LIFE INSURANCE: MEIJI LIFE, K.K

Gaining and Sustaining Long-term Advantage

Through Information Technology

Working Paper 169

Center on Japanese Economy and Business

COLUMBIA BUSINESS SCHOOL
Columbia Project: Use of Software to Achieve Competitive Advantage

**LIFE INSURANCE: MEIJI LIFE, K.K.**

Gaining and Sustaining Long-term Advantage

Through Information Technology

Working Paper 169

Case Prepared By

William V. Rapp
Co-Principal Investigator

The College of International Relations
Ritsumeikan University
Kyoto, Japan

914-945-0630 (Fax: 914-923-1416; 011-81-75-465-1214)
E-mail: william.rapp@aya.yale.edu
September 1999
SOFTWARE AS A TOOL OF COMPETITIVE ADVANTAGE:
RETAIL LIFE INSURANCE

1 Introduction: Objectives of this Benchmarking Study
2 Approach: Methodology and Questions
3 Introduction to Case:
4 The Industry Context: Life Insurance in Japan
5 Meiji Life's Retail Life Insurance Strategy
   - Organizational structure
   - Life Cycle Model
   - Using information systems as a competitive tool
6 Information Technology Infrastructure
7 Implementation of Laptop Based Life Cycle Strategy
8 Customers, Culture and Strategic Organization
9 Summary

Appendix I - Summary Answers to Questions for Meiji - Strategy & Operations
Appendix II - Some Industry and Firm Data
Bibliography and References
Introduction: Objective of this Study

This retail life insurance case study was completed under a three-year research grant from the Sloan Foundation. The project’s purpose has been to examine in a series of case studies how US and Japanese firms who are recognized leaders in using information technology\(^1\) to achieve long-term sustainable advantage have organized and managed this process. While each case is complete in itself, each is part of this larger study.\(^2\) Research on Nationwide Life Insurance as the counterpart case of Meiji is underway.

This retail life insurance case together with other cases\(^3\) support an initial research hypothesis that leading software users in the US and Japan are very sophisticated in the ways they have integrated software into their management strategies and use it to institutionalize organizational strengths and capture tacit knowledge on an iterative basis. In Japan, this strategy has involved heavy reliance on customized and semi-customized software (Rapp 1995) but is changing toward a more selective use of packaged software managed via customized systems. This is seen in Meiji’s adoption of Windows NT and Excel as the basis for their new laptop based field support system. In turn, US firms, such as Merck, who have often relied more on packaged software, are

\(^1\) In this paper and the study, software, information technology (IT) and systems are used interchangeably. In addition, when referring to the firm as a whole, the text will use “it”, but when referring to management, “they” will be used. Retail life insurance is sold directly to clients rather than provided by employers as group insurance.

\(^2\) The industries and firms examined are food retailing (Ito-Yokado), semiconductors (NEC and AMD), pharmaceuticals (Takeda and Merck), retail banking (Sanwa and Citibank), investment banking (Nomura and Credit Suisse First Boston), life insurance (Meiji and Nationwide), autos (Toyota), steel (integrated mills and mini-mills, Nippon Steel, Tokyo Steel and Nucor), and apparel retailing (Isetan and Federated). Nationwide has replaced USAA, as the latter was ultimately unable to participate. These industries and cases were generally selected based on the advice and research of specific industry centers funded by the Sloan Foundation. These are the computer and software center at Stanford, the semiconductor and software centers at Berkeley, the financial services center at Wharton (University of Pennsylvania), the pharmaceutical and auto centers at MIT, the steel project at Carnegie-Mellon and the food services project at the University of Minnesota. The case writer and the research team for this case thus wish to express their appreciation to the Alfred P. Sloan Foundation for making this work possible and to the Sloan industry centers for their invaluable assistance. They especially appreciate the time and guidance given by the center for research on financial services at Wharton as well as the retail life insurance group at Meiji. However, the views expressed in this case are those of the author and are not necessarily those of Meiji or its management.
doing more customization, especially for systems needed to integrate software packages into something more closely linked with the firm’s business strategies, markets, and organizational structure. Thus, coming from different directions, there appears to be some convergence in approach by these leading software users. The cases thus confirm what some other analysts have hypothesized; a coherent business strategy is a necessary condition for a successful information technology (IT) strategy (Wold and Shriver 1993). These strategic links for Meiji and the Japanese retail life insurance business are presented in the following case.

This case, along with the other cases, also illustrates that the implementation and design of each company’s software and software strategy is unique to its competitive situation, industry and strategic objectives. These factors influence how they choose

---

3 This refers to cases for which interviews have been completed. See footnote 2.


5 All the cases are being written with a strategic focus. That is, they examine firm IT strategy rather than the specific software or IT systems used. In this sense, they illustrate how IT is used to improve competitiveness rather than what specific software a firm is using. The latter is generally only noted to illustrate and explain the former. This emphasis was not specified when the project began but has evolved as it has progressed. There are three major reasons the cases have become focused in this way. First, at a detailed level, all these firms have unique software and IT systems due to the way they weave organization with packaged and custom software. There is thus little others could learn if a case just explained each firm’s detailed IT system or systems. Further, the cases would be long and would quickly drown the reader in data since IT pervades all aspects of these very large corporations. This was apparent at an early stage in the research when we tried to develop IT organization charts for Takeda, Merck and NEC. The second reason is that at a general level, differences in firm IT systems can be almost trivial since there are only a limited number of operating system options, e.g. IBM mainframes, Unix workstations, and Windows or MAC based PCs. Third, information technology changes very rapidly and thus each firm is constantly upgrading and evolving its systems. So detailed descriptions of each IT system would rapidly become obsolete. For these reasons, focusing the cases on strategic principles developed as the best way to explain to readers something they could use and apply in their own situations. This reasoning has been confirmed when we have presented the material in different forums as discussants have commented favorably on the approach. Equally importantly, in our interviews and conversations with management, this is where they have focused their responses. That is, as the various cases illustrate, these firms manage their IT decision-making by following a set of strategic principles integrated with their view of their competitive environments. This is similar to Nelson and Winter’s (1982) rules and routines for other kinds of management decisions and innovations, and illustrates these firms’ evolutionary approach to IT use and development. Their basic reasons for this incorporate the points noted above, i.e. their unique systems, their limited operating system options, and IT’s rapid technical change. Based on what we have learned, therefore, it is these firms’ strategic approaches, including the concept of controlled production explained later, that seem to have the widest applicability and offer other
between packaged and customized software options for achieving specific goals and how they measure their success. Indeed, as part of their strategic integration, Meiji and the other leading software users interviewed have linked their software strategies with their overall management goals through clear mission statements that explicitly note the importance of information technology to firm success.

They have coupled this view with active CIO (Chief Information Officer) and IT (information technology) support group participation in the firm's business and decision making structure. Thus, for firms such as Meiji, the totally independent MIS department is a thing of the past. This may be one reason why outsourcing for them has not been a real option except to a captive subsidiary, Meiji System Service (MSS). However, their organizations the most potential insights without becoming dated in how to use IT to improve competitiveness. The detailed strategy described here, though, only applies to retail life insurance in Japan.
relatively successful business performance is not based solely on software. Rather, as shall be described below, software is an integral element of their overall management strategy with respect to selling financial products to their retail life insurance customers. Software plays a key role in serving corporate goals such as enhancing productivity, improving account management or strengthening customer relations. These systems must be coupled with an appropriate approach to marketing, customer service, and new product development that reflects Meiji’s clear understanding of their business, their industry and the firm’s competitive strengths within this context.

This clear business vision, especially of the Life Cycle Model described below, has enabled Meiji’s management to select, develop and use the software they believe is required to assist their roughly 30,000 retail life insurance agents to operate at a higher and more consistent level of sales performance and customer service. In turn, they have integrated this “in-the-field” support with their agents and into a total support system that is coupled with the company’s overall operations. Since this vision has also impacted other corporate decisions, Meiji seems to have good human resource and financial characteristics compared to other Japanese life insurance companies (Appendices I & II on Strategy & Operations as well as Firm & Industry Data).

Yet, Meiji does share some common themes with other leading software users, such as the creation of large proprietary interactive databases that promote automatic feedback between various stages and/or participants in the development, delivery and consumption of Meiji’s products and services. Its ability to use IT to economize on traditional delivery systems and inventory such as agents and branch offices or the paper storage of policy documents while extending and expanding their customer base are also
common themes for other leading software users. In addition, Meiji has been able organizationally and competitively to build beneficial feedback cycles or loops that increase productivity in areas as different as customer service, geographic coverage, and product availability while reducing cycle times and improving the production and delivery of services to the customer.

Management recognizes that better cycle times between client contact and financial contract, and between contract and document delivery reduce costs and improve business forecasts since projections need to cover a shorter period. Customer satisfaction is also enhanced through more timely completion of the process. One example of this is that Meiji has equipped its agents with portable printers so if last minute changes or corrections must be made to an insurance plan or contract agreement, the agent can immediately print a new version. Thus, the customer does not have to wait for a new one to come in the mail. Further, this has eliminated potential errors in the new version that might have caused additional delays and customer frustration. Mailing and custom printing charges have also been reduced since only the final policy is mailed and this is now done directly via the host computer. Thus IT inputs are critical factors in Meiji’s and other leading users’ overall business strategies with strong positive competitive results for doing it well and potentially negative implications for competitors.

An important consideration in this respect is the possible emergence of a new strategic production paradigm, “controlled production”, where Meiji appears to be an initial participant. Mass production dramatically improved on craft production through economies of scale using standardized products, and lean production improved on mass
production through making production more continuous and tying it more closely to actual demand. What we call “controlled” production (CP) seems to significantly improve productivity through monitoring, controlling and linking every aspect of producing and delivering a product or service, including after sales service and product changes. Some of these effects are illustrated for Meiji in the case that follows where it describes Meiji’s new computerized sales development system.

Such controlled production is only possible by actively using information technology and software systems to continuously monitor and control functions that had previously been parts of a business structure that only responded to changes in expected or actual consumer demand rather than influencing or stimulating those changes. This may be why these firms’ skillful use of IT is seen by themselves and industry analysts as important to their business success. But this is only true when IT is integrated with a firm’s business from both an operation and organization standpoint, reflecting its overall business strategy and clarity of competitive vision. Therefore, at Meiji the software and systems development people are part of the decision making structure within the retail life insurance division while the system itself is an integral part of the way they organize, deliver and support this business from product development through delivery and after-sales service. This sequence is particularly critical in retail life insurance where the demand and supply for particular products or services shifts according to age, job status and other demographic variables.

Therefore, Seagate Technology may be correct for Meiji too when they state in their 1997 Annual Report “We are experiencing a new industrial revolution, one more powerful than any before it. In this emerging digital world of the Third
Millennium, the new currency will be information. How we harness it will mean the
difference between success and failure, between having competitive advantage and
being an also-ran.”

