

ONLINE COMMUNITIES FOR CUSTOMER RELATIONSHIP MANAGEMENT ON FINANCIAL STOCK MARKETS - A CASE STUDY FROM A PROJECT AT THE BERLIN STOCK EXCHANGE

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Abstract

Retail trading on financial exchanges is always intermediated by banks. Thus, a direct link between exchange and retail investors does not exist. However, financial exchanges offer services to retail investors. Thus, from a marketing perspective, retail investors are their direct customers. Caused by the bank-intermediated transaction chain on financial retail exchanges a direct customer relationship management (CRM) among exchanges and their customers is hardly possible. This circumvents a customer oriented product and pricing policy. Thus banks, as they are nowadays the direct link between exchanges and retail investors, define the market micro structures of the financial exchanges to a large extend. This is true not only for the bank driven whole sale trading but as well for the retail trading.

Ongoing developments of new exchange facilities for the retail trading, such as best execution functionalities, downsizing of the odd lots, adoption of trading hours, the emergence of electronic off exchange trading systems etc. show, that there is a need for improved retail trading platforms.

To overcome these CRM related problems in the financial exchange industry a joined project between the Berlin Stock Exchange and the Potsdam University was set up to implement a platform for a direct CRM among retail investors and financial exchanges. This project relies on web 2.0 technologies to build up a virtual community where the exchange and retail investors can share information about needs, requirements, and ideas about the market model for a retail trading platform and other relevant trading and settlement facilities.

The aim of this contribution is to describe this platform and their advantages for retail investors and for stock exchanges and to provide an outlook of the applicability of web 2.0 technologies in the financial exchange industry. An overview of the implementation and initialization phase of the community will be provided and first results and responses of community members are analysed.

Keywords: stock exchange, virtual community, community engineering, CRM

Introduction

The term 'web 2.0' comprises a couple of innovative technologies such as Ajax or RSS.. One of the main aspects of these new platforms and functionalities are the creation and utilization of 'user generated content' by the implementation of social software such as discussion forums, wikis or blogs (Bächle 2006, O'Reilly 2005). These platforms offer the opportunity to change the position of a customer as a simple user of products and services to an integrated coworker in the firm's production cycle (Robra-Bissantz and Lattemann 2005). In such communities customers can share knowledge, opinions, and ideas with each other and with firms. As a result, the knowledge base of all participants increases and thus builds the basis for improved products. This mechanism enhances the quality and efficiency of a customer relationship management (CRM). Customers become more committed and more loyal to the company and their products and services. From this perspective, this contribution describes the deployment of web 2.0 technologies in the industry of retail stock trading.

The retail exchange industry is coined by a lack of information sharing between end customers and service provider, in particular the retail investors and the stock exchanges, because of the intermediation of investment banks. While only the private retail investors have a direct link to their investment banks and not to the stock exchanges, there is no direct information flow and interaction between retail investors and stock exchanges. Often exchanges do not even know their retail customers/retail investors. This causes a lack of information in respect to the preferred characteristics and wishes of stock exchange micro structures. The consequence is a poor CRM and market models of retail exchanges still lack adequate trading facilities. To overcome these shortcomings a joined project was set up by the Berlin Stock Exchange and the Potsdam University, Chair for Corporate Governance and E-Commerce, to build up an innovative web 2.0 community platform.

Although there is a lot of research in the sector of community building, the case of appliance of web 2.0 technologies in the stock exchange sector shows some pivotal peculiarities in comparison to other industries (Lattemann and Stieglitz 2006, Leimeister and Krcmar 2006, Markus 2002). Hence it is not appropriate to perform a 1:1 transfer of web 2.0 communities from other industries to the stock exchange sector. First of all stock exchanges are strongly limited in respect to the release of certain information because of restrictive European and local stock exchange laws. This aspect hampers the implementation of an open non-restricted communication platform, which is per se one of the premises for non-constrained efficient CRM. Furthermore stock exchanges have a special interest in keeping a serious, objective, and independent image. However, these problems may be overcome by the employment of certain web 2.0 governance mechanisms such as the introduction of moderators, peer review processes, or recommender and quality management systems (Lattemann and Stieglitz 2006). The information is validated from the community members themselves as well as from the exchange. Thus, released information can hardly be influenced or manipulated by the stock exchange or any other interest group.

