

Insurance Industry and E-Business

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I. Introduction

The term e-business is everywhere these days. It has become a buzzword, a catchphrase. It's the hot field, the place to be for the new millennium. Jump on the e-Business train or you'll get left in the austy remains of the old business ghost town.

But what are we really talking about here? Just as many people confuse the Internet with the World Wide Web. e-Business is often mistaken for e-Commerce, which is actually one of the many subsets of e-Business. E-Commerce for our purposes can be defined as commerce enabled by Internet and related technologies.

Then just what is it? According to IBM, e-business is defined as a new business philosophy to surviving the existing business philosophy by indispensable new management paradigm in the age of Network Economy or Digital Economy. That is, it is a secure, flexible and integrated approach to delivering differentiated business value by

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combining the systems and processes that run core business operations with the simplicity and reach made possible by Internet Technology.

II. E-Business in the Insurance Industry and Strategies

Network Economy and the Changing Factors of Financial industry

What is the Network Economy which is represented by e-business? And what is the changing factors that result in Network Economy?

The characteristics of Network Economy can be divided into 3. That is. ① Moving from the group of 'Brick and Mortar' to the group of having 'distinguish idea and information'. ② The substantial and artificial border between departments, and organizations don't exist anymore, and ③ The traditional life cycle of developing products/solutions is valueless anymore.

Besides, the 3 main changing factors that change the existing economy to be Network Economy are ① the changes of customers and markets. ② the changes of competitive market/environment, and ③ the changes of technologies.

Let's discuss those factors in detail.

- 1) Characteristics of customer and social environment changes
 - (1) Increases in customers' bargaining power
 - (2) The changes of customers' buying behavior pattern (active buying behavior, sensitive to the financial products price)

- (3) Increasing needs of purchasing convenience (great needs of purchasing financial products in anytime and anywhere)
- (4) Brand-oriented in purchasing products
- (5) Increases in insecurity towards social security system
- (6) Increases in the aged and nuclear families
- (7) Increases in small independent business
- 2) Characteristics of fierce competitive environment and competitive pattern changes
 - (1) vagueness of industry segment (other industries are involved in the financial industry)
 - (2) The emerging small professional companies (professional player)
 - (3) Consolidation with other industries and M&A
 - (4) Globalization
 - (5) Price liberalization
- 3) Characteristics of technology changes
 - (1) Emergence of e-business used by internet and communication technology
 - (2) The heightening of customer-focus information management system and analysis of customer data
 - (3) Positioning technology a core of business

Among those factors, the most significant factor is the changes of 'market' attendant upon the changes of 'customer'.

The Trend of financial industry's structural changes and insurance industry's environmental changes

Among above factors, IBM's expert group in financial industry predict that several years later insurance and retail financial industry will be changed shown in <Table 1> mainly caused by 3 factors, that is ① the changes of regulation condition in the main market, ② emergence of numerous international economy community, and ③ emergence of e-business or e-marketspace.

And the Insurance Research Center of IBM announce that insurance industry will be deployed at the bottom of 4 scenarios shown in Table 2> in her research paper.

The characteristics of Those 4 scenarios are as follows.

1) Big Brother

Big Brother in the literal sense of the word represents the structure that few big insurance companies dominate the market. Those days M&A between global big financial groups just represent it. The characteristics can be summed up as follows.

- (1) The constitution of products is not diversified, so the return rate would be very low.
- (2) In order to establish efficient and cost-saving system, technology will be applied to the IC Card and Network.

