Case 9

ON-LINE BROKING STRATEGIES: MERRILL LYNCH, CHARLES SCHWAB, AND E*TRADE*

The downturn of 2001 plunged the on-line brokerage industry into its first major crisis. The industry's previous five years of phenomenal growth, in volume of on-line accounts and stock trades, came to an abrupt halt. As the decade long bull market stalled, order volumes plummeted causing competition to intensify. The transition from boom to bust had especially dire implications for the new on-line brokerage firms. In the early years of the Internet, from 1996 to 1998, Internet share trading posed a major threat to the incumbent brokerage firms. The Internet offered a new channel for individuals to trade stocks and shares with the obvious attractions of transaction efficiency, twenty-four hour trading and real time provision of stock market information. The very survival the existing broking firms was brought into question and massive upheavals seemed likely in the traditional broking industry. Yet, despite the influx of new Internet brokerage firms—especially in the US where more than 150 had entered by the year 2000—few traditional brokers disappeared. Instead the market expanded as new customers appeared and private clients increased the frequency of their trading. Incumbent broking firms began to adapt to the new channel provided by technology and exploit the changing market, with some success. By the start of the downturn, the industry looked very different from that of the mid 1990s. It also faced very different challenges: survival not growth was now the key issue.

By 2001, there were three major categories of player competing in the brokerage industry—all of which had entered into Internet trading, though sing different strategies. Among the traditional full-services brokers, Merrill Lynch ("Merrill") was pre-eminent. For over a century, Merrill operated as a successful full service brokerage firm, offering a high class service that includes advice on investment choices, to seriously rich clients. Merrill added an on-line service in 1999. During the 1970s, a new type of brokerage company, the discount brokers, emerged to challenge the traditional full-service firms. Charles Schwab ("Schwab") was the pioneer of the discount brokerage model and by far the most successful of the discount brokers. Investors were left to manage their own investments, with Schwab offering various customer services like stock market information and a cut price trading service. Schwab was greatly experienced in developing new channels to its clients and advisors, introducing PC-based on-line trading in 1984, and in 1996 starting a range of telephone-based services and Internet on-line trading. During the 1990s, the revolution in communications technology created a new type of broker. E*Trade was the pioneer of Internet on-line broking—a mode of securities trading that offered

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massive cost savings as well as convenience for investors. By 2001, E*Trade and other Internet brokers had gained a major share of the retail brokerage business, primarily in the US, but increasingly in Europe, Japan and other advanced economies too.

The weakening economy and stock market correction of 2001 was a shock to the industry. For Merrill, which added its on-line service late, as an add-on trading and communications channel for existing clients, the drop in volume sales was likely to be less of a threat than for Schwab and E*Trade, which had embraced Internet share dealing more fully. For Schwab and E*Trade, the reduction in trading volumes was serious. Their future profitability was closely linked to continued transactions growth. The downturn would adversely affect both revenues and their relative costs. If the downturn of 2001 marked an end to the long running bull market, it remained to be seen whether a strategy that was successful in the golden years of 1991 to 2000 could weather hard times. During 2001, all three companies were forced to reassess their strategies in the light of the changing industry environment. Underlying these reconsiderations was the fundamental issue of which business model was likely to be most successful within the brokerage industry in the future,
and whether all three business models could co-exist through focusing upon different customer segments?

THE IMPACT OF THE INTERNET ON THE BROKERAGE INDUSTRY

It is not difficult to understand the optimism of the early forecasts for on-line share dealing. Many of the key characteristics of the Internet made this channel look attractive for share trading. It offered many new ways to communicate and provide information—a key element of brokers' service offerings. Since securities broking involved no shipment of physical goods—it was even possible to dispense with paper documents—the Internet provided an ideal medium for the industry. The ability to reach anyone with access to the web made trading available to a vastly expanded set of potential customers. The ability to simplify transactions through electronic capture and transmission of transaction data offered cheaper administrative costs and hence lower fees for execution of trades. Lower transaction costs made it possible for brokerage companies to make money from investors with low levels of net worth and small securities portfolios. The greatest virtue of the Internet – its ability to disseminate information to any number of individuals simultaneously and almost instantaneously – proved of great value. Real time stock market information for example, previously only available to professionals could be made available to everyone. The growth in the range and scope of information provided both by on-line brokers to clients and by investors to other investors was one of the most extraordinary phenomenon of the on-line broking sector. The distributive power of the Internet was also a source of new investor benefits—they could download software tools, like portfolio management packages, that help them manage their own investments.

During the late 1990s it seemed that this new channel would create major upheavals in the brokerage industry. It was destined to alter the balance of power in favor of the customer and challenge the traditional giant broking firms like Merrill. However by mid-2001, the brokerage industry has evolved in some unexpected and intriguing ways.

Emerging Customer Segments and Business Models

After more than five years experience of on-line trading a number of new customer segments had emerged to join the original group of high net worth investors. The mass affluent—generally defined as those households with at least $100,000 (£70,000) to invest—became identified in the late 1990s as a potentially lucrative market. More than 10% of all households in developed economies fall into this category. In the US, rapid growth in the number of individuals opening brokerage accounts resulted in at least half the population having investments in the stock market. The growth in the number of small investors was accompanied by the development of websites such as www.fool.com, www.stockhouse.com, www.moneyextra.com, that not only offered stock market information and comment but also created chat rooms for their registered visitors. The ordinary investor could now talk to others, exchange experiences, and access up-to-the-minute company information and expert analysis. The result was growing fragmentation of the brokerage market. Customers could be segmented not just by net worth, but also by their investment styles and investment needs in terms of information and support services. How best to service each of these segments to meet their needs and generate profits for the broker was an open question.

