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The Rise of Neo-Intermediation: The Transformation of the Brokerage Industry

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Abstract. **Developments in information technology and increased competition both within and outside the industry have led to the unbundling and desegregation of brokerage functions. Nimble on-line institutions like E*Trade and Microsoft Investor are usurping the roles traditionally played by full-service and discount brokerages, forcing some powerful firms to narrow their focus and others to broaden their product offerings.**

These changes raise the question: will full-service and discount brokerages continue to exist as we know them in the twenty-first century? To answer this question, the authors provide a new market transformation framework called Neo-Intermediation that helps explain how leading on-line firms are desegregating and reagregating functionality in order to create value in innovative ways.

The pattern of change for brokerages is:

- **Unbundling of traditional services—market players examine the elements of the buyer and seller relationship;**
- **Reallocation of authorities as the ''customer'' determines what they will do and what they will pay for in the market;**
- **Creation of strategic alliances with complementors—sites/ products whose products complement yours. This means that if a customer has their product, they would also want yours; and**
- **Repackaging and emergence of both commodity and differentiated service providers that serve the needs of the ''new'' customer.**

The authors believe that these patterns are evident in all forms of financial services and form the basis of market interventions in most service industries. This paper addresses the transformation of the brokerage services marketplace. With new patterns of intermediation emerging, the winners of the future will be those who most successfully create new context bundles that meet customers' needs.

Key Words. **digital commerce, intermediation, brokerage, electronic markets**

Brokerage at the Crossroads

The technological and regulatory barriers that gave brokerage and securities companies breathing space are rapidly becoming extinct. Companies have to scramble to create viable strategies that balance many priorities: Should they defend their existing customer base or enter into new customer segments? Grow their existing business or expand into new products? Acquire, partner or go alone? Basically, companies are competing not only to offer different and better products and services, but to design robust, lucrative business models that take advantage of emerging forms of electronic commerce.

Electronic commerce—the facilitation of exchange of value over computer networks—is fundamentally changing the brokerage business in part by increasing the velocity of financial services [1]. On-line investing faced great skepticism from full-service brokerages just a short while ago (1996), but it is estimated that by the end of 1997, there were nearly three million on-line investors. To serve this growing customer base the number of on-line firms has mushroomed from a handful in 1994 to more than 50 in 1997. More rivals, including banks and insurers, are beginning to emerge [2].

At a strategic inflection point in terms of providing services for time-starved, high net-worth do-it-yourself investor, the brokerage industry is transforming itself in unpredictable ways. Today fast-moving firms like E*Trade are usurping roles such as research analysis traditionally offered by full-service brokerages, forcing current market leaders to narrow

their focus, and others to broaden their product offerings. Confronted with growing competition, old-guard brokers are being forced to restructure and re-focus their market offerings. Existing off-line market leaders seek to maintain their lead in value-added services through a focus on knowledge/ advise—more financial planning and investment advice—rather than transactions—processing trades. Other firms are attempting to comprehend how to offer on-line services without alienating their brokers, to minimize channel conflict.

To compete, full-service brokerages are increasing the scope of their service by taking the acquisition route. Morgan Stanley, for instance, has merged with Dean Witter, Discover & Company, which had earlier acquired Lombard Securities, an on-line brokerage. But Dean Witter did not integrate that operation into its brokerage. Instead, it changed Lombard's name to Discover Direct [3]. The strategy is to have differentiated brands serve the younger, more tech-savvy investors that gravitate to on-line trading without cannibalizing full-commission business. Banks are also getting into the act. Nations Bank is putting together a broad-based financial company that includes Montgomery Securities, an investment banking and institutional brokerage firm [4]. While Nations Bank has broadened its product line considerably, Charles Schwab has narrowed its focus within the financial services industry to the following: retail brokerage, mutual funds, support services for independent investment managers, equity securities market-making, electronic brokerage, and 401(k) defined contribution plans.

Clearly, these firms are trying to stem the tide of disintermediation: consumers and businesses bypassing them in favor of new brokerage entrants ready to provide a wide variety of financial products and services. Disintermediation in financial services is not a new phenomenon. In the early 1990s, retail banks were faced with a competitive threat from the mutual fund industry for deposits. For a while, banks moved slowly into the mutual fund business and were not overly aggressive in lobbying the regulators to lower market-entry barriers. However, when interest rates declined sharply in the early 1990s, there was a substantial runoff of deposits in search of higher yields. To compete, many banks began offering money market and other mutual funds to their customers.

With the advent of the World Wide Web, discount brokerage firms face a comparable disintermediation dilemma. Suddenly, commissions are under pressure, customers want to trade direct, and competition is coming from non-traditional sources. To address the competitive threat, some entrenched firms are seeking refuge in the supermarket approach. With this approach, a full service firm might reason: ''If on-line brokerages are competing with us for customer assets, then we must react by either establishing our own on-line channels or by acquiring brokerages.'' Following this typical re-intermediation path, the new conglomerate expects to reclaim its role of provider-in-the-middle by offering a wider portfolio of products and services. However, creating a financial services supermarket might be a misguided strategic choice for three reasons.

