

Japan Net Bank: Japan's First Internet-Only Bank – A Teaching Case

Ali F. Farhoomand

Centre for Asian Business Cases, University of Hong Kong,
Hong Kong
Ali@business.hku.hk

Vincent Mak

University of Hong Kong,
Hong Kong
VincentMak@business.hku.hk

Abstract

Japan Net Bank (JNB), Japan's first Internet bank without physical branches, began operation in October 2000. It attracted mainly young customers looking for convenient, round-the-clock bank services with much more competitive interest rates and transaction charges than traditional Japanese banks. Its access channels included the mobile Internet service i-mode and fixed-line Internet. JNB relied on flexible, open computer systems and a young workforce of only 100 people to minimise operational costs. Its stakeholders, including parent company Sumitomo Mitsui Banking Corporation (SMBC) and NTT DoCoMo (provider of i-mode), were all big companies from different industry sectors. This stakeholder base gave JNB market exposure and access to their established customer bases. By April 2001 JNB had 130,000 customers. It aimed at winning one million accounts and ¥1 trillion deposits and becoming profitable by the financial year 2002. But it needed to resolve a number of issues before being able to achieve long-term success in the face of strong competition from bricks-and-mortar banks and new Internet-only banks. One of those issues was about how to meet with wide fluctuations in usage without over-investing; the other was alliance management, i.e., how to co-operate with alliance partners to achieve competitive advantage.

1. Introduction

Yoshiyuki Miyai had a vision. He wanted to establish a completely new standard of banking in Japan – that of Internet-only banking. As president of Japan Net Bank (JNB), the first Japanese on-line bank with no physical branches, Miyai emphasised that customer satisfaction should be the focus of JNB's business – his customers should enjoy convenient access to accounts, competitive rates, customisation and secure transmission of information over the Web. To bring out the best services, he saw to it that JNB was run with low operation costs, a flat management structure, flexible computer systems and a small workforce – all drastically different approaches from those adopted by traditional banks.

JNB already had 130,000 accounts in April 2001, merely six months after it opened shop. But in order for it to maintain a sustainable competitive position in the long-term, Miyai needed to tackle several important issues. How could the Company maintain the interest and support of its large stakeholders? What advantage could be gained from the established customer bases and marketing channels of its alliances? In other words, how could the company best manage its alliances? Furthermore, how should the Company design a scalable information technology infrastructure capable of providing performance on demand but without over-investing?

2. Company Background

In July 1999 Sakura Bank, a major Japanese bank, and electronics giant Fujitsu announced their plan to create an Internet-only bank. After over a year of preparation, including getting other companies to invest in the venture, The Japan Net Bank Ltd. was established on 26 September, 2000, with capital of ¥20 billion (US\$167 million).¹ JNB began operation on 12 October, 2000, after receiving a Banking Licence from the government.

The senior management of JNB consisted of five directors, including the president, Yoshiyuki Miyai, who was appointed in September 2000. At the age of 49 he became the youngest and lowest-paid president in Japan's banking industry.² Before being recruited to his JNB job he was a manager at Sakura Bank's headquarters, and was mainly in charge of the planning of mass-retail corporate business promotions and the construction of database marketing systems. He also worked at the Sakura Research Institute, where he founded and headed the "Center for Aging and Environmental Studies".

¹ US\$1=¥120

² Kakuchi, Suvendrini (2001), "Economy-Japan: First On-line Bank takes on financial giants," *Interpress Service*, 25 January.

2.1 Stakeholders

At the time of JNB's launch, Sakura Bank, as the major stakeholder, owned 50% of the shares, with Sumitomo Bank, Fujitsu and Nippon Life Insurance each holding 10%. Mitsui & Co., NTT East, NTT DoCoMo and Tokyo Electric Power each held 5% of the shares. After Sakura and Sumitomo Banks merged on 1 April, 2001, to become Sumitomo Mitsui Banking Corp. (SMBC), the major stakeholder of JNB was SMBC, with a 60% stake [see **Exhibit 1** and **Exhibit 2**].

2.2 Business Principles

JNB was one of the core Internet businesses of parent company SMBC – 80% of its full-time staff were transferred from SMBC. However, it aimed to build up its own, independent brand name and aspired to become the de facto standard of the Japanese-style “Internet Specialised Bank” for the 21st Century's Internet community. Miyai put forward as the guiding vision of JNB's business the “customer-centric” principle, i.e., the Company and its services should be focused on customer satisfaction. He said:

In the Internet world ... customers should be treated better than in the actual world. ... We, as a company, have to seriously adopt the customer-centric principle in order to survive.

Accordingly, JNB characterised its financial products and services by four keywords:

Convenient: JNB customers enjoyed seamless financial functions and 24/7 accessibility to their accounts through the Internet. They could carry out transactions or check their accounts through multiple access channels, including ATMs and i-mode. The interfaces were designed to be very user-friendly. Moreover, customers were offered various services operated by JNB in collaboration with alliance companies.