The changes in the market—in particular, the rapid growth in the number and types of individual investors—was partly a result of the economic expansion and political changes during the 1990s[1] and partly a result of the strategies adopted by the brokerage firms. Until the 1990s, the industry had been dominated by a single business model associated with "full service" provision through brokers located in retail offices. The customers were primarily affluent individuals who were supplied with tailored services that comprised personalized advice on investment strategies and individual investments. This advice drew upon sophisticated, in-house analysis of companies and their securities. Clients were assigned to individual brokers who were responsible for managing their clients' portfolios, executing their instructions, and providing investment advice. The basic service differs little between brokerage companies. The main differences lie in clients' perceptions of their credibility and expertise. For these "full service" firms, retail broking is only one component of their business. Most are investment banks offering multiple services to corporate clients. Private client broking can be valuable as a distribution channel for new stock and bond issues underwritten by the bank. Retail clients are charged fees that tend to be based on accounts rather than trades. Revenues come from the yearly commission per account based on asset value, interest earned on cash kept in accounts, and other commissions from executing trades.

The on-line brokers adopted a very different strategy which involved offering the basic support services that their customers to manage their own investments and execute trades as specified by the client. This was, essentially, a "do-it-yourself" model of investing. Contact with the company was mainly on-line. Customer support included information and software investment tools. The foundation of this model was technology—for the on-line brokers to succeed required customer confidence in the reliability and security of the IT systems that executed trades and delivered customer support.

In between these two distinct lay a spectrum of alternatives with levels of personal service that varied from web-based support and telephone advisors to face-to-face contact with brokers. The discount brokers have led the way in developing these models. Discount brokers that emerged during the 1970s and 1980s offering a variant on the traditional model—fewer research and advice services in return for lower commissions. However, like the full service brokers, they provided their services through brokers located in local retail offices. The emergence of internet and digital telephone services allowed the discount brokers the opportunity to diversify their communication and transactions media through the addition of Internet links and automated telephone service. Figure 1 depicts the different business models.

[Figure 1 about here]

While the major traditional brokers were also investment banks, discount and on-line brokers were essentially distributors of financial products. For these companies, income derived from three main sources: commission on trades, interest income derived from the difference between interest payments to clients on their cash balances and the interest earned on margin loans, and a portion of the market-makers bid-ask spread. Total income, therefore, was significantly affected by trading volumes and size of clients' investment assets. For discount brokers total income was also affected by commission rates which varied between their different service channels and service levels.

Technological advance tended to increase the cost efficiency advantages of the on-line model over the traditional model. The on-line brokers were pioneering the integration of client transactions with market execution.. Direct Access Trading ("DAT") represented the next generation of on-line trading that allowed for direct and instant market access. DAT allowed a client to trade directly with an exchange such as NASDAQ or through an Electronic Communication Network ("ECN"), where the latter were essentially private trading systems that potentially could provide the platform for global access to 24 hours-a-day, real-time trading.[2] ECN's already competed with the traditional exchanges, where they accounted for approximately one third of total share volume and 40% of the dollar volume traded in Nasdaq securities and around 3% of total share and dollar volume in listed securities.[3]

Successful strategies for on-line Internet brokers?

By 1998, the future of on-line trading looked assured. The volume of on-line securities trading was growing rapidly and a broad measure of consensus existed regarding the conditions for success for an Internet brokerage firm.

Like other dot.com companies of that period the early Internet on-line broker entrants were obsessed with the critical need for rapid growth in customer accounts. The argument for this strategy was based on solid grounds. The automation of transaction processing resulted in high fixed costs but relatively low marginal costs; hence economies of scale were substantial. As the volume of transactions increase so these fixed costs were spread over a larger volume of business, hence marginal costs also fell. In addition there was the critical mass argument. On-line brokers derived substantial revenue from sources other than trading fees. These non commission revenues grew with the number of accounts, admittedly at a diminishing rate. However, marginal costs were also decreasing—usually at a faster rate. Various estimates attempted to find the critical number at which revenue/account exactly balanced cost/account. At this point the broker could be profitable with zero commissions, i.e. free trading. It was thought that the firms that achieved this first would be in a dominant position. This led to further speculation that only a small number of on-line brokers would survive when this point was reached. These considerations fuelled a battle for market share in which all the on-line brokers spent hugely on marketing to obtain brand recognition and build market share. Evidence suggested that spending on marketing did yield results in terms of growth of customer accounts.

Price competition was fierce in the early years. For example, E*Trade cut commissions seven times in the four years up to 1998. The lower costs of transactions on-line made this possible but the strong belief in the need to maximize volume growth fuelled the entrant firms' commitment to this policy.

Despite the intensity of competition in both advertising and commission rates, the potentially disastrous effects of this competition was offset by the rapid growth of the market. Most of the accounts opened by the on-line brokers were to new investors—but how long could this growth continue? Most forecasts of the growth of on-line securities trading were based upon projections of the number of Internet users. The exponential growth of Internet use during the latter half of the 1990s resulted in expectations that provided internet securities transactions would also follow an exponential growth trend for the foreseeable future (taken to be around 2002).

The critical role that technology played in supporting on-line transactions was recognized early by the on-line brokerage firms. Customers valued security, reliability, speed, ease of use and integrity of data records. System failure for any reason could be a major factor in losing clients. The choice between building systems in-house or working with an IT vendor could affect success in two ways – performance and capital cost. This was a resource that received much attention.

In the same way that quality of service was a key success factor for full service brokers, on-line brokers also accepted the need to compete on was added value services like provision of information, new products and software tools to help portfolio management. The only difference was that these services were web-based.

THE THREE COMPANIES

Until the downturn of the global equity market at the beginning of 2001, the three companies, Merrill, Schwab and E*Trade, prospered (Exhibits 1.0, 2.0 & 3.0). The threat to the traditional broking industry had not developed as expected; instead new on-line business models appear to co-exist successfully with full service broker models. In the following section, we describe recent developments at each of the three brokers.