In Meiji’s case, as with the other leading software users examined in this case
study series, the key to using software successfully is to develop a mix of packaged and
customized software that supports the firm’s business strategies and differentiates it
from competitors. However, Meiji’s management has done this by using IT to enhance
Meiji’s existing organizational strengths rather than trying to adapt the organizational
structure to the software used. They have also looked to functional and market gains to
justify the additional expense incurred in customizing certain systems, including the
related costs of integrating the customized and packaged software into a single
information system while training the staff to use it. This integration is done by first
assessing the possible business uses of software within the organization and its
operations. Particular focus is placed on IT’s role in enhancing Meiji’s core
competencies or particular retail life insurance sales and delivery functions.
Management rejects the view that information systems are generic products best
developed by outside vendors who can achieve low cost through economies of scale and
can more easily afford to invest in the latest technologies.⁶

⁶ Meiji and the other cases have been developed using a common methodology that examines cross-national pairs of
firms in key industries. In principle, each pair of case studies focuses on a Japanese and American firm in an industry
where software is a significant and successful input into competitive performance. Excepting Nationwide, the firms
examined are ones recommended by the Sloan industry centers as ones using software successfully. Nationwide was
recommended by a leading securities analyst as a replacement for USAA. So all are recognized by their industry as
being good at using IT to improve competitiveness. To develop these “best-practice” studies, we combined analysis of
current research results with questionnaires and direct interviews. Further, to relate these materials to previous work as
well as the expertise located in each industry center, we held working meetings with industry centers. In addition, we
coupled new questionnaires with the materials used in the previous study to either update or obtain a questionnaire
similar to the one used in the 1993-95 research (Rapp 1993). This method enabled us to relate each candidate and
industry to earlier results. We also worked with the industry centers to develop a set of questions that specifically
relate to a firm’s business strategy and software’s role within that. Some questions address issues that appear
relatively general across industries such as inventory control. Others such as managing the IC manufacturing process
are more specific to a particular industry. The focus has been to establish the firm's perception of its industry and its
competitive position as well as its advantage in developing and using a software strategy. The team also contacted
customers, competitors, and industry analysts to determine whether competitive benefits or impacts perceived by the
firm were recognized outside the organization. These sources provided additional data on measures of
competitiveness as well as industry strategies and structure. The case studies are thus based on extensive interviews by
the project team on software's use and integration into management strategies to improve competitiveness in specific
industries, augmenting existing data on industry dynamics; firm organizational structure and management strategy
collected from the industry enters. Further, we gathered data from outside sources and firms or organizations with
which we worked in the earlier project. Finally, the US and Japanese companies in each industry were selected on the
basis of being perceived as successfully using software in a key role in their competitive strategies. In turn, each firm
saw its use of software in this manner while the competitive benefits were generally confirmed after further research.

10
Approach

In undertaking this and the other case studies, to assess the importance for each firm of the kinds of issues noted above, the project team sought to answer certain key questions while still recognizing firm, country and industry differences. These have been explained in the summary paper referenced in footnote 4. We have set them forth in Appendix I as well, where Meiji’s profile is presented based on company interviews and other research. Readers who wish to assess for themselves the way Meiji’s strategies and approaches to using IT address these issues may wish to review this summary prior to reading the case. For others it may represent a useful outline. 7

Introduction to Case

The case begins by placing Japan’s life insurance industry in a competitive context and then examines the governmental policies, economic factors, and competitive dynamics affecting the Japanese market for retail life insurance products and services. As one of Japan’s leading life insurance companies, and its oldest (Meiji 1993), Meiji’s evolution and current business strategies are an integral part of this development and its

---

7 The questions are broken into the following categories: General Management and Corporate Strategy, Industry Related Issues, Competition, Country Related Issues, IT Strategy, IT Operations, Human Resources and Organization, Various Measures such as Inventory Control, Cycle Times and Cost Reduction, and finally some Conclusions and Results. They cover a range of issues from direct use of software to achieve competitive advantage, to corporate strategy, to criteria for selecting software, to industry economics, to measures of success, to organizational integration, to beneficial loops, to training and institutional dynamics, and finally to inter-industry comparisons. These are summarized for Meiji in Appendix I.
situation illustrates the competitive business issues facing Japan’s life insurance industry. Indeed, it is critical that Meiji successfully manages its transition to a new competitive model. This is because while retail life policies and group life policies each account for about 50% of the face value of Meiji’s total life insurance in-force, retail clients represent the major portion of related life insurance profits. At the same time, Meiji’s organizational structure and software product choices help one understand the company’s use and demand for software. The study concludes by examining Meiji’s use of information technology as a tool to create a competitive advantage in selling and delivering retail life insurance. The last section summarizes the findings and identifies other potential strategic benefits. However, to appreciate the role of information technology within Meiji’s retail life insurance group, some important industry, market and economic characteristics need to be explained first.

**The Industry Context: Life Insurance in Japan**

In his 1998 review of the Japanese Life Insurance Companies (Ostrom 1998), Douglas Ostrom describes an industry which in the 1980s was perceived as a financial juggernaut and major international source of capital. Even at the end of 1998, they had Yen 192.6 trillion ($1.6 trillion) in assets, and 690 million policies in force with a face value of Yen 1.9 quadrillion ($16.1 trillion). In addition, this financial clout was highly concentrated in 30 domestic companies compared to 2000 in the US. However, more recently, the industry has experienced many of the bankruptcy and bad loan problems of the Japanese banks (Ueda 1998 and Ogawa 1998), even if on the whole escaping their scandals and executive malfeasance. The collapse in the 1990s of Japan’s Economic Bubble that in the late 1980s had propelled Japanese stock and real estate prices to
ethereal levels (Rapp 1997) has thus predictably affected the large life insurers’ loan, stock and real estate investment portfolios too. This is especially true of loans collateralized by real estate and securities. However, while in 1997 this situation was considered manageable with bad loans as a percent of life insurance company assets of around 1 to 2% for the top companies (Appendix II), by March 1999 this problem had grown considerably. For example, the bad loans of Nippon Life, the world’s largest life insurance company, grew by 70% between March 1998 and March 1999 (Choy 1999).

Further, in June of this year, Toho Mutual Life was effectively absorbed by GE Capital with its remaining business closed down by the Financial Supervisory Agency (FSA). This event added to the anxiety of both customers and officials that had been created by Nissan Mutual Life’s bankruptcy in April 1997 since up until then the Nissan Life bankruptcy had been considered an isolated occurrence. The collapse of Japan’s stock market has also sharply reduced the life insurance companies’ hidden or unrealized capital gains at the same time that their loan losses have increased (Appendix II). That is, as of September 1997, the latent stock profits for several big life insurers were indicated as disappearing at the current Nikkei of roughly 17000 (Appendix II).

In addition, loan losses were rising. After writing off ¥en 800 billion in bad loans in FY 1998, using the same loan classification criteria as the banks, the largest 8 life insurers still had ¥en 1.1 trillion in bad loans on their books as of March 1999. That is the same amount they had at the end of fiscal 1997. This deteriorating asset situation has in turn been coupled with falling premium income partly due to low investment returns and partly reflecting customer concerns with the industry’s economic health. The top eight firms, for example, witnessed a 17.4% contraction in new individual (retail) life
insurance and annuity contracts and a 4.6% fall in total contracts overall (Choy 1999). Since contractual payments currently exceed investment income, the fall in premiums, which used to cover the payments out, has forced some asset liquidation to pay these obligations at precisely the wrong time in the business cycle (Choy 1999).

Indeed, this contractual mismatch or difference between what the life insurers have guaranteed policyholders and what they are earning on their investments rose substantially from ¥en 128.3 billion in FY 1997 to ¥en 1.3 trillion in FY 1998, causing further investment return headaches. Nippon Life has reported that its guaranteed payment rates during this period ranged between 3.8 and 4.1% while its investment returns were less than 2% (Choy 1999). While Nippon Life and the other big insurers have other products and income sources, Nissan Life went bankrupt precisely due to the relatively large number of high rate (5.5%) contracts they had written compared to weak investment earnings (Ostrom 1998 and Choy 1999). So the ability of even the large life insurers to continue this scenario is clearly limited.

While some firms have tried to solve the decline in premiums problem by raising contractual premium rates, this is a "no-win" situation. This is because the firms have been reducing their payments since 1990 precisely because of the fall in their investment returns, while still not solving the contractual mismatch. But raising premiums relative to payments will further lower rates of returns to investors who will then seek other investment opportunities, thus lowering total premium income even more. Thus this tactic is bound to be self-defeating. Therefore several insurers have begun to realize the appreciation on some of their remaining stock and other appreciated assets to cover loan losses just as the banks have had to do. However, this action diminishes their actual
“hidden” reserves once again. Indeed, as noted above, several no longer have any hidden reserves. This situation has forced many firms to pare costs, including doing the “unthinkable”, reducing employment. The first to feel the ax have been under-performing sales agents (Choy 1999). The cash flow squeeze has also stimulated political pressure on the government to include insurance in its “Big Bang” liberalization, including entrance into non-life insurance products, securities, and the “third” insurance sector currently dominated by foreign firms. The latter has thus become an area of intense even acrimonious negotiations between the US and Japan.

In addition, because their problems have not been considered as severe, the life insurers’ difficulties have in many ways been exacerbated by the government’s policies to rescue the banks. First they were forced to buy preferred shares to prop up bank capital on which Meiji in particular will take a 35 billion yen loss due to its forced investment in Hokkaido Takushoku (Ostrom 1998). Next, to create a positive funding spread to build bank capital and earnings, the Bank of Japan has lowered interest rates almost to zero. This has, in turn, lowered investment returns on loans, bonds and deposits, limiting the insurers’ ability to meet their investment targets and to create a positive spread between their own contractual payments and their investment returns. However, attempts to solve this contractual mismatch by investing in higher return foreign assets have exposed the insurers to foreign exchange risks that have been realized with the yen’s steady appreciation since the summer of 1998. (Appendix II shows the foreign asset exposure of the major life insurance companies.)

---

9 This sector spans highbred life/non life policies including personal accident, cancer, and hospitalization. Foreign firms have about a 40% share, though it is only about 5% of total insurance market (Choy 1999). To enter this and other markets life companies may create for profit holding companies (Urushibata 1997). But legal obstacles are formidable; so this will take time and could be expensive. Therefore in the meanwhile, they are likely to rely on affiliations, joint ventures or specialized unconsolidated subsidiaries.
Exacerbating these problems is Japan’s continued economic weakness that limits loan demand and return on assets generally. This is coupled with the fact that large Japanese corporations are not borrowing either, since they can raise funds directly on their own credit more cheaply (K. Ogawa 1998). Further, the demographics that for most of the postwar period have been extremely favorable for life insurance are now disappearing. That is, previously rising life expectancies have rapidly outstripped actuarial assumptions. Premiums have therefore generally exceeded actual death payments, permitting life insurers to build huge reserve portfolios. But recently, and for the foreseeable future, these benefits are disappearing. Life expectancies are no longer rising faster than actuarial assumptions and the proportion of older people in the population is increasing rapidly. By 2025 more than 25% of Japan’s population is expected to be over 65, more than any other country, compared to around 14% in 1993, the second lowest among the advanced industrial nations. Japan is in fact aging faster than any other country (Amari, Rapp & Patrick 1998).

Given this combination of factors, it is hardly surprising that life insurance companies have turned to other opportunities and activities to develop new and more profitable business such as new long-term health care products that will target Japan’s aging population. They are also expanding into non-life insurance products (Urushibata 1997), brokerage, and money management. The introduction of 401(k)-type plans and other asset management accounts has combined with rising retirement concerns to greatly expand asset management opportunities (MOF 1997). This focus on new products and businesses has lead life insurers into both acquisitions and affiliations, many with old Zaibatsu partners (Choy 1999). Examples are: the merger of Daido and
Taiyo Mutual Life; Yasuda Fire & Marine, Yasuda Trust, Yasuda Life and Fuji Bank’s plans to jointly sell investment trusts; Tokyo Fire and Marine’s agreement with Meiji, Mitsubishi Bank and Mitsubishi Trust to develop pension and investment trusts; Nippon Life’s plan to work with Putnam Investments to also enter the trust and asset management business: Dai-ichi Life’s agreement to cooperate with IBJ to develop a joint financial services operation; CIGNA’s plan to cooperate with Yasuda Fire and Marine to market pension and investment products; Tokyo Mutual Life’s product development pledge from the Reinsurance Group of America; Metropolitan Life and Asahi Mutual’s agreement to provide investment management services; Chiyoda’s marketing of Unum’s long-term disability product (Choy 1999) and recently Nippon Life’s proposed tie-up with Sakura Bank to provide unsecured consumer loans through a new web-based lender with ties to monthly insurance premiums or benefits (Japan Times, 9/25/99). The last will involve a relationship with the AM/PM chain store too as a way to provide a new insurance for nursing care for the elderly.

