ACTIVATORS AND INHIBITORS OF SUCCESSFUL GLOBAL IS IN THE STRATEGIC MANAGEMENT CYCLE OF MULTINATIONAL INVESTMENT BANKS

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Abstract

Strategic management of global information systems (IS) is increasingly important for the multinational investment banking industry that had originally utilized information networks crossing national borders for profit making purposes. Significant changes have occurred to the scope of strategic management of IS in modern organizations following major restructuring of the global business environment. This research has sought to find whether new organisational forms, management strategies and competitive, collaborative and co-operative ideas in relation to global IS that have emerged in the cycle of strategic management of the multinational investment banks have enabled Global Information Systems. It was further investigated what changes in business model, organisational management structure and human resources in relation to strategic management of IS activate or inhibit successful global IS in those organizations. It is difficult for multinational corporations to successfully activate global IS because of disparate technological infrastructure, multiple vendors, conflicting standards and regulatory structure in different national jurisdictions. In addition, sensitivity to non-financial and non-economic factors such as differences of languages, religions, gender roles, customs and traditions is required. In order to establish cross-border IS, it is necessary to minimize obstacles by adjustment of organizational factors sometimes at the structural level. What changes activated or inhibited successful global IS in the multinational investment banks? This paper presents findings from nine different cases of organizational change from six financial Groups, and examines activators and inhibitors of successful global IS from the aspects of business model, organisational management structure and human resources.

Keywords: Globalisation, Strategic IS Management, Multinational Investment Banks, Case Study

1   INTRODUCTION

Strategic management of information systems (IS) is a critical management challenge (Santos and Fjermestad, 2002). The rapid change of technology increases the complexity faced by IS management as well as the pressure on senior management who are responsible to achieve the continuous growth of companies (Benamati, 1999; Shipps and Zahedi, 1999; Huxley et al, 2002). Organisational survival is increasingly dependent on strategic IS, and strategic IS decides the continuity of the organisation (Audy and Lederer, 2000). This research examines investment banks that originally emerged by establishing information networks to transfer capital beyond national borders. The investment banks took the multi-national path around the 1980's leveraging advances of IT and the trend towards globalization. Those banks continue to take up the challenges to implement globally networked IS. This paper presents findings from nine different cases in six such organizations. It argues that global IS in the multinational investment banking industry are not only dependent upon changes of technology, but also upon change of business strategy, organizational form, organisational management structure and human resources of the companies. Following a brief introduction, research questions referring to previous work are firstly clarified. This is followed by brief outlines of the cases from the selected organizations. Thirdly, it elaborates key findings from the case studies and presents conclusions.

2   RESEARCH QUESTIONS

In the early days of emerging IT/IS, often a system department was responsible for the design and development of computer systems, and other departments were responsible for the operational process of the business (Vandenbosch and Avital, 2000). Many researchers (Earl, 1995; Earl and Feeny, 1995; Chan, 1999; Presley and Meade, 1999; Willcocks and Sykes, 2000; Lederer and Johnson, 2003; Axelsson and Goldkuhl, 2005) emphasise the importance of integration between business strategy and IS strategy to strategic management so that IS can respond effectively to the requirements of other business units. IS strategy making involving various organizational actors is important (Axelsson and Goldkuhl, 2005). In addition, the existence of a global competitive business model is promulgated as one of the most important factors for IT/IS solutions (Willcocks and Sykes, 2000). However, IS strategy making led by business strategy is rare and difficult to achieve (Earl and Feeny, 1995). IS strategy often focuses on small-scale solutions, meeting short term business objectives (Axelsson and Goldkuhl, 2005), because IS specialists have difficulty changing their view from micro-orientation to macro-orientation, do not possess enough experience in business functions, and often lack an interest in business knowledge (Couger, 1995). Therefore, richness in communication and mutual understanding within the top management team are important to activate successful strategic IS (Lederer and Johnson, 2003). Especially, the role of the CIO in the top management team is increasingly becoming important (Earl, 1995; Huff and Enns, 1999; Willcocks and Sykes, 2000; Reich and Nelson, 2003; Hirschheim, Porra and Parks, 2003; Stephens, 2003), and support by the top management team of the IS department is a critical success factor for strategic IS (Lunce, 1999; Kearns, 2000). In addition, some IS have different impacts on organisational structure at different times (Sampler, 1995). Organisational structure should be changed to enable expected benefits from strategic IS (Boddy, 1995). In order to establish cross-border IS, it is necessary to minimize negative obstacles by adjustment of organizational decision making structures (Raisinghani, 1999). Significant changes occur to the scope of strategic IS management in modern organizations in relation to massive restructuring in the global business environment (Marshall and McKay, 1999). New organisational forms, new management strategies and new competitive, collaborative and corporative ideas are emerged in response to the rapid changes of IT/IS (Marshall and McKay, 1999; Shipps and Zahedi, 1999; Murphy and Platt, 2002). Therefore, it is important for researchers as well as practitioners to take a wide view of various aspects to examine the *"cycle of strategy formulation, implementation, evaluation, and re-formulation" (Axelsson and Goldkuhl, 2005)* in strategic management of global IS.