In the following section industry-specific considerations will be described from a practical and theoretical perspective. Further on, the phases of the 'community engineering' process will be outlined in greater detail by referring to the model of Leimeister and Krcmar (Leimeister and Krcmar 2006). Research results will be presented. The paper ends with a summary and an outlook in the last section.

Steps to Implement a Virtual Market Model Community

The Process of Market Modelling

Today's equity exchanges are faced by a fierce competition. The worldwide biggest exchanges are merging, such as the London and the New York Stock Exchange or the merger of the France, Dutch, Belgium, and Portuguese exchanges to Euronext. Off Exchange trading platforms such as Electronic Trading Networks (ECN) and Multilateral Trading Facilities (MTFs) harm the position of traditional stock exchanges. Thus, in particular small local retail stock exchanges have to invent and implement new market models to attract their trading facilities to investors and to meet new legal standards such as the 'European Markets in Financial Instruments Directive - MiFiD' (Gomber, Gsell and Reininger 2007). As a consequence, recently retail exchanges have offered more and more retail market oriented elements in their market models, e.g. best execution functionalities (Budimir, Holtmann and Neumann 2001) and try to ensure highest price-quality. To integrate retail investors into the institutional financial markets, some trading features are already introduced in respect to customer needs.

However, due to the missing link to the retail investors, the market development process at stock exchanges strongly relies on an indirect market research, by analyzing order flows or by conduct investment bank research. Retail investors are hardly involved into the process of market modelling. This contribution shows an approach to enable the integration of retail investors directly into the market modelling process by applying an online community concept.

The Exchange Project and Community Engineering

While private investors communicate and interact directly with their investment banks in the transaction chain of stock trading, exchanges have no direct link to the retail investors. Even worse, exchanges can not identify individual retail traders because order streams show no retail investor information. This leads to a lack of information about private investors' preferences about trading modes and market models.

By establishing a web 2.0 online community at an exchange, two sequential goals could be achieved. In the first step retail investors should be linked closer to the exchanges et v.v. to enhance an efficient CRM. In the second step, this should result in a direct integration of the retail investor into the process of the market engineering (customer integration approach). Basically, this contribution focuses on results in respect to the first step which is mainly driven by the conceptualization and technical implementation. Because of the short time since the beginning of the project, it could not be expected to achieve reliable results considering the step two.

The basic idea is to implement a platform to enable retail investors to discuss with representatives of the stock exchange, with each other, or with other experts. On the one hand customers can then get directly involved in the specification and design of market models and market innovations. Furthermore, with this approach stock exchanges can adopt needs, desires, and wishes of private investors and extend their own service portfolio. Additionally, virtual product communities can be used to increase customers' loyalty to a specific company (Sester, Eder and Scheichel 2006). This is a very important aspect in the stock exchange sector because retail investors are hardly loyal to exchanges. Prices and service are of major importance in the choice of an exchange. On the other hand, exchanges may perform market research on such innovative platforms by analyzing investors log files in online chats and discussions. Information about the decision making process of private investors promise to be a rich source for the specification of market models.

The project started in January 2006. The web based portal was implemented in July 2006. To build up and operate an interactive web based discussion board several aspects and steps have to be considered before the launch of the platform. In this respect, Leimeister and Krcmar developed a community engineering model which describe the process of community building and community management (Leimeister and Krcmar 2006). This approach was adopted for the presented project. The community engineering approach covers the following five steps: (1) analysis, (2) design, (3) implementation and operation, (4) controlling, and (5) evolution.