However, with all large life insurers facing the same business and economic environment, as shown in the examples above, most have sought similar solutions. Further, recently announced and prospective mergers among the banks, such as the one between DKB, Fuji and IBJ, put some of these cooperative affiliations in question. In addition, the most important strategic objective of these affiliations is to offer the life insurers’ existing customers as well as new customers an expanded range of products. Therefore, the strategic problem in retail life insurance, as in many other areas, remains how to differentiate one’s product and services, including the new ones, from others, while creating a lasting competitive edge in Japan’s gradually deregulated financial
environment. This strategic issue is especially critical given more life insurance
competition from the new life insurance affiliates of non-life insurers or even from non-
insurance parents such as SONY, GE and Softbank (Choy 1999). Also, the life insurers
are clearly not the only ones looking at the same expanding business opportunities in
investment advice and asset-management. The field is crowded with Japanese and
foreign financial institutions of every description, including those who specialize in this
activity on a global basis. Nevertheless, if one can succeed in this objective of selling
existing and new customers a wider range of products and can also avoid more credit
problems, then cash flow should become positive as both premium income and other
earnings increase. Therefore, it has had to be addressed by Meiji and other life insurers
as a key strategic issue.

Historically and currently the Ministry of Finance’s (MOF) control of all life
insurance products and their pricing has complicated this strategic problem of
effectively differentiating one’s products and services from those of competitors. The
MOF’s approach to life insurance has been the convoy theory with avengerence, and it
has severely limited the range of product offerings and the competition for new business
(Choy 1999 and Ostrom 1998). Now, all that seems about to change. Since the Second
World War, of course, most life insurers have grown and developed as mutual
companies. That is, they are owned by their policyholders. Indeed, this was part of a
conscious policy by the US occupation to break up the Zaibatsu, most of whom had
captive insurance companies. Meiji Life had been part of the Mitsubishi Group along
with Tokyo Fire and Marine. However, the focus on mutual firms seemed to suit
government policy even after the San Francisco Peace Treaty in that there was no
change in the law or encouragement for life insurers to reorganize as “for-profit” firms such as the non-life companies. The reason appears to be that the mutual life insurance companies contributed to increased household savings and were viewed as stable sources of long-term capital to be channeled to a rapidly growing industrial sector. They thus expanded greatly along with Japan’s spectacular postwar economic growth. They also benefited disproportionately as noted above from the Japanese population’s increased life expectancy since life insurance benefits paid fell well below actuarial expectations and therefore premium income. As major securities and property investors, the firms were also huge beneficiaries of the rapid rise in stock and real estate values triggered by Japan’s spectacular economic growth.

Thus, at the beginning of the 1980s when the foreign exchange law changed, they were assiduously solicited by international investment banks. Many opened overseas offices to supervise the acquisition of foreign securities and trophy real estate properties. In turn, their massive portfolio acquisitions, especially of high return US government bonds, weakened the yen further and raised their capital gains. However, the benefits of such asset diversification came to an abrupt halt in October 1985. The rapid appreciation of the yen due to the Plaza Accord caught them by surprise, resulting in massive foreign exchange losses. Numbers in excess of $50 billion have been mentioned. Because their overseas diversification did not work out well, they subsequently channeled their share of Japan’s increasing liquidity in the post Plaza period into Japanese assets, helping to fuel the emerging “Bubble” economy. While in the short term they appeared to be major gainers from this process, in the long term as explained above, the collapse of the Bubble has left them with significant headaches.
At the same time, the continued regulatory compartmentalization of Japanese finance by the Ministry of Finance (MOF) before, during and after the Bubble has limited their ability to respond to a deteriorating economic and business situation with new products and services (Rapp 1997 and Horiuchi 1998). This situation has only recently begun to change with the prospects of the “Big Bang” (MOF 1997, Horiuchi 1998 and K. Ogawa 1998). That is, with Japan’s “Big Bang” coming many of these restrictions will disappear and new competitive opportunities will develop (Choy 1999).  

But as explained above, this is both a benefit and risk for Meiji and the other life insurers. It is a benefit because of the new markets into which they can expand and the new products and services they can offer. It is a risk due to the influx of several powerful new competitors. In addition, the greater flexibility being given to the Postal Savings System and their insurance arm will contribute to these increased competitive pressures as well.

**Meiji Life’s Retail Life Insurance Strategy**

Meiji is very much a part of this competitive and economic environment. While its financial situation remains strong (Appendix II) with a solvency ratio above 700, significant “latent” profits even at current stock prices, and a relatively low exposure to

---

9 What the Wharton Center has noted for the US is now coming for Japan: “Deregulation of the financial sector, globalization of economies, and advances in information technology have all contributed to the dramatic changes taking place in the structure of U.S. financial markets and are altering the very nature of many financial services firms. … Gone are the days when U.S. financial services firms were neatly segmented by regulation and practice — when international competition barely existed and information technology was in its infancy. Advancing technologies, globalizing markets, and changing consumer demands have dramatically altered the competitive landscape and opened new windows of opportunity. … The traditional boundaries between industry segments are fading as new competitive pressures emerge. To adapt, industry players need to fully understand the evolving financial services marketplace and decide where their competencies offer the greatest advantage. New distribution channels, new products, and changing consumer behaviors mean providers must continually adapt their systems and procedures in order to ensure efficient and effective service delivery.” See Urushibata (1997) for outline coming “mega-competition” due to reciprocal entry and likely changes in activity. For example, he notes that as of October 1996, Meiji had 18,000 agents and 23 appraisers working in their new Marine & Fire subsidiary. In turn, Meiji announced
foreign assets, it still has suffered from stagnant premium income. Despite an almost 50 percent increase in total assets from March 1992 to March 1999, Fiscal 1998 (3/99) premium income of ¥2.5 is essentially unchanged compared with Fiscal 1992 and 1991 income of ¥2.4 to 2.6 trillion (Appendix II). Further, during this period, individual or retail life insurance policies, including annuities, fell from 66% to around 50% of total policies in force. So the share and value of group life insurance premiums and policies relative to the more profitable individual policies has been rising sharply. Therefore, about 5 years ago Meiji recognized that it needed to develop a new strategic initiative to reverse this trend as well as to prepare for new developments.

Given the evolving economic and competitive context for life insurers explained above, this strategy had to address certain fundamental conditions. It had to use Meiji’s 40,000 (3/97) person sales force, help educate that sales force and Meiji’s customers about the new financial options available, and establish a competitive advantage relative to other providers. The retail life insurance strategy Meiji has developed meets these conditions and is dependent on three basic aspects of its business. One is its retail life insurance infrastructure, including its sales force, branches and information network. The second is its new retail marketing strategy, and the third is its detailed evaluation of Japanese people’s lifestyle or pattern of personal development. Though it is very difficult, Meiji makes a particular effort to manage and analyze the statistical data related to the last two aspects of its business in order to differentiate its products and services from competitors and to retain its customers on a long-term basis. They have

---

September 17, 1999 (Japan Times) that they had agreed to form a partnership with Nissin F&M and will invest up to the current 10% limit in Nissin’s stock, thus becoming Nissin’s top shareholder.

10 Between March 1993 and 1996 Meiji aggressively reduced its foreign assets from 1.7 trillion yen to 582 billion (Appendix II). Between 3/97 and 4/99, it reduced its sales force from 40,000 to 30,000.
coupled this data with an integrated IT and organizational strategy that helps enhance sales force and branch network productivity (footnote 10). In this way, they have used IT to achieve a result that meets their business goals for the retail life insurance business.

One outcome of the “Big Bang” and the proliferation of both products and providers has been that the relatively simple structure of Japanese finance from the individual consumer’s viewpoint is changing rapidly, as the U.S. system has already (see footnote 9). Previously, due to the MOF’s controls, if one wanted life insurance or an annuity, one went to a life insurance company. Further, because prices were fixed, one chose between providers based on the investment payment or non-financial factors such as the company for which one worked. That is, there might be a keiretsu connection. Alternatively, if one wanted to invest in stocks or the Japanese equivalent of a mutual fund, one went to a securities company. If one wanted a long-term debenture, one went to a trust bank or a specialized long-term lender such as IBJ. If one needed auto or home insurance, one approached a non-life insurance company. If one required a mortgage above the limits of the government’s housing program, one applied to a bank or trust bank. Thus, for each of a limited number of investment or lending options, there has been a clear set of suppliers. That is now changing as financial service companies enter each other’s turf (MOF 1997) as well as offer new products such as long-term care insurance, dental insurance or overseas mutual funds. This means the Japanese consumer must be helped both to understand these new products and why those being provided by a non-traditional provider might be superior, including the potential benefits of “one-stop” shopping. Or as Jon Choy (1999) has stated: “Japanese consumers must be educated about the sudden, bewildering proliferation of options.”
It is with this situation in mind that Meiji set out four years ago to develop its life cycle model and to combine it with a delivery system that would assist its roughly 40,000 retail sales agents to deliver the related services in a more consistent and effective manner.\(^{11}\) Thus, the primary strategic drivers at the retail level have been the evolving customer life cycle concept and the improved productivity of the sales force. It is in terms of these two goals that Meiji has developed criteria for selecting software and measuring the success of its IT systems. That is, as Meiji has developed its plans to compete across industry segments, its goal has been to determine how it can best deliver traditional and new financial products to their existing customer base while retaining and expanding that base so new competitors cannot take it away. So a critical aspect of their strategic thinking is to build sustainable competitive barriers based on their core competencies between customers and the emerging wider competition. Only in this way can it maintain profitability and avoid “excessive” competition (Rapp 1999).

Their strategic solution has been the life cycle model incorporated into a laptop delivery system with the life cycle concept and related products embedded in the software. Their stated (Meiji 1997) strategic aims in implementing the new system are:

“Strengthen the sales performance of the sales force;

Improve the Quality and Speed of Customer Service;

Restructure the information systems basis;

Improve the efficiency of service and deskwork;

Have a system with good cost performance.”

\(^{11}\) In 4/93 there were almost 50,000 agents and 1610 sales offices (Meiji 1993). By 7/97, there were 40,000 and 1500 (Meiji 1997). By 4/99 agents were 30,000. An early effort to understand customer requirements and potential new products and services used a 1992 survey of 50,000 questionnaires sent randomly to selected customers (Meiji 1993).
In implementing this strategic approach, Meiji’s management has determined based on their questionnaires and surveys that the company’s customers have an evolving and growing set of financial needs that change throughout their lives. The question is how to track these changing needs by individual customers and then market and deliver the appropriate products in a timely manner. They also need to insure that the products develop and change in a way that is responsive to alterations in lifestyles and technology. Further, they need to know how valuable typical customers really are on a discounted basis and how easily the firm can retain them throughout the cycle?