This research therefore posed the following question.

Question 1; "What new organisational forms, management strategies and competitive, collaborative and co-operative ideas in relation to global IS emerge in the cycle of strategic management in the multinational investment banks?"

Strategic IS has a significant impact not only on the short but also on the long term profit of companies (Remington et al, 1999). Although IT/IS strategies have become more and more important to the success of companies (Lunce, 1999), many companies fail to fully realize the benefits of IT/IS investment because of mismatches between business and IS strategies (Presley and Meade, 1999). It is difficult for multinational corporations to successfully activate global IS because of differing technological infrastructure, multiple vendors, conflicting standards and regulatory structure between different national entities (Earl and Feeny, 1995). In addition, it is necessary to tackle non-financial and non-economic factors such as differences of languages, religion, gender roles, customs and traditions (Johnson et al, 1998). Hence a second question is formulated.

Question 2; "What changes in business model, organisational management structure and human resources in relation to strategic management of IS activate or inhibit successful global IS in the multinational investment banks?

3 DATA COLLECTION

In order to answer the questions clarified in the section 2, the research selected the Grounded Theory analysis approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998), which enables a) visualisation of the mechanisms in the strategic management cycles in relation to global IS to detect new factors and b) integration of the visualised mechanisms to detect activators and inhibitors of successful global IS in the selected cases. Following theoretical sampling (Glaser and Strauss, 1967; Strauss and Corbin, 1998), data collection was conducted in three phases which were a) open, b) relational and variational, and c) discriminate sampling (Strauss and Corbin, 1998). For open sampling, the internal documents available were IS project related, and the companies' official information was collected from internet sources. In the relational and variational sampling, unstructured interviews were conducted. Various levels and types of manager as well as other employees participated in the process. Although the open, relational and variational sampling focused on three entities in two corporate groups, the discriminate sampling expanded to five other cases by investigating official information from similar companies, reviewing manuscripts of unstructured interviews, and conducting semi-structured interviews with respondents. This discriminate phase focused on organisational forms, management strategies and competitive, collaborative and co-operative notions. The whole process is summarized in table 3.1. The data collection statistics are shown in tables 3.2, 3.3 and 3.4.

Sampling Phases		Open	Relational and Variational	Discriminate
Selected Cases				
	Company Codes	SAFG and JPFG	SAFG and JPFG	SAFG, USFG1, USFG2, USFG3, GBFG1, GBFG2 and JPFG
Collected Data				
	Internal Data	IS Projects		
	Official Data	Companies' Information (I)		Companies' Information (II)
	Interviews		Unstructured (I)	Unstructured (II)
				Semi-Structured

Table 3.1: Selected Cases and Collected Data in the Theoretical Sampling Process

Group Code	SAFG		JPFG	
IS Projects				
	Site Location	Tokyo	Singapore	London
	Data Source	Business Process Re-engineering	Business Process Technical Architecture	Systems Infrastructure Project
	Year of Data	2001	2000	2004
	Size of Data	191 words	65 words	135 words
Companies' Official Information (I) – Year 2004				
	Data Source	Company Policy		Corporate Philosophy
	Size of Data	929 words		322 words
	Data Source	Employee development		Employee training
	Size of Data	84 words		257 words
	Data Source	Structure and management		Organisation Chart
	Size of Data	198 words		116 words

Table 3.2: Data Collection Statistics - Open Sampling

Unstructured Interviews (I)				
Group Code	SAFG		JPFG	
	Site Location	Tokyo	Singapore	London
	Year of Data	2004	2004	2004
	Number of Interviewees	6	3	6
	Number of Interviews	9	3	9
	Total Length of Interviews	5 hours 40 minutes	3 hours	3 hours 35 minutes
	Size of data in Manuscripts	4480 words	2301 words	1587 words

Table 3.3: Data Collection Statistics - Relational and Variational Sampling

Group Code	USFG 1	USFG 2	USFG 3	GBFG 1	GBFG 2
Companies' Official Information (II) - Year 2005					
Size of data in Manuscripts	218 words	228 words	243 words	232 words	241 words
Unstructured Interview (II) / Semi-Structured Interviews					
Year of Data	2004	2005	2004	2004	2005
Method	Telephone	Face to Face	Telephone	Telephone	Face to Face
Number of Interviewees	1	1	1	2	1
Number of Interviews	3	2	1	2	2
Total Length of Interviews	2hours 35min	1hour 8min.	1hour	40min	49min
Size of data in Manuscripts	217 words	171 words	360 words	276 words	139 words

Table 3.4: Data Collection Statistics - Discriminate Sampling

4 CONTEXT OF SELECTED CASES

This section describes the context of the selected cases in which data was collected. Paragraphs 4.1 and 4.7 describe the context from which the theories were first induced. Paragraphs 4.2 – 4.6 describe the contexts used in the discriminate sampling phase.