Merrill Lynch

The investment banking giant, Merrill Lynch & Co., Inc, traced its origins back to 1820. It had offices in 44 countries and total client assets of around $1.6 trillion. Merrill was a late convert to the Internet. For several years it seemed trapped on the horns of a dilemma. If it did not offer on-line trading it would continue to lose clients to the on-line brokers. If it did offer on-line trading, what would become of its army of 17,000 brokers and how could it hope to maintain its client fee structure for its traditional broker service? It was not until the hiring of Michael Packer, a former senior executive at Bankers Trust, as a technology consultant that the firm overcame its paralysis and began to embrace the Internet. A group was formed with the mission of developing a technology-based system for retail broking to be in place by the end of 1999.[4] The group was led by another new hire, John McKinley from GE. Momentum gathered and progress was helped along by the acquisition of D.E. Shaw's discount brokerage in early 1999. By December 1999, the new web-based product was complete.

For Merrill, the opportunity provided by the Internet was two-fold. Development of on-line services enabled it to retain its existing client base as well as attract new clients from the fast-growing affluent customer segment and additionally, the spill-over effects of embracing Internet technology were significant for Merrill's institutional business. Merrill offered two main on-line services: Merrill Lynch OnLine® and Merrill Lynch Direct™. The former service offered clients, by its own admission, the best of both worlds – the convenience of on-line account access and the advice of a Merrill Lynch Financial Advisor. The latter service offered on-line transactions, but without the advisory service. Product pricing was simple: for fee-based, full-service customers using Merrill Lynch OnLine, trading was free; while for clients of Merrill Lynch Direct, the cost was $29.95 per trade for US equities. Table 1 compares the fees of the three brokerage firms. Clients could also have on-line access to cash management services and Merrill's research. For Merrill's full-service customers, a fee was charged at a rate of 1% of equity and mutual fund assets and 0.3% of cash and fixed income assets. The rates declined with increasing asset size. The minimum annual fee was $1,500. In return, clients received a personalized service from a Merrill financial advisor as well as unlimited broking transactions at no additional charge, where orders can be placed via a consultant, the telephone or Internet.

[Table 1 about here]

Technology

Merrill offered a variety of sophisticated tools, such as personalized Watch Lists and securities trackers. Clients could also consolidate information from all their financial service providers on My Financial Picture, which provided an easy way of sharing this information with their adviser to enhance the level of advice and guidance received. Research and information could also be received as a wireless service from Merrill Mobile. Given that new customers were likely to be drawn to the Merrill Lynch Direct service, Merrill offered the Merrill Lynch Educational Channel on its web site, to afford investors the opportunity to learn the basics of financial planning and investing.

Partnerships

Given that Merrill was already a full-service broker, which was part of a larger investment banking group, its on-line services were developed internally for the most part. However, at the end of 2000, Merrill outsourced its mortgage origination and servicing operations to Cendant on a private label basis to provide an enhanced array of services to its clients nationwide. May 2001 further saw a new UK on-line banking and stockbroking joint venture between Merrill Lynch and HSBC—one of the world's biggest banks.[5] This service was targeted at the mass affluent, self-directed investor, where potential investors with a minimum investment amount of £10,000 in cash and securities. Clients were offered access to their accounts on-line and by telephone, as well as through a physical network of investment centers. Merrill aimed to become a broad-based provider of financial services to its retail clients. To this end it worked with a variety of partners to encourage cross-selling of its own financial services and offerings from partners. The rewards program linked to its Visa Signature card offered discounts on goods and services from its partner companies together with the added benefit of reward points. Similarly, through its on-line service, Merrill offered clients similar partner offers.

Responding to the Market Downturn

Merrill was one of the most successful and largest securities houses, with group net earnings of nearly $4 billion in 2000 (Table 2). The market downturn of 2001 soon forced Merrill to downgrade its earnings forecasts. At the end of June it announced that its second quarter revenues would be approximately 15% lower than those of its previous 2001.[6] However, Merrill was not as vulnerable to a fall in trading volume as other brokers since its pricing system was based on fees linked to portfolio value rather than charge for specific transactions.

[Table 2 about here]

However, the likelihood of prolonged market weakness encouraging Merrill to question its on-line strategy. On-line broking had been offered as part of a market segmentation approach: Merrill was offering Internet-based enhancements to its traditional customers while targeting Merrill Lynch Direct at a new customer segment where it competed directly with other deep-discount, on-line brokers. What were the strategic options facing Merrill? Should it continue with a market segmentation approach targeting both affluent and mass market customers, even if its discounted on-line service threatened its traditional advisory business? Or should it re-focus on its wealthiest clients, those with $1 million or more to invest, and offer on-line broking simply an add-on transaction channel for these clients? According to a report published by the firm in May, the wealth of high net worth individuals around the world rose 6% to $27 trillion in 2000, despite declines in global equity markets.[7]

Charles Schwab

Charles Schwab was incorporated in 1971 and entered the discount brokerage business in 1974 prior to the SEC's (US regulatory body) abolition of fixed commissions in 1975. Always a leader rather than a follower, Schwab began on-line trading in 1984, although it didn't go live with Internet trading until 1996. By 2001, Schwab held more than 7.2 million active customer accounts with total assets worth $805.8 billion at the end of March 2001, and of these, around 4.1million accounts are on-line with 81% of total trades conducted on-line. With a US branch network of 398 offices, Schwab has continued to expand both its product range and geographical coverage—it launched its Australian subsidiary at the end of 2000.

Schwab pursued a multi-channel strategy, aimed at providing a wide selection of choices for its clients' investment needs through on-line and telephone broking as well as a personal broker service provided by its network of offices. Telephone access was in two forms: automated telephone channels or through a service that allowed customers to talk to a firm representative. The latter was organized through five regional client telephone service centers and two on-line client support centers that operated both during and after market hours. Automated services include Telebroker®, which was Schwab's touch-tone telephone quote and trading system, and Schwab by Phone™, which was Schwab's voice recognition quote and trading service. On-line broking services for retail clients were via www.schwab.com, although there was also CyberTrader's integrated software-based trading platforms for highly active investors as well as a wireless service, PocketBroker™.