First, many successful 1990s businesses have rediscovered the virtues of adhering to their core competencies and the power of strategic outsourcing in order to gain agility. Most of the conglomerates which attempted to enter the financial services arena—learned the hard way that adding unfamiliar lines of business can dilute their ability to compete, weaken shareholder and customer loyalty and multiply management complexity. For example, American Express Co. and Sears, Roebuck and Co. were unable in the 1980s to successfully combine retail brokerage, credit card lending, and insurance sales [5]. The reason for failure is economic. Risk and cost sharing in the production or delivery process can enable better time to market and make providing a product/service bundle more efficient than integrating everything in-house.

Second, offering additional products to an existing customer base does not prevent customers from leaving. For instance, banks discovered that offering additional credit cards to existing customers did not stem the loss of market share to specialists such as MBNA. These specialists used credit data warehousing and decision analytics technology to build risk profiles and to better select and target prospects. Also, the decision to add new products to an existing portfolio is complicated by an uncertain environment such as the Internet. In an uncertain techno-marketplace, a firm is often making an informed guess about what it thinks is best for a customer without fully knowing what that customer's preferences and goals are.

Third, techo-enabled firms like E*Trade are putting themselves ''in the middle'' in a new way by

providing customers with interactive and personalized services at little or no cost. This branding and trust-building approach enables the service providers to learn directly and accurately from each customer what's actually important to him or her. Armed with this intimate customer knowledge, these companies are better positioned to build loyalty and increase profits for the long term.

Clearly, re-intermediation is a difficult strategy as sustainable competitive advantage is becoming rare in the on-line environment. High performers today look for a series of short-term advantages over a long period of time instead of attempting to plot a far-sighted course in an environment with too many unpredictable variables.

The emergence of neo-intermediation

Innovative Internet-based intermediaries are the real threat to the entrenched players. These firms are adopting dramatically more effective means of forging interactive relationships with customers that we call: neo-intermediation. Neo-intermediation takes as given the economic functions performed by financial intermediaries and asks what is the best organizational structure to perform those functions. Neo-intermediation rests on two basic premises: (1) financial functions are more stable than institutions providing them—that is, functions change less over time; and (2) competition will cause the changes in organizational structure to evolve toward greater efficiency in market mediation.

On-line neo-intermediation is defined as a customer driven relationship that integrates content, tools, and infrastructure in the functional context of a certain configuration of complementors and suppliers. Central to the concept of neo-intermediation is the notion of added value, which is essentially the incremental benefit that the new ''in the middle'' firm brings to the customer.

Neo-intermediaries are pioneering new approaches with a clear aim: They are looking to exploit synergism across different product lines. They innovate more frequently and organize to seize opportunities much faster than their competitors. Why? Concentrated focus on traditional sources of competitive advantage—such as cost, technology, and differentiation—is inadequate because competitors are quick to replicate advantages. Neo-intermediaries seek to identify and rapidly respond to subtle changes in even the smallest of target markets—the individual customer. To sustain competitive advantage, neo-intermediaries have to embrace business practices that encourage deep customer insight and thinking about how to materially improve the customer's value proposition.

In the following section, we outline some forces for change in the brokerage industry that have created the need for a neo-intermediation framework.

Forces of Change in the Brokerage Industry

Our research examines the pressures for change that are overcoming the inertia in the brokerage industry. Three forces are now changing the rules of the brokerage industry:

- Changes in securities regulation.
- Shifts in the balance of power due to the commoditization of brokerage products.
- Changing strategic priorities from a make model to a source model.

Changes in securities regulation

Securities regulation reform is transforming the players, services and market structure in the United States resulting in a general trend of industry consolidation that has attracted new competitors and strengthened existing ones [9]. Three events have been particularly noteworthy.

First, negotiated commissions and unbundling of investment services in 1975. At that time, the individual investor could access the financial markets only through a full-commission broker, who provided investment advice and placed trades.[1] Under pressure from Congress, the Securities and Exchange Commission changed these policies, allowing for negotiated commissions and unbundling of investment services, these developments enabled the creation of discount brokerage firms such as Charles Schwab which could separate financial advisory services from execution services, and could execute trades at a lower cost than a full-commission broker.

Second, the lifting of the Competitive Equality Banking Act of 1987 (CEBA) growth cap. This meant that, credit card firms like Discover Card (Dean Witter), were able to compete and grow like most other companies, without the legislatively-imposed

red tape of having to move assets from one legal entity to another.

Third, the passage of securities litigation reform.[2] The slow but steady dismantling of the Depression-era regulatory structure will encourage commercial banks to expand their securities business and perhaps undertake new acquisitions. Take for instance Toronto-Dominion Bank, one of the largest banks in North America (over 1,000 branches across Canada). TD Bank owns and operates Green Line Investor Services, Canada's largest discount broker. Taking advantage of the Section 20 relaxation, TD Bank has expanded its offerings in the U.S. by purchasing Waterhouse Securities, one of America's leading discount brokerage firms. Waterhouse Securities and Green Line, together, service over 1,100,000 individual investors through 120 branch offices across Canada and the United States and as far away as Hong Kong [10].

The trend of large banks moving aggressively into the brokerage business will continue, and the implications are obvious: there will be more intense competition and further consolidation in financial services. In general, there is no more powerful force in transformation of market practice than that of regulation. Market deregulation, incremental reporting and governance requirements change the competitive landscape. Changes in financial services engendered by regulatory reform are merely beginning. We can expect such reforms to result in significant restructuring of the competitive landscape in the early part of the next century.