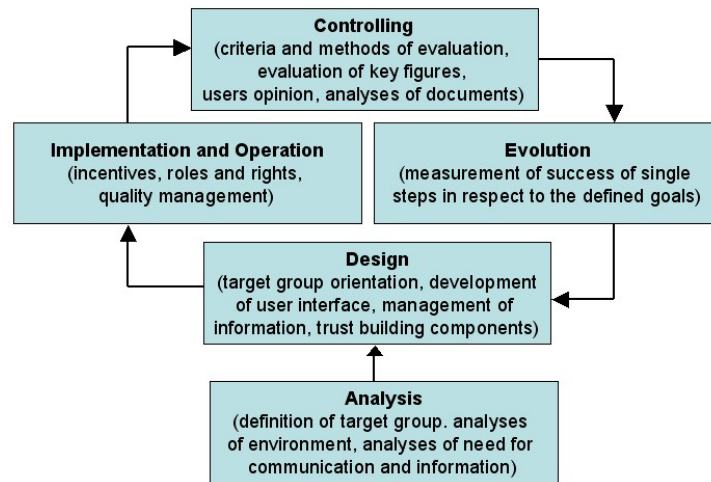


Figure 1: Process of Community Building and Community Management (Leimeister and Krcmar 2006)

The exchange-community project comprised each of these five steps. The project started in January 2006 with an analysis of key issue (attracting the exchange for retail investors, increasing the basis of active traders), the definition of a target group (retail investors) and a research of existing information- and communication technologies (ICT) at the exchange and their attributes (e.g. interfaces, competences etc.).

A performed market research depicted that many retail banks already operate virtual retail communities and that a large variety of internet stock investment platforms exist (among others www.wallstreet-online.de; www.tradesignal.com; www.aktienboard.com, www.yahoo.com). However, all these platforms aim at sharing market information for stocks and prices among traders. Joint discussions and forums among retail investors and exchanges about market modelling do not exist.

After a four month analyse period, the *design phase* was conducted between May to July 2006. A technological platform, community governance mechanisms (Lattemann and Robra-Bissantz 2006, Lattemann and Stieglitz 2006) and the design of the graphical user interface were defined. The online exchange community was opened in July 2006 (implementation and operation phase) and thereafter continuously monitored and controlled (controlling phase). Within this time frame a lot of changes in provided services, functionalities, and structure of the portal were planned and realized (evolution phase) (see Figure 2).

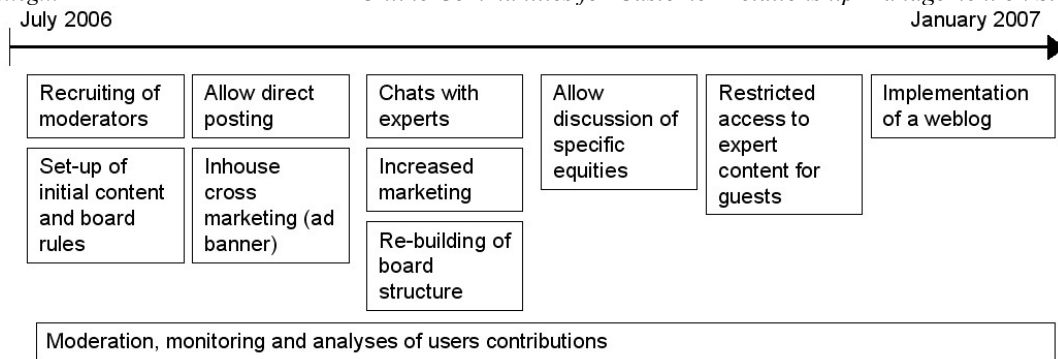


Figure 2: Improvements of the Community Platform between July 2006 and January 2007

In January 2007 the outcome of the Web 2.0 portal was evaluated by a comparison of first extracted figures such as the number of registrations, the number of members and the impact on the perceived image of the stock exchange (see section ‘Controlling Phase’). After the completion of this evaluation and with a positive review, the project partners agree to extend the time frame of project.