The launch of Internet technology provided Schwab with an opportunity to tap into new customer markets while maintaining telephone and branch-based service. The effectiveness of its "bricks-and-clicks" strategy is indicated by the fact that over 70% of new accounts were opened at its individual. Customer education was a key component of Schwab's on-line offering. WebShops, which were introduced in 1999, were the first in a series of educational workshops designed to help investors increase their skills in using Schwab's on-line services. In mid 2001, Schwab had offered approximately 2,700 WebShops, teaching investors how to invest on-line. A recent variation on this theme was the Schwab Gift Package, which combined an educational toolkit with a low-minimum balance brokerage account designed for young people.

However, while continuing to attract new investors, Schwab was re-orienting its customer focus increasingly on the growing numbers of "mass affluent" individuals both in the US and overseas, where surveys showed that up to a quarter of mass affluent investors were prepared to make their own financial decisions with little or no advice, with almost half of these wired to the Internet.[8] Since the launch of its Signature Services program in 1999, targeted at mass affluent investors, Schwab had designed a new annuity product, which was intended as a retirement supplement for clients who had maximized contributions to individual retirement accounts (IRAs) or 401K accounts. SchwabAdvisorSource, was also launched, which refers customers with more investable assets who seek a higher level of investment advice. In this case, clients needed a minimum of $100,000 to use the service, which offered referral to over 400 advisers. More than 16,000 new and existing clients were referred in 1999 alone. Schwab's up-market movement was reinforced with : its acquisition of US Trust, the America's leading specialist private bank. However, this acquis ition also created overlap between US Trust's private banking services and Schwab's investment advisory services to affluent individuals. Schwab's investment advisory services included custodial, trading and support services that were offered to about 5,700 independent investment managers who together guided the investments of around a million Schwab accounts containing $224.2 billion in assets at the end of March 2001. Schwab's ability to appeal to affluent investors remained an issue. A recent survey by Siegelgale, a New York branding and marketing strategy agency, showed that Schwab's appeal dropped off among the wealthiest clients – it ranks first in households with income between $35,000 and $74,000, but only ninth in households with incomes of $75,000 and over.

Technology Strategy

Technology was at the core of Schwab's on-line strategy: it provided the basis for Schwab's extension and improvement of its service offerings such as Mutual Fund One Source, which made available nearly 1300 funds with no-load, no-transaction fees from around 250 fund families. The Analyst Center connected customers to proprietary and third-party investment research and decision-making tools, while the Mutual Fund Performance Profile allowed customers to analyze the performance of their entire mutual fund portfolio. A new strategy called Core & Explore further enabled customers to build a core portfolio of index mutual funds and, as they became more knowledgeable, they could explore actively managed funds. A recent development during the first quarter of 2001 was StockExplorer, an on-line screening tool which enabled clients to identify equities that met certain screening criteria according to the investment strategy selected. This tool that mimicked the advisory function of a personal broker.

At the same time, systems had to respond to the challenge of varying capacity demands. 1999 was a major growth year for Schwab, with total customer assets up 48% on the previous year to $725 billion and with the number of new accounts expanding by 1.5 million to reach a total of 6.6 million accounts at year end. This growth was necessitated $126 million investment in information and communication systems which doubled transactions processing capacity as well as enabling the web site to cope with a single-day record of 78 million web site hits in December of that year.

It is not surprising that, given Schwab's focus on multi-channel delivery, the company tended to focus on internal development of its technology to ensure high levels of control and integration. Its recent move to collaborate with outside providers was justified by Schwab's need to enhance existing services, such as its MyAccounts service which utilized technology from Yodlee Inc. to aggregate on-line financial information for clients and enable them to analyze and manage that information within one password-protected site. Similarly, iPhrase, a provider of the first dynamic website navigation and precise search platform, was selected by Schwab to be used on the company's web sites in an attempt to make the information provided by Schwab easier to access by its customers. Most importantly, Schwab entered into a technology alliance with Ericsson in 2000 to develop wireless trading applications. In fact, Schwab has led the way in committing to the development of wireless broking, believing that wireless services will take off once devices can be "always on" with GPRS (General Packet Radio Service) instead of users having to dial up for access. "We don't think there will be such a thing as a wireless investor. It will not be the only channel. It will be part of an integrated channel concept –

people want to be able to access services when, where and how they want." Robert Sofman, senior VP of global wireless at Charles Schwab.[9]

Strategic Alliances

Between 1999 and 2001, Schwab became more active in forming partnerships and alliances with other companies. Myschwab.com was created in collaboration with the leading portal, Excite, in 1999 to offer a free personal web page service, where customers could create a customized web site. This was followed in October 2000 with Schwab forming a global alliance in October 2000 with AOL: Schwab offered investment tools and information to several AOL brands, while Schwab sought to attract new clients from among AOL's 28 million members using special offers, incentive awards, and promotions. Schwab further formed a strategic alliance with E-LOAN Inc. to provide mortgage products to its on-line clients. Earlier in 2001, it also entered into a joint venture with rival broker, TD Waterhouse, to engage in securities market-making in the UK through the acquisition of a mid-sized UK marketmaker, the Glasgow-based Aitken Campbell for £60million.

Responses to the Market Downturn

Weakness in equity markets tend to negatively impact mass-market retail brokers that brokers that focus upon wealthier private clients. Small investors tend to have less diversified investment portfolios and are more likely to withdraw from equity markets in a downturn. Schwab, whose success was based heavily upon the huge expansion in the number of small investors during the last two decades of the 20th century, was particularly vulnerable to declining equity markets. Falling trading volumes during 2001 hit Schwab financial performance heavily: trading revenues in the first quarter of 2001 were down 51% year-on-year, with total revenues down 30%. (See Tables 3 and 4).