In addition, there are other questions that must be answered such as when is the appropriate time to start marketing a new customer or new product, how much effort should be made per potential customer, and what is the most effective way to market and deliver each product or service? These are complex issues that vary by product and customer group and require much thought and data. However, there does seem to be a consensus between Meiji and their competitors about the best time to begin life cycle marketing. Given Japan’s compact geography and limited labor mobility, it is just after students have graduated and entered the labor force. This is because Japanese consumers generally have great loyalty, and Meiji and its competitors’ operations are nationwide. Clients thus have little reason to shift providers as they pursue their careers.

However, since Meiji is very conscious of the expense of delivering its products and service to different customers, it does try to identify fairly specifically different customer groups and their varying financial service needs according to their current lifestyle. Categories are not broad gauged, such as everyone in the twenties, but are increasing well defined. However, because Meiji is relying on its traditional sales force,
its approach is somewhat different than a bank's such as Sanwa.\textsuperscript{12} Nevertheless, they closely analyze the productivity versus the costs of delivering products or services for an individual agent in order to identify the "best practice" that can then be coupled with Meiji's software system to raise the performance level of all agents, a kind of iterative expert system based on an analysis of their own top agents. They also try to assess the potential returns from certain new market segments such as young people just starting their careers as well as the products that are mostly likely to appeal to them.

In addition, as these individuals progress through their lives, their economic needs and earning power will grow. More importantly, their life insurance and annuity requirements will increase even faster, and they will also eventually become more and more profitable customers for newer products such as dental care, long-term nursing care and disability income protection as well (Meiji 1993). At the same time, they are being targeted by other competitors too (Rapp 1998, 1998a and 1999a). So the competition for their business will be fierce.

Nevertheless, as a person's financial needs change, Meiji's has structured its retail marketing strategy to change with them. But for this strategy to be effective, Meiji must gather and manage a wide range of information about its client base and potential customers so it can offer these products in a personal and timely way. This approach has parallels with Sanwa Bank's new system for their automated bank services, indicating that at least two leading software users in Japan's financial services industry are pursuing similar strategies to deal with both existing competition and the effects of future deregulation, i.e. the "Big Bang". (See footnote 12.)

\textsuperscript{12} See Rapp 1998, 1998a and 1999a for further discussion of Sanwa's Life Cycle Model. There is also an expected 1999 Columbia Working Paper on Sanwa as part of this case study series.
Making the strategy work therefore requires Meiji to efficiently track its large and growing customer base as well as its potential customers in terms of individual needs and to then deliver products to that base efficiently and profitably. Of course one benefit of alliances is that this is an easy way to expand the accessible client, though it also exposes your client base to exploitation by your partner. However, even with the expanded product lines provided by such alliances, the firm still needs low cost and productive delivery into each segment. As already explained, Meiji spends considerable effort in evaluating costs but also in increasing agent productivity. Indeed, it believes it is very good at implementing a strategy that combines cost containment with revenue enhancement. Further, Meiji’s management recognizes that this approach has become even more important as Japan’s “Big Bang” has gotten underway in 1999. This is because increased competition will potentially decrease premium revenues and policies in-force more while increasing marketing costs. So it has become very important to target the first time customer with multiple products and services as this has the advantage of spreading sales costs over a larger number of assets and revenue streams.

A critical aspect of Meiji’s approach to this situation has been to increase the independence of its agents through IT by incorporating most of what they need in the laptop system, including direct links to the central information system. This has begun to reduce the need for local sales offices, permitting them to extend the cost cutting measures they had implemented between 1993 and 1997 (footnote 11). This is because the basic information infrastructure for the retail life insurance division is controlled from Meiji’s information technology center rather than locally as before. In this way IT has helped to control costs. Further, as the new IT sales system is based on the observed
“best practice” of its top agents, the system has improved the consistency, performance and productivity of its sales-agents overall (footnote 11). In practice, each agent receives a laptop with preloaded software incorporating all aspects of the new life cycle model, including the appropriate links with Meiji’s various products and services. This system is then constantly upgraded along with agent training as new products are introduced. Thus, when the agent visits a customer and puts in the client’s basic lifestyle data, information on the related products is displayed graphically and in written form. The agent then can explain the products and their relation to the client’s life plan including variations based on inputs and suggestions from the client and the agent. The clients, in turn, are able to immediately visualize the impact of their suggestions and requirements.

The agent can therefore show the customer how various products and services will perform over the individual’s life cycle under different scenarios. The system was extensively piloted prior to launch to assure that both the agent and the customer could easily understand and respond to its nuances since its effectiveness depends on a symbiotic integration of system, agent and client. Once a sale is made, the agent can then enter that information electronically as opposed to the old system of first going to a local sales branch. Further, each agent now has a portable printer. Therefore the agent can print an insurance plan or other contract documentation once approval has been obtained. For some products, such approvals can now be obtained centrally and electronically as well, again speeding the process. In addition, the portable printer permits agents to accommodate possible later plan or contract changes immediately at the client’s home or workplace at the time of change. This system has vastly improved customer satisfaction and has reduced overall insurance plan printing costs, which used
to be expensively printed in multiple colors. Furthermore, the number of local branches necessary to support its sales force as well as storage requirements for policies have fallen too. Finally, policy-printing costs have fallen as well since the final version sent via the host computer is more likely to be completely accurate.

The "Mobile Personal Computing System for Every Agent" has thus achieved its goals (Meiji 1997) of being a "Sales Aid Tool," of "Managing Clients and the Agreement Database," of tracking "Profit (Sales) Information," of providing "Training and Intelligence (monetary, commodity, and sales)," of helping "Administration," of "Maximizing Information Usage," and of "Maximizing Efficiency of Service, Deskwork, Time management." Thus, through direct marketing and electronic means, Meiji has found it can build a structure that will support a long-term customer relationship. It is not clear how Meiji takes the revenues or profits from this prospective long term relationship into account in determining the profitability of adding a new customer versus the cost of servicing and supporting that customer. Nevertheless, they believe such new customers are basically profitable from the beginning, based on the size of their accounts and the lower cost of electronic support. However, Meiji is presently analyzing this assumption in more detail and expects to refine it by type of customer and product over time. This indicates they recognize that strategically using software and information technology is a dynamic and continuous process with the objective being to solve the traditionally high service cost per customer and product while still initiating the relationship early in the client's life cycle. So far, the system has improved not only product delivery but has lowered costs as in the example of the portable printer explained above. They have also identified savings in workflow or cycle-time.
Developing a new application takes one-fifth the time of the old system and one-half the administrative time (Meiji 1997). As explained above, the system achieves these results by simplifying deskwork, assessment and approvals; by reducing and speeding paperwork; by eliminating redundant inputs; by confirming and completing the transaction on site; and by adding value and supporting the agent’s function (Meiji 1997). This simplification and improved data processing also extends to after-sales service: from claims and benefits to invoices, account management and address changes.

Furthermore because the newly trained sales-force and its automated support system are development cost intensive, these costs are subject to user base economics in that each additional user reduces the cost of delivery to others by spreading the fixed systems costs over more and more users (Rapp May 1997). Success in this area is subject to a beneficial loop of increasing returns and greater profits. A clear indication of the benefits to Meiji of this strategy is its announcement that it will close several more of its local sales offices. This should give it significant cost and operating profit advantages at a time when corporate earnings and capital are under pressure (Appendix II).

Interestingly, the insurance analyst at Nikko was not very aware of what Meiji was doing in terms of its IT delivery system, though he placed their favorable financial situation right behind Nippon Life (Appendix II).

The retail life insurance division’s management’s approach is dynamic in that they are constantly adding to the number of functions and services that the laptops and their trained sales force can deliver. This is part of the constant strategic upgrading and development of the company’s IT and retail delivery system that has allowed it to increasingly shift away from local branches while upgrading and increasing the average
performance of its sales-force (footnote 11). The basic decision criterion in this respect has been to enhance the agents’ capabilities with systems and machines, to expand the capacity of the delivery system, and to reduce costs, all through extending the use of electronics. However, management always keeps in mind Meiji’s customers’ various and shifting needs so those customers do not feel alienated by the shift in delivery structures. This was one reason for the extensive piloting of the system before its launch in the fall of 1997. It is also one of the reasons they have continued to modify it since its introduction according to agent and customer feedback. The objective is to make the sales approach more congenial and user friendly while getting the customer to accept the life cycle plan approach to their finances. This is critical since strategic success depends on client and agent easily understanding and appreciating the information presented. The use of animated characters and personalized examples within the software system are a clear illustration of this approach because it has proved a better way to establish a closer bond between agent and client. Similarly, Meiji has developed the capability to identify and sell products that will appeal to clients planning for specific events or situations such as college, weddings, and retirement. Indeed, the software continually tracks the potential demand for additional products and services on an individual basis and will send reminders or remind the agent as required.

The benefits to Meiji and its 5.77 million retail clients (as of 4/99) of this tailoring of services and products with their delivery by age and family circumstance for each market segment should grow as the effects of the “Big Bang” accelerate. Part of this strategy will also involve greater co-operation with affiliates such as with Tokyo Fire and Marine (Choy 1999). As noted above, the two insurers plan to create a
company to develop and market a Japanese version of pension and investment trusts, i.e. to manage “401(k) type” contribution plans. Also, Meiji has recently increased its investment in Nissin Fire and Marine. These and similar ventures have necessitated working out ways to deliver joint products and share in the profits.

**Information Technology Infrastructure**

Meiji’s base information system is a typical Japanese “three-tier” mainframe system similar to most other large Japanese financial institutions (Rapp 1995).\(^{13}\) The mainframes manage a series of servers (3500 units) that in turn manage the laptop PCs, the office PCs and the Workstations. The client server system of 8500 units for the one hundred branches and fifteen hundred sales offices is combined with the host system and

---

\(^{13}\) The mainframe (IBM) controls the servers (Toshiba), which control the networking system and communicate with the laptops. The mainframe has the task of scheduling operations, controlling security, especially document access, and program management. One current concern is that as IBM moves to parallel processing they are not sure how this will affect Meiji and how they will be required to adjust Meiji’s software, though IBM will work with them to facilitate this. The total system software is thus IBM based while the LAN manager is Windows NT. Roughly 80% of the total system is customized, and virtually all of the big application systems are customized. While they use Windows NT for the retail life insurance laptop system, the rest of their networking, about 70% of the company’s total networking requirements, is Novell and UNIX based. This still seems easier to them. They have about 8000 PCs online not including the field laptops. These on-line PCs all use MS-DOS V and Windows 3.0. As Meiji currently has 15 million COBOL programs and hundreds of millions of lines of code composing their system, they are not going to change this basic system. Therefore the laptop system had to be designed to work and interface with this larger information system or jihokai (Information Management).

By using client servers for different groups, however, they have created better information access for both groups and headquarters. The groups are broken down into areas such as Asset Management, Actuarial, Marketing Analysis, Dealers, and Agents. In selecting vendors, Meiji is not wedded to one but will buy from competitors provided the system provider can integrate the software into Meiji’s system. In their selection, they look first at technical merit and then at installed price including the cost of adaptation and integration. IT management will also hire outside custom programmers such as MSS to do coding, but Meiji will do the basic design and actual integration. MSS’s other business is mostly with non-life firms such as for Yasuda or Tokyo F&M. Despite the laptop system’s use of Windows NT and Meiji’s overall IT sophistication, no e-mail yet. However, apparently they still have some secrecy concerns about e-mail. In addition, as local branch PCs are connected to head office on a real time basis, there has been little need as yet for e-mail and given the priority of the laptop project, they had more pressing software concerns. Interestingly, even at Head Office they still use computers on a group basis due to space and cost considerations. Currently, there is one computer for every 5 people. Meiji’s system’s only external connections are to the Credit Card system, to payment relationships with the banks and to the Group Life customers.