4.1 SAFG: The Swiss American Finance Group

The Group was originally established in 1856. A Swiss Bank stimulated business growth by building an international network in order to expand market share and increase profits in the 1970s. In 1978, the Group announced a business partnership with a U.S. investment bank, which became a market leader on Wall Street by the mid-1980s. The U.S. investment bank faced difficulties between 1986 and 1988 with various types of financial losses. In 1989, the Swiss Bank underwent restructuring simplifying the complex global organization structure. In 1996, the shareholding company underwent another reorganization that structured the organization into four global business units including a global investment bank. Currently, the official co-headquarters of the Swiss American Group are located in Zurich and New York. Two traders joined the New York and London offices of the Group to implement new global business models in 1992. They needed global IS to activate the global businesses in the Asia-Pacific region. Trading volume of the new businesses increased in 1993. In 1994, the Group accelerated its change in management structure from local to regional organisation and some senior managers as well as IT staff moved to Singapore to establish a new information processing centre. A new system development project was launched in 1995 and in 1997 restructuring of the Group strengthened the global reporting line. The new in-house system for the Asia-Pacific region was successfully implemented in 1998. Through this system the Group accumulated a great deal of knowledge and experience and subsequent major projects went particularly smoothly. The project manager who had led similar activities in a large US based financial group (USFG3 - see 4.4) joined the Swiss American Group to drive a global IS/BPR project in 1998. This project originally focussed on all global business processes with a remit to relate them to IT. However, the enormity of the scope was recognised and no delivery occurred, though the Group had spent over USD 200 million. Interviewees who were involved in the project indicated a number of critical failure factors. The project was started from the London office and difficulty was experienced attempting to build consensus for the project between New York, London and Zurich. The programme office attempted to gather all requirements from all departments, but finally they found that it was almost impossible to deal with everything that the users had come to expect. The programme office started to compromise by not dealing with everything. As a result, the project was stopped in 2003 by a new CEO who came from a significant American financial Group (USFG1 - see 4.2). Around 2001 when the global IS/BPR project seemed to have failed, two discussions in relation to centralisation of IT support emerged in the Swiss American Group. One support Group was proposed to be in the USA, and another in Singapore. Though many discussions between senior managers had been arranged, there was no outcome at this stage. In 2002, the Group reorganized with a new top management team. A new global Head of Operations, Product Control and IT, joined from the same significant American financial Group as the CEO had been recruited from. The new global Head provided strong sponsorship and leadership to enable the transfer of the support Group from New York and London to Singapore by November 2002. In addition, the Singapore office already existed and the Swiss American Group had fostered a sound relationship with the Singapore government smoothing their path.

4.2 USFG1: The Significant American Financial Group

Following the Depression, the Glass-Steagall Act of 1933 required financial service firms to segregate commercial banks from investment banks. Though being a traditional financial institution in the U.S. the bank decided to operate as a commercial bank. In 1935 several employees of the financial institution split off to form an investment bank (USFG1). They were the first investment bank to

create computer models for financial analysis in 1964. By 1971, they had established a mergers & acquisitions (M&A) department along with the sales and trading department. The shares of the entity were publicly listed in the stock exchange in 1986. In 1997 they announced a merger with a large American stock brokerage. They are considered to be one of the top two investment banks in the world. A respondent from the Significant American Financial Group emphasised the efficiency of their global IS. As a pioneer of advanced technology in the investment banking industry, they had implemented global in-house developed systems as well as a global networked electronic mail system from New York head office to other branches in order to activate a global business model in the mid-1980s. In 1986 the Group was one of the first foreign entities to obtain a Tokyo Stock Exchange members license. At that time, the Tokyo office of the Group had already utilized the global IS. When the Group commenced business in any location worldwide, the same approach was applied. It enables any Group employee to login to the same system environment through the same procedure from any location within Group facilities. The Group's globally standardised computer system is still being continuously enhanced.

4.3   USFG2: A major US Financial Group

A major US Financial Group (USFG2) was established in 1859 in Boston. In 1903, it was merged with another bank which had originally been established in Massachusetts in 1784. It operated a full range of financial, banking, and trust services for individual and commercial customers. Their Headquarters are located in Boston. The Group became one of the ten biggest financial Groups in U.S. financial market through a merger with another financial institution in 1999. After the merger, they operated about 1,500 branches in North America as well as over 250 offices in more than 25 other countries. In 2004 they merged with a large rival financial Group whose identity they assumed. In the mid-1970s, they separated their business into two areas as a) Domestic business in U.S.A, Latin America and South America, and b) International business in Europe, Middle East, Asia Pacific and Oceania. The IT department for the international business was located in the London office. The head office in Boston acted as a strong project sponsor to develop new global IS for international business in 1977. The project focused on a) replacement of all financial transactions applications, and b) standardisation of global communication networks. The design and development work of the project was started from 1977 and implementation started from the London head office then moved to Paris, Frankfurt, Luxemburg, Singapore, Hong Kong, Tokyo and Melbourne. The project was completed in Melbourne in 1981. After the implementation, the system was adopted by Boston head office for implementation in Latin America and South America by relocating a couple of IT specialists from London to Boston to establish a department and undertake knowledge transfer.

