multicollinearity at all. Such a result indicates that an enterprise can meet its target of organizational performance either by means of intellectual capital or by marketing innovation strategies. In other words, to tackle the cutthroat competition and transformation of the market, an enterprise must promote intellectual capital for maintaining competitive edge while developing marketing

innovation strategies to improve organizational performance, so as to provide better, more superior insurance policies/services that give back to the society with assured sustainability. That way, an insurance company will be able to create added values for customers and create a win-win situation with excellent performance.

Contributions of this study

1. This study suggests Taiwanese life insurance firms conduct continuous product innovation: product innovation is currently a highlight of the development of Taiwanese insurance companies, in particular at the moment of cutthroat competition. Local insurance companies should focus on the existing products, using product innovation to provide more and better products/ services, so as to satisfy market demand while stimulating customers' willingness to buy. This study, therefore, points to local insurance companies in a timely manner for continuous implementation of product innovation.

2. This study encourages life insurance firms to enhance intellectual capital when working out marketing strategies: the term "intellectual capital" covers all the skills, expertise, experiences and intelligence presented by a company to solve problems. The intellectual capital includes such factors as human resources capital, relationship capital and structure capital. An enhanced intellectual capital is beneficial to a company as it increases intangible assets, which include high-valued overall infrastructures/processes, and also the sound relationships maintained both inside and outside the organization. The results yielded in this study therefore provide enterprises with a reference and help them attach

a greater importance to intellectual capital while laying down marketing strategies.

3. This study offers life insurance firms timely suggestions regarding strengthened marketing efforts: in the era of knowledge-based economy, marketing innovation is the very key for enterprises to success. Given the ongoing technological advancement and information explosion, the life cycle of a product becomes shorter and shorter, a sign of the growing importance of marketing innovation. Meanwhile, marketing innovation calls for certain extraordinary expertise, working methods and tools. To create prolonged competitive edge, an enterprise must integrate marketing analyses, marketing strategies (4P$_S$), and marketing tactics and at the same time develop marketing programs that are implemented throughout the insurance market.

Research restrictions

Amidst the limited time, resources and human forces, we have accomplished all phases of the research in a manner as conscientiously as possible. And yet, we are still faced with quite a few restrictions, notably the following ones:

1. In this study, we took sales growth rate as the criteria for marketing performance. Although ROA and ROE are better tools to demonstrate the performance of corporate growth, the data required for ROA and ROE calculations involves trade secrets and consequently is unavailable. That is why the data adopted in this study might not be able to accurately indicate a company's performance.

2. Amidst restricted time and resources, we adopted Convenience Sampling to draw samples. The samples so drawn might not be able to fully illustrate the substantial conditions of the population, which is the biggest restriction of this study.

3. The influence upon performance of organizations of different industries and natures

The study on intellectual capital fits all varieties of businesses and is not confined to insurance firms alone. In every business sector, intellectual capital bears different definition. In this study, we take the managers and staff of life insurance firms listed in Taiwan as samples. In order to make a breakthrough or to collect a wider range of data, the future studies may choose organizations of different natures or industries, and look into the influence upon the organizational performance. It is hoped that this will discover desirable qualities and lead to a better analytical comparison of different industries.

ACKNOWLEDGEMENT

REFERENCES

Bagozzi RP, Yi Y (1988). On the Evaluation of Structure Equation Models. J. Acad. Mark. Sci., 16(1): 70-83.

Bonoma TV, Clark BC (1988). Marketing Performance Assessment. Boston: Harvard Business School Press.

Bontis N, Keow W, Richardson S (2000). Intellectual capital and business performance in Malaysian industries. J. Intellect. Capital, 1(1): 85-100.

Chao PY (2005). A Probe into The Interrelationship between Human Resources Management Performance and Organizational Performance: Using Strategic Human Resources as The Extraneous Variable, Taiwan: M.A. thesis, Graduate School of Human Resources Management, National Central University.