The Commoditization of Brokerage Products

In parallel to regulatory changes, technology is rapidly making commodities out of brokerage products. Commoditization, or product similarities, reduces competition to a lowest common denominator usually based on price. Most basic transaction products in the brokerage industry such as placing and executing an order, are commodities. This community has suddenly realized that the Internet and other alternative ways of reaching customers, could push product commoditization to a further, undesirable extreme.

Commoditization is most evident in the decline in commissions. E*Trade sparked a price war by cutting commission rates in half, to $19.95 per trade. In response, Fidelity Brokerage Services set its on-line price at $28.95, which was 30% to 40% less than its standard commissions. To gain marketshare, AmeriTrade, further cut commissions to $8. Soon after, Quick & Reilly Inc. launched Suretrade, with $7.95 commissions. Web Street Securities goes even further, executing 1,000-shares of many NASDAQ stocks for free [6].

Commoditization is impacting brokerage industry structure. To battle commoditization, some firms are providing retail brokerage services under distinct brand names, each of which offers a range of services and commission rates designed to appeal to specific groups of investors within the discount brokerage market. AmeriTrade, for example uses four brand names [7]. Accutrade, offers advanced technology delivery systems to sophisticated investors. K. Aufhauser & Company, provides third-party research and investment analysis to experienced investors. Ceres Securities, offers execution services to customers who want minimal transaction costs. eBroker provides execution services exclusively through the Internet. This branding strategy allows AmeriTrade to align the cost structures of its discount brokerage businesses with service levels desired by their customers. The logic goes as follows: For every high-margin customer it serves through Accutrade, Ceres Securities may well pick up a dozen medium- or low-margin Internet-access accounts. Economies of scale and back-office infrastructure are essential in offering these services. Small providers may be able to serve particular niches better, but they would be hard-pressed to match the combined reach of AmeriTrade.

The market trends in homogenization of service offerings and increase in price-based competition are not going to abate in the near future. However, whether brokerage companies can break free of their heritage and make product differentiation work in their favor remains to be seen.

Changing strategic priorities: From a make to a source model

Increasingly, brokerage firms are outsourcing non-critical activities such as content services so that they can concentrate on enhancing their ability to create a unique customer context. Outsourcing is rapidly becoming a central theme in rationalizing organizational and channel structures. The reason for this: individual investors who realized that they can do better by buying trading-related functions separately. For example, they can obtain ''pure'' news and

charting information at Yahoo, while executing trades at E*Trade.

The combination of changing customer requirements and technological improvements are motivating neo-intermediaries to discover new, more efficient ways to fulfill such basic needs as portfolio management and news monitoring. Innovative banks, mutual fund companies, and finance companies compete directly with discount brokerages, while concurrently cooperating with them to augment the traditional package of services offered by full service and discount brokerages. Smaller firms like E*Trade are partnering with complementors such as Quote.Com in order to focus on a smaller number of functions.

The bundling of brokerage services to facilitate outsourcing illustrates a movement away from the in-house ''make'' model to a ''buy and integrate'' model. However, this fragmentation of traditional functions is not an end point but part of a transition to more efficient arrangements. Although some niche companies will continue to be successful, other companies will recombine functions to meet the needs of customers better and to take advantage of new technology to produce and deliver products at lower cost.

Given that the winds of change are blowing rather strongly, firms need to comprehend implications of changes such as unbundling, vertical compression, price based competition, horizontal integration, and the need to re-examine content alliances. However, this list of factors provides neither a framework for understanding the fundamental changes under way nor a way to think about how the future might evolve. Customary incremental approaches cannot cope with the changes brought about by the Internet or provide a framework to strategize about impending changes. What does provide such a framework is a logical analysis of the desegregation and reaggregation design patterns that the brokerage industry is undergoing.

Neo-Intermediation Framework

New patterns of intermediation form the basis of new market interventions in most service industries. The pattern of change are:

1. Unbundling of traditional value proposition—market players examine the elements of the buyer and seller relationship.
2. Reallocation roles and responsibilities as the customer determines what they will do and what they will pay for in the market.
3. Creation of strategic alliances with complementors—firms whose products complement yours—in order to generate traffic and build brand awareness.
4. Repackaging and emergence of both commodity and differentiated service providers that serve the needs of the ''new'' customer.
5. Emergence of patterns of loyal and disloyal behaviors in buyers, sellers, and intermediaries which causes the whole process to recycle again.

These market transformation patterns repeat themselves, since they are a generic result of a given set of forces.

The Unbundling of the Value Proposition

Neo-intermediaries are adept at unbundling and re-aggregating the value proposition based on customer context. As the Internet took off, discount brokerages like E*Trade and others realized that it would change the fundamental forces in the market, and that successful players would need to take a completely different approach. The key was to identify and scale the right features by desegregating the existing value chain. The logic goes as follows: If E*Trade can desegregate, and drive costs down, it can lead the way to new business models while establishing a well-branded position that is hard to assail.