[Tables 3 and 4 about here]

Schwab began encouraging its employees in February 2001 to take time off in an attempt to avoid layoffs. Fridays were abolished for three weeks, with half of Schwab's 26,000 employees told to start their weekends early with days off taken as holiday or unpaid leave.[10] By March, however, the trading situation had worsened and Schwab announced that it was going to fire 13% of its employees and, through layoffs and attrition, the workforce was cut by 14% to 22,597 during the first half of 2001, the biggest layoffs occurring in the call centers. Schwab also announced proposals for reducing lease commitments for office space, as well as removing from service some certain systems hardware. Charles Schwab and 750 of his top managers were not exempt from the cutbacks: all received salary cuts of between 5% and 50% for January and February. The one exception to all this was the marketing budget; it was reported that Schwab is still going to spend the same amount on marketing in 2001—around $330million—as in the previous year.[11] Given that client daily average trades continued to go down, with trading volume in the first eight days of June down 21% from May, the company was forced to consider the need for a more radical and permanent downsizing of its operations.

The severity of the downturn in Schwab's business brought into question the robustness of its strategy. Schwab had pursued a successful multi-channel strategy, where the use of technology has been central to its strategy of enhancing its offering to a broad segment of investors. Its current positioning towards the mass affluent investor did, however, carry risks. Could Schwab differentiate its service offering further and obtain higher fees from a more select and stable investor base, or would it get "stuck in the middle" in between Merrill Lynch (and other full service brokers)at one end of the investor spectrum and E*Trade and the deep-discount brokers at the other end of the spectrum, where price competition was ferocious?

E*Trade

E*Trade was the pioneer of Internet trading and a "pure play" entrant. Its success had been rapid: transaction revenues were over $739 million in 2000 (Table 5) and the company had enhanced its respectability with transferring its listed from the Nasdaq to the New York Stock Exchange early in 2001, less than five years since its IPO on August 16, 1996. From a mere 91,000 customer accounts at the time of listing, in March 2001, E*Trade reported over 3.7 million active customer accounts, total customer assets of $47.9 billion, and 3,800 employees. Growth had been explosive—the number of customer accounts had almost doubled during 2000.

The company launched its new financial portal site, Destination E*Trade, in late 1998 along with a "state-of-the-art" new customer support centre. Convenience of access had always been a priority of E*Trade, where customers could access the system through the Internet, CompuServe, Prodigy Internet, Microsoft Investor, WebTV, direct modem connection, and TELE*MASTER®—their proprietary touchtone and speech recognition telephone investing system. With the opening of the E*Trade Knowledge Centre in 1999, E*Trade directed its attention to younger customer who were new to investing. There were two types of accounts: an E*Trade account or a Power E*Trade account; the latter designed for more active investors where commissions per trade declined with the frequency of transactions down to $4.95 per trade for 75 trades or more per calendar quarter. However, like Schwab, E*Trade sought to extending its money management services. It acquired Private Accounts to provide low cost, direct access to nationally-recognized money managers and timely access to portfolio information. It also launched E*Trade Personal Money Management, an online investment resource that allowed investors to search for, compare and hire professional money managers via the Internet. It was available at a low cost to customers with a minimum of $100,000. The OptionsLink service was also launched in early 2001. This provided employees with a means to exercise stock options through activating a margin account and conducting cash exercises on margin, thus helping those who do not have the required funds to exercise their stock options without any cash outlay.

E*Trade was heavily dependent on revenues from brokerage commission, and vulnerable to any downturn in trading volume since its low commissions implied a high "critical mass"—the point at which a firm is profitable while charging no commissions at all. E*Trade's vulnerability to a market downturn was exacerbated by the fact that a decline in trading volumes typically results in increased price competition among Internet brokers. June 2001 saw the launch of www.brokerageamerica.com, which offered investors a rebate on every equity transaction plus commission-free trading for all US equity market orders. It was able to do this by combining brokerage and market-making operations under one roof. It would be a "no-frills" approach with neither equity research nor other add-ons. E*Trade's response was to diversify its revenues. It developed E*Trade Bank which, with $11bn in assets and $5bn in deposits, was the largest pure-play Internet bank and the US's 19th largest savings bank. Not only did the bank offer fully integrated banking and broking services, but customer convenience was further enhanced with E*Trade Access, the third largest ATM network in the USA with around 9,600 ATM's. The success of the bank was owed, in part, to gains from cross-selling efforts to the broking customer base, with around 63% of net new accounts representing brokerage customers. At year end 2000, the bank's growth rate in deposits was 116% over the previous 12 months with customer acquisition costs down to under $117 per account from $190 a year previously. The acquisition of LoansDirect, the mortgage origination platform, was also successful—during first quarter 2001, the company tripled its volume of loans and generated a volume increase of more than $600 million compared to the same quarter in 2000. The low interest rate environment had expanded the demand for home loans, and the mortgage banking business provided a source of assets for E*Trade Bank.[12] In early 2001, E*Trade Bank further entered into the first virtual banking partnership customized for employees of Oracle Corp. An E*Trade Access ATM was set up on Oracle's Redwood Shores campus and Oracle employees were targeted by customized Internet banking products. Through a co-branded website, employees were able to research and access the products and services created exclusively for them. At the same time, E*Trade Bank aimed to target many of the 3,600 corporate clients of E*Trade Business Solutions, while more than one million employees participated in the options administration program of E*Trade Business Solutions.

The company also expanded geographically: as of May 2001, E*Trade served customers in Australia, Canada, Denmark, Hong Kong, Israel, Korea, Japan, Norway, South Africa, Sweden, the UK and the US through branded web sites. Recent overseas expansion included joint ventures such as that with Softbank Corp in Japan (October 1999) and Korea (February 2000), as well as new operations in South Africa and Sweden. During 2001 E*Trade launched in Hong Kong after initially entering the Hong Kong market in 1999 with the acquisition of TIR Securities, an institutional broker with seats on multiple global exchanges. E* Trade also inaugurated its expansion into the Middle East with a subsidiary in Israel—an attractive market for E*Trade in view of Israel's high rate of Internet usage (nearly 20% of Israel's population was on-line in 2001). The Hebrew and English language site offered on-line trading of US stocks with plans to add trading on the Tel Aviv Stock Exchange later in 2001.[13] Orders were processed in real-time using the company's proprietary technology with customers able to use a multi-currency (Shekel and/or US dollar) trading account.