The Process of Analysis

Target Group Definition

As mentioned above, the focus of the project lies on the implementation of a platform for a continuous and bilateral communication between retail investors and stock exchanges. As experiences from other corporate web based communities depict (e.g. Deutsche Postbank AG 2005), CRM platforms should be started with a set of competent and interested customers, thus with a closed user group. In the first phase (test) until July 2006, the target group was restricted to specifically selected retail investors. Only well-informed (high knowledge about stock markets) and well-interested investors (responded immediately to the mailings etc.) were invited to join the platform. The members of the target group are characterized by three essential aspects:

- (1) Profound affiliation and knowledge in the field of finance and investment topics.
- (2) Existence of a minimum of technological knowledge, such as using the internet, understanding the concept of online discussions, or complete a registration process in the internet.
- (3) Active trading on the exchange (at least once a week)

Approximately 6.000 addresses from retail investors were collected by scanning past registrations on the exchange-portal, past trading seminars, exhibitions, and other events. These 6000 retail investors received a mail from the exchange with the information about the exchange community initiative and with a questionnaire about their relation to the exchange, characteristics of trading activities, computer literacy and further basic customer information. According to the return of the questionnaires, 300 retail investors are identified to fulfil the stated requirements and demonstrated their willingness to participate actively in the project. These 300 retail investors were invited to a kick off event in spring 2006 on the floor of the exchange. As expected, only approximately 10 per cent of this sample appeared. These were in particular local based retail investors (from the states of Berlin and Brandenburg). This event was set up as a discussion panel. Among others, creativity techniques such as the 635 method (Rohrbach 1969) were employed to detect topics and features of the new platform. The suggested topics and features will be outlined in the following sections ‘Analysis of Environment’, ‘Development of Interface’, and ‘Structure of the Platform’.

Analysis of Environment

As an outcome of the discussion panel, it has been identified that retail investors wished to set up discussion forums among others for the following two topics:

- (1) Market model and characteristics of a retail trading platform
- (2) Financial investments

The implementation and operation of a community which deals with rapidly changing information (e.g. continuously changing market information and stock prices) is different from other communities, which discuss topics such as health (Leimeister and Krmar 2006), food (see www.blog-frosta.de) or more strategic bank services (see www.cortalconsors.de).

Daily changing information is of pivotal relevance for the retail investors. Thus, it can be assumed that social aspects such as identity (Haring 2002), values and ideologies (Gabriel and Goldmann 2001, Raymond 1999), and affiliation (Haring 2002, Raymond 1999) are of less importance in financial communities than in other communities. Hence, the motivation is far more driven by the need for new information (Raymond 1999, Shah 2003), the enjoyment and the desire to create and improve (Gabriel and Goldmann 2001, Gelernter 1998) and training, learning and career concerns (Lakhani and von Hippel 2003, Lerner and Tirole 2002, Raymond 1999). This has been considered in the design and functionalities of the platform by introducing appropriate governance mechanisms (such as differentiated access and rights concept, user ranking system, employment of moderators etc.; see section ‘Governance and Incentive System’).

To learn more about the environment of online communities, research was conducted to gather information about existing competitors and reference projects. Three analyses were carried out:

1. Research on existing web based communities of several topics in general
2. Research on existing finance communities
3. Identification of other financial communities that are operated by stock exchange

These analyses show that there are several successful financial communities existing. Furthermore there are a lot of communities dealing with financial and investment topics (e.g. www.wallstreet-online.de). However, no web based community operated by a stock exchange, in particular with the aim to improve the market model and to strength the customer relationship between the retail investor and the stock exchange, exists.

The Phase of Design

The community engineering and the features of the platform strongly relied on the supposed findings of the research phase.

Development of User Interface

One of the major aspects in setting up a virtual community is to choose a specific technology. Following an evaluation of eight different open source and proprietary programmes it was decided to use the ‘invision power board’ software (www.invisionboard.com/), because this platform received the highest score in a ranking according to the requirements of the Berlin Stock Exchange (costs, functionality, technical support, compatibility to existing technology and know-how etc.). In a later stage, additional software (ParaChat) was added to allow chats with external experts (www.parachat.com). Later research on members’ desires showed that such a module had to be added because of an unexpected high interest of private investors to chat with external market experts about financial topics (brokers, experts of Chinese market, experts in social investments etc.).

The platform design was adapted to the corporate design of the stock exchange (see Figure 3).