Competitive: JNB offered attractive interest rates and fees compared with conventional Japanese banks [see **Exhibit 3**]. Its deposit interest rates were more than twice that of the average rates offered by major Japanese banks, and its charges for fund transfer were less than half those of conventional banks.

Customised: every customer had his/her own specific information page on the Web. Customers would receive e-mail notifications of transaction details such as receipt of fund transfers, expiration of term deposits, errors in automatic account debits, etc.

Confidential: the confidentiality of JNB customers' private information was strictly secured; private information could not be used without customers' agreement. Information transferred through the network was encrypted by 128-bit SSL (Secure Sockets Layer). The database and servers storing JNB customers' information were protected by a firewall and an access-surveillance system. All Internet banking transactions could not be processed without a password.

Moreover, the last login date and time was always indicated at every login to a JNB account, so customers would know whether their accounts had been accessed illegally.

2.3 Services

JNB's staple services included ordinary deposit, term deposit, money transfer, small-size consumer loan, cash card and credit card [see **Exhibit 1**]. Its access channels included the Internet, dial-up, mail order, telephone and Automatic Teller Machines (ATMs); from November 2000 onwards JNB services were also available through NTT DoCoMo's i-mode mobile Internet service. Wired and wireless Net users could open accounts, check their balance and transfer money on-line, and would receive e-mail notification of the completion of money transfers. Customers had 24-hour access to their accounts through the Internet. The only physical channel was the JNB Head Office in Tokyo's Shinjuku Mitsui Building. Deposits and withdrawals of cash could be carried out through ATMs or the Head Office.

Soon after launch, JNB began to diversify into services other than basic bank transactions such as ordinary and term deposits. For example, it allowed on-line payment for bills and services of Tokyo Electric Power, Nomura Securities and Nifty Corp.'s on-line shopping mall.³ It also became the official bank of Yahoo! Japan.

2.4 Organisation and IT System

JNB maintained a flexible, flat, team-like structure. It had a very low cost base. It distinguished itself from traditional Japanese banks with a small and young (average age 33) workforce and one single physical office. By April 2001 it employed 52 full-time employees and around 50 part-time customer call centre staff. The full-time staff worked in three departments in charge of planning, information technology and sales respectively. The company emphasised the division of labour and the concentration of expertise. Miyai stressed that their management style was different from the top-down approach of traditional Japanese corporations:

When you take a look at the top-down kind of management, it is almost impossible for the top person to grasp or to understand everything that is happening in the field.

Therefore, JNB's department heads had to make important decisions, while the whole company still developed according to a unified strategy. This structure

³ The Nifty Corp., an Internet Service Provider, was owned by JNB stakeholder Fujitsu.

allowed for the contingency that, when one department met with a burst of workload, other staff who did not belong to the department, or even those who did not work in similar fields, would support the department under stress. This was what Miyai called JNB's "crisis management" or "risk management".

JNB also adopted a flexible, open information technology system, as Miyai claimed:

We have an open system at JNB which is probably unique in Japan. Only we can provide this kind of open system in a very inexpensive manner. ... If any modifications in service are needed, we can provide them very speedily.

JNB was developing an improved IT system with Fujitsu through the year 2000. The system would be divided into three parts. One was a normal banking IT system, like an accounting and loan system; the other was a management information system, including customer relationship management; and the third was a multiple channel customer interface. The building of JNB's IT applications was mostly outsourced under the supervision of IT Department staff.

3. Industry Background

3.1 The US On-Line Banking Experience

By March 2000, 97 US banks had fully transactional Web sites, showing how developed on-line banking was in that country. The first Internet-only bank in the world, Security First Network Bank, was started in the US in October 1995. Pure Internet start-ups were expected to have lower operation costs because they did not need to have physical branches. Internet banking could also save operating costs by reducing the inefficiencies of paper-drawn transactions, monthly statements, credit card statements and bills.

However, Internet-only banks lacked brand recognition and physical presence. By early 2000, Internet-only banks in the US were not doing well. Competition from existing banks was fierce. Estimates around that time showed that only approximately 10% of Internet users did any banking on-line. Internet-only banks had only 200,000 customers. Only 9.4 million people had ever banked on-line, and, of those, 3.1 million had discontinued the service, mainly because it was too time-consuming to use or because of poor customer service. US Net-only banks had also suffered from massive advertising fees. Many failed to make a profit to recoup their heavy investment costs in advertising and systems; some had been incorporated into banks that initially established them as independent start-ups, while others teamed up with other businesses to provide more value-added services.

3.2 New Banking Regulations in Japan

In 1997 the Japanese government began the famous “Big Bang” deregulation of the financial market; one of the resulting measures was that non-bank companies could become significant partners in financial ventures.⁴ Prior to that, the country had not issued a new bank licence for almost half a century. Among the new banks that appeared as a result were those that only had an Internet presence. JNB was the first of its kind to start operations. Sony Group and the retail giant, Ito-Yokado, were due to open Net banks in mid-2001. Sanwa Bank was planning to set up an Internet-only bank with three other companies in 2000 but withdrew later because of concerns over resources.

