METHOD FOR PROVIDING ON-LINE BROKERAGE SERVICES TO INSTITUTIONS

A method for providing on-line equity brokerage services to a plurality of financial institutions, each financial institution having a respective equities brokers (151, 152, 153). The method includes providing a plurality of service cells at a central service institution (71) being assigned to one of the plurality of service cells (101, 102, 103), each service cell providing at least one technical consultant, installing a communications line between each of the plurality of financial institutions and the central service institution (72), providing on-line equity brokerage software for each of the plurality of financial institutions (73), and customizing a front end module of the software for each of the plurality of financial institutions, the front end module including an identification of the respective financial institution (74).
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METHOD FOR PROVIDING ON-LINE BROKERAGE SERVICES TO INSTITUTIONS

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

The present invention relates to a system and method for providing brokerage and other financial services.

2. BACKGROUND INFORMATION

Brokerage services for equities and other financial instruments to date have functioned in several ways. To buy and sell equities, for example common stocks, a client in the U.S. traditionally has engaged an equities broker at a U.S. brokerage licensed to buy and sell equities in the U.S. Examples of such traditional brokerages include MERRILL LYNCH, GOLDMAN SACHS, and SMITH BARNEY. The equities broker typically serves a client by personal or telephone contact. The client places orders to buy or sell shares in a U.S. publicly-traded stock by calling the equities broker and telling the equities broker the number of shares of stocks to buy or sell. The equities broker then purchases or sells the stock through a stock exchange, such as the New York Stock Exchange, the NASDAQ, or the American Stock Exchange. The equities broker also may initiate the contact and provide recommendations to the client.

In addition to traditional brokerage services described above, many firms, such SCHWAB.COM, E*TRADE, TRADE.COM and MERRILL LYNCH permit individual investors to buy and sell U.S. stocks or bonds on-line, for example over the Internet. The orders are placed using an HTML graphic interface at a client computer of the client, and are sent electronically over the Internet to a server of the brokerage firm. An on-line equities broker, often unknown to the client, reviews the order for compliance, and then the order is executed through the proper exchange, often through a registered clearing
agency.

As with traditional brokerage houses, many of these on-line or Internet-based services also provide the opportunity for clients to purchase government or corporate bonds and receive analysis of equities and bonds. Typically, Internet-based services have been structured so that one department performs stock trading, while another department handles bond trading, and another department performs research. Options and derivatives trading may occur in yet another separate department. SCHWAB.COM also permits international investors to purchase both US and UK securities, for example, through its web site.

To date, many smaller traditional brokerage houses have not been able to offer Internet-based services due to the high cost of purchasing, developing and maintaining the equipment and software necessary for offering such services. International brokerages often have not been offering Internet-based services, due to a lack of Internet expertise in those countries.

However, most investors already have a developed relationship with an equities broker and are not willing to alter this relationship. However, they also want to be able to trade on-line.

Summary of the Invention

An object of the present invention is to provide a method for providing institutions with on-line trading services and customer support for such on-line brokerage services.

The present invention provides a method for providing on-line equity brokerage services to a plurality of financial institutions, each financial institution having respective equities brokers, the method comprising:

- providing a plurality of service cells at a central service institution, each financial institution being assigned to one of the plurality of service cells, each service cell providing at least one technical consultant;
- installing a communications line between each of the plurality of financial institutions and the central service institution;
- providing on-line equities brokerage software for each of the plurality of
financial institutions; and

customizing a front end module of the software for each of the plurality of
financial institutions, the front end module including an identification of the
respective financial institution.

5 The method of the present invention permits individual institutions to quickly
set up on-line trading operations without investing large amounts of time or
money developing their own software. The service cell structure permits the
central service institution to provide quick and customized service directly to the
equities brokers at the respective financial institution.

10 Each service cell may be language specific for the country of the individual
institution, i.e. the technical consultant is fluent in the language of the respective
equities brokers. The service cells preferably are all in a single location at the
central service institution and the on-line equities brokerage software is provided
by the central service institution. The central service institution also preferably
provides a centralized software development group for the on-line equities
brokerage software, so that each technical consultant preferably is in a same
location or building as the centralized software development group. Thus
technical consultants have access to each other and to the centralized software
development group, so that information can be freely exchanged.

15 The present method thus permits even small brokerages to offer on-line
equities brokerage services, since the central service institution can provide the
services more inexpensively. The small brokerages do not need to provide
service or develop software internally.