4.4   USFG3: The large US based financial Group

The large US based financial Group (USFG3) was established in 1910 in Wall Street. The Group had large bond positions on certain swings on a daily basis. However, they were punished for illegal trading pricing in the bond market in 1991. The fines weakened the financial situation and led to acquisition by another financial Group. Most of the proprietary trading business was disbanded after the acquisition. It was the first U.S. financial institution to combine banking with insurance since the Depression. In the late 1980s, the New York head office had an international operations department which dealt with all back office activities for all entities worldwide. However, this was very inefficient. In the early 1990's, USFG3 started to move the operations functionality from New York to Florida to reduce operational costs. Almost at the same time, the head of the IT Department commenced discussions with a consulting firm to find the best solution to develop efficient global IT and operations. The result of the consultation was a migration from *"Centralisation in New York"* to *"Decentralisation worldwide"*. In order to conduct the decentralization project, the IT department and the Operations department in the New York office contacted the Front Offices who would be the project sponsors. Firstly, the project was discussed between New York and London. However, the

New York financial market was facing recession at that time after the *"Black Monday"* shock, and transactions of the US treasury that had badly impacted on the profit of the Group. On the other hand, since the Japanese market was performing very well, the New York IT and Operations department contacted the Tokyo office to request them to join the project as a project sponsor. With the approval of the Tokyo office, the project got under way. Following implementation in Tokyo, a small team was organised in the New York office and the management gave strong support to the team to speed up the implementation. Within two years, the decentralisation project had been completed in the New York, London and Tokyo offices.

4.5 GBFG1: The London Bank

The London Bank (GBFG1) was founded as a venture capital lending bank in the heart of the financial district of London more than 300 years ago. The bank expanded its branch network by merger and acquisitions of other banks in the early 20th century, and was one of the British big five banks in 1918. They began to develop global business around 1925 with the merger of large banks in South Africa, Egypt and India. In 1969, they acquired one of the largest UK banks with a head office that was located outside London. They were the first British bank to publicly list their shares on the New York and Tokyo Stock Exchanges in 1986. In the 1990s a Global consolidated computer system was necessary to quickly obtain profit and loss figure for the investment banking business, but the financial statements of their overseas offices were independently generated until 1996. They considered selling the investment business function to another financial group. However, they decided to challenge the financial investment business, and hired a star trader and team to revitalize the investment banking business and implement a global business model from the Swiss American Financial Group (see Case 4.1). The business process in the support sections worldwide was reviewed and the necessity of globally consolidating the computer system was recognized in 1997. In 1998, the head office in London decided that they would implement an ERP application in all entities worldwide. All offices received an implementation schedule based on market conditions from head office. The implementation activity for the global ERP system was conducted by a special team organised in London and they visited each entity to conduct user acceptance testing and implementation. First, the New York Office went live, followed by the Asia-Pacific region where implementation started from Hong Kong and Singapore followed by Tokyo. Progress of the implementation was shared with other entities. The Tokyo Office completed the implementation of the system in September, 1999.

4.6 GBFG2: An English Bank

The British leg of this bank was established in 1836 during the industrial revolution. It played an important role in Birmingham business and enlarged its business steadily until the 1880s. They opened branches/representatives and acquired international subsidiaries in the major financial markets worldwide from 1974. A Colonial Bank acquired about 15 percent of the shares of the English Bank in 1987 establishing a strong business relationship. The Colonial Bank acquired full ownership in 1992 and re-patriated it's headquarters to London in 1994. In 1999, as part of a global re-branding the English Bank was renamed along with the other entities of the British Colonial Bank to an identity that was hoped to be geographically neutral whilst echoing the arena of much of the Colonial Bank's growth. In the mid-1980s, the English Bank segregated their business into three areas: domestic retail in England, international wholesale banks in the U.K. and non-U.K. The IT department in the London head office took care of all IT activities in all three areas. A global standardisation for IS projects was started from 1984. However, the progress was slow until 1986. In order to accelerate the speed of the project, they hired new IT managers from a U.S. investment bank in 1987. The new IT managers conducted projects based on a common philosophy of smooth communication. In 1990, one project started from New York, went through Toronto, Paris, Helsinki, Oslo, Stockholm, Madrid, Singapore, Hong Kong, Tokyo, and finished in Sydney in 1992.