New banks in Japan were required by the authorities to make a profit within three years. JNB planned to meet the requirement through acquiring one million accounts in three years (a target also taken by US online banks to be a break-even point).

3.3 Consumer Banking in Japan

The value of financial assets held by Japanese individuals was close to ¥1,400 trillion by early 2001; more than half of this was deposited in private banks or postal savings accounts, which were managed by the Ministry of Public Management, Home Affairs, Posts and Telecommunications. With a population of approximately 125 million, this meant an average deposit of more than ¥5.6 million or about US\$47,000 per person. Many banks offered low interest rates of around 0.02% on ordinary deposits and 0.1% on term deposits.

Japanese did not use credit cards a great deal. By 2001, credit card purchases accounted for just eight per cent of consumer spending in Japan, compared with 14 per cent in Europe and 21 per cent in the US.⁵ Borrowing was considered shameful in a culture much bound by old concepts, so paying by credit card in public could be an embarrassment. Moreover, card companies offered inflexible payment terms;⁶ few provided revolving-payment schemes that allowed customers to keep borrowing as long as they made minimum monthly repayments. In many cases, credit card users could only repay in one go or in fixed instalments, and the culture

⁴ The new guidelines were announced by the ruling Liberal Democratic Party's Research Commission on the Finance and Banking Systems on 3 August, 2000, and were adopted by the Financial Reconstruction Commission (FRC) and the Financial Services Agency (FSA). The guidelines allowed the FRC and FSA to check the financial health of companies having equity stakes of 20% or more in banking subsidiaries. Even if major corporate stakeholders' stakes were less than 20%, they were subject to the authorities' inspection as long as they were deemed to be virtual parents due to their strong influence on a bank through such means as having representatives on its board.

⁵ The Economist (2001), “Finance and economics: A borrower be,” *The Economist*, 21 April.

⁶ Ibid.

was such that they preferred repaying card debts in one go quickly if they could afford it. Card companies therefore relied mostly on 2.5% vendor commissions for profits and earned little from interests. Their lack of good marketing accentuated the problem: although there were schemes involving credit card points, customers could only use their points to redeem low-quality gifts. The consumer loan market in Japan was doing much better by comparison, because its deals with customers were done with more privacy; it was worth ¥7 trillion by early 2001, double the market size of credit cards. But consumer loan companies charged interest rates as high as 20%.

Japanese consumers generally preferred to pay by cash or money transfers. As a result, the success of a Japanese bank relied heavily on its ATM services. Determining factors included whether the ATMs were conveniently located, whether they charged a small or no handling fee, whether they were open for long hours (the ATMs of most banks in Japan shut down at 7p.m.) etc. ATMs were widely distributed in Japan. There were 130,000 ATMs in the country, compared with 190,000 in the US, but Japan's land area was only 4% of that of the US.

On-line banking with limited services – as an extension of traditional banking – was already available in Japan in 1997 with Sumitomo Bank. Sakura Bank followed in 1998 and later Tokyo-Mitsubishi, Sanwa, Fuji and others started their own on-line services. All leading city banks offered on-line services by late 2000. The total number of Internet accounts at major commercial banks reached 1.4 million at that time.

According to a Nielsen/NetRatings report, the Internet population in Japan was some 38 million in January 2001, and 41% of them were active users. Another report said that about 100 million people in Japan, or 79 per cent of its population, would have access to the Internet in the fiscal year 2004.⁷ A study by Yankee Group in early 2001 found out that some 20% of all Japanese households had a (fixed-line) Internet connection at the end of 2000, less than the 50% Internet penetration in the United States.⁸ This was mainly due to high Internet access charges in Japan, which could be as much as ¥2,000 (about US\$17) a month by late 2000. Low penetration of fixed-line Internet connections had driven a lot of people to use i-mode, which could cost only about several hundred yens a month. I-mode was a cellular Internet service offered by NTT DoCoMo, allowing e-mails and other Internet functions to be carried out via handsets. It had more than 22 million subscribers by April 2001. In fact i-mode became so popular that Miyai once said:⁹

Internet banking is really “cellular banking” in Japan.

⁷ Japan Economic Newswire (2001), “100 mil. people forecast to have Internet access in FY 2004,” *Japan Economic Newswire*, 24 April.

⁸ Yankee Group (2001), “Residential Internet service providers in Japan,” Yankee Group press release, URL: <http://www.yankeegroup.com/webfolder/yc21a.nsf/press/A50DBCA80AD5B27D85256A4500551B4F?OpenDocument>, 8 May.

⁹ Rowley, A. (2001), “Sunny days for Internet banking in Japan,” *The Business Times Singapore*, 8 February.

However, analysts had pointed out that the Japanese banking culture was conservative and mistrustful of on-line transactions in general. Customers preferred bricks-and-mortar banks to give them peace of mind about where their money was kept. But younger people were more ready to embrace such services; in fact, young people in their 20s were a core customer group of i-mode.