Meiji has different systems for different groups. For instance, asset management has one system but for trading Meiji purchased a package from the US as it was available quickly. It is a Digital workstation based system. They did this because there is little domestic software development in this area, and it would be expensive to develop their own with no real strategic benefit since in trading it is what they own or buy that is important not the mechanics of how it is done. The advanced hardware and software package they purchased is Amtrade. The key IT issue for them has been getting it integrated with their overall system since there are 15 million steps that have to be converted and tested.
an on-line network (Meiji 1997). The sales offices and the host are connected through an
on-line public network, while the sales offices and regional offices communicate
through a collect and delivery network. The regional offices connect to the host via an
ATM relay and Meiji’s proprietary and customized middleware. The overall system has
dual back office and marketing functions. This structure allows them to disperse the data
base but centralize important applications.

Though they use a Japanese version of Windows NT to link the laptop PCs and
keep the system and its use simple for the in-the-field agents, they have developed their
own PC software for the laptops. This is because the expert system on the laptop
incorporates Meiji’s own life cycle model and integrates it with Meiji’s own product and
service offerings. In addition, because it is a real time on-line system, it has been totally
integrated with their own business operations which as is typical of most large Japanese
firms is a customized mainframe system involving hundreds of millions of lines of code
(Rapp 1995). However, the laptops are fully able to communicate with the mainframe-
managed system, sending and receiving information. This communication in turn
depends on customized versions of NT workflow and network management packages
they bought from Microsoft. In this way, Meiji developed its own semi-customized
middleware that provides the interface or bridge between the NT system and Meiji’s
total IT system (Meiji 1997). That is, the middleware was developed as a method to
customize the workflow package.

In addition to reducing document storage, printing, and local branch costs, these
improved systems communications have also facilitated document retrieval and claims

The next project for the laptop and life cycle system is how to use the maze of information they have accumulated to
improve the system and its competitive impact.
processing, again improving customer satisfaction. The clear objectives of speeding communication, improving agent productivity, and increasing client satisfaction have in turn enabled Meiji to select, develop and use the software required for each function and to integrate it into their support system. This is because it is relatively easy to measure whether these objectives have been achieved. However, except for operating systems, it has generally developed its own software systems including the agent laptop life cycle system. About 150 people are working in its Information Systems Division and another 400 in its captive software subsidiary Meiji Systems Service (MSS).\textsuperscript{14} Total EDP costs are about 0.5\% of Meiji’s revenues with about 25\% of its EDP needs purchased from MSS. These purchases account for about 25\% of MSS’s revenues.

**Implementation of Laptop Based Life Cycle Strategy**

In July 1998 the study team received an update on the introduction of Meiji’s new retail life insurance strategy based on its laptops and life cycle model strategy. At that time, retail life’s management reported that 90\% of the system they had developed themselves. The rest is based on Windows NT at the operating system level and Excel at the laptop application level. As already noted, part of their NT software system purchases also included some workflow and network management packages. However, the only packaged software Meiji bought was that related to Japanese Windows NT and Excel. It then took them 7.5 million steps to develop the new laptop system (2.7 in sales, 1.65 in basis, and 3.15 in operations). After the pilot launch, 40,000 laptops with the preloaded life cycle systems and sales software were then introduced in September 1997.

\textsuperscript{14} Many large Japanese Corporations have captive software subsidiaries to reduce costs by doing work for other or related companies (Rapp 1995). The cases on Nippon Steel and Nomura feature more detailed descriptions of their captive software companies, Enicom and Nomura Research Institute. MSS’s annual revenues are about ¥4.5 billion.
It took 3 days to introduce all the laptops to all sales units. Nevertheless, the introduction went smoothly with only some glitches due to printer problems. This was the first difficult point they encountered.

This occurred because before the introduction of the new system, all insurance plans were printed in multiple copies, and Meiji had sixty or seventy different forms in different colors for its different products. Therefore, every time the agent switched to a new product, the data format changed slightly. This created some problems at the first stage of introducing the new laptop system that had to be solved since at that time they were relying on the local sales offices to print the forms on the basis of the data inputs from the laptops. Given the number of product lines just for life insurance, with each requiring a different format, created real design and presentation problems for the agents and their clients. But Meiji had to solve this issue since the policies associated with these plans represented half the face value of the life insurance in force and the major portion of Meiji’s life insurance profits.

The retail life insurance group, therefore, developed an overlay system that they introduced in October 1998 which has enabled them to print any format on plain paper without putting in new information. It actually uses a Windows 95 based software called Sales Point that is on a card containing all the necessary information. It is a plug-and-play system since you can just pull out the card once you have printed. Although it is different than what Sales Point is supposed to be used for in practice, it has solved the problem and allowed Meiji to introduce the portable printer system in combination with the laptop system as described above. Other than printing, there was no problem and introduction of the basic IT supported expert sales system went very well. The only
practical problem was printing as already mentioned, though this was an important issue that needed to be addressed productively since the time required delivering a printed insurance plan via branch office and mail actually slowed sales. But they did solve it.

Furthermore, the manner in which they did it had the added benefit that when a plan was hand-delivered and any change was required, an extra trip to the local sales office was now avoided, directly increasing agent productivity. In addition, the only change in their printing system that was required was moving to all black and white insurance plans since color printing is too slow and expensive by portable printer. One measurable benefit from this new procedure is that they are now saving 2 million sheets of paper per month plus the cost of color printing. Further, they discovered that previously because each branch had only two printers, they had pulled out LAN (local area network) cards and brought the PCs to the printer. Now that they send data directly through the LAN, they have uncovered large time benefits by eliminating this previous procedure. Once a client has approved a plan and an agreement is made, an insurance policy is overlay-printed in a specific form through the host system. It is then mailed directly to the customer, again by-passing the branch offices. So all data transfers are now done electronically between agent and host computer.

Meiji does have some client-related issues, however, concerning the new system and security. Indeed this becomes more problematic as the company expands Internet usage and therefore potentially exposes its database to unauthorized access. Naturally, with 40,000 agents in 1998 and now 30,000 (4/99), access to the corporate database is a difficult situation for both the company and the agents since the latter are giving up information (data) about their clients with whom many agents have a long and close
relationship. Therefore, in addition to a code number that is given to each agent, the agents must also sign in with their own signatures. This is one reason why Meiji adopted Toshiba's "Libretto" as its laptop since this computer allows pen-based entries on the touchscreen. In turn, the computer makes sure that the code number and the signature match and that the agent only can access information about his or her clients. An agent cannot access the system and client database on a general basis except for corporate-wide information the company feels all employees should know. Meiji feels this approach helps prevent client information from leaking despite the fact that after introduction, 80 to 100 machines disappeared. Also, it frustrates outsiders guessing an agent's number even though agents often use common numbers like their birthday or address. The signature requirement has definitely helped to prevent unauthorized entry, and as yet they do not believe any such entry has occurred. Meiji has incorporated other system access and use protections as well. For example, if someone steals data, Meiji has built into the data an automatic sunset effect that automatically erases all data after one month. Further it can't be used after three days unless it is properly accessed every day. Therefore, turning off the laptop computer washes the data from the laptop, and that laptop must be reconnected with the system server to refresh the information or the data is permanently erased.

The most important impact of course is that actual sale results from the system's introduction have been even better than expected. The speed to contract is measurably better, whereas previously there was a lot of back and forth and exchange of documents. Now the different options can be shown instantly and, once the selection is made, the insurance plan or agreement contract can be printed. Closing the contract is also faster.
However, while the sales people say the improvement is measurable, they cannot quantify it in any precise way. There have also been competitive responses that indicate Meiji's major competitors are feeling the pressure. In addition, the delayed timing of their responses indicates Meiji has achieved first mover advantages. This is because Dai-ichi announced that the introduction of its system would not take place until June 1998, and Nippon Life announced its planned system introduction would not be until January 1999. This initiative by Meiji has added to the competitive and economic pressures being felt by all life insurance companies.

One interesting area of competitive impact Meiji has been able to quantify is the increased sales of a product that was only available with the introduction of the laptop and the life cycle model. This has given them a lot of satisfaction. This product is a life cycle insurance product or plan that can be automatically linked with other support products and that will shift over time with the client’s needs. That is, before the introduction of the life cycle laptop system, products were sold based on the individual’s specific needs at that time. Now this new product bases it on the client’s intended or stated life plan. For example, looking at a family with small children the policy would be based on what that family’s forecasted needs would be year by year. In the early years when the children were growing, there might only be need for life insurance. But as the children grow and leave home, the amount of life insurance required falls and so do the related premiums. The new policy automatically makes this reduction but then shifts the payments to a retirement program based on an annuity amount. Thus, the client can design and customize an individualized life policy in the same way one can customize and order a Toyota car via computer (Rapp 1995). Indeed, there is a lot of
flexibility in this policy since any type of product the customer wishes to assess for any
time during the client’s life can be shown by using the new laptop system. Given the
growth in this product’s sales, Meiji is not being affected as much by the stagnation in
the life insurance business as their competitors. This has already justified the strategic
introduction of the laptop system and life cycle model. In this way, this product’s
success and its impact are measurable. However, Meiji wondered if this approach could
be used in the US, where agents are not part of a specific company’s sales force.

Meiji’s management has also made an evaluation of the sales force and its
interaction with the system. Under their evaluation system, the top 20% of the agents are
very skillful. For these agents, even the new laptop system is not sufficient, and they
supplement it with their own e-mail and computer use since they want more functions.
This is because they are not allowed to use the company’s laptops for this purpose given
potential virus problems. The next middle group of agents, about 60% of the force, is the
group whose productivity the new system is intended to raise. The bottom 20% are
unfortunately hopeless since they are unable to really use the new system despite
training and support. (This evaluation of the sales force was made prior to launch so they
could see whether the system’s introduction really had an impact.) Based on this prior
categorization, management is basically pleased with the new laptop system since the
company has been successful with the target group and the new life plan policy. In
addition, since introducing the laptop system they have been able to reduce their agent
sales force from 40,000 at that time to 30,000 as of April 1999! Further, sales training
and operations are becoming more familiar with the possibilities of using an IT strategy
as part of Meiji’s individual business operations. However, Meiji management feels
there is even more potential for employees to couple IT with their own actions, though this should evolve as they become more familiar with using the system.

In addition to the direct policy sales benefits and the faster contract cycle, the agents can now easily connect to the firm’s LAN (Local Area Network). Meiji finds the agents are better informed about products and the company since they now have access to information that before was generally available only to the branch manager who could access the PC network. This increased knowledge has expanded many agents ability to sell yielding another unexpected sales merit from the new system that had not been anticipated. From this fact, they know the agents are taking advantage of the system, which in turn is improving their capabilities. On the other side too, it is easier for managers to quickly assess each sales person and his or her sales by type of product and customer. This provides feedback that can help focus training and support.

The new system also means it is no longer necessary to have cards with customer profiles at each branch. With almost 6 million clients plus another three to four prospects, the 86 current branches (4/99) would on average now each have over 100,000 such cards under the old system. Databases and e-mail have therefore eliminated a lot of paper and paper shuffling. Further, in organizing sales performance and forecasts by product, type of customer, sales agent, branch, or region, it is very easy to assemble and reassemble data for every sales activity whereas before one had to put everything on paper in time-consuming and very detailed reports. Similarly, presentation formats can now be very easily switched.