Preferably, the on-line equities brokerage software includes a program that
provides the equities brokers at the respective financial institutions with broker
software to view and approve trades submitted on-line. This software may be
similar to that described in commonly-owned U.S. Patent Application No.
09/487,112 entitled “Cell-Based Brokerage System and Method” filed on even
date herewith, which is hereby incorporated by reference herein. The on-line
equities brokerage software also may be for example similar to that described in
U.S. Provisional Application No. 60/143,738 filed on July 14, 1999 and hereby
incorporated by reference herein.

In a most preferable embodiment of the present invention, the method further includes hosting the on-line equities brokerage software on a base server at the central service institution and a secure communications line is established between a customer database at the financial institution and the base server. The customer database can contain information on customer accounts, such as account balance, trading limitations, address, etc. This arrangement permits the equities brokerage software to be offered quickly. At a later date, the software then may transferred to a server at the financial institution. The secure communications line may be for example made secure with public key encryption such as that offered by RSA and may be a dedicated T1 line or its equivalent, for example.

The central service institution may be a U.S.-based brokerage, for example, and could be similar to that disclosed in commonly-owned U.S. Patent Application No. 09/487,112 entitled “Cell-Based Brokerage System and Method” identified above.

Preferably, the front end module is a set of HTML-based pages customized for the equities markets serviced by the respective financial institutions. The front end module may include both an identification for the respective financial institution and for the central service institution, a so-called co-branding arrangement.

The communications line preferably is also a secure connection and can permit the technical consultant to view information concerning the on-line equities brokerage software. The communications line may be formed by a WAN or therough the Internet.

The central service institution most preferably is independently organized from each of the other financial institutions, so that the foreign institutions may remain independent and still provide on-line services comparable to larger integrated world-wide brokerages. Independent as defined herein means that the central service institution does not own more than twenty-five percent of the equity of the other financial institutions. Since many financial institutions wish
to remain independent, but feel threatened by the competition of on-line brokerages, the present method can provide for a low cost method for providing on-line services and financial institution independence.

5 Brief Description of the Drawings

Fig. 1 shows a schematized view of one embodiment of the system of the present invention;

Fig. 2 shows a front end module available to client of one of the financial institutions brokerages of Fig. 1; and

Fig. 3 shows a basic flow chart for the method of the present invention.

Detailed Description

Fig. 1 shows a central service institution 100 for serving a plurality of financial institutions 151, 152, 153 having equities brokers. Information concerning the accounts of the clients of each brokerage is stored on servers 141, 142, 143 of the respective financial institution. This information includes account balance, portfolio, contact and trading approval information. Central service institution 100 includes a plurality of service cells 101, 102, 103. Each service cell has at least one telephone, preferably connected to a call center 14, which can field incoming calls and direct them to the proper cell. However, each telephone of the cell may have a direct dial telephone number as well. Each cell 101, 102, 103 also has at least one computer connected to a server 12 of institution 100, for example by a 100 Mbyte Ethernet connection.

Each equities brokerage 151, 152, 153 has clients 251, 351, clients 252, 352, and clients 253, 353 respectively. These clients have an existing relationship with their respective equities brokerage and a serviced by an equities broker. Each of the equities brokerages may also be formed as a cell-based brokerage as described in U.S. Patent Application No. 09/487,112, entitled “Cell-Based Brokerage System and Method” identified above.

The clients may have Internet service provider (ISP) connection for access to the Internet for example. The servers 141, 142, 143 of each of the equities
brokerages 151, 152, 153 thus may be installed with on-line equities brokerage software provided by the central service institution 100. This software permits a client to enter trade information and send it to the equities broker at the respective financial institution 151, 152, 153. The software may be similar to that described in incorporated-by-reference U.S. Provisional Application No. 60/143,738, for example. A front end module of the software however is customized for each institution. Each set of software may have a unique URL which provides access to the front end module. Fig. 2 shows a simplified front end module 131 customized for institution 151. An institutional identifier 80, for example the hypothetical name Banco Murcia, is provided along with an identifier of the central service institution, Trade.comSM. The language could be provided in Spanish and the equities permitted to be traded solely those traded on the Madrid Exchange.

Preferably, the front end module 131 is actually a set of web pages in a specific language providing a variety of services which brokerage 151 is licensed and registered to provide, such as bond trading.