Unbundling the value proposition

Rather than taking existing institutions as a given, we need to concentrate on the underlying functions that all brokerage value-chains must provide. Functionally, every on-line brokerage value chain is comprised of three main categories:

Distribution. —Electronic distribution—Internet Service Providers, providers of home and on-line banking services and traditional banks—that must be in place to distribute the product, such as on-line advice and trading. This distribution infrastructure

also helps in new account acquisition and development.

Customer context. Context makes discrete content bundles more interactive, entertaining, easy to navigate and understand. Increasingly, industry leaders are less concerned with the piece parts, and more concerned with unifying them into an experience for the do-it-yourself investor. This act of framing the customer context has become a key element of on-line strategy. The proper mix of content, context and community is emerging as a new frontier. Take for instance, AOL's Motley Fool, a context creator, which has frequently updated content and a community component where people become active participants talking about stocks.

Tools/content. The valuable information that is being delivered, such as real time quotes of stocks, options and futures contracts, investment newsletters, up-to date information on stock upgrades and downgrades, and charting and analysis programs. Content also includes high-end advisory services which are crucial for retaining customers. Traditionally, tools and content components were always necessary to do analysis on content. The emergence of electronic commerce has shattered the unified or vertically integrated model and has enabled the tools and content components to be de-coupled and largely outsourced.

Unbundling the value proposition requires functional decomposition. Functional decomposition, often initiated by the new market entrant, is the basic building block of any strategic design process.

To illustrate how the functional decomposition of the brokerage industry consider how the old bundle of functions is fracturing into discrete services. Fig. 1 illustrates the portfolio of services offered in the brokerage industry. The objective of functional decomposition is to either eliminate non-core functions or creatively integrate functions dispersed among several different players to reduce cost, improve system coordination and responsiveness.

Unbundling the value proposition—E*Trade and Microsoft Investor

Neo-intermediaries like E*Trade and Microsoft Investor have disassembled and reassembled distribution channels and content into integrated collections of functions. They are essentially controllers of customer context. Take for instance, E*Trade.

1. Channel Infrastructure—E*Trade leases the required network infrastructure from third parties such as America On-line, AT&T and Microsoft Network. At the back-end, E*Trade provides clearing and execution services to its own retail brokerage operations, as well as to independent broker-dealers, depository institutions, registered investment advisors and financial planners.
2. Context—E*Trade's objective is to provide a wealth of information in a highly personalized, interactive context, which creates an entertaining environment that attracts active traders to its websites, fosters brand awareness and encourages more frequent trading. One of the new techniques for providing context in the on-line environment is to build end-user communities around specific types of stocks. By organizing its websites by stock types, E*Trade is able to aggregate targeted demographic user groups, thereby offering advertisers and sponsors access to highly defined audiences.
3. Tools/Content—E*Trade provides content and tools from sources like Quote.Com, InvestTools and other sources through ''content alliances''. The objective is to provide individual investors with access to multiple sources of independent investing advice, research and interactive services that help them make profitable investment decisions. By outsourcing content, E*Trade benefits from access to new and fresh content, turnkey market hardened commerce systems, low costs, and a share of the revenue. The partners gain by getting access to an efficient distribution channel and a strong brand.

Clearly, E*Trade is a neo-intermediary that controls the customer context. Table 1 illustrates the relationships that E*Trade is engineering to create a customer context [11].

Microsoft Investor is taking a similar strategic road with its partnerships with such companies as PC Quote, Morningstar, Zacks Investment Research, and others. able 2 below shows how Microsoft Investor is rapidly re-aggregating discrete products and establishing a customer context by quickly bringing innovations to market.

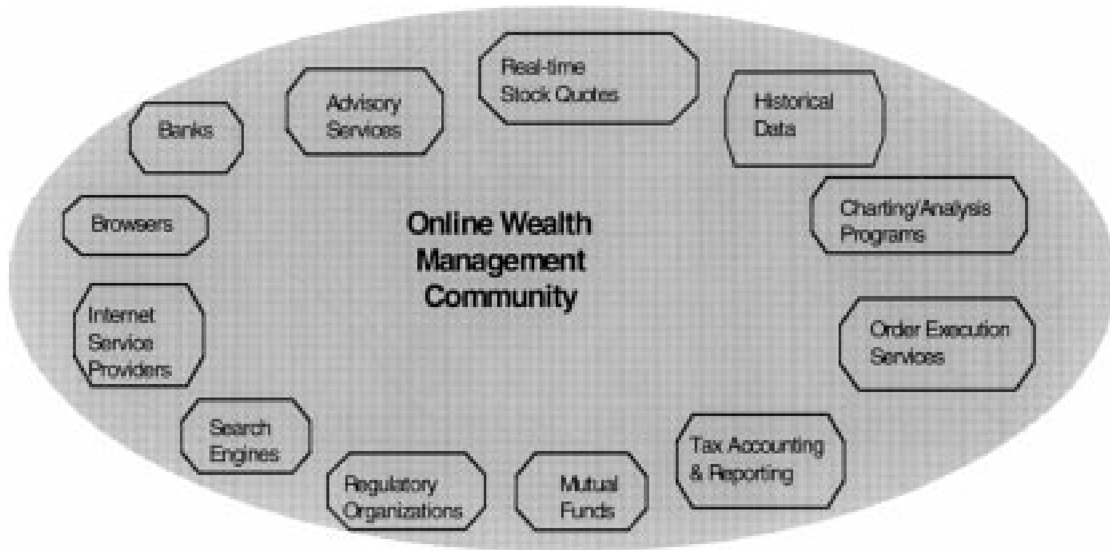

Fig. 1. The Unbundling of the Brokerage Industry.

