G –TRADE

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Abstract- Trading is nothing but the act of process of buying selling & exchanging commodities, at either wholesale or retail, within a country or in between countries. i.e. Business deals or transaction. G-Trade plays vital role in trading implementations applications. These business processes are highly customized depending on the Organizations business and objectives. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing. The wholesaling process is an intermediate step in the distribution of merchandise. Wholesalers are organized to sell or arrange the purchase or sale of goods for resale (i.e., goods sold to other wholesalers or retailers), capital or durable non consumer goods, and raw and intermediate materials and supplies used in production.

I. INTRODUCTION

G-TRADE is nothing but G-Business (G-Vyapar). The process of buying , selling and exchanging commodities at either wholesale or retail. Commodity can be obtained from farmers, suppliers or retailers. Our system keeps record of all these transactions and provides a cheat free and easy way of business.

The main aim of project is trading done virtually. G-Trade plays vital role in trading implementations applications. These business processes are highly customized depending on the Organizations business and objectives.

The information and contents provided in the cyberspace often share the same characteristics as public goods in that they are non-rivalrous and non-excludable (Kollock, 1999). Hence, the existing scholarship on public goods may help understand the interaction and dynamics in OCs. It has long been illustrated in the public goods literature that rational individuals may not take into account the externalities that they impose on others when they independently engage in production activities (see, e.g., the classic example of cattle grazing in Hardin (1968), and also, Coase (1960)). Similarly, because individuals do not fully benefit from the information or contents that they share with others in OCs, they may tend to free ride on others' contributions. The voluntary contribution levels by each individual member in OCs may thus be lower than what social optimum would call for.

Objectives of system:

1) Administration.
2) Master.
3) Banking and Payment Gateway.
4) Maintaining Active Database.
5) Analysis.

II. ADMINISTRATION:

A system administrator, or sysadmin, is a person who is responsible for the upkeep, configuration, and reliable operation of computer systems; especially multi-user computers, such as servers. The system administrator seeks to ensure that the uptime, performance, resources, and security of the computers he or she manages meet the needs of the users, without exceeding the budget. To meet these needs, a system administrator may acquire, install, or upgrade computer components and software; automate routine tasks; write computer programs; troubleshoot; train and/or supervise staff; and provide technical support. In larger organizations, some of the tasks above may be divided among different system administrators or members of different organizational groups. For example, a dedicated individual(s) may apply all system upgrades, a Quality Assurance (QA) team may perform testing and validation, and one or more technical writers may be responsible for all technical documentation written for a company. System administrators, in larger organizations, tend not to be systems architects, system engineers, or system designers. In smaller organizations, the system administrator might also act as technical support, Database Administrator, Network Administrator, Storage (SAN) Administrator or application analyst.

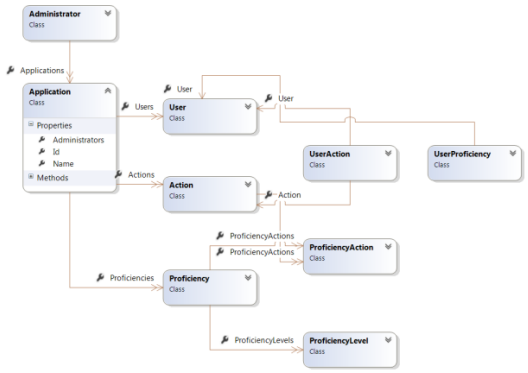

Fig 1: Administration of website

Particularly when dealing with Internet-facing or business-critical systems, a sysadmin must have a strong grasp of computer security. This includes not merely deploying software patches, but also preventing break-ins and other security problems with preventive measures. In some organizations, computer security administration is a separate role responsible for overall security and the upkeep of firewalls and intrusion detection systems, but all sysadmins are generally responsible for the security of computer systems.

III. MASTER:

We are designing web-site which will be more user friendly. Designing well-structured websites to facilitate effective user navigation has long been a challenge. A primary reason is that the web developers' understanding of how a website should be structured can be considerably different from that of the users. While various methods have been proposed to relink web pages to improve navigability using user navigation data, the completely reorganized new structure can be highly unpredictable, and the cost of disorienting users after the changes remains unanalyzed. This paper addresses how to improve a website without introducing substantial changes. Specifically, we propose a mathematical programming model to improve the user navigation on a website while minimizing alterations to its current structure. Results from extensive tests conducted on a publicly available real data set indicate that our model not only significantly improves the user navigation with very few changes, but also can be effectively solved. We have also tested the model on large synthetic data sets to demonstrate that it scales up very well. In addition, we define two evaluation metrics and use them to assess the performance of the improved website using the real data set. Evaluation results confirm that the user navigation on the improved structure is indeed greatly enhanced. More interestingly, we find that heavily disoriented users are more likely to benefit from the improved structure than the less disoriented users.