4.7 JPFG: A Japanese Bank

JPFG was originally established by one of the founders of traditional Zaibatsu Groups in 1880. Zaibatsu are the large confederations of Japanese companies that have become global household names though their activities extend well beyond household goods. The Group historically maintained cross shareholdings relationship within the more than twenty publicly listed companies including banking, insurance, manufacturing, trading, natural resources, real estate and transportation. The banking company played the role of the main bank for the Group companies. In 1996, the bank merged with another Japanese traditional foreign exchange bank which was established in 1880. This was the only bank licensed under the foreign exchange bank law regulated in 1954, and received special permission from the Japanese government for establishing overseas offices for foreign exchange and international finance. The investment banking business unit of the Group provides a broad range of investment banking services which are corporate advisory capital markets, derivatives, structured finance, and securities, and global services through investment banking subsidiaries in Hong Kong, Singapore, New York and London. However, no concept of global IS was detected in the data collected for the period between 1983 and 2004. Many interviewees emphasised the cultural difference between Japanese and Western banks, especially with respect to human resource management and organisational management structure. It was emphasised that the process of decision making becomes consensual and takes much longer than in Western banks. The Japanese bank does not clarify a global business strategy and IT activities are outsourced to *Keiretsu* companies, which are established through a cross shareholding scheme in the *Zaibatsu* Group. This mechanism is very beneficial for employees working in the lifetime and seniority system, especially for employees who achieve high positions in the bank. *"Amakurdari"* allows the senior managements of the banks to obtain high position in the *Keiretsu* companies including IT services after retirement from the core banking business.

5 ANALYSIS

In order to enquire into Question 1, this section visualises the mechanisms in the strategic management cycles in relation to global IS to detect new factors in the selected cases indicated in section 4 (Matsumoto and Wilson, 2005b). In the open sampling phase, the research discovered four central categories which were a) business model, b) organisational management style, c) human resource management and d) IS management which impacted on global IS. By indicating cause, change and consequence of the four central categories, the research visualised the mechanisms in the strategic management cycles in relation to global IS (Matsumoto and Wilson, 2005a).

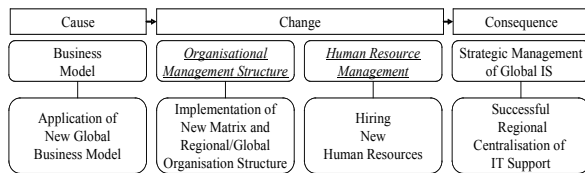### 5.1 New Global Business Driven: Successful Global IS Management

Cause	Change		Consequence
Business Model	*Organisational Management Structure*	*Human Resource Management*	Strategic Management of Global IS
Application of New Global Business Model	Implementation of New Matrix and Regional/Global Organisation Structure	Hiring New Human Resources	Successful Regional Centralisation of IT Support

Figure 5.1a: SAFG: 1992-2001

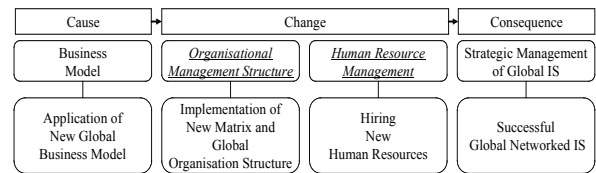| Cause	Change		Consequence
Business Model	*Organisational Management Structure*	*Human Resource Management*	Strategic Management of Global IS
Application of New Global Business Model	Implementation of New Matrix and Global Organisation Structure	Hiring New Human Resources	Successful Global Networked IS

Figure 5.1b:USFG1:Mid1980s/GBFG1:1996-99

"New Global Business Driven Approaches" were identified in SAFG, USFG1 and GBFG1. All three cases were identified as successful global IS. The approach possessed very strong power to change organisational management structures and human resources because the new business model is directly linked to profit making. In addition, the new business models clearly need globally networked IS. Therefore, it was mandatory to formulate and implement a global IS strategy. As a pioneer of advanced technology in the investment banking industry, USFG1 had already implemented a global business model as well as global IS in the mid-1980s. SAFG imported the global business model from USFG1. In order to activate global IS, SAFG gradually changed the organisational management

structure from local to regional, and then to global from 1992 until 2001. GBFG implemented global IS after the mid-1990s.

5.2 New Organisational Management Structure Driven: Successful Global IS Management
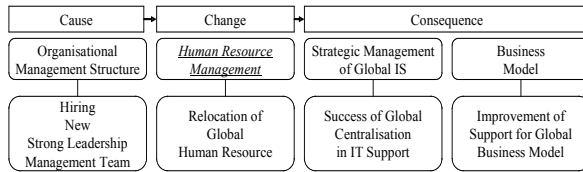
Cause	Change	Consequence	
Organisational Management Structure	*Human Resource Management*	Strategic Management of Global IS	Business Model
Hiring New Strong Leadership Management Team	Relocation of Global Human Resource	Success of Global Centralisation in IT Support	Improvement of Support for Global Business Model