Each of the clients 251, 351 is provided with an identification number and a password for accessing account information or a secure location on the server 141 of the brokerage 151. A server as defined herein may include one or more processors or computers. Server 141 preferably includes a web server for providing access to the on-line brokerage software. The web server is connected to a global telecommunications and information network, such as the Internet, and provides for example an HTML-based interface such as web pages for the clients.

The brokerage 151 may have a set of web pages stored on the web server for permitting clients to access a variety of services, such as equities trading, bond trading, purchasing private placements, buying insurance and other types of financial products. Each client 251, 351 may select to purchase a particular financial product over the web pages or by telephone. However, depending upon the trading approval status of a particular client, the client may be informed that trading is not possible. For example, a client who attempts to purchase an equity
on margin, but is not pre-approved for margin trading, will be informed that the trade is not permissible.

In order to purchase or sell a equities on-line, client 251 enters into predefined fields the stock symbol, the quantity, the action desired, the account to be charged or credited and the order type, and if necessary the price. For example, client 251 inputs a Spanish stock into symbol, 100 into quantity, selects cash account, and selects buy at market. The client 251 may click on an HTML-based button 81 to process the trade. The information is transmitted to server 141 and can be read by the licensed Spanish equities broker of brokerage 151 who services client 251.

The broker then approves or disapproves the trade. If approval is granted, the order is executed on the appropriate market, cleared through an appropriate clearing house and confirmed to client 251, for example by e-mail. If the order is disapproved, the client 251 is informed by e-mail or telephone why the order has been disapproved.

Because the equities brokers at the various brokerages are likely to be unfamiliar with the on-line trading technology, each brokerage is assigned a service cell 101, 102, 103. A communications line, for example a dedicated T1 line or a VPN (virtual private network), is established between the servers 141, 142, 143 and server 12 of the service institution 100. A technical consultant in each of the service cells 101, 102, 103 is provided, preferably with the appropriate language skills, for each of the brokerages 151, 152, 153. These technical consultants can provide service and answer questions about the software, not only for the equities brokers, but if desired, also for the clients of the respective brokerages 151, 152, 153. If such a service is provided for customers, the equities brokers need not answer technical questions for their clients.

The technical consultants are familiar with the front end modules and the equities brokerage software and have access to a software development center 15 preferably located in the same building.

If permissible by applicable securities and exchange regulations, the service cells may be expanded to form account cells as defined in co-pending U.S.
Application No. 09/487,112, entitled "Cell-Based Brokerage System and Method" cited above. In such a case, after hours or extended trading hours may be offered by the service cells, and other financial products as well.

Fig. 3 shows a flowchart of the method of the present invention. In step 71, a plurality of service cells are provided at central service institution 100, each financial institution being assigned to one of the plurality of service cells, each service cell providing at least one technical consultant. The service cells may be preexisting or created as each financial institution installs the brokerage software.

In step 72, a communications line is installed between each of the plurality of financial institutions and the central service institution. Preferably, the communications line is installed between a server of the service institution 100 and a server of the financial institution. This can be accomplished by a dedicated VPN. For example, the servers may be MICROSOFT WINDOWS NT servers having PENTIUM processors. Dial-up access through a telephone line may then be provided. However a dedicated line preferably is provided for constant access. The server 10 thus has access to the on-line equities brokerage software provided at the financial institution. Database information on clients may or may not be accessible, depending on the level of security desired by the financial institution.

In step 73, the on-line equities brokerage software is provided for each of the plurality of financial institutions, preferably placing the software of the server of the financial institution. It is possible that the server 12 first house the brokerage software, and that the communications line provides access to the server 12 for the equities brokers at the financial institutions.

The on-line brokerage software is accessible for example through the ISPs of the various clients.

In step 74, a front end module of the software for each of the plurality of financial institutions is customized so that the front end module including an identification of the respective financial institution. This customization involves, for example, altering the HTML code so that the financial institution is identified on the web pages viewed by the clients, and also involves changing the language and also the permissible entries. For example, Spanish customers may be
permitted to only enter in equities symbols traded on Spanish exchanges.