Neo-Intermediation: Strategy, Structure and Process

The ability to rapidly re-aggregate value is a core competency which offers significant competitive advantage. As customers demand novel products to meet their evolving needs and as innovative firms discover ways to combine products to lower total cost or improve some aspect of their financial service, neo-intermediation is emerging as a competitive strategy. The first step in devising an effective neo-intermediation strategy is to consider the nature of the demand for the products. Many aspects are important—for example, customer segments, demand patterns, content partners, demand predictability, product variety, and market standards for service.

Customer segmentation

In the new competitive space, it is increasingly apparent that content, distribution channels, and technology are not sustainable differentiators. Customer context is emerging as the key differ-

Table 1. *E*Trade sourcing relationships*

Relationships	Types of alliances
New account development and distribution	Internet access and service providers Internet content providers Providers of home and on-line banking services Traditional banks
Content and new products	News and portfolio tracking Investment tools Knowledge management products
Existing product enhancement	Encryption technology Cash management services
Improving existing operational efficiency	Market makers Self-clearing operations and record-keeping
International licensing	On-line investment companies outside USA
Enhance brand perceptions	Direct web-marketing Co-marketing

entiator, in order to develop the right context, on-line customer segmentation is key. Critical sub-groups of the investment community exhibit unique sets of interests and appetites. Four customer segments in on-line brokerage services are evident. These segments are based on frequency of trading.

1. Passive Trader. These customers usually has a brokerage account with a full-service provider. They use the on-line medium to follow the news about stocks in their portfolio and keep abreast of market ups and downs.
2. Long-term Investor. These convenience-minded consumers want a comprehensive package of financial products like mutual funds aimed at long-term growth. They also want tools for financial planning and portfolio optimization. Breadth of offerings and ease of use are most important to this customer. The latest in technical analysis and being on the ''bleeding-edge'' is not a major concern.
3. Active Trader. These data-hungry investor values high-quality information, investment tools, and research. Active traders often look for stock trading, mutual funds, news, and research in one integrated, easily accessible place.
4. Hyperactive Trader. These are often day-traders who tend to do a lot of trading and hence are price conscious and value speed of execution. Simple interface, price and fast service are important issues for this self reliant customer. This segment often called ''lunatic-fringe'' by developers is also early-adopters of new and innovative services as they are constantly in search of better tools to gain an edge.

Active and hyperactive do-it-yourself investors move from one broker to another, always searching for a lower price or a different shopping experience. They tend to have multiple accounts. They have no loyalty to any particular brokerage, and are always in search of a better deal or a new promotion. They are endlessly interested in the experience of others, and word of mouth is seen to be the most trusted and reliable source of information.

Today, every brokerage firm wants some else's active and hyperactive customers. Why? Because even though on-line trading margins are decreasing, it's not hte actual trading that generates profits. Firms make money by lending stock held in accounts, from the interest on margin loans and from the cash balances in accounts. To quickly build assets under management, new on-line brokerage entrants are ''cherry picking'' active and hyperactive customers aiming to pick up the profitable ones by offering them a new delivery channel, a better brand image or enticing them through highly targeted marketing campaigns. However, this is a short-term strategy because the active and hyperactive customer segments are expensive to win (as there are significant costs entailed in getting their attention in the first place), difficult to service (as they are highly demanding), and almost impossible to keep.

To create a sustainable strategy in the long-run,, firms will have to place an emphasis on understanding and responding to customers' real preferences in terms of: the content dimension (what is the customer interested in?); the technological dimension (what is the demand for new technologies such as personalization); the pricing dimension (how price sensitive is the customer); and the service dimension (what service attributes do the on-line customers value?).

If the four dimensions are in sync with one another, then the product or service hits a customer's sweet spot that we term ''ease of use.'' Ease of use will be a key selling feature of new technologies and products in the years ahead. Ease of use has three dimensions: accessibility which implies ease of use, service and support; efficiency of new products and technologies that will make lives easier and save customers time and headaches, or contribute more directly to personal productivity; and practicality that will make things more useful and functional. If the dimensions are out of sync, then a feeling of discomfort will develop leading to potential defections.

Transactional vs. knowledge-based products

Brokerage products can be classified on the basis of their demand patterns in two categories: transactional or knowledge/advisory. Transaction products include real-time stock, futures and options quotes, charts, and execution of trades. Because such products satisfy basic needs, which don't change much over time, they have stable, predictable demand and long life cycles. But their stability invites competition, which often leads to price competition and low profit margins. To avoid low margins, many companies introduce innovations in terms of bundles to give customers an additional reason to buy their offerings.

Knowledge/advisory products include pre-pur-

chase information such as analyst reports, advisories, newsletters and recommendations. These products range from commodity information to sophisticated advisory services offering model portfolio of legendary investors like Warren Buffet or well-regarded fund managers. Fig. 2 shows a framework of advisory services. Knowledge products keep the investor informed and help them make better decisions.