Figure 5.2a: SAFG: 2001-2004

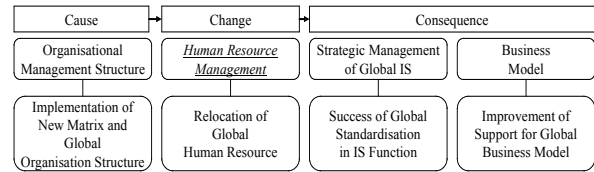| Cause	Change	Consequence	
Organisational Management Structure	*Human Resource Management*	Strategic Management of Global IS	Business Model
Implementation of New Matrix and Global Organisation Structure	Relocation of Global Human Resource	Success of Global Standardisation in IS Function	Improvement of Support for Global Business Model

Figure 5.2b: GBFG2: 1987 -1992`

"New Organisational Management Structure Driven Approaches" were identified in SAFG and GBFG2. Both cases were described as having successful global IS management. The approach did not aim at implementation of a global business model, but aimed at acceleration of an on-going global IS project or resolution of organisational problems. GBFG2 hired new IT managers from another U.S. investment bank to highly prioritise the global standardisation of the IS project. SAFG organised a new top management team possessing strong leadership by head hunting experienced managers from USFG1 to change the direction of strategic management of global IS. Both cases indicate that human resources were globally relocated to improve global IS after organisational management structure changes. This approach fits with the recommendation of Earl (1995) that emphasises implementing information management (IM) strategies to activate global IS, if the global IT/IS strategy cannot be formulated.

5.3 New Global IS/BPR Project Driven: Success and Failure of Global IS Management
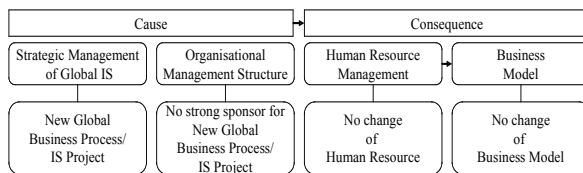
Cause		Consequence	
Strategic Management of Global IS	Organisational Management Structure	Human Resource Management	Business Model
New Global Business Process/ IS Project	No strong sponsor for New Global Business Process/ IS Project	No change of Human Resource	No change of Business Model

Figure 5.3a: SAFG: 1999-2002

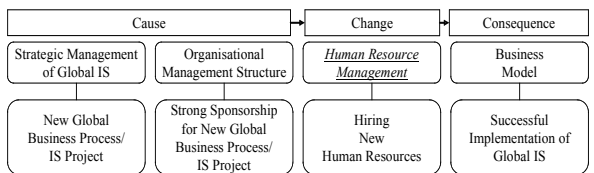| Cause		Change	Consequence
Strategic Management of Global IS	Organisational Management Structure	*Human Resource Management*	Business Model
New Global Business Process/ IS Project	Strong Sponsorship for New Global Business Process/ IS Project	Hiring New Human Resources	Successful Implementation of Global IS

Figure 5.3b: USFG2:1977-82/USFG3:Early1990s

"New Global IS/BPR Project Driven Approaches" were identified in SAFG, USFG2 and USFG3. The critical success factor of the approach is a project sponsor in the organisation. The same project manager experienced success and failure through similar approaches of global IS projects in different multinational investment banks. The case of USFG3 was identified as a success. The project aimed at the decentralisation from the New York head office. The project found strong project sponsorship not only in New York but also in other locations. The case of SAFG is thought to be failure. The project team could not find a strong project sponsor in SAFG. The project had a democratic style, because the authorities for decision making were distributed to various departments such as operations, accounting and product control as well as locations such as New York, Zurich and London. The case of USFG2 was success. The project teams found strong sponsorship in the head office in Boston.

5.4 Traditional Human Resource Management: No Global IS Management
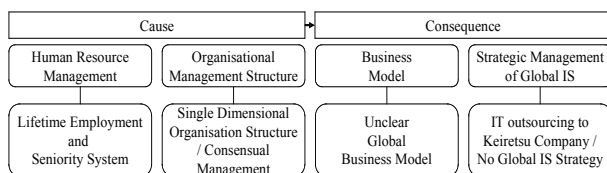
Cause		Consequence	
Human Resource Management	Organisational Management Structure	Business Model	Strategic Management of Global IS
Lifetime Employment and Seniority System	Single Dimensional Organisation Structure / Consensual Management	Unclear Global Business Model	IT outsourcing to Keiretsu Company / No Global IS Strategy

Figure 5.4: JPFG: 1983-2004

The model indicates a paradoxical phenomenon in relation to strategic management of global IS in the Japanese traditional bank. Lifetime employment and seniority system initially aimed at the encouragement of loyalty for the company.

However, this leads to a consensual management style which inhibits the establishment of a clear global business model. Accompanied with the *Amakudari* culture, IT activities were outsourced to Keiretsu companies without any global IS strategy.

6   CONCLUSION

In order to answer the Question 2; *"What changes in business model, organisational management structure and human resources in relation to strategic management of IS activate or inhibit successful global IS in the multinational investment banks?",* the following matrix was defined to show the occurrences of emerged activators and inhibitors.