2) Back to the Future

The core of this scenario is that the structure of insurance industry is just like now, that is there is big, medium, and small insurance companies, and they supply the market in their own way. As contrast

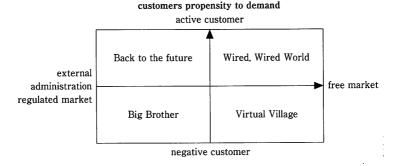
⟨Table 1⟩ Prediction of the changes of Insurance and Retail Financial Industry

structure of financial industry (present)					
company	products	targets	main channels	competitive factors	
insurance	life insurance non-life insurance retirement pension	all customers	salesman agent	• product/function • relationship between customer and salesman/agent owner	
securities brokers	investment	investor	broker/ financial consultant/ direct marketing	• product/function • level of understanding customer's needs and interests	
bank	account, CD credit	all customers	regional distributed branch network	• convenience • safety/reliability • regional network	

Changes of regulation conditions in the core markets
Big global communities
Emergence of e-MarketSpace

Structure of financial industry (2005)					
company	products	targets	main channels	competitive factors	
insurance	high value-added integrated products	affinity group	customer-oriented specialization (e.g. low cost, convenience, complete e-commerce)	• products' characteristics/price or • innovation by technology	
reinvented retail financial service	† widen	worksite marketing	customer-oriented specialization (e.g. Increasing mediation, high cost)	or market/customer segmentation level or cost-saving, convenient channel	
non-banks	4	portal visitor	customer-oriented specialization (e.g. flexible services)	or customer relation- oriented marketing philosophy or strategy alliance or part or all of factors	
traditional retail financial services	convenient commodity	traditional customers	customer-oriented specialization		

⟨Table 2⟩ Deployed Scenario of insurance Industry



Big brother, Back to the Future suppose the customers are active, the government and the financial competent institutions regulate at a certain level. By the way, developing countries and backward countries will adopt it to protect their own insurance industry in the future.

The characteristics of this scenario are as follows.

- (1) The insurance industry is protected by the government or the financial competent institutions.
- (2) The competition between insurance companies is rare for the difficult entry of other industries.
- (3) Insurance consumer can get wanted products and services from various access points or contact points, such as salesman, agent, call-center, T/M, and so on.
- (4) Technology will be applied mainly in supporting and developing those various access points.

3) Virtual Village

In this scenario, the insurance market is generally free, but the customers have very negative buying behavior. The chief characteristics is the emergence of Affinity Group (e.g. the agricultural co-operative, the mutual-aid association, the colleague's association, the graduate's association, and etc.) which is on behalf of the insurance consumer.

Under such market environment.

- (1) Numerous new participants from other industries enter the insurance market for the market is being free.
- (2) Moving from insurance company to affinity group by the power of market.
- (3) Insurance products are a part of financial products rather than a independent one.
- (4) Emergence of Bundler
- (5) Insurance (financial) consumer response the value of financial (insurance) products/services, but not set up the financial planning or portfolio by themselves.
- (6) Requiring other products or added services rather than just a product.
- (7) Affinity Group represent the person who belongs to it contact the insurance (financial) institution.
- (8) The survival problem of existing agents is emerging under such environment.
- (9) Technology is used as a tool to communicate smoothly in an organization or a group.

4) Wired, Wired World

In this scenario, insurance market is liberalized, the buying behavior of customers change into active, and they submit themselves to carry out portfolio.

The characteristics are:

- (1) Customers submit themselves to demand the necessary products/ services from several companies in order to plan portfolio and order the most satisfied products/services.
- (2) Mix the obtained components of products form financial institutions all over the world by themselves.
- (3) Choose companies by greater credit and brand image.
- (4) Demand diversified product/service to each person.
- (5) Customers is floating, and the customer loyalty is low.
- (6) Banks, securities companies and other new participants enter the insurance industry aggressively.
- (7) Inbound revitalize further.
- (8) The survival problem of existing agents is emerging just like under the Virtual Village scenario.
- (9) Technology is to supply necessary professional knowledge that can develop product's components for meeting the customers' needs.

Under such environment, the risk of new participants entering the insurance industry will be increased, since the protection of government is weakening gradually in the domestic insurance industry. The environmental changes of domestic insurance industry is shown in <Table 3>, and the competition between industries will be fierce in the near future.

In the global environmental changes of financial industry, how do the domestic insurance companies respond is another problem. Most of domestic non-life insurance companies commonly have 4 problems except for a few insurance companies.