Although knowledge can act as a transaction stimulus and enable a company to achieve higher profit margins, the very novelty of knowledge and advisory products makes demand for them unpredictable. In addition, their life cycle is short because as imitators erode the competitive advantage that innovative products enjoy, companies are forced to introduce a steady stream of innovations. The short life cycles of these products further increase unpredictability. It may seem strange to lump technology and knowledge together, but both types of innovation depend for their success on customers changing some aspect of their trading patterns or value proposition.

Innovation through integration: Creating the right intermediation structure

Having determined the nature of brokerage products and their intermediation priorities, managers can employ a matrix to formulate the ideal structure to support the effective delivery of the customer value proposition. Each category requires a distinctly different kind of neo-intermediation structure. Innovative knowledge products require a different intermediation structure than stable, low-margin transaction products. A transaction structure is aimed at reducing transaction costs of order-taking, execution, clearing, and storage. Transaction structures seek to increase efficiency of placing customer orders, and doing custodial and cash management activities.

Knowledge intermediation is more of a mediation function aimed at effectiveness. The objective is to ensure that the variety of information and advice reaching the end-user matches what customers want to buy. Knowledge costs include mediation costs of evaluating various sources, creating alliances, and establishing technological integration. Ineffective knowledge intermediation results in customer churn and dissatisfied customers.

Strategic failure is often caused by a mismatch between the type of product, a specific target segment, with distinct requirements and needs and the type of intermediation structure. The choice of a neo-intermediation context is dictated by whether a firm elects to compete on low cost, operating excellence (e.g., by emphasizing reliability), customer context creation (e.g., by emphasizing customization), or superior choice. The four cells of the matrix (Fig. 3) represent the four possible combinations of products and priorities.

Level 1: Low cost trading. The customer's value proposition is simple: low or lowest price and hassle-free service. The predictable nature of transaction products makes market mediation easy because a match between supply and demand can be achieved. Companies that make such products are thus free to focus almost exclusively on minimizing transaction costs, given the price sensitivity of most trading products. In this instance, the important flow of information is the one that occurs within the chain as suppliers, resellers, and delivery channels coordinate their activities in order to meet demand at the lowest cost.

Level 2: Integrated trading. The value proposition is to offer products that push performance boundaries. Reading early customer reaction or other market signals and reacting quickly, during the new product's short life cycle is critical in Integrated Trading models. In this instance, the flow of information occurs not only within the service chain but also from the marketplace to the service chain. The strategic decisions to be made are not about minimizing capacity costs but about creating barriers to competitive response. To do so, the firm may have to lock itself into an efficient internal process or into ties with partners.

Level 3: Integrated account management. Most important in this environment is providing the customer with an integrated set of products and delivery channels. For instance, Schwab provides Web access, direct dial-up access, and access through on-line service providers such as America On-line and Microsoft Investor. Also, on-line customers have access to Schwab representatives in branch offices nationwide. On the product side, Schwab provides integrated access to hundreds of mutual funds through Mutual Fund OneSource service. In this service, customers find the portfolio manager's commentary,