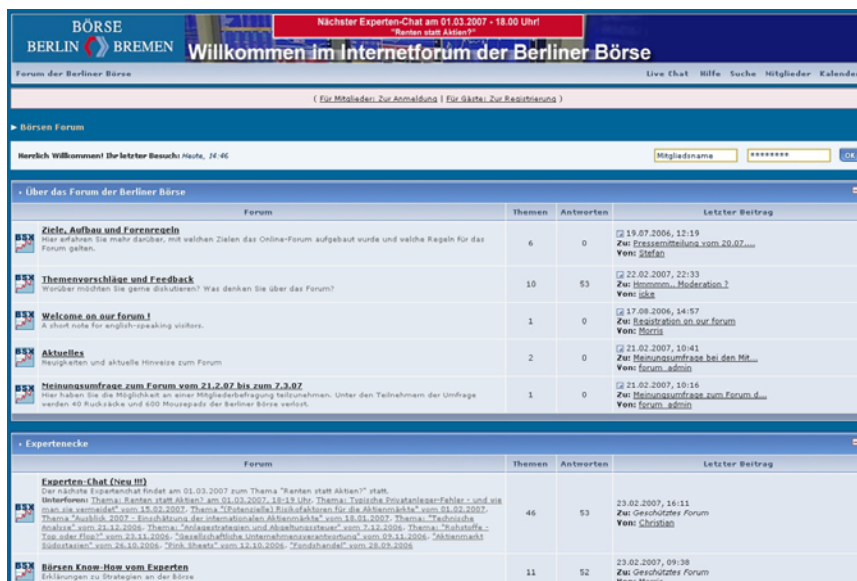


Figure 3: Design of the Discussion Board of the Berlin Stock Exchange

The initial structure of the discussion board was mainly influenced by results of interviews and the performed work shop with private investors. Before the launch of the platform, relevant topics were pre-processed by experts of the stock exchange and from the involved researchers. According to Leimeister and Krcmar (Leimeister and Krcmar 2006) and Markus (Markus 2002), the uploading of high quality content into the empty platform, before the start of the operation, is one of the success factors to realize network effects. After the launch of the platform the quantity of topics rapidly grew and content was added by retail investors. However, discussions about the market model of the stock exchange were initiated only slowly.

In order to conform to the tight EU and German exchange regulations, rules of conduct and about the postings of content in the virtual community were disclosed to the community members. To build up trust and to achieve a broad basis of acceptance, these rules were intensively discussed with the community member.

The later introduced expert-chats are conducted on a regular biweekly basis since September 2006. Different experts were invited to share knowledge with private investors about changing topics such as 'Fond Trading', 'Pink Sheets', 'Raw Material/Commodities', or 'Corporate Social Responsibility'. Analyse showed that the 'experts corner' was one of the main reasons to participate in the community.

The Phase of Implementation and Operation

After a first test phase, which was conducted with a sample of test users (see section target group definition), the system was opened to other users. This project phase was supported by announcements on the homepage of the exchange, in newsletters, and in newspapers. From this point on every internet user was allowed to register to the community and to open up threads and to contribute comments.

Group Policies

The virtual community consists of four groups. Each group has different rights and duties. This role and rights concept comprises the following issues:

- The **administrators** set up the board structure and maintain the data base and log files. Therefore, this is the only group that has access to administration functionalities.
- The group of **moderators** monitors the content of the platform. Moderators answer user's questions and bring up new topics and discussions within the platform. Furthermore they have the duty to remove illegal, inadequate, or commercial contributions. The tasks of moderators changed with the growth of the community and with the changing from the initialization stage to the growth stage of the project. For a more detailed discussion of the life cycle of online social communities, see Wynn (Wynn 2004). In the initialization stages, it is most important to generate new contributions and fill the board with high quality content. This aims at accelerating network effects on the platform. In respect to network effects, a critical mass of registered members and contributions must be achieved (Leimeister and Krcmar 2006). In later stages of the life cycle of the community, monitoring and customer care gains importance. This finding was supported by a permanent analysis of moderator's tasks and customer satisfaction.
- To become a **member** of the community, retail investors have to register on the platform with an email address and user name. These users receive additional rights such as access to all content within the community platform and the ability to participate in chats with experts. From an operators' standpoint the number of members is most important for the success of such a tool, and especially for customer relationship management purposes. These members are privileged to receive information and notification in the case of certain events.
- Not registered **guests** are not privileged to generate contributions, participate in chats with experts, or receive access to expert's knowledge, which is published in a separated, password secured area. This restricted access was implemented in December 2006 after an increased number of registrations.