4. Targets and Competitors

4.1 Results and Targets

More than 40 per cent of JNB's 130,000 customers in April 2001 were people in their 30s, and more than 32% of those were in their 20s. Seventy-five per cent were men, and more than 60% of the transactions were carried out between 5p.m. and 9a.m. [see **Exhibit 4**]. These figures suggested that the Bank attracted Internet-savvy young males who enjoyed the convenience of banking after working hours.

JNB's main profit source was interest on loans. Its business targets, to be achieved by financial year 2002, were to acquire one million accounts, ¥1 trillion of deposits and ¥84 billion of loan balance, and to begin making a profit. If JNB could achieve its targets, it would be as large as a midsize regional bank in Japan in terms of deposits.

JNB was confident of meeting its business targets. It said it would not repeat the failures of its US counterparts because ATMs, the predominant physical interface for Internet bank customers to withdraw/deposit cash, were much more widely distributed in Japan than in the US. Also, transferring money between banks in Japan, including JNB, was generally better developed and more efficient than in the US, because in the US transactions were predominantly done through credit cards or cheques while transactions through bank transfers took place frequently in Japan. As Miyai stated:

Japan is far advanced in the money transfer system [compared to the US].

This difference could mean a different fate for Japanese on-line banks, such as JNB, compared to their US counterparts.

4.2 Competitors¹⁰

4.3 Bricks-and-Mortar Banks

Although styling itself as the “first Internet-only bank”, JNB nevertheless had to compete in a crowded market among well-established bricks-and-mortar banks. To start with, banking habits and the conservative consumer culture in Japan gave bricks-and-mortar banks a leading edge. On the other hand, traditional banks provided a whole variety of value-added financial services, including consultations and foreign currency exchange. Moreover, traditional banks were making their services more convenient by installing more and more ATMs, and the major ones had also developed on-line services. The most important edge JNB had over its competitors seemed to be lower overheads, competitive rates, lower fees [see **Exhibit 3**] and strong alliance backing.

4.4 Sony Bank

JNB also needed to compete against new entrants that provided similar services. One of those competitors was Sony Bank (<http://sonybank.net/>), an Internet-only bank expected to start operation in mid-June 2001. Sony Bank Inc.’s capital, at ¥37.5 billion, was almost twice that of JNB, but it had a more modest target.¹¹ It promised to provide basic banking services (deposits, card loans, bank payments etc) at launch but would later develop services such as foreign currency deposits, credit cards and house loans. Although Sony Corp. was the predominant stakeholder with an 80% stake, the participation of SMBC (16%) and US-based JP Morgan Chase & Co. (4%) was also strategically important. Incidentally, SMBC was also the major stakeholder of JNB.

Sony Bank’s strategy was similar to that of JNB in terms of higher rates, lower fees, a small workforce and no physical branches. In particular, the new bank’s management stressed customised, one-to-one services. Sony Bank’s card loan interest rate would be around 6.5% and the one-year time deposit rate was around 0.5%. In the beginning the bank was expected to earn revenues chiefly from securities investments rather than its lending business; it planned to become profitable in three years. Customers of Sony Bank could use SMBC’s ATMs and ATMs at the “am/pm” convenience store chain as contact points. The bank also had plans to join up with the nationwide 25,000 ATMs of Japan’s state-run “postal-

¹⁰ Information about JNB’s competitors was obtained from press reports and the competitors’ Web sites.

¹¹ Target amount of deposits: ¥500 billion after three years and ¥1 trillion after five years of operation; target number of customer accounts: approximately 400,000 within three years and approximately 600,000 within five years.

savings system”. Customers did not need to pay ATM handling fees until the end of 2001, but the bank planned to charge ¥100 to ¥200 per usage from 2002. In addition, J. P. Morgan Chase would provide personal financial advice through the Web.

Sony Bank was obviously going to benefit from the Sony empire. Other arms and affiliates of the Sony Group, the businesses of which included electronic products, entertainment, life insurance and credit card loans, could potentially help in attracting clients. On-line purchases of Sony products through Sony-related Web sites could be done through Sony Bank's settlement services.

4.5 IY Bank

Another Internet-only bank to enter the fray was IY Bank, which began operation in May 2001. Its “Internet” was predominantly a sprawling ATM network, although Internet-based transactions would also be possible. It was expected to install round-the-clock ATMs in 3,650 Ito-Yokado supermarkets and Seven-Eleven convenient stores within two years of operation. IY Bank ATM network had linked up with Sanwa Bank, one of Japan's largest commercial banks; it also planned to link up with Asahi Bank, Shizuoka Bank and Yokohama Bank. It had already joined up with a combined network of nine city banks (called BANCS) and charged commission whenever a customer of another bank in the network withdrew money from an IY Bank ATM. IY Bank's deposit interest rate was 0.05%.¹² Sanwa Bank depositors could withdraw money via IY Bank ATMs free of charge initially and for ¥52 from December 2001 -- half the standard fee charged by other banks.¹³ Because it might take several years for IY Bank to establish its own customer base, the commission income from other banks would be a major portion of the bank's revenue.