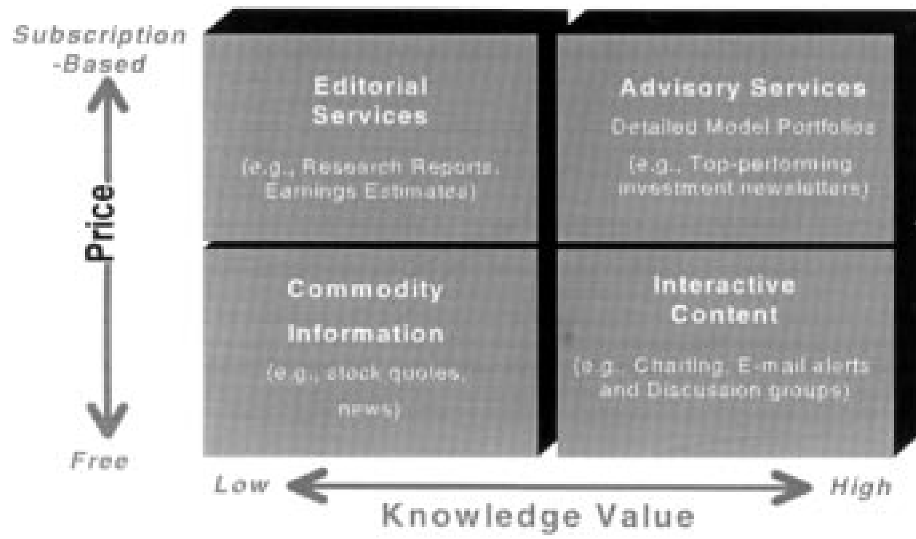

Fig. 2. *A framework for advisory services.*

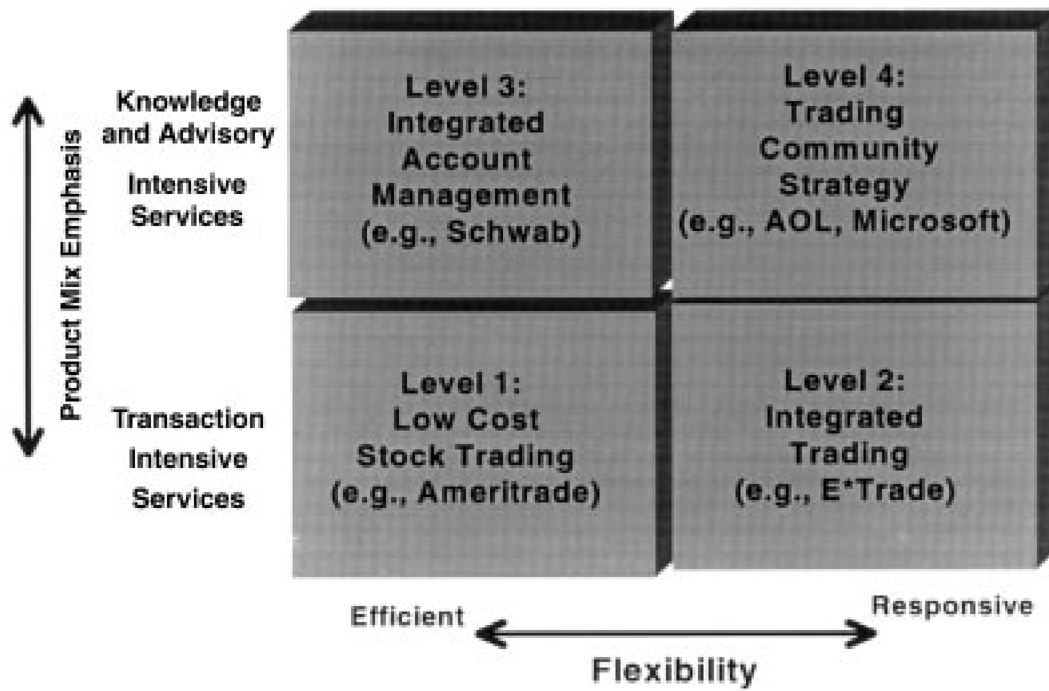

Fig. 3. *Product flexibility and product mix.*

fund philosophy and fund prospectus information. In order to hedge against uncertain demand, suppliers should be chosen for their speed and flexibility, not for their low cost.

Level 4: Trading community. Most important in this environment is customer choice (see Table 2). This involves having a full range of services available to serve customers upon demand—this may involve running a ''see-through company'', in which a variety of goods or services are available quickly through contract arrangements. The resulting networks or value-adding partnerships are like confederations of specialists. They are flexible and specialized, and they emphasize inter-firm relationships, with a pooling of complementary skills and resources to achieve shared goals. The uncertain market reaction to context innovation increases the need for flexibility and adapting to changing demand. Short product life cycles increase the risk of obsolescence. Market mediation costs are higher for Trading Community products.

By using the matrix to plot the nature of the demand for each of their product families and their intermediation priorities, brokerage firms can discover whether the process the company uses for supplying products is well matched to the product type—an efficient process for transactional products and a context responsive process for knowledge products. Companies that have a knowledge product with an efficient information value chain (upper left-hand cell) might have problems if the demand for advisory services changes. Companies that have a transactional product with a responsive information value chain (lower right-hand cell) might have problems that arise from coordination issues.

Co-Branding and traffic growth

One of the challenges of an intermediary is to manage soaring branding and marketing expenses with plummeting commission rates. E*Trade has shown the brokerage industry that a firm with a great brand image can win customers and service their financial needs via products from third parties. The importance of establishing market share for new products increases the importance of effective branding. Any activity that is not central to the context creation strategy can be performed better by another organization. Along with rationalizing their activities, firms are exploring new marketing relationships and alliances with customers, suppliers, and intermediaries.

The resulting openness to partnering is producing new collaborations for the sharing of activities such as co-branding and traffic growth. Wouldn't it be nice to have other sites that refer interested customers or even sell your products? This is what Amazon.com did to become the ''world's largest bookstore'' with their digital associates program. On-line brokerage firms are using similar tactics to build a franchise. Once a firm finds complementor sites based on customer segments that it seeks to serve, it becomes possible to:

Table 2. *Microsoft Investor Community*

Services offered by Microsoft investor	Companies providing the capability to the Microsoft investor community
Portfolio tracking	MSN
Investment finder	MSN
Premium business news	PC Quote, MSNBC
Daily editorial and market summaries	Freelance Editors
Analyst consensus recommendations	Zacks Investment Research
Mutual fund analysis	Morningstar
Earnings estimates	Zacks Investment Research
Company profiles	Hoover's Inc. (Austin, TX).
Historical data	CSI
Fundamental stock data	Media General Financial Services
Financial statements	Zacks Investment Research
Email notifications	MSN
Discussion groups and chats	Individual Forum Leaders
On-line trading through leading partners	E*TRADE, AmeriTrade, Charles Schwab, DLJ Direct, Waterhouse, National Discount Brokers

create mutual hyperlinks and banners, exchange or place ads, promote and sell each other products.

The logic behind co-branding alliances is simple: an individual electronic commerce website can maximize its awareness and traffic through the use of strategic alliances with other websites having high user traffic. Through the use of embedded hyperlinks, higher traffic websites can refer potential customers to electronic commerce websites for potential purchases of goods or services. These agreements generally involve economic arrangements including up front payments or commissions on the dollar volume of goods sold. These payments are analogous to rent paid by traditional ''brick and mortar'' retail locations, and can be critical to an electronic commerce website's ability to expand.