The common problems are:

⟨Table 3⟩ Environmental Changes of Insurance Industry

external environment	influence	changing factors			
government's protection	strong → weak	 liberalization			
challenge of new participant	weak → strong		• participate from other industries (life & non-life insurance co-operated, bank, etc.)		
pressure of price reduction in line with market demand	weak → strong	 low premium high quality service demand comparable information choose company according to credit diversification of product services demand special products to meet the needs the old's needs demand convenience diversified channel→bancassurance 			
challenge of substitution services	weak → strong	• self-insurance • deduction • substitution financial products	• e-business ¹⁾ • supply network services ²⁾ • direct marketing		
challenge of supplier	medium	 Estatistical associations (domestic, overseas) spot service, repair shop hospital 	• the financial industry, capital market • reinsurance companies		
competition in the industry	weak → strong	profit gap reorganize the industry (alliance, M&A new market entry)			

note 1) e-business: a business from of electronic commerce by utilizing internet

- (1) The lack of diversified strategies in meeting the customers, products, and channels.
- (2) How to reduce the expenses and surrender ratio, and raise the customers' loyalty, and reform the agent to improve productivity.
- (3) The structure of organization and business process should be

²⁾ network services : a business runs from selling products to settlement as virtual company in the network

customer-focus.

(4) The awkward insurance technique and information technology compared with the insurance companies in the advanced countries.

The solution of such problems is not just to simply improve productivity, but should access from the viewpoint of company's management strategies, and the competitive strategies should be set up.

3. Current E-Business Status of U. S. Insurance Industry

The basic factor of above changes said in Chapter 2 can be summed up in a words that is the emergence of Network Economy or Digital Economy represented by E-Business.

An American professional investigation Institution, 'IDC' predict that no more than 0.2 billion internet users in 1999 will increase in 0.5 billion. And the same as domestic, according to the statistics, there are 1.0 million internet users in Korea on Jan. 2000, which is 20 % of the population. It's a very high level.

And another American professional investigation Institute, 'Forrester Research' estimated that the scale of e-business used B2B (Business to Business) amounted to 250 billion dollars in 1999, and Just 4 year later, in 2003, it will amounts to 1300 billion dollars. Moreover, B2C (Business to Customer) amounted to no more than 18 billion dollars in 1999, but it will increases by 7 times, that is 100 billion dollars in 2003.

In view of insurance industry, premium income was no more than 0.3 billion dollars in 1999, and it will be over 4 billions dollars in 2003, that is 10 times as much.

The main objectives of American insurance companies using e-business are as follows.

(1) Research new customers

- (2) Improve customer service
- . (3) Reduce costs and improve quality
 - (4) Increase customer retention
 - (5) Deliver new products and services
 - (6) Integrate providers & suppliers
 - (7) Enable new alliance
 - (8) Integrate global operations

However, several obstacles exist in grafting e-business on the old business structure. According to the survey of 'Forrester Research', the most representative obstacles in using e-business among American insurance companies are shown in <Table 4> and there are some difference between life and non-life insurance.

(Table	11	Obstacles of F-Business	
\ Table	4/	Costacies of F-Business	

(unit: %)

Life insurance	1. Complexity of products 2. Conflict of interests with agent 3. Security risk 4. Regulations 5. Technology integration 6. Ignorant shout the abstrales	36 17 17 13 8
Non-life insurance	Conflict of interests with agent Technology integration Complexity of products Regulations Over-invested costs	36 20 15 10 5

Under the new e-business environment, the new participants are different from the existing insurance companies who start from 0 and easily enter the financial business including insurance business without enormous investment. Such new participants emerge as new rival of existing companies. Such participants can exactly grasp and analyze what the customers really wants, and the representatives companies are Yahoo, InsWeb, Quotesmith e.Coverage, Progressive, AnnuityNet.com.

National Wide, AutobyTel, AIG, Livia, General Life, etc.

Besides, main overseas insurance companies who challenge the new opportunity using internet technologies in various fields and successfully graft e-business are shown in <Table 5>.