	SAFG	USFG1	USFG2	USFG3	GBFG1	GBFG2	JPFG
Global Business Model	S 1992-2001	S Mid1980s			S 1996-99		
Organisational Management Structure	S 2002-04					S 1987-1992	
Global IS/BPR Project	F 1999-2002		S 1977-1982	S Early1990s			
Traditional HR Management							N 1983-2004
Nationality	Swiss/U.S.	U.S.	U.S.	U.S.	U.K.	U.K.	Japan
Head Office(s)	New York and Zurich	New York	Boston	New York	London	London	Tokyo

Table 6.1: Success and Failure of Global IS ("S" cases with successful global IS. "F" case which failed global IS. "N" case with no concept of global IS.)

6.1   Activators

By analysing three cases in SAFG, USFG1 and GBFG1, *"New Global Business Models"* were identified as strong activators for successful global IS. But the opportunity to implement global IS driven by a global business model might be a single organisation events. In the cases of USFG1 and GBFG1, the speed of implementation of global IS was less than two years, but SAFG took about 8 years before completion of stable global IS. The difference of implementation speed may come from the centralisation of political decision making in USFG1 and GBFG1 and the political conflict between three locations in SAFG. By analysing the cases of GBFG2 and SAFG, *"New Organisational Management Structures"* were identified as activators that improved the efficiency of existing global business models. This approach identifies the notion that change came about from the prioritisation by the organisation resolving the problematic situation through changing strategic direction. GBFG2 took accelerated an on-going global IS project three years after commencement of the project. SAFG stopped the global IS/BPR project which had nearly failed and changed direction to global IT support. Both *"New Global IS/BPR Projects"* in USFG2 and USFG3, successfully achieved global standardisation or decentralisation following strong business sponsorship.

6.2   Inhibitors

In the case of SAFG, the global IS/BPR idea which came from USFG3 became an inhibitor for successful global IS without any strong business sponsorship. Success or failure of the global IS project might depend on organizational culture, especially political power in the organization. This case suggests that global IS/BPR which can become a *"medicine"* with strong sponsorship can also become a *"poison"* without strong sponsorship. In addition, centralisation or global co-ordination by

decentralised authority might be difficult. From the JPFG case, it is seen that the factors relating to global IS were very different from those in Western banks. JPFG keeps the traditional Japanese lifetime employment and seniority system which creates the consensual organisational management structure. Global business strategy was not clarified and IT activities were outsourced to *Keiretsu* IT companies. Many senior managers who joined *Keiretsu* companies might possess political power and interact robustly with the core business companies as *"Old Boy"* members.
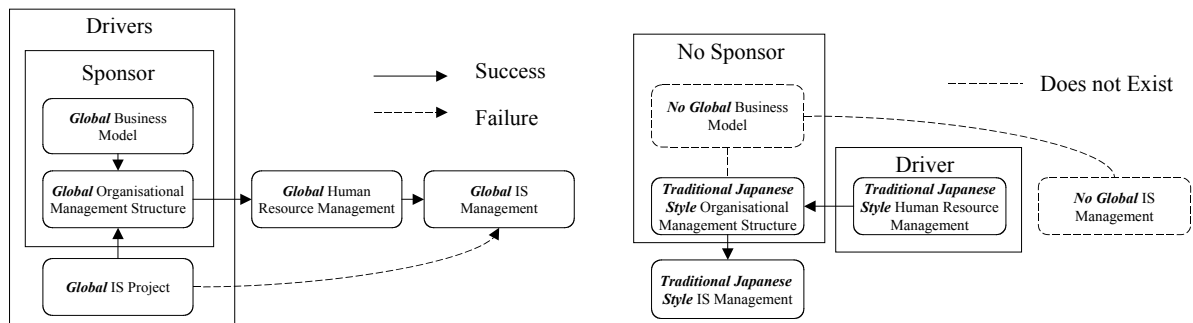
6.3   Integration

Figure 6.3a: Western Investment Banks   Figure 6.3b: Japanese Investment Bank

In order to clearly integrate findings of the answers to Question 2, the two models in Figure 6.3a and Figure 6.3b are devised. The Western investment banks have mechanisms to find IS project sponsorship. Global Business models, global organisational management structure and global IS projects can become strong drivers to activate global IS. The Global business model is the most powerful driver because it possesses a profit opportunity. Changing organisational management structure to a global style can also activate global IS. Cases of failure with these two drivers were not identified, but there was a case failed including a global IS project, because the global IS project failed to find sponsorship in the organisation. Moreover, the human resources are directly affected by the change of organization management structure in the Western cases. In contrast the Japanese investment bank has no mechanism to find IS project sponsorship. Lifetime employment and the seniority based system are the foundation of the organization management structure. In order to maintain this system, employees' feeling of mutual importance needs to be continuously maintained. As a result, traditional IS management in the Japanese case had difficulty formulating a global IS strategy. Since those structures are a facet of traditional Japanese organization it is believed these findings may generalize to the Japanese financial industry and other traditional Japanese enterprises and will not be easily changed.