The Ito-Yokado business group, the major stakeholder of IY Bank, consisted mainly of a supermarket chain and the Seven-Eleven Japan convenient store chain. It was Japan's biggest retail group, enjoying annual sales of more than ¥5 trillion (US\$42 billion) by mid-2000. The capital of IY Bank at start was ¥20.3 billion, with 51% from Ito-Yokado and 49% from Seven-Eleven Japan. Its capital was expected to expand to ¥60 billion within a year due to likely equity investments from Matsushita Electric Industrial Co., Itochu Corp., Sanwa Bank, Asahi Bank, Mitsui & Co., Hitachi Ltd. and NEC Corp.

IY Bank intended to be settlement-focused and would develop loan and card business and Internet-based services later. IY Bank planned to install 24-hour

¹² Jiji Press Ticker Service (2001), "IY Bank to Start Operations on Mon.", *Jiji Press Ticker Service*, 1 May.

¹³ Jiji Press Ticker Service (2001), "Sanwa Charges Less for Use of IY Bank ATMs", *Jiji Press Ticker Service*, 12 May.

ATMs at 3,650 stores under the group by spring 2002 and at 7,150 stores within five years of operation.

“We are targeting profitability in two years by taking advantage of the Ito-Yokado group’s existing customer base, which is 10 million customers per day, and its low-cost operations,” said Takashi Anzai, president of IY Bank.¹⁴ Toshifumi Suzuki, president of Ito-Yokado, said its break-even point would be 60-70 transactions per ATM per day.¹⁵

4.6 eBANK

Another Internet-only bank, called eBANK, was expected to start operation in June 2001. It would specialise in the settlement of payments for small-value online purchases worth up to ¥100,000, and would charge a lower commission than ordinary banks. eBANK was operated by Japan Electronics Settlement Planning Inc., which was formed by the trading house, Itochu Corp., and a group of companies in January 2001. By March 2001, its investors included Japan Telecom, Yamato Transport and Ericsson Holding International. Its capital was about US\$37 million.

4.7 The Power of Brand Name

A survey of Japanese Internet users between July and August 2000 asked respondents which Internet bank they would deposit their money in.¹⁶ The 3,825 respondents were mostly in their 20s and 30s, which was the market sector most attracted to on-line banking in Japan. 16.8% respondents said they intended to open accounts at IY Bank, 9.8% at Sony Bank, 6.3% at JNB and 3.7% at eBANK. Analysts said the results showed the power of the brand name of the company that set up the bank.

¹⁴ Uozumi, Daisuke (2001), “Ito-Yokado set to launch convenience-store banking,” *The Nikkei Weekly*, 7 May.

¹⁵ Ibid.

¹⁶ As quoted by Makato Sato (2000) in “New-style banks face tough road,” *The Nikkei Weekly*, 13 November. The survey was conducted by Japan Research Institute, an affiliated think tank of Sumitomo Bank.

5. Strategic Issues

5.1 Alliances

In the face of so much competition, JNB had the advantage of strong, broad, strategically important and multi-industry alliances [see **Exhibit 1**]. As president of (the pre-merger) Sakura Bank Akishige Okada remarked:¹⁷

JNB's strength lied in its alliance with many blue-chip corporations.

Miyai explained the importance of alliances in the following remarks:

What a bank can provide, as a matter of fact, is not so much different from that provided by other banks. ... So how can we differentiate ourselves from others? It's by having alliances with other companies.

It could be possible without alliances, just to start the bank itself. ... But [in that case] it would have been difficult to broaden or expand the business by leveraging the alliances' customer bases.

JNB had two kinds of alliances: shareholding alliances and non-shareholding alliances. As described previously, its shareholding alliances were top companies possessing huge customer bases. Since JNB could acquire customers through its alliances, it had relatively low reliance on mass-media marketing. Therefore, it had a low advertising budget – US\$8.3 million in the first year, about a third of the advertising expenditure of a bricks-and-mortar bank in Japan.

The other kind of alliance was not related to JNB through equity holding. For example, JNB was the official bank of Yahoo!Japan, and it had on-line payment agreements with Nomura Securities. These also offered channels to reach new customer bases and more marketing exposure.

5.2 Scalability vs Investment

Scalability was a major concern with JNB. As Miyai said:

In the Internet world, sometimes volume will increase rather abruptly by a great amount. ... The service could deteriorate as a result; how can we avoid that and maintain high service quality? It's one of the issues that we are facing. But probably, after some time, there will be fewer telephone calls. How can we control these things, and how can we invest accordingly?

The problem was that customer behaviour on the Internet was rather unpredictable. Demand might surge dramatically, like in the wake of a very successful marketing

¹⁷ As indirectly quoted by Susumu Maejima (2000) in “1st Internet bank makes its debut,” *Asahi News Service*, 12 October.

campaign or after the release of encouraging company news. The Company's IT infrastructure as well as human resources might have difficulty coping with a surge in demand, but customers would still expect high-quality service, including fast and convenient on-line connections. To prepare for such a scenario, the Company's operations needed be scalable to limits far above average – maybe ten times or more. It also needed to make accurate demand forecasts and build the necessary infrastructure in time for foreseeable increases in transaction volume in the future. On the other hand, it would be unwise for the Company to over-invest on scalability issues.