4. Correspondence on the e-business management

In order to survive in the fierce competition, insurance companies have to obtain several essential core factors and the ability of shaping the e-business strategies.

IBM's insurance specialist group sum the core factors into 6.

1) Information collection and application as asset

Insurance companies build the infra that can apply information (customer information, market information, rival company's information, etc.) as the most valuable asset.

2) Understand the powerful customers

If customers can not get necessary information by themselves, they will request it from site/information provider. Moreover, they will establish community for their own rights and interests, demand to improve the quality of products and services, and quickly move to the insurance company that can offer what they want.

3) New business model

Up to now, the organization of most insurance companies is 'product-based silos' or marketing channel organization. But this kind of organizational constitution act as obstacle to the necessary efforts in response to the market changes quickly. So, the new proposition of

⟨Table 5⟩ Main Overseas Insurance Companies Succeed in E-Business

Opportunity/ Application Sector	Company	Application Purpose	Expectation
Customer Loyalty Creation	Royal Macabees	• acquire and maintain effective agent	establish the positive brand image raise channel loyalty and productivity
	ATP	offer information to industrial customer target for employer of 140,000 and 2.7 million	* reduce 10% of working expenses * diversify ATP by Industry Leader
Financial Service for Market Share	Investors Group	financial service widen the range of products include personal securities exchange in the traditional Mutual Fund products	* increase Wallet-share * improve customer partnership
On-line Sales and Services	John Hancock	* support multiple access point distribution model - expand the function of offering products and service by the channel of independent agent, brokers/dealers/banks/internet/direct marketing	* support to acquire and maintain financial advisor
	Prudential UK	* offer the function of calculating household price	
	State Farm	e-business based marketing improve the quality of Leads offered by agents	• increase sales of each agent by 20-30% • improve sales close rate (1-in-27 to 1-in-7)
	Livia	earn profit from new channels interactive pension calculator	* 35 employee * maintain 250,000 customers
	Europ Assistance	* reduce cost/expand market share - complement the inefficient call center	online price calculating by web/order/ offer products information improve the productivity of call center and agent
	Lincoln Financial Direct	• independent internet sales amenity of Lincoln Financial Group	* supply online services
	Yasuda Fire & Marine	* set up 'Access Hub' for improving access to channels	* reduce channel expenses by call center/internet

Opportunity/ Application Sector	Company	Application Purpose	Expectation
On-line Sates and Services	Aetna Taiwan	offer services and products by internet	acquire industry leadership from agent and customers
	Generali Versicherungen	• expand central Europe market	* business integration * improved customer care
Golbal Competitiveness Accumulation	SwissRe	innovative product development by knowledge system apply global team skill for developing new products	• form 'global village' to support product innovation and market leadership
	Elvia	• speed to market - new products quick development and marketing - survive in the deregulated market	• improve the employee's access to customer information
	Liberty Mutual	• increase market competitiveness by targeting affinity group - affinity group marketing as new channel	• improve the relationship with affinity group - diversified offer and inquiry
Win/Win Claim System Establishnet	Chubb	Just-In-Time claim reporting 24 × 7 Daim reporting thru internet customers/agent/broker check claim information by web	* improve services for the customers and business partner * fulfill the business in the position of customers
	Aetna	develop e-pay system for dealing with claim improve the ability of dealing with claim	• improve the relationship with doctor by shortening the processing time
	Yasuda Fire & Marine	• shorten claim life-cycle - reduce claim costs by efficient management of external parties	• expand customer services

customer value should be established and it should be customercentric network rather than customer focus network.

4) Optimal value chain

Traditional value chain waste time and costs resulted from overlapped functions in a series of operational behavior and department units.

However disaggregated value chain can exactly cognition the hidden expenses in the particular part of traditional value chain. The disaggregated value chain means all process in a company such as 'product development \rightarrow marketing \rightarrow sales \rightarrow acceptance and risk appraisal \rightarrow contract management and premium administration \rightarrow customer service \rightarrow asset management' can be disaggregated as 'product development \rightarrow marketing \rightarrow sales', 'acceptance and risk appraisal \rightarrow contract management and premium administration', and 'customer service \rightarrow asset management'.