The role of each user is logged in their personal profile and is publicly available.

Governance and Incentive System

It is of crucial importance to know why users participate in social networks and why users contribute information to the community - primarily on voluntarily basis - to set up an online community. On the basis of these information, an appropriate incentive system can be designed and implemented.

Such findings can be derived from research contributions about other internet mediated social communities. In open source projects for example, where volunteers generate software codes, research has been conducted to identify the motivational drivers (Achtenhagen, Müller-Lietzkow and Knyphausen-Aufseß 2003, Lakhani and Wolf 2005, Lattemann and Stieglitz 2006, Lerner and Tirole 2002, Osterloh, Rota and Kuster 2003). As Shah depicts, the need for information, fun, and reputation reasons within social communities are dominating aspects to contribute voluntarily (Shah 2003). Thus, a governance system, which refers to these motives, was set up in this project. Incentives are implemented to increase the

willingness to participate and a reputation system which focuses on the number of published contributions by members was applied. Members are ranked according to their number of contributions. An overall real-time ranking list is accessible by all users. The effectiveness of such a reputation system is influenced by two aspects (Markus 2002):

- (1) The social interrelation among the member (feeling as a community)
- (2) The reputation of the board operator.

Hence, in a virtual community, which is based on strong interrelations, it is more interesting for a user to receive a status as a 'power user' or 'user of the month', than in a community with fluctuating and distanced members that do not participate frequently. Since personal relationships have to grow in time to build up social networks, it is hardly possible to employ these kinds of governance mechanisms efficiently in the initial stage of such a project.

Because of their traditional independent and objective status, exchanges in the financial market have a high reputation. This reputation is directly transferable to the virtual world. Thus, financial exchanges - as operators of virtual communities - are naturally associated with a high reputation. This signals respectable and high quality content. Therefore, from the perspective of a member, it is more desirable to be a superior member in an exchange operated community than in a community where the operator is unknown or of lower reputation.

Quality Management

The assurance of high quality within the posted content on the community platform is one of the dominating factors for/of success. Because of the stringent legal framework for exchanges not only the quality but also the accuracy of the content are of primary importance.

Sester et al. showed that user's motivation to contribute to a virtual social network decreases when the average quality of the contents is low. Furthermore content of bad quality may fall back to the operator and damage his/her image (Sester, Eder and Scheichel 2006). Quality management is primarily driven by the group of moderators who remove certain contributions that do not fulfil the rules of the platform (e.g. advertisements and spam).

A strict monitoring policy was deployed in the initialisation phase of the virtual exchange community to make sure that all contributions are compliant to the rules and regulations of the platform. Each member's contribution has to pass a process of confirmation and be released by the moderators. Furthermore, discussions about specific stocks were not allowed in the initialization phase. This aims at preventing price manipulation by information published on the exchange system. Feed back by users showed that such a restriction hampered the usability and signalled distrust against community members by the operator. Therefore these restrictions were removed in August and December 2006 to increase the feeling of autonomous behaviour within the community.

The Controlling Phase

The installation and initialization of the platform was organized according to project management techniques. Work packages and milestones were defined. Functional and technical specifications, deliverables, and measurable targets were set up. A resource management was applied and a project organization led to the employment of specified members which have special tasks. The following key objectives were controlled and monitored:

- (A) Establishing a bilateral communication between private investors and the stock exchange
- (B) Increasing loyalty of private investors to the operator
- (C) Enhanced knowledge base of target group
- (D) Improving the image of a stock exchange with high technologic skills and instruments
- (E) Collecting and converting ideas for improvements of a market model for retail investors
- (F) Increasing number of exchange customers and the number of daily trades

These objectives were measured by the following criteria:

- (1) Number of registrations in the community in a specific time (dedicated to objective A &B)
- (2) Number of new contributions in a specific time (dedicated to objective A)
- (3) Quality of member's profile data (dedicated to objective C)
- (4) Customer's satisfaction with the platform (researched by questionnaire) (dedicated to objective D)
- (5) Perceived image of the exchange by the community members (researched by questionnaire) (dedicated to obj. D)
- (6) Number of new ideas for the specification of new features of a market model (dedicated to objective E)
- (7) Number of trades and contracts notes of the exchange (dedicated to objective F)

Except for the effects on the real exchange business (objective F), which will probably materialize in a longer period than 9 months, all these indicators provide valid information about the success of the projects. However, as Schoberth, Preece, and Heinzl (2002) depict, the postings in financial communities is highly influenced by external variables such the volatility and

level of prices on the stock market. In this respect, the observation period is coined by a strongly increasing stock market. This may bias the research results.

The figures are monitored continuously. It shows that the number of registrations and the number of contributions are accelerating. The number of registrations as well as the number of contributions increased strongly since October 2006 (Figures 4 and 5). It can be assumed that networks effects are already in place. Hence, a bilateral communication channel between private investors and the stock exchange is established (objective A). It can be assumed that loyalty of private investors increases, as registered users are frequently on the platform (objective B).

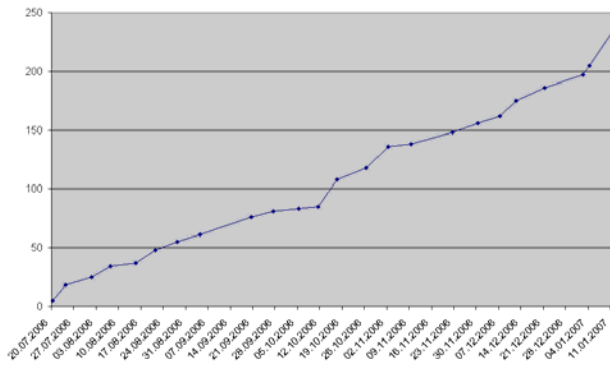


Figure 4: Number of Registrations

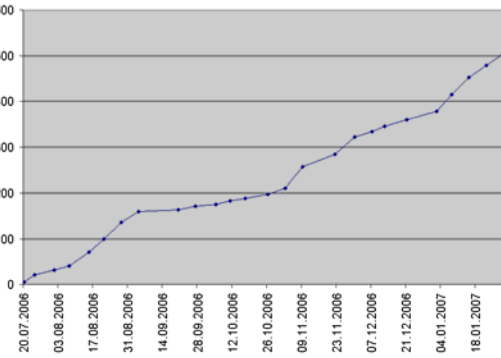


Figure 5: Number of Contributions

Furthermore user data are collected to gather information about skills and interests of community members (Objective C). The survey assessed information about gender, age, and the behaviour of community members. These data are analysed to receive a profile of retail investors and to optimize related activities such as customer trainings or advertisement.

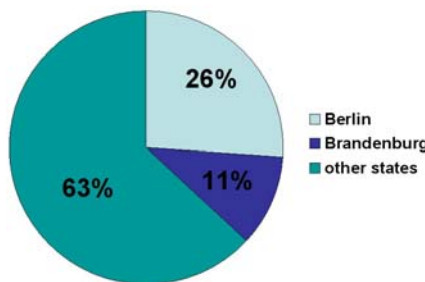


Figure 6: Regions where Members come from

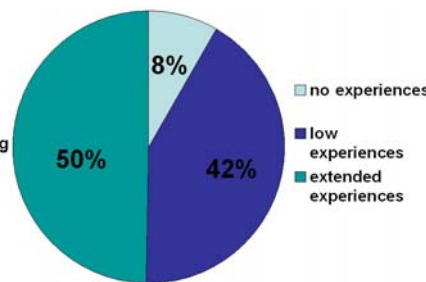


Figure 7: Knowledge in Financial and Investment Topics

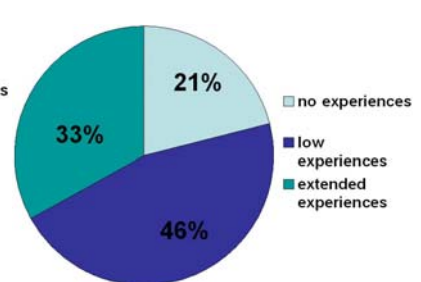


Figure 8: Knowledge in Using Web Based Discussion Boards

Beneath these profile data, users were asked if they already performed a trade on the stock exchange. This was answered by 66% with 'yes', while one third never sold or bought stocks at the stock exchange which initiated the project (objective B). Most users described themselves as extended experienced with financial and investment topics.