5.3 The Case of Schwab¹⁸

On-line brokerage firms in the US could illustrate the problems of scalability. Internet trading, even more than on-line banking, required reliable service and fast, safe, accurate, real-time transfers of information around the clock – a tall order indeed. The market leader was Schwab.com, the on-line trading arm of brokerage firm Charles Schwab Corp. Schwab.com was launched in 1996 and became the world's biggest on-line brokerage site. Its on-line customer assets were US\$418 billion as of March 2000, when on-line trades accounted for more than 70% of Schwab's total trading volume. It was handling an average of more than 380,000 trades per day for 3.4 million customers.

The years 1998 to 2000 were the better days of Internet business, during which Schwab had to deal with ever-increasing demand. In 1998, in part because heavy customer traffic at Schwab's Web site occasionally slowed down service, Schwab spent US\$324 million or about 11.8% of its revenue on upgrading its computer systems. But still, within the first two months of 1999, the brokerage firm suffered four site crashes, partly because of equipment malfunctions and partly because on-line trading volume exploded; other on-line securities firms also suffered similar service disruptions. The incidents made headline news and Schwab poured more money into building a more robust IT infrastructure. The company used to aim to be prepared for traffic peaks of three to four times its daily average volume, but by early 1999 it was already aiming for peaks of 10 times average volume. In 2000, Schwab spent US\$409 million or 58% of its overall capital spending on IT equipment. Its total IT expenditures for 2001 were initially expected to be as high as US\$800 million.

However, after the stock market stumbled and the US economy slowed down in early 2001, on-line trading volume at Schwab was down by about 30%;¹⁹ the company's earnings in the first quarter of 2001 fell by 68% compared to the same

¹⁸ Information used in this section was obtained from press reports and Schwab's Web site.

¹⁹ Although number of active accounts grew to 7.7 million and customer assets reached US\$805 billion.

period in 2000. In March 2001 it announced that it would lay off 11% to 13% of its staff, amounting to some 3,400 jobs. At the same time, all senior managers in the company received salary cuts of 5% to 50%. Schwab had also kept its IT expenditure in check: it was removing some of its servers by early 2001 (it used to install new servers daily when the market was at its peak), and had stopped further investment in its wireless trading product, Pocket Broker.²⁰ Yet it could not scale back too much. It had to provide new products and better services in order to survive, and all of that needed technology. It also needed to be prepared for unexpected surges in demand and a possible future market recovery. The firm was caught in a dilemma of scalability versus investment.

6. A Thorny Path to a Golden Land

Yoshiyuki Miyai knew that his job was not easy. He and his 100-strong staff had to fight like a David against Goliaths from the traditional banking sector, as well as newcomers backed by Sony and Ito-Yokado. He had to keep an eye on his company's internal organisation, making sure that both the IT systems as well as human resources were well prepared to respond efficiently to any ups and downs in the market. His company also needed to consolidate its alliances and made good use of them. Several on-line ventures had risen and fallen, and JNB might become just another failed attempt. If, instead, it grasped its opportunities, overcame all the obstacles and succeeded brilliantly, it would set the example of a completely new kind of winning business model for 21st Century Japan – the Internet-only banking model. Miyai's vision would then become the reality.

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²⁰ Ptacek, M. J. (2001), "Schwab tries to move forward as it cuts back," *The American Banker*, 6 April.

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Exhibit 1: Outline of Japan Net Bank²¹

Company Name: The Japan Net Bank, Limited

Capital: ¥20 billion

<i>Stakeholder</i>		<i>Per cent shares</i>
Sakura Bank (50%) (before 1 April, 2001)	Sumitomo Mitsui Banking Corporation (since 1 April, 2001)	60%
Sumitomo Bank (10%) (before 1 April, 2001)		
Fujitsu Limited		10%
Nippon Life Insurance Co.		10%
Mitsui & Co. Ltd.		5%
Nippon Telegraph and Telephone East Corp. (NTT East)		5%
NTT DoCoMo Inc		5%
The Tokyo Electric Power Co., Inc.		5%

(Sakura Bank and Sumitomo Bank merged on 1 April, 2001 to become Sumitomo Mitsui Banking Corporation (SMBC))

Directors and Employees:

Directors and full-time employees:	52
Customer call centre staff: approx.	50
Total: approx.	100

Number of Automatic Teller Machines (ATMs):

SMBC ATMs: approx.	7,600
“@BANK” ATMs in “am/pm” convenient stores: approx.	1,000

Business Hours: 24/7 on-line

²¹ As of end of March 2001 unless otherwise stated.

Products/Services: ordinary deposits, “Net” term deposits, money transfers, card loans, auto loans, on-line debits, cash cards, credit cards, e-mail notifications of transactions, real time e-passbooks, an e-mail magazine etc.