Through its business diversification and geographical expansion, E*Trade increased its physical presence. In addition, the company announced in 2001 that it would become the exclusive ATM network for all Target stores through its E*Trade Access subsidiary, with the aim of installing over 1,000 units during 2001 and 2002. In addition, the companies agreed to open E*Trade Zones (400square foot E*Trade stores) in 20 SuperTarget stores in 2001. It also planned to open a new "super store" in New York City, where visitors would have access to their accounts through 200 computers and via three ATM's on-site. The centre would include a café, gift shop, book shop and access to E*Trade On Air's daily broadcasts on market conditions. Financial advisers would be available for high net worth clients, and educational seminars would be held on-site.[14] As Chairman and CEO, Christos Cotsakos, explained:

> "In the changing market environment, it's important for investors to know they have both electronic and physical access to information, products and services to meet their individual investment needs."

Technology

E*Trade's success as an on-line broker was based upon its development of proprietary transaction processing technology and an IT infrastructure is based on a modular architecture that was scaleable to handle increasing transaction volumes. Recent development included the enhancement of E*Trade AccountExpress (the first real-time account opening and funding service that allowed customers to open and fund an account electronically) by increasing the cash amount that new customers could initially invest as well as enabling faster and easier transfer of additional funds to E*Trade. New customers could begin investing within minutes with their buying power increased from $2,000 to $5000. MarketCaster, a new applet product provided brokerage customers with free, streaming, real-time stock quotes. Customers were able to set up one or more customized watch lists and monitor the performance of stocks without having to refresh their computer screen. MarketTrader was also a new tool, aiming to provide all *PowerE*Trade* customers with streaming Nasdaq Level II quotes, integrated trading and personal account information in a single screen. It was offered to E*Trade's most active traders—those who traded more than 30 (PowerE*Trade) and 75 times (Platinum Level) per quarter respectively. Later in 2001, E*Trade intended to launch E*TradePro, which featured direct access to ECNs

(‘Electronic Communication Network’), streaming market data, and dynamic order status in a customizable desktop application. Integrated wireless banking and brokerage was launched in October 2000. Since early 2001, its wholly-owned subsidiary, Clear Station, a leading investment website and community, offered wireless services to mobile phone users, giving them access to content and tools via web-enabled phones. Its offerings were compatible with all Web-enabled phones, and it expected to offer wireless access through personal digital assistant (PDA) devices in the second quarter of 2001.[15] As Pam Kramer, E*Trade’s Chief Global Content and Product Officer, announced:

> Our continuing commitment to on-the-go investors is to provide access to our services and content anytime, anywhere, on any device.

Partnerships and Alliances

As part of its strategy, E*Trade continued to develop content, technology and distribution alliances including *Bond Exchange* (Bond Trading), *Instinct* (after hours trading), *Briefing.com* (research), Inset (insurance), *Critical Path* (e-mail services), and *Every Path* (wireless application provider). At the same time, E*Trade acquired a number of companies including *Private Accounts* (providing low cost, direct access to nationally-recognized money managers), *VERSUS Technologies* (software for global cross-border trading), *Card Capture Services* (to expand the array of financial transactions and ultimately on-line brokerage via ATMs), *Taliban* (the nation’s largest pure-play Internet bank) and *Clear Station* (a financial media site that integrates technical and fundamental analysis with community discussion to offer investors ideas, analysis and opinion). Also, E*Trade together with Ernst and Young announced a joint venture in 2000 to provide a personal electronic advisory service to help prepare clients for major financial events such as buying a home, tax and estate planning, educational funding, and retirement planning.

Responses to the Market Downturn

Revenue diversification was important for pure play Internet companies, particularly for E*Trade whose average customer balance was $17,500 versus $106,000 for Schwab and $180,000 for Merrill.[16] E*Trade’s transaction revenues at the end of the first quarter 2001 were down 48% year-on-year, with commission revenues down 51%. The company’s 10-Q report dated May 2001 reported unrealized losses of $11.6 million in its own equity investments, however, E*Trade was financially liquid for at least the next twelve months, although funds may have to be raised thereafter. Tables 5 and 6 show E*Trades performance during 200 and early 2001.

[Tables 5 and 6 about here]

What did the future hold for a pure play entrant like E*Trade? The events of 2001 highlighted E*Trade the financia l vulnerability of its business model in a market downturn. Given the criticality of trading volumes for the success of the on-line, deep-discount, business model, E*Trade had attempted to diversify revenues as well as creating a bricks-and-mortar presence. But this quest for new sources of revenue was also raising costs, while compromising the simplicity of E*Trade's strategy.

FUTURE PROSPECTS

The application of Internet technologies to traditional markets led to the emergence of new, on-line markets, where new customer segments emerged from the application of new business models. Nowhere was this more apparent than in the retail securities brokerage industry. Powerful, long-established incumbents such as Merrill Lynch were challenged by an entirely new type of player. Established discount brokers, such as Charles Schwab, were even more threatened, since their competitive advantage—low costs and low prices—was dramatically undermined by E*Trade and the other new players. During the late 1990s, all the established players-both full-service like Merrill and discount like Schwab—hurried to embrace the new web-based technologies and add new on-line services to their existing offerings.