References

Axelsson K. and Goldkuhl G. (2005), "Strategic Management of IS and IT", Conference Tracks, 14th European Conference on Information Systems, http://www.ecis2006.se

Audy J. and Lederer A. (2000), "Seven principles of organizational learning in information system planning: Preliminary Findings from a case study", Proceedings of the AMCIS 2000, AIS

Benamati J. (1999), "The effect of emerging IT Groups on coping with rapid IT change", Proceedings of the AMCIS 1999, AIS

Boddy D. (1995) "IT and Organisational Change", Information Management: The Organizational Dimension, Oxford University Press, pp. 337 - pp. 346

Chan Y.E. (1999), "IS strategic and structural alignment: eight case studies", Proceedings of the AMCIS 1999, AIS

Couger J.D. (1995), "The Changing Environment for IS Professionals: human Resource Implications", Information Management: The Organizational Dimension, Oxford University Press, pp.426-435

Earl M.J. (1995), "An Organisational Approach to IS Strategy-Making", Information Management: The Organizational Dimension, Oxford University Press, pp. 136 - pp. 170

Earl M.J. and Feeny D.F. (1995) "Information Systems in Global Business: Evidence from European Multinationals", Information Management: The Organizational Dimension, Oxford University Press, pp. 77 - pp. 100

Glaser G. and Strauss A. (1967), "The Discovery of Grounded Theory: Strategy for qualitative research", Aldine De Gruyter

Hirschheim R., Porra J., Parks M.S. (2003), "The evolution of the corporate IT function and the role of the CIO at Texaco: how do perceptions of IT's performance get formed?", ACM SIGMIS Database, Volume 34 Issue 4, November 2003

Huff S.L. and Enns H.G. (1999), "CIO influence behaviors: antecedents, consequences, and moderators", Proceedings of the SIGCPR, April 1999

Huxley C., Stewart G., Taylor C. and Rosemann M. (2002), "Identifying the process most necessary for achieving strategic goals", Proceedings of the AMCIS 2002, AIS

Johnson P.C., Elmallah A.A., Crow S.R. and Gezi K. (1998), "International Technology Transfer: A Theoretical Development for Firm Level Analysis", Proceedings of the AMCIS 1998, AIS

Kearns G.S. (2000), "Top management support of SISP: Creating competitive advantage with information technology", AMCIS 2000, AIS

Lederer A.L. and Johnson A.M. (2003), "Two predictors of CEO/CIO convergence", Proceedings of the SIGMIS, April 2003

Lunce S.E (1999), "When managers make irrational contingency planning decisions", AIS 1999

Marshall P. and McKay J. (1999), "Strategic Information Systems Planning in the Virtual Organisation", Proceedings of the AMCIS 1999, AIS

Matsumoto H. and Wilson D.W. (2005a), "Application and validation of the emerged Cross-Cultural Comparison Model with similar and conflicting SISP models", Proceedings of UKAIS 2005

Matsumoto H. and Wilson D.W. (2005b), "Testing a Rigorous Execution of Grounded Theory Using Comparative Cross-cultural Case Studies of Strategic Global IS Management in Investment Banks", Proceedings of the 4th European Conference on Research Methodology for Business and Management Studies, April 2005, pp.323 - pp.336

Murphy M. and Platt M. (2002), "Perceptions of System Integration Success in Bank Mergers: Is best of Breed Best?", Proceedings of the AMCIS 2002, AIS

Presley A. and Meade L. (1999), "Strategic alignment and IT investment selection using the analytic network process", Proceedings of the AMCIS 1999, AIS

Raisinghani M.S. (1999), "Transborder data flow issues and their impact on Multinational companies", Proceedings of the AMCIS 1999, AIS

Reich B.H. and Nelson K.M. (2003), "In their own words: CIO visions about the future of in-house IT organizations", ACM SIGMIS Database, Volume 34 Issue 4, November 2003

Remington W.S., Moores T., Swanson Z. and Folts. B (1999), "Electronic Commerce and the challenge for IS Planning: Who will be the EC-Winners?", Proceedings of the AMCIS 1999, AIS

Sampler J.L. (1995), "Exploring the Relationship Between Information Technology and Organisational Structure", Information Management: The Organizational Dimension, Oxford University Press, pp.5 - pp. 22

Santos J. and Fjermestad J. (2002), "Global Information Systems: connecting organisations in the global environment", Proceedings of the AMCIS 2002, AIS

Shipps B. and Zahedi F. (1999), "Agile IT staffing strategies: Determinants and impacts", AIS 1999

Stephens C.S. (2003), "Special issue on the evolution of the CIO role: past and future perspectives", ACM SIGMIS Database, Volume 34 Issue 4, November 2003

Strauss A. and Corbin J. (1998), "Basics of Qualitative Research", SAGE Publications, Inc

Willcocks L.P. and Sykes R. (2000), "Enterprise resource planning: the role of the CIO and it function in ERP", Communications of the ACM, Volume 43 Issue 4, April 2000