Access Channels: Internet, i-mode (a wireless Internet service), telephone, mail order, television

Business Targets: By Financial Year 2002, to gather 1 million accounts, ¥1 trillion deposit

Balance and ¥84 billion loan balance, and to begin making a profit

Exhibit 2: Profile of Japan Net Bank Stakeholders²²

Sumitomo Mitsui Banking Corp. (SMBC, www.smbc.co.jp, 60% stake)

The result of a merger between Sumitomo Bank and Sakura Bank, effective from 1 April, 2001, SMBC was among the largest banks in the world, with more than US\$940 billion assets and deposits amounting to around US\$590 billion. The bank provided commercial and investment banking services, including credit and equity derivatives, loan trading and financial advisory services. As of 1 April, 2001, it had 27 million accounts, 578 domestic branches and approximately 7,600 Automatic Teller Machines (ATMs) in Japan.

Fujitsu Limited (www.fujitsu.com, 10% stake)

Computers and information technology accounted for more than two-thirds of sales of Fujitsu Limited. The company was one of Japan’s top two PC makers and a leading maker of servers, software, storage devices and peripherals such as printers and scanners. Its information technology services included systems installation and management. The company also made communications systems, consumer electronics, semiconductors and electronic components. Fujitsu reported consolidated revenues of ¥5.48 trillion for the fiscal year ended 31 March, 2001. It consisted of 517 consolidated subsidiaries with operations in more than 100 countries. Its subsidiary, Nifty Corp., was an Internet Service Provider that offered a comprehensive Internet service called @nifty. @nifty’s sites and services included e-commerce portals, forums, auction sites, member homepages and Internet access. As of January 2001, @nifty had 4.4 million subscribers.

²² Compiled from *Hoover's Company Profile Database*, *Nelson's Public Company Profiles*, *The Major Companies Database*, *Worldscope-International Company Profiles* and press reports.

Nippon Life Insurance Co. (Nissay, www.nissay.co.jp, 10% stake)

The world's third-largest insurance company, Nippon Life Insurance's revenues for the fiscal year ended 31 March, 2001, were more than US\$82 billion. It was also the world's largest institutional investor for asset management for long-term and stable returns. Its products included individual and group life insurance products. It also partnered with such firms as Deutsche Bank and SMBC to offer investment trusts, personal lending and other services. By the end of March, 2001, the company was setting up a joint venture with several other companies to boost sales, create computer systems for insurance services and rationalise agency networks. Other businesses included real estate development and management. It had 13 million clients.

Mitsui & Co. Ltd. (www.mitsui.co.jp, 5% stake)

Japan's largest "sogo shosha" (general trading company) and part of Mitsui "keiretsu" (network of loosely affiliated firms), Mitsui & Co. acted as a go-between for buyers and sellers who imported or exported goods. It was an integrated trading company promoting trade and industrial development globally; its vast range of activities covered many industries. It had a comprehensive global network including 549 consolidated subsidiaries, 282 in Japan and 267 abroad. Its subsidiaries and affiliates traded a diverse group of products, including industrial machinery, steel, petrochemicals, food, soft drinks, computer hardware, medical equipment and textiles. Its total transactions in the fiscal year ending 31 March, 2000 was US\$110 billion. Mitsui & Co.'s largest revenues were generated from trading in the machinery and energy sectors, but it was looking to increase its biotechnology and IT investments. One of its subsidiary business was the Curiosity Internet shopping mall. Mitsui & Co. also owned 13.2% of the shares of DoCoMo AOL (formerly AOL Japan), an Internet access provider with 500 thousand subscribers.

Nippon Telegraph and Telephone East Corp. (NTT East, www.ntt-east.co.jp, 5% stake)

NTT East and NTT West were both regional telephone companies in Japan. They and NTT Communications Corporation, a long-distance carrier, were all entirely owned by holding company NTT Corp., which was the largest telecommunications company in Japan and one of the largest in the world. NTT East mainly provided fixed-line telecommunications in the eastern areas of Japan for 27 million clients. NTT Corp. itself was a giant, doing everything from telephone and mobile services to ISP business and data systems, with sales in 2000 approaching US\$98 billion. NTT Corp. was 46% state-owned.

NTT DoCoMo, Inc. (www.nttdocomo.com, 5% stake)

Formerly NTT Mobile Communications Network, DoCoMo was established by NTT Corp. in 1991 as NTT's wireless subsidiary. By 2001 NTT still owned 67.1% of that enormously successful public company. It had 32 million mobile phone subscribers, amounting to more than 50 per cent of the Japanese market. DoCoMo also offered paging, maritime and in-flight phone services, and sold handsets and pagers. The company gained even more phenomenal success with the wireless Internet service i-mode; i-mode was rolled out in February 1999, and by April 2001 had more than 22 million subscribers. DoCoMo was busily expanding its worldwide business in 2000 and 2001, hoping to establish i-mode style services in the developed world. Moreover, it would be pioneering the powerful third-generation (3G) mobile phone service in the world as it planned to launch the first 3G service by October 2001 in Japan. 3G enabled fast download of large amounts of data, so that users could even carry out face-to-face teleconferencing through mobile screens. DoCoMo also owned 42.3% of the shares of DoCoMo AOL, an Internet Service Provider (formerly AOL Japan). DoCoMo's sales figure in the fiscal year ending 31 March, 2000, reached US\$30 billion.