The new linkages require relationship management skills and careful negotiations. Both participants must realize durable mutual benefits in financial terms (through increased revenues or lower costs) or hard-to-quantify benefits due to risk sharing or the pooling of expertise and market knowledge. Such mutual benefits are increasingly feasible because of advances in information technology that have sharply reduced the costs of coordinating and administering transactions between partners.

Selecting neo-intermediation design alternatives

How can a firm choose a strategic arrangement when confronted with multiple possibilities? It should rely on strategic design principles, subject to the constraints of prior commitments, resource availability, and rigidities. The design choice must meet the requirements of:

1. Risk Management—Risk management is a key element of strategic design. Firms in high-velocity environments, where relationships are uncertain, are creating portfolio of options for coping with inevitable uncertainty of demand. These options enable a firm to explore context design by trial and error.
2. Customer Migration—Neo-Intermediation design questions must be asked in the context of two different customer bases: existing customers and new customers. For a firm with an established customer base, the key question is: *How do they reach out to the technically proficient investors without losing their margins or alienating their existing customer base*. At the same time: *How do they migrate their existing customer base quickly?* One of our favorite jokes applies very well to the problems facing entrenched players: How could God build the world in only six days? Answer: He had no installed base of customers. With no installed base, E*Trade and other deep discount brokerages have been focused on advancing the active and hyperactive category; while firms like Schwab are more interested in migrating their existing customer on-line rather than acquiring new ones.
3. Incremental Functionality—How closely does the neo-intermediary structure address customers' stated and unstated requirements? Can the customer find and appreciate the value in a firm's offering? By examining value from the customer's perspective, functions might be combined to address hitherto unmet needs in innovative ways. Firms are managing functionality by designing context in a bottom-up fashion, so that the context functionality meets the anticipated requirements of the target market.
4. Branding and Cost-Efficiency—Can the company justify a tradeoff in cost-efficiency to gain greater strategic effectiveness and coverage because of the multiplier effect that distribution has on increasing the impact of the other marketing variables?
5. Long-run adaptability—Can the neo-intermediary design handle possible new products and services and incorporate emergent content forms? A critical challenge in the on-line setting is the implementation of a measurement and control system for monitoring performance of an intermediation structure. These controls define the information collected, standards for performance, and ways to compare expectations with results. Without this information, there is no basis for learning, correcting mistakes, and adjusting assumptions to fit reality. Thus the end of this step signals the beginning of another cycle in the design process.

On-line distribution channels, content and branding have become evolving networks, comprising many complementary ways to reach and serve customers. Whatever the choices, many are bound to fail as it is hard to predict technology or customer behavior. However, the costs incurred—even when there is a failure—should not be viewed as losses but as investments in learning how to understand and gain access into the market. As the market stabilizes, the

firm should choose to provide a specific context rather than continuing to experiment with costly options.

Summary

Increased competition from non-traditional institutions, declining transaction costs due to new information technologies, the erosion of product boundaries in the face of new customer demands and, less restrictive regulations are accelerating the transformation of the brokerage landscape. This trend is being reinforced by World Wide Web, which is reducing industry barriers and making the underlying business structure semi-transparent.

Electronic commerce, new market practices, and increasing customer capabilities will clearly play a role in providing new products, perhaps giving rise to completely new functional intermediaries [8]. Current thinking in e-commerce strategy has focused too much on desegregation, on technology, not enough on re-aggregation or neo-intermediation. Most of history suggests that a pure desegregation strategy won't work with customers. For instance, in PC software, the trend has been towards integrated application suites, not components. Clearly, packaging, branding and simplicity are becoming more necessary, not less. As a result, inefficient firms will be exposed and become vulnerable.

For brokerage firms, electronic commerce changes the rules of competition. It will:

- Reduce the value and importance of physical assets as they are complemented or replaced by virtual assets, chiefly knowledge.
- Desegregate the marketplace value-chain, allowing buyers to obtain financial instruments, advice and research and execution services separately. This will accelerate commoditization of many existing products and services.
- Open the way for more competition across industry borders. This will require brokerages to respond by forming alliances, with other providers of products and services. They need to examine where they can add value: Content, Context, or Infrastructure?
- Result in a contest for customer relationships and brands, requiring the adoption of a culture which is more flexible and entrepreneurial.

For customers, the implications are formidable. To mention a few:

- Customers will enjoy greater choice and more freedom to choose products and suppliers. The corollary
- Customers will demand the same levels of trust and integrity in the networked world that they expect of today's off-line system.

We do not know when companies will introduce new packages of products or when new intermediaries will emerge. Clearly, financial innovation is at work in the marketplace, and that will lead to a repackaging of brokerage functions. Some of the repackaging may well be undertaken by existing full-service firms. But we should also expect new institutional arrangements to emerge. The winners of the future will be those who best package functions to meet customers' needs, not those who cling to old institutional arrangements.

Notes

1. This is due to the fact that all stock exchanges required brokers to charge fixed minimum commissions for trades of listed stocks.
2. The Federal Reserve's decision to expand the Section 20 Securities powers of bank holding companies is likely to have a major impact in the United States.

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