The market downturn of 2001 dramatically changed the competitive environment for all the players. While established brokers such as Merrill had been converging towards the discount and on-line brokers such such brokers such as Schwab and E*Trade, now the convergence was the other way round: Schwab was moving up market to attract high net worth investors, while E*Trade was diversifying its product and service offering and establishing bricks-and-mortar outlets. But despite the security offered by high net worth clients and diversified revenue sources, things were not entirely going Merrill's well. Increasingly the investment banks were being criticized for allowing their investment advice to their brokerage clients be subordinated to their investment banking relationships with their corporate clients. During Spring 2001, Merrill was hit by a series of lawsuits alleging that its stock recommendations were biased by the company's investment banking relations. Several of these lawsuits related to Merrill's top Internet analyst, Henry Bloget whose recommendations tended to be skewed towards companies that Merrill acted as an underwriter or adviser to.

In the changed economic climate of 2001, all three companies needed to consider how they should continue to adapt their strategies to the new market circumstances and, even more fundamentally, which business model of the brokerage business was likely to be most successful in the future?[17]

TABLE 1. Comparison of Broking Fees

	On-line	*Telephone*
Merrill Lynch	For fee-based, full-service customers, trading is free; for anyone else, $29.95 per trade.	
Charles Schwab	(Schwab.com) $29.95 up to 1000 shares or $0.03 per share for trades over 1000 shares	TeleBroker® and VoiceBroker® start at $30 + 1.7% of principal for trades up to $2,499.
E*Trade	$14.95 per trade for listed stocks & $19.95 for Nasdaq stocks for the first 29 trades.	

TABLE 2. Merrill Lynch: Consolidated Statement of Earnings

(in $ millions, except per share amounts)

	2000	1999	1998
Revenues:			
Commissions	$ 6,977	$6,355	$5,814
Principal Transactions	5,995	4,752	2,850
Investment Banking	4,049	3,614	3,265
Asset Management	5,688	4,753	4,202
Other	967	746	650
	23,676	20,220	16,781
Net Interest	3,111	2,101	1,018

Net revenues	26,787	22,321	17,799
Non-interest expenses:			
Compensation & benefits	13,730	11,337	9,308
Communications & Technology	2,320	2,053	1,758
Occupancy	1,006	953	881
Advertising & Market Development	939	783	690
Brokerage, clearing & exchange fees	893	779	764
Professional fees	637	571	559
Goodwill amortization	217	227	227
Provisions for staff reductions costs	-	-	430
Other	1,328	1,412	1,062
	21,070	18,115	15,679
Earnings before income taxes & dividends	5,717	4,206	2,120
Income Tax Expense	1,738	1,319	725
Net Earnings	3,784	2,693	1,271
Net Earnings (common stockholders)	3,745	2,654	1,233
Diluted net earnings per common share:	$ 4.11	$ 3.11	$ 1.49

TABLE 3. Schwab's trading volume, 2001 versus 2000

	3 months ended	
(All figures in 000s)	*31 March 2001*	*31 March 2000*
Daily Average Trades:		
Online	204.3	304.0
Telebroker and Schwab by Phone	9.5	13.5
Regional client telephone service centers, branch offices and other	39.7	69.1
	253.5	386.6

Active On-line Accounts (millions)	4.3	3.7
On-line Schwab client assets ($ billions)	327.9	417.7

	March 2001	*March 2000*
Daily average trades (000s)	195.8	310.0
Mutual Fund OneSource® trades (000s)	57.7	76.6
Total daily average trades	253.5	386.6

TABLE 4. Charles Schwab Corporation: Consolidated Statement of Income

(in thousands, except per share amounts)

	Year Ended December 31		
	2000	1999	1998
Revenues:			
Commissions	2,294,145	1,874,594	1,318,103
Asset Management & Admin Fees	1,583,098	1,220,346	936,796
Interest revenue, net of interest expense†	1,237,100	819,790	577,643
Principal transactions	570,207	500,496	286,754
Other	103,101	71,193	58,574
Total	5,787,651	4,486,419	3,177,870
Expenses excluding interest:			
Compensation & benefits	2,414,480	1,888,414	1,374,436
Other Compensation	38,703		
Occupancy & equipment	415,356	306,900	236,232
Communications	353,044	278,509	216,389
Advertising & market development	332,311	247,808	159,784
Depreciation & amortization	261,732	174,651	152,107
Professional services	254,549	184,470	114,097
Commissions, clearance & floor brokerage	138,038	100,132	87,273
Merger-related	68,986		
Goodwill amortization	45,544	6,419	6,443

Other	233,435	200,201	153,471
Total	4,556,178	3,387,504	2,500,232
Income before income taxes	1,231,473	1,098,915	677,638
Income taxes	513,336	432,469	267,509
Net income	718,137	666,446	410,129
Weighted average common shares			
Outstanding – diluted*	1,403,763	1,373,030	1,342,895
Diluted earnings per share ($):	0.51	0.49	0.31
Dividends declared per common share ($)	0.0407	0.0373	0.0360

* All periods have been restated to reflect merger of The Charles Schwab Corp with US Trust Corp as well as the May 2000 three-for-two stock split

† $1,351,776 in 2000, $898,219 in 1999, and $773,998in 1998

TABLE 5. E*Trade: Consolidated Statement of Operations

(in $ thousands, except per share amounts)

	Year Ended September 30		
	2000	1999	1998
Revenues:			
Transaction revenues	739,078	355,830	162,097
Net Interest	359,496	153,622	65,789
International	166,061	124,233	105,851
Other	107,686	40,546	28,173
Provision for loan losses	(4,003)	(2,783)	(905)
Net revenues	1,368,318	671,448	361,005
Cost of services	515,571	302,342	151,329
Operating expenses:			
Sales and marketing	521,532	325,449	126,141
Technology development	142,914	79,935	36,203
General & administrative	209,436	102,826	51,346
Amortization of intangible assets	22,764	2,915	2,480
Merger related expenses	36,427	7,174	1,167
Total operating expenses	933,073	518,299	217,337
Total cost of services & operating expenses	1,448,644	820,641	368,666
Non-operating income	184,775	65,787	10,504
Income (loss) before income taxes	104,449	(83,406)	2,843
Provision (benefit) for income taxes	85,478	(31,288)	1,883