The advent of the Internet has provided an unprecedented platform for people to acquire knowledge and explore information. There are more than 1.73 billion Internet users worldwide.

The fast-growing number of Internet users also presents huge business opportunities to firms. According to Grau, the US retail e-commerce sales (excluding travel) totalled$127.7 billion in 2007 and will reach $218.4 billion by 2012. In order to satisfy the increasing demands from online customers, firms are heavily investing in the development and maintenance of their websites. Internet Retailer reports that the overall website operations spending increased in 2007, with one-third of site operators hiking spending by at least 11 percent, compared to that in 2006.

Despite the heavy and increasing investments in website design, it is still revealed, however, that finding desired information in a website is not easy and designing effective websites is not a trivial task. Galletta et al. indicate that online sales lag far behind those of brick and-mortar stores and at least part of the gap might be explained by a major difficulty users encounter when browsing online stores. Poor website design has been a key element in a number of high profile site failures. McKinney et al. also find that users having difficulty in locating the targets are very likely to leave a website even if its information is of high quality.

A primary cause of poor website design is that the web developers' understanding of how a website should be structured can be considerably different from those of the users. Such differences result in cases where users cannot easily locate the desired information in a website.

This problem is difficult to avoid because when creating a website, web developers may not have a clear understanding of users' preferences and can only organize pages based on their own judgments. However, the measure of website effectiveness should be the satisfaction of the users rather than that of the developers. Thus, WebPages should be organized in a way that generally matches the user's model of how pages should be organized.

Previous studies on website has focused on a variety of issues, such as understanding web structures, finding relevant pages of a given page, mining informative structure of a news website and extracting template from web pages. Our work, on the other hand, is closely related to the literature that examines how to improve website navigability through the use of user navigation data. Various works have made an effort to address this question and they can be generally classified into two categories to facilitate a particular user by dynamically reconstituting pages based on his profile and traversal paths, often referred as personalization, and to modify the site structure to ease the navigation for all users, often referred as transformation.

An Example

We use an example to illustrate the aforementioned concepts and how to extract the metric from weblog files. To analyze the interaction between users and a website, the log files must be broken up into user sessions. A session is a group of activities performed by a user during his visit to a site and propose timeout methods to demarcate sessions from raw log files. In this definition, a session may include one or more target pages, as a user may visit several targets during a single session. Since the metric used in our analysis is the number of paths traversed to find one target, we use a different term mini session to refer to a group of pages visited by a user for only one target. Thus, a session may contain one or more mini sessions, each of which comprises a set of paths traversed to reach the target. We use the page-stay timeout heuristic. Specifically, we identify whether a page is the target page by evaluating if the time spent on that page is greater than a timeout threshold. The intuition is that a user generally spends more time reading on the documents that they find relevant than those they do not. Though it is impossible to identify user sessions unerringly from weblog files, we find the page-stay heuristic an appropriate technique for the context of our problem. We depict in where a user starts from A, browses D and H, and backtracks to D, from where he visits C, B, E, J, and backtracks to B. Then, this user goes from B to F and finally reaches the target K. We formally denote the mini session by S ¼ ffA; D;Hg;fC; B;E; Jg; fF;Kgg, where an element in S represents a path traversed by the user. In this example, mini session has three paths as the user backtracks at H and J before reaching the target K. Note that D and B only appear once in S because of caching.

Nowadays, an increasing number of web applications require identification registration. However, the behaviour of website registration has not ever been thoroughly studied. We use the database provided by the Chinese Software Develop Net (CSDN) to provide a complete perspective on this research point. We concentrate on the following three aspects: complexity, correlation, and preference. From these analyses, we draw the following conclusions: firstly, a considerable number of users have not realized the importance of identification and are using very simple identifications that can be attacked very easily. Secondly, there is a strong complexity correlation among the three parts of identification. Thirdly, the top three passwords that users like are 123456789, 12345678 and 11111111, and the top three mail providers that they prefer are NETEASE, qq and sina. Further, we provide some suggestions to improve the quality of user passwords.