Other realized benefits are the time saved by telecommuting instead of constant trips to the office to access data over the PCs, check paper files, or look for and print
documents. This in turn has reduced clerical and back office requirements and personnel since the agents do more on the spot. It is also easier to relate incentive compensation directly to sales results on a regular basis because the data readily exists in usable form. Managers can easily monitor progress and react to situations quickly as they arise. Such benefits may be sustainable too. Up until now, the history of life insurance in Japan is a long one, but it has been heavily regulated by the MOF since WWII. But this regulation has not extended to computerization. That has been left to each individual firm. Therefore, unlike the pricing or development of insurance products, computer systems have not been so closely regulated by the MOF.

It is due to this freedom to act that Meiji feels they can retain the benefits generated by the new system and such benefits will not be regulated away by the Ministry. Additionally, they can use the data they are gathering for management decision making at the firm level. So they will have better information to respond to the changes that are evolving due to the Big Bang and the entry of many new competitors. As explained above, these benefits could be important when many of the changes that are occurring are not limited to regulatory ones. Yet, Meiji believes their main sales channel will remain life insurance and their agents even as they introduce new products from other sectors. Some of these other products and services are: complex payment systems, fixed income products, financial products based on actual investment results, combination products for individuals calculated and adjusted by the computer according to the individual’s life plan, and investment purchases.

The new computerized system also permits multiple sales channels that will facilitate Meiji’s proposed affiliations with other providers such as Dresdner Bank or
Tokyo F&M in investment and investment advisory products. This is important if Meiji hopes to begin direct marketing by mail, call centers or over the web with no agent involved. At the very same time, Meiji has no intention of abandoning its sales force since service remains an important core competency and competitive advantage. The key from their perspective has been to make the sales force more productive and cost effective, which the new laptop system with its embedded software appears to have done. This is why the laptop life cycle system is totally contained within Meiji, and no aspect has been outsourced even to MSS. Rather MSS works on mainframe related software, systems and databases. It is for these functions that Meiji is using MSS more as Meiji focuses on more strategic software uses.

Customers, Culture and Strategic Organization

In many ways Meiji’s approach to introducing its expert life cycle delivery structure is more customer oriented in terms of their basic strategy than a US insurer’s. That is, Meiji has not tried to force its customers to accept something they do not find congenial. Rather, it has developed and promoted what it believes is demanded by each customer segment. Indeed, the initial pilot project and further refinements since the launch in the Fall of 1997, have focused on designing and developing a customized integrated system that is built on and adapted to both its organizational structure and its client base. Management has not tried to adapt the organizational structure to the software or force the clients to use something that is convenient or low cost to the company, such as a packaged program, but that is not fully compatible with the customer. Rather, the system is designed to help the agent serve and provide the customer’s needs either currently or over the customer’s life cycle.
Management’s perspective in this regard is that the functional and market gains explained above justify the additional customization expense, including the cost of integrating the customized application with the Japanese NT system packages and then integrating the whole into their total corporate IT system. Further, they can evaluate the enhanced productivity and learning of their existing sales force that they targeted by building consistency, reliability, and repetition into the system and its operation to deliver products and services. Meiji has thus integrated both clients and agents into its strategic delivery system while formalizing their acceptance and use of the life cycle model with its reminders and other service support mechanisms.

Conversely, outsourcing would have put the firm and its IT support system one step away from its agents and the clients. This is the major reason Meiji rejects this concept and develops internally virtually 100% of its own application systems and software. Its human resource (HR) and client policies thus seem more aligned with their IT systems than many US counterparts (Harker 1997) in that customer segments are getting both the benefits of automation and continued customer service. This approach also should facilitate cross selling which was an important strategic goal in developing the system as otherwise both agents and customers would have had difficulty in understanding the use and benefit of a wide variety of new products.

Furthermore, as in both the US and Japan, customer behavior is difficult to change, by enhancing the existing field agent system instead of trying to substitute electronics, Meiji appears to be going more with the flow. In essence Meiji has found it easier and more efficient to align its delivery and HR systems with its customers’ psychology, goals and interests rather than trying to get the customers to align
themselves with a different perhaps totally automated cost driven strategy. The former approach takes additional revenues or net return over time to the system’s introduction cost into consideration whereas the latter does not. From a strategic perspective, a priori the former seems more user friendly and potentially profitable long-term. But it also definitely seems more attune to Japanese values and thus more appropriate to the Japanese market in which Meiji is competing.

15 At a meeting at Columbia in September 1997, Wharton Professor Harker who is leading a large project on retail banking and software systems explained that the results of his investigation of the retail function at large US commercial banks demonstrated the need to align HR with strategy. But in fact most US banks do not. For example, he noted if a bank is using college graduates, then it should expect inputs into the system from which it will get benefits. However, if a system is well established, and the bank does not expect employees to manage it, such as cross-selling, then it should be less demanding of educational requirements, though this is not usually the case. The process Harker’s team used to establish this research result was mapping IT and management process across parallel functions, such as opening an account, a CD, changing an address, etc., etc. From this, they found efficiency matters in terms of both cost and customer perception. In addition, consistency was key to such efficiency and customer perception, but is dependent on who controls the system. If it is the person adding value, the customer comes first; if it is the person managing MIS, then system cost per unit predominates. However, as explained in the introduction, for firms in the best practice sample, these two perceptions and functions are more integrated. So system costs are balanced against customer value and revenues. Thus at Meiji there is someone who controls their whole retail strategy, including the related system. To the extent this is not true at other insurers, such firms will be at a competitive disadvantage. Maintaining that balance, though, means constantly understanding how and why something is being done. Indeed, Harker indicated it was critical for firms to think about how and why they did things so they could understand the reasons why and could then make rational choices concerning business systems. This is obvious from the case studies such as Meiji since such understanding allows the “best-practice firms” to make IT and software choices for rationally explainable business reasons. When this is not true for competitors, they will suffer. Harker noted that the best performers involved customers as part of the process, i.e. the total business process. Simplistically, this means it does not pay to offer life insurance if people only want annuities. Therefore, if a firm wants customers to buy a particular service or product, that product should serve the customer’s needs and interests at that time.

By targeting revenue enhancement and not just costs, Meiji seems to be emulating the banks, which are emphasizing current operating earnings per employee as a critical goal and efficiency indicator as well as operating expenses as a percent of operating revenues. Such measures naturally focus on automation that complements Meiji’s segmentation marketing strategy. Also, given Japan’s current low cost of capital and relatively high personnel costs in financial services, especially given the permanent employment system, heavy emphasis on automation may be appropriate given factor cost allocation too. Meiji has studied each segment or customer group and knows what each customer is looking for in financial services. Further, it monitors these groups and keeps information in service delivery loops so when an event is coming, it can solicit the related business on a targeted basis, e.g. college loans when child gets to be that age. This is built into the life cycle concept and the matching of services with customer profiles. It also means mailings and other direct marketing efforts are more specific to customers’ needs and thus have a greater chance of success than the generalized shotgun approach used by many US insurers. Further, being able to do this efficiently and know the revenues generated by a new marketing effort will cover the cash outflow is important in an environment where loans are being written off or restructured so their balance sheet contribution to cash flow is deteriorating. Therefore, from a long-term perspective, it would seem a life insurer needs a management and strategic mix of both operating efficiency and revenue enhancement. In essence, integrated service delivery is only viable if the information delivery needed to support that service and related products is also integrated and is strategically aligned with business goals and objectives. Consistent with this dictum, Meiji adds new products and services over time to their basic delivery structure both as this is technically feasible and is demanded by the customer segments these products are designed to serve, either currently or over their life cycles. Usually it just involves upgrading the laptop software and some training on how to use it. Thus Meiji is very customer oriented in terms of its IT strategy because it has integrated it into its strategic delivery system. Permanent employment may be a plus here, but it is also a function of Meiji’s basic retail life insurance strategy.
Looking towards the future and illustrating Meiji's evolutionary approach to IT strategy and its implementation, Meiji is already starting to consider the next generation
of IT based service and delivery systems. As Mr. Inomata, Meiji’s Manager of Systems Planning & Development, noted in September 1999: “The recent phenomena of the pervasive Internet plus the mergers and tie-ups of Japanese financial institutions are suggesting that Japanese firms should take additional steps. More specifically, the development of software should be done based on systemization of intranet (to put something on a website) or system collaboration beyond the companies. We are planning to take a strategy to put already developed C/S (client server) software on a website. In this case, since software will be shared among companies, the differences in customization may shift from system design to a matter of expression. Thus, the superiority over others will become less clear. On the other hand, as a tie-up is based on a logic of scale that emphasizes how much we can invest in a system, competitive strategies emphasize available quantity or scale rather than how to use IT technology. Therefore, new factors will be added to establish competitive superiority by customizing systems of software.” In this way there is “a movement to incorporate IT technology into strategies through customizing packaged software in Japan and the United States.”

**Summary**

In their study “Information Technology, Work Practices, and Wages,” Larry Hunter and John Laflkas (1998) note there have been two basic approaches to using IT in the workplace. One is to automate existing practices to reduce the skills needed to perform a given task, or “deskilling”. The other is to enhance employees’ existing skills to extend their capabilities and make them more productive, or “upskilling”. Hunter and Laflkas then evaluate the performance of customer service representatives (CSRs) in terms of their IT support at different retail banks to see how these two alternative
scenarios apply in practice. Their results are instructive in the Meiji case despite the differences in industry, economics, and culture.

This is because their study indicates IT systems that generate information as opposed to just automating existing tasks tend to be “skill-biased” and support high involvement or high performance work practices. That is they are “upskilling”. Such “upskilling” usually improves existing skills, creates new skills, and leads to greater worker autonomy. In turn, the IT system usually evolves and changes in tandem with work practices so there is a co-evolution of technology and work practices. As such development is based on the firm’s original choices, this view supports an evolutionary approach to understanding IT’s use in the firm and how certain firms achieve best practice (Nelson and Winter 1982). Furthermore, since they correlate upskilling with higher wages and strategy solutions, this approach should be preferred when possible.

Indeed, the specific results and comments on cross-selling and cross-selling prompts by the IT system are worth repeating here. “More extensive use of this software is consistent with … the potential of technology to create new kinds of information and new ways of linking different sorts of data. Such software can suggest sales opportunities to its users, provide information that enables users to link together financial services that might have been previously unrelated, and can help the service representative to engage the customer more fully in the sales and servicing processes.” From this perspective, I think we can see Meiji has selected an upskilling approach to developing its retail life insurance IT system and solving its strategic problem.

The decline in corporate lending and the decrease in investment and premium income combined with the Big Bang pressures of new competitors’ entrance into retail
life insurance has forced Meiji Life to develop a retail life insurance marketing approach that differentiates it from other insurers and the new competitors. Meiji’s strategy in this regard has emphasized its existing sales force supported by laptops and a more automated delivery system of an expanding range of services related to Meiji’s model of its customers’ life cycle requirements.

To differentiate its strategy, Meiji’s management is depending on three basic elements 1) its retail sales force and infrastructure, including its branches and IT network; 2) its life cycle marketing product strategy; and 3) management’s evaluation of its existing and potential customers’ patterns of personal development throughout their lives. Though difficult, Meiji systematically collects, manages and analyzes data related to the last two and links that directly to its sales force with preprogrammed laptops. This is because Meiji envisions its customers as having an evolving and growing set of financial needs that change systematically during their lives. When the customers are young and starting to work, their needs are likely to be for credit and consumer related finance. When they marry, they will need debt products such as mortgages for an apartment that expands to a house and life insurance as they have children. Then there are savings products for college, weddings and retirement.