To sum up, the fundamental should be built up, which can improve the productivity by removing the non-value-added business and redesigning or simplifying the business process.

5) Integrate marketing channels

For the present, in order to prevent conflict of channels, the business should conduct business continuously by the traditional marketing channels and make these channels participate in the transfer to the e-business.

6) Establish innovative master plan

In order to acquire the competitive forces early, companies must

continuously develop the up-to-date products and services, and must be mass customization of the products and services for entry into market (market-segment-of-one: market segmentation just for one customer) by One-to One Marketing.

5. E-business Concretization

To build up e-business environment, IBM have suggested 3 waves to minimize risk and opposition, and to improve internal forces.

However, it is not need to follow 1-3 waves accordingly, companies must consider its core forces and current, and can carry out 1, 2 stage simultaneously.

Wave 1: e-business of value chain to maximize internal efficiency of a company temporarily by utilizing internet.

- Improve compensation system-develop customer self-service station
- · Promote company's image-improve customer loyalty
- Internet direct marketing-establish the system can conclude contract in the internet
- Build up financial service system-build up system that can carry out financial business in the internet

Wave 2: e-business value system that is customer-centric.

- · Business support system-develop agent self-service station
- Build up knowledge management system-develop know-how as intellectual asset
- Financial consultant support system-supply financial advisory service
- · Customer information related service-establish the system that customer can checks and modifies his own information, contract, trade

status, etc.

- Internet marketing based on customer information-build up the system that can collect and apply customer information in communication with customer
- · Alliance marketing-insurance marketing through alliance

Wave 3: e-business value network that can create new business including the company's interested parties

- E-business of purchase system-apply internet to all kinds of purchase process
- Develop extranet of group market-build up exclusive extranet for group (company)
- Participate in new financial business-participate in banking or similar industry exclusively for company's own customer

In order to transfer to new e-business, domestic insurance company have to solve the problem first, that is to define existing salesman organization newly. Under the e-business environment, the existing salesman's role must be changed a person who sell insurance products only into a trusted adviser that can advise customer's financial status.

To sum up the objectives of e-business is to create new business opportunities and improve efficiency of existing business operation. In order to achieve such objectives, the management and staff must have ability to predict the change of financial industry under e-business. They also have to create new business process and understand it, and need core forces that can carry out innovative activities continuously.

However, current conservative culture of domestic insurance indus-

try is the biggest obstacle that does not support the speed, flexibility, and experimental spirit demanded by e-business environment. Recently, the insurance companies in developed countries recognize that they must change to 'customer-centric', 'network cooperation system', 'network customer-centric strategy model' for their survival in the sharply changed environment at least next 5 years.

6. E-business Access Strategies

IBM suggest that e-business access strategies is a series of repeated course, that is firstly, establish strategy, secondly, reform the core process to concretize the strategy; and thirdly, establish organization, IT infra, and related system to support the core process, and rebuild the process on the basis of experiences obtained through operation; and continuously improve it at the bottom of gained learning effect through reoperation.

Stage 1: Establish e-business strategy (see <Table 6>)

A lot of researches and investigation should be done for establishing e-business strategies, and the most important factor is arouse sympathy of all employee in the company.

Stage 2: Management Innovation of E-Business (see <Table 7>)

Management innovation should be done that can offer value proposition to cooperate and compete all interested parties.