The Chinese Software Develop Net (CSDN) is established in December 1999 [1]. After about 10 years' development, it has become one of the biggest developers' communities in China. CSDN provides IT news, web forums, blog hosting, resource downloading, and other services. It is said that more than 90 percent of excellent Chinese programmers registered in CSDN. On December 2011, CSDN was attacked by some hackers; more than 6 million pieces of users' identification information were leaked. We just use this database to analyze user behaviours in website identification. CSDN identification is composed of three components called CSDN account, CSDN password and registration email. These three elements should be provided when one wants to register as a CSDN user. When logging in the CSDN website, a user needs to provide his CSDN account and CSDN password.

In this paper, we study user behaviours in three aspects: complexity of each identification component, correlation between identification components and user preference in choosing password and email. The conclusions can be drawn as follows: firstly, using the complexity model that we build, we find that the complexity of most users' identification is very low which means users do not realize or care about the importance of the identification. Secondly, the three parts of identification has a strong correlation which means that users tend to use similar identifiers in different websites. Thirdly, users prefer choosing some very simple identifiers as their password, such as 123456789, 12345678 and 11111111, and the biggest email providers in China are NETEASE, qq and sina which have the top three numbers of users.

After further discussion of related work in Section II, Section III builds a complexity model and analyzes complexity of each identification part. Section IV then analyzes correlation between identification components. In Section V, we analyze user preference in using password and email provider. Then some conclusions are drawn in Section VI.

RELATED WORK

Owning to the privacy of the users' registration information, website owners are unwilling to share these databases to academics so that few researches based on large-scale actual datasets have been reported. Using 400 students' password information, the authors found that mnemonic password is as secure as random password, and more secure than standard password. This evaluation was limited to guessing certain password using a password cracking dictionary. With 290 individuals' password information, the authors found that the majority of mnemonic passwords are related to external resources, such as famous movie quotes and famous singers. So the passwords are only as secure as common passwords, if not less, since it would be obtained by attackers using an attack dictionary based on such external sources. Half a million Windows Live users were studied, and it was found that an average user has 6.5 passwords which are used to log in 3.9 different sites. Each user owns about 25 accounts that needs passwords, and types an average of 8 passwords every day. And overwhelming majority of web users pick passwords that are composed by lower case letters only unless they are forced not to do so.

Over 7 700 accounts are studied in. The authors developed a method by which an attacker can search for a certain user's new password using an old one. Applying the framework, they found that using the knowledge of expired passwords from the same account,41% of passwords could be obtained in three second in a university system. We obtained a large-scale actual dataset which is more than 6 million pieces of users' identification information from CSDN. And this is nearly the whole database of CSDN users' identification information. So there is basically no sample bias.

IV. BANKING AND PAYMENT GATEWAY

A payment gateway is an e-commerce application service provider service that authorizes payments for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar. It is the equivalent of a physical point of sale terminal located in most retail outlets. Payment gateways protect credit card details by encrypting sensitive information, such as credit card numbers, to ensure that information is passed securely between the customer and the merchant and also between merchant and the payment processor.

A payment gateway facilitates the transfer of information between a payment portal (such as a website, mobile phone or IVR service) and the Front End Processor or acquiring bank. When a customer orders a product from a payment gateway-enabled merchant, the payment gateway performs a variety of tasks to process the transaction.