The term "on-line order" as used herein is defined as an order processed over a telecommunications network such as a WAN, LAN or the Internet. "Internet" as defined herein is a global IP-based communications network. "Web server" as defined herein is a server computer which provides and accepts data over the Internet.
WHAT IS CLAIMED IS:

1. A method for providing on-line equity brokerage services to a plurality of financial institutions, each financial institution having respective equities brokers, the method comprising:
   providing a plurality of service cells at a central service institution, each financial institution being assigned to one of the plurality of service cells, each service cell providing at least one technical consultant;
   installing a communications line between each of the plurality of financial institutions and the central service institution;
   providing on-line equities brokerage software for each of the plurality of financial institutions; and
   customizing a front end module of the software for each of the plurality of financial institutions, the front end module including an identification of the respective financial institution.

2. The method as recited in claim 1 wherein the brokerage software resides on a server of each of the plurality of financial institutions.

3. The method as recited in claim 2 wherein the server is a web server.

4. The method as recited in claim 1 wherein the brokerage software resides on a server of the central service institution.

5. The method as recited in claim 4 wherein the server is a web server.

6. The method as recited in claim 1 wherein each of the plurality of financial institutions is independent from the central service institution.

7. The method as recited in claim 1 wherein at least one of the financial institutions is a non-U.S. equities brokerage.
8. The method as recited in claim 1 wherein the central service institution is a cell-based U.S. registered equities brokerage.

9. The method as recited in claim 1 wherein the customizing step includes providing a non-English language HTML-based interface.

10. The method as recited in claim 7 wherein the customizing step includes identifying symbols of equities permitted to be traded by the non-U.S. equities brokerage.

11. The method as recited in claim 7 wherein a service cell of the plurality of service cells assigned to the non-U.S. equities brokerage provides non-English language technical support.

12. A central service institution for providing on-line equity brokerage services to a plurality of financial institutions, each financial institution having a respective equities brokers, the central service institution including a plurality of service cells at a central service institution, each financial institution being assigned to one of the plurality of service cells, each service cell providing at least one technical consultant; a communications line between each of the plurality of financial institutions and the central service institution; a software development center for providing on-line equities brokerage software for each of the plurality of financial institutions and for customizing a front end module of the software for each of the plurality of financial institutions, the front end module including an identification of the respective financial institution.
FIG. 1

CALL CENTER

SOFTWARE DEVELOPMENT CENTER

SERVER

SERVICE CELL

SERVICE CELL

SERVICE CELL

SERVER

EQUITIES BROKERAGE

CLIENT

ISP

EQUITIES BROKERAGE

CLIENT

ISP

EQUITIES BROKERAGE

CLIENT

ISP

EQUITIES BROKERAGE

CLIENT

ISP

EQUITIES BROKERAGE

CLIENT

ISP
FIG. 2
FIG. 3

71 - PROVIDING A PLURALITY OF SERVICE CELLS AT A CENTRAL SERVICE INSTITUTION

72 - INSTALLING A COMMUNICATION LINE BETWEEN EACH OF THE PLURALITY OF FINANCIAL INSTITUTIONS AND THE CENTRAL SERVICE INSTITUTION

73 - PROVIDING ON-LINE EQUITIES BROKERAGE SOFTWARE TO EACH OF THE PLURALITY OF FINANCIAL INSTITUTIONS

74 - CUSTOMIZING A FRONT END MODULE OF THE SOFTWARE FOR EACH OF THE PLURALITY OF FINANCIAL INSTITUTIONS, THE FRONT END MODULE INCLUDING AN IDENTIFICATION OF THE RESPECTIVE FINANCIAL INSTITUTION
### INTERNATIONAL SEARCH REPORT

**INTERNATIONAL SEARCH REPORT**

**International application No.**

PCT/US99/41767

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPCl(7): G06F 17/60  
US CL: 705/37  

According to International Patent Classification (IPC) or to both national classification and IPC

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S.: 705/37

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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<tr>
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<td>US 6,029,146 A (HAWKINS ET AL) 22 February 2000, see entire document</td>
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<td>US 5,666,493 A (WOJCIK ET AL) 09 September 1997, see entire document</td>
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<td>US 4,942,616 A (LINSTROTH ET AL) 17 July 1990, see entire document</td>
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Further documents are listed in the continuation of Box C.  

See patent family annex.

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Form PCT/ISA/210 (second sheet) (July 1998) *
B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

EAST, PROQUEST
search terms: broker, brokerage services, salesperson, advertising, service cells, technical consultant, brokerage software, financial institutions