The key to Meiji’s success in implementing this strategy is its tracking, marketing, and delivery of these products on a timely basis. It must also assure product development evolves in a way that is responsive to changes in its customers’ lifestyle as well as in the technology used to sell and deliver the appropriate products and services. To address these and related strategic issues, Meiji has developed profiles identifying different customer groups and their financial needs according to lifestyle, family size,
etc., that is built into their software and that they constantly modify based on surveys and customer/agent feedback. It cross matches these with a varying set of products, including new product offerings. In this way Meiji is constantly offering new and old customers products tailored to their changing financial needs. The mechanism to deliver these can also be adapted to changes in technology such as web-based policy loans.

Furthermore, by getting the customer acquainted with Meiji’s automated life style system at an early date and by constantly increasing the number and quality of services and products, Meiji hopes to improve customer contact, reduce customer migration and keep costs low. By targeting and reinforcing the technical bias of younger Japanese, they are also using IT to influence customer behavior and expectations and tie them to Meiji on an interactive basis, since the competition looks less advanced and sophisticated. But for the strategy to work, Meiji must gather and manage a wide range of information about its client base so it can offer products in a personal and timely way while constantly improving the efficiency and user appeal of its delivery systems. However, they do seem to be good at doing this as well as at improving and managing the related organizational and customer complexities needed to handle the technical complexities and develop the supporting systems. This is important since we know when there is conflict among managers and employees in goal setting employees can sabotage the system and productivity improvements become limited (Hunter and Lafka). Meiji’s approach of making the field agents a party to the system’s development and evolution therefore seems very sound. Simplicity and easily understood measurable goals have been part of this successful IT strategic development and its implementation too.
As with other leaders in using IT, establishing beneficial IT loops with articulated goals and outcomes appears to have been part of this process. For example, using IT to monitor customer events and keep the information in service delivery loops means when a customer event occurs, the agent can solicit related business. As agent success is likely to be greater, this reinforces agent and client acceptance of the system and the life cycle concept. In turn, Meiji builds the basis for its own business success including business and product diversification. This helps to reestablish its earnings and asset base. Given current economic conditions, such developments are critical to its competitive position compared to other Japanese financial institutions. While a stronger company will find it easier to retain customer confidence in an uncertain environment.

In this way, we have seen that Meiji’s retail life insurance division has used IT to control every aspect of its business from sourcing to delivery and even after-sales service and support since management views this as literally a life-long relationship. They also want the customer to see it this way too. Therefore, Meiji is trying to use IT to impact its competitive environment by changing the way its customers look at their financial requirements and the kind of service and products they expect to respond to these new perceptions. This would seem to be the beginnings of a “Controlled Production” paradigm (Rapp 1998a and 1999a). This approach is what several of the leading IT users in our case studies appear to practice, where they use IT not only to control all aspects of their business but to directly influence the external environment too. If Meiji is successful, this interactive process should reinforce the Nikko Research analyst’s rating of Meiji as among the top life insurers most likely to emerge from the current crisis and the “Big Bang” as leaders in Japanese finance.
## APPENDIX I

### Summary Answers to Questions for Meiji – Retail Strategy & Operations

<table>
<thead>
<tr>
<th>General Management and Corporate Strategy</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the firm integrated software into their retail management strategy, including using it to institutionalize organizational strengths and capture tacit knowledge on an iterative basis?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Has the firm succeeded solely on the basis of its software strategy?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Does the firm believe some customized software and its close organizational integration enables the company to capture and perpetuate on a more consistent basis certain tacit knowledge and unique corporate features, i.e. core competencies, that account for its continued success in the marketplace with reliability and repetition important elements in their thinking?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Is firm’s software strategy successful because it is well managed and introduces software innovation when it serves corporate goals for enhancing productivity or customer relations within its industry?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Does the division generally meet established criteria as a quality organization such as: effective organizational self assessment, use of project and especially cross functional teams, improving quality outcomes through reducing uncertainty, rapidly diffusing learning throughout the organization including the use of software and information technology, effective implementation of organizational and technical change, facilitating change via evolution rather than revolution or reengineering¹⁶, emphasizing participatory management, having process excellence, using value added analysis, actively doing benchmarking, constant organizational improvement, commitment to concrete realistic goals, effectively managing a dynamic iterative experimental process through goal setting, training and constant consultation?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Does firm plan in detail for operational excellence including the contribution of IT to the allocation of resources?</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Do their planning systems enable management to make better business, operating and resource allocation decisions, including those related to software and IT?</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

¹⁶ MIT Systems Dynamics Group in a September 1997 presentation estimated that 70% of reengineering efforts fail.
Do they focus on a small number of priorities, usually three or fewer, with a well-defined system reaching from the commitment of senior management to the department level with associated metrics?

Is the firm a “high performance” workplace for services?

Is there a heavy emphasis on improving process through using IT?

**Industry Related**

Is industry economics and competitive dynamics an important strategic driver for the firm and for its use of software and information technology in that IT has been adapted to the firm’s particular industry and competitive situation?

Do industry paradoxes exist such as: declining stock prices, manufacturing improvements that create product improvement difficulties, or employees’ active product use that retards improvements?

**Competition**

Is software a significant and successful input into the firm’s competitive performance?

Does firm explicitly and consciously perceive the implications of their IT strategies and use on competitiveness and business success?

Are there direct links between their IT strategies and overall management goals?

Do customers, affiliates, competitors, industry analysts, government officials, industry associations and suppliers perceive the competitive benefits or impact of the firm’s use of information technology?

Has the firm gained first mover advantages through successfully introducing software-related innovations?

**IT Strategy**

Is firm a sophisticated software user that consciously designs and implements a software strategy to achieve competitive advantage?

---

Does the firm utilize several types of software input in combination to achieve competitive advantage?

Does the firm’s system work to rapidly uncover barriers to implementation, including using new or improved software, while generating cross-functional and hierarchical consensus so measured goals can be achieved?

Is leadership at different levels actively involved in driving IT plans, assessment and deployment with regular progress reviews that link plans, goals, metrics, milestones, resources and responsibilities?

Does system allow for flexibility and innovation plus change and individual efforts if they meet goal, planning and metric criteria?

Is there a clear vision making project and new product IT selection straightforward and closely related to strategic goals and processes?

Does IT strategy involve a conscious and clearly defined reliance on customized and semi-customized software plus packaged software with specific criteria and goals for selecting each type, and do they measure this so firm knows customized IT achieves functional or market gains that justify additional expense, including costs of integrating customized and packages into a single IT system?

Does firm use option valuation methods to manage uncertain and random outcomes since this appears to be at the IT implementation frontiers even among very well managed companies? Does their IT strategy include increased use, development and integration of industry and company specific vertical application software and embedded software in its production and delivery processes to improve competitiveness?

If firm has embedded software strategy, is it integrated or interactive with their IT and overall business strategy affecting production, product design or service that improves quality and costs long term?

Do they favor increased outsourcing of software design and development?

Does firm believe large-scale outsourcing by many US companies assumes those firms’ information systems development need not be integrated with their business organization and that they view their IT systems as generic products best developed by outside vendors who can achieve low cost through economies of scale? That is, do they
feel these firms’ approach focuses on cost side of software and such firms do not see differences among systems used by competitors? Do they in turn believe this is a mistake by their competitors that gives them a long-term and sustainable competitive advantage over such companies because they believe outsourcing surrenders a firm’s strategic software options since systems service companies have an incentive to develop increasingly standardized products and are one step removed from the company’s customers and business?

Has the firm established a software strategy that is open and interactive with its customers and/or suppliers?

Has this enabled it to capture information or cost competitive externalities?

**IT Operations**

Do participants own goals and are then committed to implementation strategies?

Does the firm embed software into its production and delivery processes and what are its competitive market implications? Is IT technology tied to high speed telecommunications technology, allowing the firm to track, receive and deliver shipments or services directly or on-line without further handling or processing?

Does it manage potential risks extensive IT use or open systems?

Do they work to ensure consistency and reduce programming errors?

Is informal interaction a key aspect of planning and implementation?

Is firm’s system institutionalized and self-reinforcing with good communication and consensus building while software and IT play a role, including preventing retrospective goals or target reduction?

**Human Resource and Organizational Issues**

Does firm pay close attention to systems training and organizational integration for all employees, reducing errors through improved consistency and staffing efficiencies across the firm since software can confound even routine operations?

Does certain software require special HR competencies or education?

Does the firm try to change human behavior to use software?
Parameter Metrics - Inventory, Cycle Times and Cost Reduction

Are goals or targets tightly linked to regularly reviewed metrics with inputs coming from all levels that are often cross-functional affecting large parts of the organization, e.g. cycle times, timely delivery, and customer satisfaction?

Does the firm have standard agreed ways to explicitly organize or manage this software selection process?

Does the firm have agreed ways to measure and evaluate success in using IT to promote objectives such as lower costs, contract time, market share, product development times, or system support?

Are IT costs balanced against overall long-term productivity or revenue gains?

Does the firm have methods to ensure increased customization costs result in lower costs downstream so developing and using customized software makes sense?

Has the firm created large interactive databases to allow automatic feedback between stages or players in the production and delivery process? And are these databases constantly being refined and updated on an interactive basis with actual performance results in a real time global environment? What are the competitive and metric impacts of this? such as reducing inventory costs and wastage while improving the quality of customer service?

Has firm used IT to create beneficial feedback cycles that increase productivity, reduce cycle times and errors, and integrate product and delivery?

Do other firms or analysts have alternative measures of competitiveness or views on the appropriate industry strategy?

Has the firm achieved better than industry growth, superior delivery, improved control, reduced down-time or changeover problems, reduced product or process errors, fewer complaints, an improved product development process, and/or any other definite and measurable progress relative to competitors?

Do the firm’s metrics go beyond financial to areas like customer satisfaction, operational performance, and human resources?
Does their evaluation system apply to new product development and significant projects as well as to continuous operations?

Summary and Conclusions

Conclusions and Results

Can you summarize mission statement on role and impact of IT as a tool of competitive advantage for this firm in this industry?

Is it consistent with strategies identified as successful or appropriate in existing competitiveness research from Sloan’s industry study center?

Are there important business or IT situations requiring more research?

Is intellectual property protection important in explaining successful and sustainable use of IT to achieve firm’s competitive advantage?

Are beneficial cost impacts an important consequence of this firm’s successful IT strategy?

Does this firm fit profile where IT seems likely to contribute to greater competitiveness?

Based on this case is market for vertical application and embedded software growing?

Since Japanese competitors normally do not outsource, do Japanese firms see themselves as benefiting from this US trend?

Does this leading Japanese firm assign positive value to improved integration and enhanced control through selective customization?

Do general measures such as decreased costs, as evidenced by reduced account servicing expenses, reflect benefits of a successful IT strategy?

Are the benefits of a successful software strategy also reflected in specific industry standards such as an expanded customer base?

Does this leading IT user have explicit criteria for selecting package versus customized software and for semi-customizing packages?
Do this firm closely integrate or couple IT and business strategies beyond mere alignment?

Do they closely integrate organizational and HR policies with IT systems?

Have they reorganized to use software and information technology?

Has IT codified or built on existing organizational strengths or core competencies, including HR alignment with business and IT strategies?

Have they embraced and integrated IT as part of business strategies and core competencies?

Is MIS function integrated with the rest of retail life insurance in terms of organization and decision making?