However the question about members' knowledge regarding web based communities was answered with 'low' by 46% of the participants. Knowledge, experiences, and expectations of users influence the acceptance of an online-community. Hence, the platform must consider all these factors. Our analysis shows that design and usability of the community is of central importance. Otherwise members will not be able to publish contributions or abort the process at a certain stage because of the complexity of the system.

The Evolution Phase

The measuring of these and other figures, e.g. acceptance of the platform/customer satisfaction (e.g. awareness of platform, perception of design, functionality, technology, etc.) (objective D) depicts that the set up process and operation of the virtual community at the stock exchange was well defined and appropriate for the specific conditions around the financial exchange market.

Although there is a strong increasing number of registered members and participants in the 'expert's corner', the total number of contribution posted by community members increased only slightly (objective A & B). However, since December 2006 the number of contributions seems to grow with increasing speed.

The platform was promoted on the website of the stock exchange, in newspapers, and in the internet (e.g. focus-online.de, freenet.de, boersenreport.de) in order to increase the awareness.

In December 2006 a personal web-log was introduced as an additional feature on the platform. From then on members were able to post their trading experiences and observations by boarding this web-log. The effect of this feature on customer satisfaction will be measured in the near future.

This platform shows that it is possible to operate a CRM system by exchanges to get in direct contact to their customers. With this platform, the stock exchange now permanently receives information about private investor's preferences. This information can be used in a second step to improve the exchange retail trading system.

As retail investors are not used to think about market models and market engineering, input by retail investors in respect to market modelling issues falls short. Until now, retail investors posted only a small number of ideas into the system (objective E). None of the posted ideas have been realized so far. However, the platform initiates the reflection about market modelling and financial market engineering by retail investors. It can be assumed that this process takes time. Additionally, there has not been any evidence about the impact of this community on trading activities until now (objective F).

Conclusion

The financial exchange industry reveals a lack of information sharing among end customers and service providers, in particular the private investors and the stock exchanges. The reason for this issue is rooted in the intermediated role of investment banks in the investment process of retail equity trading. Thus, no direct information flow and interaction between private investors and stock exchanges exists. This causes a lack of information regarding the preferred characteristics of stock exchange market models for retail trading and a poor customer relationship management. Existing exchange trading systems reveal features which attract only wholesale trading to a large extent. They still lack retail trading facilities. In order to overcome these shortcomings a joined project was set up by the Berlin Stock Exchange and the Potsdam University to implement an innovative web 2.0 community platform.

This approach outlines that an appliance of innovative web 2.0 technologies can help to establish a direct link between private investors and stock exchanges and to receive appropriate customer data for the development of a trading facility which reflects customers' needs. The successful implementation of a virtual community depends strongly on the way and process of community engineering and management and the implementation of appropriate governance mechanisms, which support the willingness of private investors to post voluntarily and to act actively as a member in the virtual community.

However, building up a virtual community is a long term project. To be successful, a critical mass of users and contributions must be attracted to achieve network effects (Markus 2002). The enhancement of the system must be aligned with the life cycle and project stages of the platform. Therefore, it is important to continuously identify the environment of a virtual community. External developments and market trends, however, may have a strong influence on the number of members and the degree of activity as Schoberth et al. showed (Schoberth, Preece and Heinzl 2003).

So far, this research is limited regarding the analysis of in-depth data from retail investors, such as their wishes and needs for trading facilities etc. The analysed data only provide evidence on a closer customer relation. To what extent this could be transferred into enhanced trading facilities must be subject of further analysis. Hence, further research will be performed on the basis of this project to determine the effect of the introduction of new features within the platform and to analyse the impact of different governance mechanisms on the behaviour of community members in the field of financial exchanges.

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