Chena HJ (2007). A Study on the Relationship among High-Performance Human Resources Management Practices, Human Resources Capital, Entrepreneurship, and Entrepreneurship Performance of Small and Medium Businesses in Taiwan, Kaohsiung City, Taiwan: M.A. thesis,, Department of Human Resources Development, National Kaohsiung Applied Technology University.

Chen KH (2008). A Study on the Relationship among Customer Knowledge Management, Marketing Expertise Creation Capability, Marketing Innovation and Market Performance, Taiwan: M.A. thesis, Graduate School of Industry Management, National Cheng Kung University.

Chenb YC (2007). A Study on the Relationship among High-Performance Human Resources Management Practices, Human Resources Capital, Knowledge Sharing and Innovation Performance, Taiwan: M.A. thesis, Department of Human Resources, National Kaohsiung Applied Technology University.

Chiu YH (2004). A Study on the Influence of Relationship Marketing by Shipping Companies upon Relationship Quality and Marketing Performance, Taiwan: M.A. thesis, Department of Navigation Management, National Marine Science University.

Clark BH (1999). Marketing performance measures: history and interrelationships. J. Mark. Manage., 15(8): 711-733.

Clark BH (2001). A summary of thinking on measuring the value of marketing. J. Targeting, Meas. and Anal. for Mark., 9(4): 357–369.

Drucker PF (1998): Knowledge Management in Harvard Business Review on Knowledge Management. Boston: Harvard Business School Press.

Drucker PF (2007): Innovation and Entrepreneurship. Burlington: Butterworth-Heinemann.

Hsieh TH (2007).The Relation between Institutional Human Resources Management and Organizational Performance: the Intermediary Role of Human Resources Capital and Customer Capital, Taiwan: M.A. thesis, Graduate School of Labor Science, National Chungcheng University.

Hsu SC (1983). Management Science, Taipei, Taiwan: Tunghua Bookstore.

Hsu YT (2004). A Study on the Relationship between Intellectual Capital and Performance of Sea Freight Liner Operators, Taiwan: M.A. thesis, Department of Transportation and Communication Management Science, National Cheng Kung University.

Hung L (2009). A Study on the Relationship between Intellectual Capital Management and Organizational Performance, Kaohsiung, Taiwan: M.A. thesis, Graduate School of Business Administration, I-Shou University.

Joshi M, Cahill D, Sidhu J (2010). Intellectual capital performance in the banking sector: An assessment of Australian owned banks. J. Hum. Res. Costing Acc., 14(2):151 – 170.

Lee HY (2002). A Study on The Interrelationship among Individual Creativity, Organizational Innovative Climate and Innovation Performance, Taiwan: M.A. thesis, Graduate School of Business Administration, National Central University.

Lin MC, Lin HH (2005). A Study on the Influence of Intellectual Capital, Marketing Strategy and Risk Management Strategy upon Business Management Performance. Econ. Social Sys.. Theories, Issue. 36.

McCarthy EJ, Perreault WD (1990). Basic Marketing: A Managerial Approach. Homewood, IL., Irwin.

Pan YY (2007). The Relationship between Equity Structure, Capital Structure and Corporate Performance, Taoyuan, Taiwan: M.A. thesis, Graduate School of Business Administration, Chang Gung University.

Peng TL (2008). A Study on the Relationship among Knowledge Management Promoting Factor, Intellectual Capital and Organizational Performance, Taiwan: M.A. thesis, Graduate School of Business Administration, Chungcheng University.

Shih CC (2005). An Integrated Analysis on Intellectual Capital, Added Values of Intellectual Capital and Enterprise Performance: Taking Taiwan's Information Electronic Industry for Instance, Taichung, Taiwan: M.A. thesis, Graduate School of Accounting, Providence University.

Shumpeter JA (1942). Capitalism, Socialism, and Democracy. N.Y., Harper.

Slater SF, Narver JC (1995). Market orientation and the learning organization. J. Mark., 59(3): 63-74.

Wang ML, Hsu CC (2006). The Organizational Innovation and Organizational Performance: The Extraneous Effect of Human Resources Management System. Hum. Res. Manage. J., 6(3): 45-69.

`