---

**APPENDIX II**

**SOME FIRM AND INDUSTRY DATA**

*Industry Data (Top Life Insurers) – as of 3/31/99 (Choy 1999)*

<table>
<thead>
<tr>
<th>Company</th>
<th>FY 1998 Assets (Yen billions &amp; %)</th>
<th>Premiums Amount</th>
<th>New Policies Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%Δ</td>
<td>Amount</td>
</tr>
<tr>
<td>Nippon Life</td>
<td>42682</td>
<td>1.1</td>
<td>5823</td>
</tr>
<tr>
<td>Dai-ichi</td>
<td>29741</td>
<td>3.7</td>
<td>3991</td>
</tr>
<tr>
<td>Sumitomo</td>
<td>24165</td>
<td>1.9</td>
<td>3339</td>
</tr>
<tr>
<td>Meiji</td>
<td>17282</td>
<td>1.4</td>
<td>2526</td>
</tr>
<tr>
<td>Asahi</td>
<td>12148</td>
<td>(0.2)</td>
<td>1583</td>
</tr>
<tr>
<td>Mitsui</td>
<td>10115</td>
<td>(7.2)</td>
<td>1575</td>
</tr>
<tr>
<td>Yasuda</td>
<td>9745</td>
<td>2.9</td>
<td>1524</td>
</tr>
<tr>
<td>Chiyoda</td>
<td>4360</td>
<td>(13.3)</td>
<td>599</td>
</tr>
<tr>
<td>Taiyo</td>
<td>6969</td>
<td>2.1</td>
<td>1235</td>
</tr>
<tr>
<td>Daido</td>
<td>5483</td>
<td>2.5</td>
<td>1193</td>
</tr>
<tr>
<td>Company</td>
<td>FY 1998</td>
<td>Yield Gap*</td>
<td>Bad Loans**</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>(Yen billions)</td>
<td>Amount</td>
<td>%Δ</td>
</tr>
<tr>
<td>Nippon Life</td>
<td>360</td>
<td>320.5</td>
<td>70.0</td>
</tr>
<tr>
<td>Dai-ichi</td>
<td>240</td>
<td>170.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Sumitomo</td>
<td>230</td>
<td>106.1</td>
<td>(45.7)</td>
</tr>
<tr>
<td>Meiji</td>
<td>150</td>
<td>87.1</td>
<td>26.2</td>
</tr>
<tr>
<td>Asahi</td>
<td>130</td>
<td>147.2</td>
<td>32.6</td>
</tr>
<tr>
<td>Mitsui</td>
<td>87</td>
<td>117.7</td>
<td>(10.2)</td>
</tr>
<tr>
<td>Yasuda</td>
<td>79</td>
<td>31.9</td>
<td>(14.0)</td>
</tr>
<tr>
<td>Chiyoda</td>
<td>44</td>
<td>130.0</td>
<td>(46.4)</td>
</tr>
<tr>
<td>Taiyo</td>
<td>90</td>
<td>81.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Daido</td>
<td>12</td>
<td>35.8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Guaranteed payments minus net investment income; ** According to new Financial Supervisory Agency Definition; *** Ratio of risk-weighted assets to half of defined liabilities

**Financial Positions of Large Life Insurance Companies 9/30/97 (Ostrom 1998)**

<table>
<thead>
<tr>
<th>Insurer</th>
<th>Assets (Billions of Yen and %)</th>
<th>Growth Rate (%)</th>
<th>Foreign * Securities</th>
<th>Vulnerable** Hidden Gains</th>
<th>Bad Loans % Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nippon Life</td>
<td>¥41,030</td>
<td>4.0%</td>
<td>¥2,836</td>
<td>¥12,000</td>
<td>0.3%</td>
</tr>
<tr>
<td>Dai-ichi Life</td>
<td>28,760</td>
<td>5.6%</td>
<td>1,720</td>
<td>13,900</td>
<td>0.5</td>
</tr>
<tr>
<td>Sumitomo Life</td>
<td>24,048</td>
<td>3.7%</td>
<td>1,530</td>
<td>17,300</td>
<td>1.5</td>
</tr>
<tr>
<td>Meiji Life</td>
<td>16,808</td>
<td>3.1%</td>
<td>582</td>
<td>13,500</td>
<td>0.3</td>
</tr>
<tr>
<td>Asahi Life</td>
<td>12,072</td>
<td>2.4%</td>
<td>1,169</td>
<td>17,000</td>
<td>0.9</td>
</tr>
<tr>
<td>Mitsui Life</td>
<td>10,522</td>
<td>4.3%</td>
<td>662</td>
<td>16,900</td>
<td>1.3</td>
</tr>
<tr>
<td>Yasuda Life</td>
<td>9,369</td>
<td>4.5%</td>
<td>846</td>
<td>17,000</td>
<td>0.3</td>
</tr>
<tr>
<td>Taiyo Life</td>
<td>6,762</td>
<td>3.6%</td>
<td>339</td>
<td>11,000</td>
<td>1.1</td>
</tr>
<tr>
<td>Chiyoda Life</td>
<td>5,822</td>
<td>0.0%</td>
<td>482</td>
<td>17,800</td>
<td>3.5</td>
</tr>
<tr>
<td>Kyoei Life</td>
<td>5,585</td>
<td>-1.0%</td>
<td>342</td>
<td>18,000</td>
<td>0.5</td>
</tr>
<tr>
<td>Daido Life</td>
<td>5,152</td>
<td>4.3%</td>
<td>274</td>
<td>15,000</td>
<td>1.1</td>
</tr>
</tbody>
</table>

* As of March 1996; ** Level Nikkei 225 stock average below which unrealized stock gains will disappear

**Rating of Life Companies as Potential “For-Profit” Holding Companies**

<table>
<thead>
<tr>
<th>Nikko Research Center (Urushibata 1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company*</td>
</tr>
</tbody>
</table>

57
<table>
<thead>
<tr>
<th>Company</th>
<th>Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nippon Life</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>AA</td>
</tr>
<tr>
<td>Dai-ichi</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Sumitomo</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BBB</td>
</tr>
<tr>
<td>Meiji</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AA-</td>
</tr>
<tr>
<td>Asahi</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BBB</td>
</tr>
<tr>
<td>Mitsui</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BB</td>
</tr>
<tr>
<td>Yasuda</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A-</td>
</tr>
<tr>
<td>Chiyoda</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Taiyo</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BBB</td>
</tr>
<tr>
<td>Toho</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Kyoei</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
<tr>
<td>Daido</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A+</td>
</tr>
</tbody>
</table>

1 is excellent, 2 good, 3 so-so, 4 no good, and 5 bad. GE absorbed Toho subsequent to this rating.

* Profits equal operating income minus gains on securities sales; cash flow equals revenues minus insurance claims and other payments, interest expenses, operating expenses, deferred insurance payments, tax payments, dividends policyholders, and director bonuses; life insurance business is based on insurance income & expenditure ratio which equals (Insurance premium income minus insurance payments) divided by revenues and the insurance in-force from group insurance; solvency margin value is defined table above; hidden profit is unrealized profits on stock portfolio.
<table>
<thead>
<tr>
<th>Key Firm Data for Meiji Life</th>
<th>3/31/95</th>
<th>3/31/96</th>
<th>3/31/97</th>
<th>(Urushibata 1997)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>¥3610.2</td>
<td>3672.2</td>
<td>3736.7</td>
<td></td>
</tr>
<tr>
<td>Expenditures</td>
<td>3550.1</td>
<td>3494.3</td>
<td>3592.1</td>
<td></td>
</tr>
<tr>
<td>Operating Income</td>
<td>60</td>
<td>177.9</td>
<td>207.6</td>
<td></td>
</tr>
<tr>
<td>Amended Operating Income</td>
<td>(116.3)</td>
<td>2.0</td>
<td>45.2</td>
<td></td>
</tr>
<tr>
<td>Cash Flow</td>
<td>1260.3</td>
<td>1194.0</td>
<td>424.0</td>
<td></td>
</tr>
<tr>
<td>CF % Payments, Expenses &amp; Dividends</td>
<td>60.6%</td>
<td>52.1</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Insurance Income &amp; Expenditure Ratio</td>
<td>29.5%</td>
<td>29.9</td>
<td>(2.1)</td>
<td></td>
</tr>
<tr>
<td>Insurance In-Force of Group Pensions</td>
<td>5095.9</td>
<td>5576.8</td>
<td>5817.2</td>
<td></td>
</tr>
<tr>
<td>Solvency Margin Value</td>
<td>602.5%</td>
<td>463.6</td>
<td>983.9</td>
<td></td>
</tr>
<tr>
<td>Provision Policy Reserves</td>
<td>1247.2</td>
<td>906.7</td>
<td>898.0</td>
<td></td>
</tr>
<tr>
<td>Hidden Stock Profits</td>
<td>2033.4</td>
<td>1002.2</td>
<td>2024.1</td>
<td></td>
</tr>
<tr>
<td>Asset Appraisal Gains</td>
<td>106.2</td>
<td>108.7</td>
<td>16.9</td>
<td></td>
</tr>
<tr>
<td>Yield on Investments</td>
<td>3.3%</td>
<td>3.3</td>
<td>2.3</td>
<td>(This is from 4.3 as of 3/93)</td>
</tr>
</tbody>
</table>
### Firm Data (billions of ¥en)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash, Short term Money Claims</td>
<td>588.6</td>
<td>672.2</td>
</tr>
<tr>
<td>Money in Trust</td>
<td>728.6</td>
<td>501.2</td>
</tr>
<tr>
<td>Domestic Bonds</td>
<td>1044.5</td>
<td>863.2</td>
</tr>
<tr>
<td>Domestic Stocks</td>
<td>3176.8</td>
<td>2960.4</td>
</tr>
<tr>
<td>Foreign Securities</td>
<td>1730.6</td>
<td>1603.9</td>
</tr>
<tr>
<td>Policy Loans</td>
<td>269.3</td>
<td>230.2</td>
</tr>
<tr>
<td>Financial Loans</td>
<td>5026.9</td>
<td>4594.5</td>
</tr>
<tr>
<td>Real Estate</td>
<td>803.7</td>
<td>729.6</td>
</tr>
<tr>
<td>Others</td>
<td>213.3</td>
<td>270.0</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>13,582.2</strong></td>
<td><strong>12,425.0</strong></td>
</tr>
<tr>
<td>Reserves</td>
<td>13,414.0</td>
<td>12,150.8</td>
</tr>
<tr>
<td>Legal Reserves &amp; Surplus</td>
<td>168.2</td>
<td>274.2</td>
</tr>
</tbody>
</table>

### INCOME AND EXPENSES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Premium Income</td>
<td>2,601.7</td>
<td>2,418.3</td>
</tr>
<tr>
<td>Investment Income</td>
<td>778.0</td>
<td>938.5</td>
</tr>
<tr>
<td>Other Income</td>
<td>99.0</td>
<td>56.1</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>3,478.7</strong></td>
<td><strong>3,412.9</strong></td>
</tr>
<tr>
<td>Insurance Expenses</td>
<td>1,243.9</td>
<td>1,154.4</td>
</tr>
<tr>
<td>Transfers Policy Reserves</td>
<td>1,268.2</td>
<td>1,119.4</td>
</tr>
<tr>
<td>Investment Losses</td>
<td>320.1</td>
<td>423.5</td>
</tr>
<tr>
<td>Operating &amp; Business Expenses</td>
<td>511.3</td>
<td>446.6</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>3,343.5</strong></td>
<td><strong>3,143.9</strong></td>
</tr>
<tr>
<td>Ordinary Profit</td>
<td>135.2</td>
<td>269.0</td>
</tr>
<tr>
<td>Unappropriated Surplus</td>
<td>164.1</td>
<td>270.4</td>
</tr>
</tbody>
</table>

Source: (Meiji Life 1993)

### BIBLIOGRAPHY AND REFERENCES


61