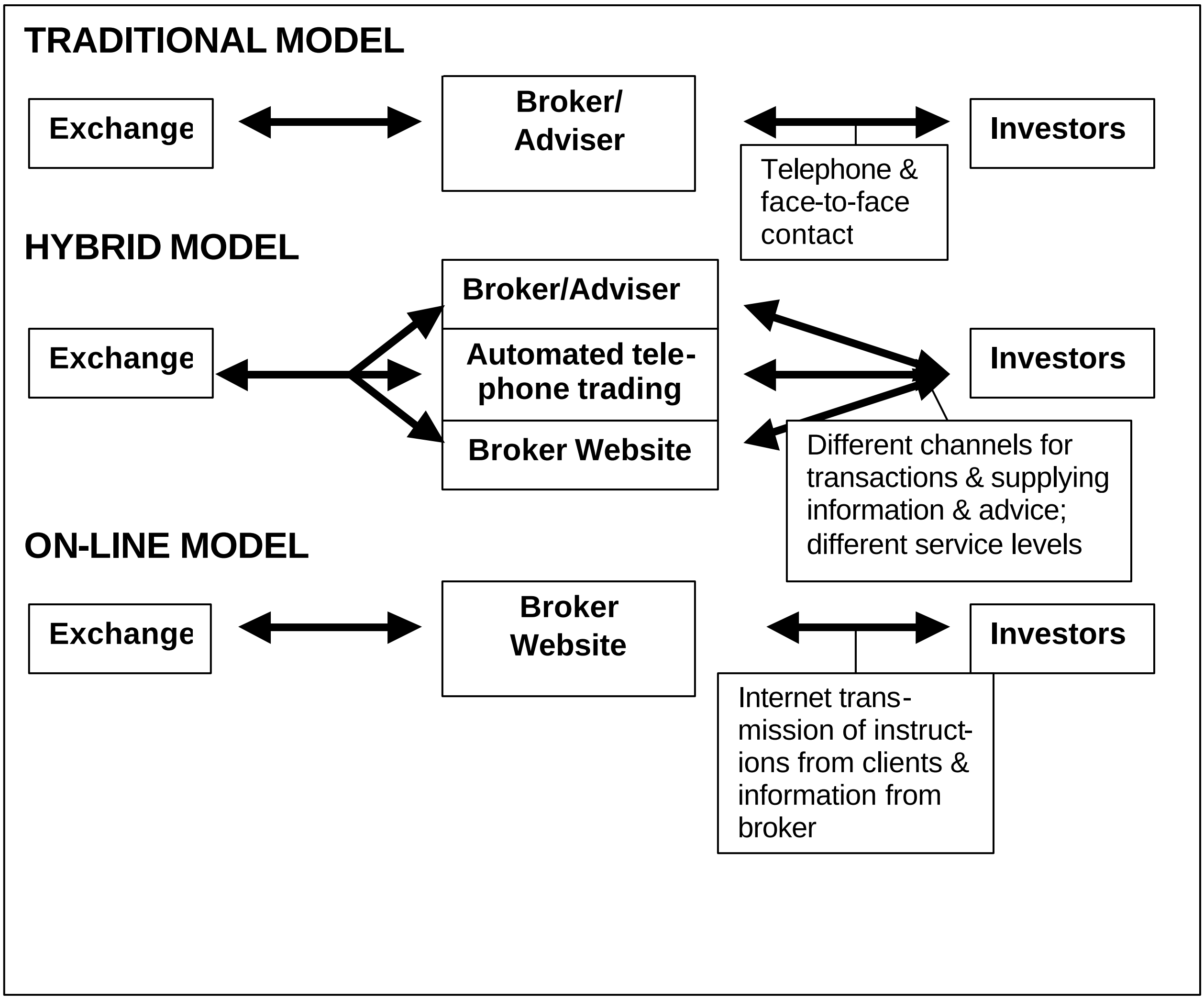
Net income (loss)	19,152	(56,769)	(402)
Diluted net income (loss) per share ($)	0.06	(0.21)	(0.01)
Shares used in per share calculation	319,336	272,832	195,051

TABLE 6. Operating data for E*Trade, 1st quarter 2001 versus 2000

	3 months ended	
	31 March 2001	*31 March 2000*
Daily Average Domestic Trades (000's)	130.4	226.1
Active Brokerage Accounts (millions)	3.2	2.4
Domestic brokerage client assets ($000)	39,995	61, 569
Average domestic brokerage commission ($)	13.62	15.85

*(Source: E*Trade)*

FIGURE 1. Alternative business models within the brokerage industry



NOTES

[1] In Western Europe and in the former socialist countries of Eastern Europe, the privatization of state-owned enterprises provided a huge boost in share ownership.

[2] http://www.tradefreedom.com/features/freedom.html

[3] http://www.sec.gov/news/studies/ecnafter.htm

[4] *The Economist*, 06/09/01

[5] www.mlhsbc.co.uk

[6] Merrill Lynch Press Release, June 26, 2001.

[7] Merrill Press Release, May 14, 2001.

[8] *Financial Times*, June 22, 2001.

[9] *Financial Times*, February 7, 2001.

[10] *The Independent*, February 3, 2001.

[11] *Financial Times*, March 28, 2001.

[12] *Canada Newswire*, April 19, 2001.

[13] *Canada Newswire*, May 8, 2001.

[14] *Funds International*, April 30, 2001.

[15] *Canada Newswire*, April 24, 2001.

[16] *Forbes Global*, October 1, 2001,

[17] For additional information on the industry and the companies, see the following web sites:

US Securities and Exchange Commission:	http://www.sec.gov/cgi-bin/srch-edgar
Company websites:	www.ml.com
	www.schwab.com
	www.etrade.com