The Tokyo Electric Power Co., Inc. (TEPCO, www.tepco.co.jp, 5% stake)

Tokyo Electric Power was the world's largest private electric power company, serving 26 million customers in Japan's Kanto area, including Tokyo. To diversify its operations as deregulation opened up part of the market to other electric suppliers, by 2001 TEPCO was moving into telephony and Internet services. It owned a major stake in Tokyo Telecommunication Network (TTNet), which provided local and long-distance phone services, and had partnered with nine other Japanese electric power companies to create PNJ Communications, a potential rival to NTT. TEPCO's revenues in the fiscal year ending 31 March, 2000, stood at more than US\$40 billion.

Exhibit 3: Selected Fees and Rates of Japan Net Bank²³

Products/Services			Japan Net Bank	Average of City Banks (**)	Notes
Ordinary Deposit		%	0.050	0.022	
“Net” Term Deposit (1 year)		%	0.200	0.073	The quoted City Bank rate was for Super Term Deposits (1 year, less than ¥3 million)
Charge of Fund Transfer to Other Banks (*)	(less than ¥300,000)	¥	168	420	City bank transfers could be done through Telegraphic transfer ATMs by cash
	(less than ¥300,000)	¥	262	630	
Charge of Fund Transfer within Japan Net Bank (*)	Internet	¥	52	105	
	i-mode	¥	10	N/A	

* No need to pre-register remittees;
Transfer charge might be reduced depending on the customers' whole transactions.

** From media information.

ATM Charge:

Deposits: Free

Withdrawals: (up to 3 times*** in the same month): Free (after the fourth time*** in the same month): ¥157

***Additional free charge benefit might be granted depending on the customers' whole transactions.

Collateral-free Card Loans: maximum borrowed amount: ¥500,000; interest rates ranged from 10.5% to 13.5%.

Account Maintenance Charge:

¥1,050 per month UNLESS Average deposit balance of previous month was more than ¥300,000, OR

Total amount received by the account within the last three months was more than ¥300,000, OR

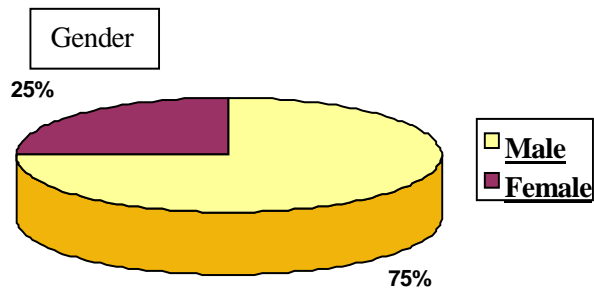
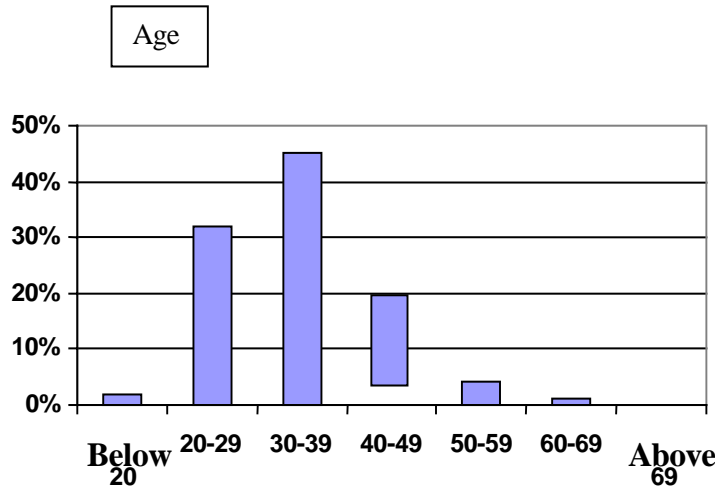
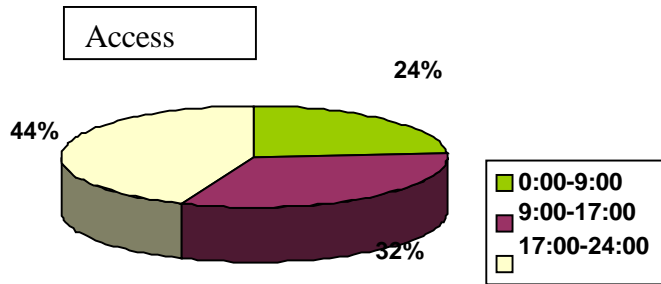
Loan balance at the end of previous month was more than ¥50,000

²³ As of 17 April, 2001.

Exhibit 4: Customer Profile of Japan Net Bank²⁴

Number of Accounts: 130,000

Breakdown:



²⁴ By 12 April, 2001.