Stage 3: Establish E-Business Management System (see <Table 8>)
E-business management system is constituted by 6 factors, that is
mission, organization structure, role and responsibility, process, evalua-

(Table 6) Establish E-Business Strategies

	· i abio o · L		occ chalogics	
Develop/Refine e-business Direction	Perform Environment Analysis	Define Future Strategic Context	Identity and Profile Strategiec Opportunities	Create Strategic Roadmap
*examine, grasp, and document current management policies (vision,	*investigate and understand current business environment and the industry trend	*investigate customer-focused future business environment	*determine e-business field that can maximize the effect	*define working plan including procedure and priority ordered initiative
value, mission, objective, advantage, strategy, and business principles, etc.)	*evaluate e-business technology and best practice	*evaluate the changes of e-business technology and grasp new application	*find the opportunity that can produce new business field or new value proposition	*calculate the necessary costs and define superior business case
*define the position and role of e-business in the company's management policy	market, customers, counselors, substitute products, supplier, and partner	*evaluate the changes of market, customers, competitor, substitute products, supplier, and partner	*define the standard of evaluation and the priority order according to management policy	*develop e-business strategy
management policy from the fitness and timely point of view, or establish new management policy	customers' current and future core abilities *find customers' current and future e-business initiative	•evaluate influence, and grasp core business driver	*define traditional core ability in the opportunity part and regrouping to meet the initiative	

tion plan, and business policy.

Stage 4: Establish E-Business System

To Establish system is $12\sim16$ weeks needed. The small, but measurable function should be determined and built first, and then the company should consider that the business will be built is important or not to the customers or the company. Furthermore, do we have the ability

⟨Table 7⟩ E-Business Management Innovation

1. E-business Opportunity Analysis

2. As-Is Analysis 3. To-Be Model Design

4. Implementation Plan Establishment

Module 1

Opportunity analysis Workshop

Module 2. As-Is Analysis Module 3. To-Be Model Design

Module 4. Implementation Planning

5. Change Management

*set up the business goal

*CSF analysis

*e-business opportunity factor analysis

*process analysis *organization analysis *IT analysis

*sales force analysis

*competition strategy/ organization strategy establishment

*define project *implementation plan *final business case and proposition

*design objectives and principles *superior new process

model *superior new organization model

*superior IT architecture

*new detail process design

*new detail organization design *influence analysis

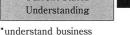
Module 5.

Change Management

*communication/ education plan

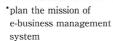
⟨Table 8⟩ Establish E-business Management System

Current Status



- environment
- *understand current e-business strategies
- *analyze current e-business management system
- *understand the tasks of e-business management system
- *gap analysis compared with Best Practices

Management System Establishment



- *design propellant business process
- *design management organization system
- *define the responsibility and role of management organization
- *prepare evaluation plan of management system
- *prepare the managerial policy of management system

Future Plan Establishment

- *find out implementation problems
- *establish implementation plan
- *draw final report

to carry out, and how difficult in carrying out.

III. Conclusion

Under the e-business environment, insurance consumers demand high quality information of products and services, want to order the products and services without the time and place limitation, and wish to gain information in purchase.

Besides, value and convenience are accounted much rather than brand name and logo, so the value recognition rises, that is demand products and services of high value.

Hereby, the insurance companies should widen the range of products and services by integrating new channels (internet, kiosk, bancassurance, and call center) properly, posses on-demand ability without adding extra expenses, improve the efficiency of supplier's management, and supply services just-in-time.

Furthermore, the insurance companies should strengthen own core competitive forces by reducing the indirect costs, new channels aggressively, and cut the working expenses by applying the latest technology actively.

Therefore, insurance company should priority invest in the field of 'profit maximization', 'customer relation management improvement', and 'new channel acquisition' by e-business.

According to the MeKenna Group (professional investigation Institute), through introduction of e-business, the customer base could be

expanded by 44 %, the internal operational expenses could be cut by 50 % or more, and agent loyalty could be risen by 35 %.

Thereupon, CEOs should consider following core factors.

- 1) Establish new business model and e-culture in line e-business environment
- 2) Defensive strategies of customer and brand against new participants
- 3) Build up the flexible and solid IT infra
- 4) Plan our the opportunities of new business model and strategies
- 5) E-Business management in the dimension of electronic portfolio
- 6) Define the relations with existing business infra and business innovation
- 7) Establish wrap management system

In the general, CEOs should take e-business into consideration as new business paradigm rather than IT problems. So it should be accessed strategically from the viewpoint of company's survival strategy.