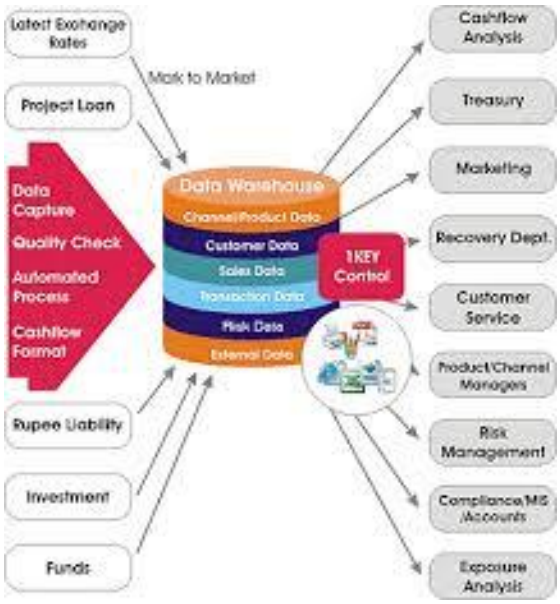

Fig 2: Banking Details

- A customer places order on website by pressing the 'Submit Order' or equivalent button, or perhaps enters their card details using an automatic phone answering service.
- If the order is via a website, the customer's web browser encrypts the information to be sent between the browser and the merchant's web server. In between other methods, this may be done via SSL (Secure Socket Layer) encryption.
- The payment gateway may allow transaction data to be sent directly from the customer's browser to the gateway, bypassing the merchant's systems. This reduces the merchant's PCI-DSS compliance obligations without redirecting the customer away from the website.
- The merchant then forwards the transaction details to their payment gateway. This is another (SSL) encrypted connection to the payment server hosted by the payment gateway.
- The payment gateway forwards the transaction information to the payment processor used by the merchant's acquiring bank.
- The payment processor forwards the transaction information to the card association (e.g., Visa/MasterCard)
- If an American Express or Discover Card was used, then the processor acts as the issuing bank and directly provides a response of approved or declined to the payment gateway.
- Otherwise [eg: a MasterCard or Visa card was used], the card association routes the transaction to the correct card issuing bank.
- The credit card issuing bank receives the authorization request and does fraud and credit or debit checks and then sends a response back to the processor (via the same process as the request for authorization) with a response code [e.g.: approved, denied]. In addition to communicating the fate of the authorization request, the response code is used to define the reason why the transaction failed (such as insufficient funds, or bank link not available). Meanwhile, the credit card issuer holds an authorization associated with that merchant and consumer for the approved amount. This can impact the consumer's ability to further spend (eg: because it reduces the line of credit available or because it puts a hold on a portion of the funds in a debit account).
- The processor forwards the authorization response to the payment gateway.
- The payment gateway receives the response, and forwards it on to the website (or whatever interface was used to process the payment) where it is interpreted as a relevant response then relayed back to the merchant and cardholder. This is known as the Authorization or "Auth"
- The entire process typically takes 2–3 seconds.

- The merchant then fulfills the order and the above process is repeated but this time to "Clear" the authorization by consummating the transaction. Typically the "Clear" is initiated only after the merchant has fulfilled the transaction (eg: shipped the order). This results in the issuing bank 'clearing' the 'auth' (ie: moves auth-hold to a debit) and prepares them to settle with the merchant acquiring bank.
- The merchant submits all their approved authorizations, in a "batch" (eg: end of day), to their acquiring bank for settlement via its processor.
- The acquiring bank makes the batch settlement request of the credit card issuer.
- The credit card issuer makes a settlement payment to the acquiring bank (eg: the next day)
- The acquiring bank subsequently deposits the total of the approved funds into the merchant's nominated account (eg: the day after). This could be an account with the acquiring bank if the merchant does their banking with the same bank, or an account with another bank.
- The entire process from authorization to settlement to funding typically takes 3 days.

Many payment gateways also provide tools to automatically screen orders for fraud and calculate tax in real time prior to the authorization request being sent to the processor. Tools to detect fraud include geo location, velocity pattern analysis, OFAC list lookups, 'black-list' lookups, delivery address verification, computer finger printing technology, identity morphing detection, and basic AVS checks.

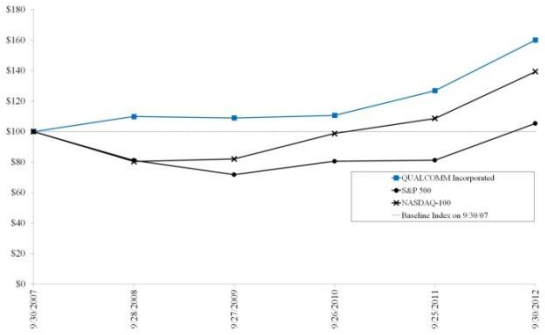

Fig 3: Payment Gateway

Security: Since the customer is usually required to enter personal details, the entire communication of 'Submit Order' page (i.e. customer - payment gateway) is often carried out through HTTPS protocol. To validate the request of the payment page result, signed request is often used - which is the result of the hash function in which the parameters of an application confirmed by a «secret word», known only to the merchant and payment gateway.

V. ACTIVE DATABASE:

Real-time active database systems (RTADB's) have attracted the attention of researchers in recent times. Such systems are envisioned as control systems for environments as diverse as process control, network management and automated financial trading. Sensors distributed throughout the system report the state of the system to the database. Unacceptable state reports typically results in corrective actions being triggered with deadlines. Thus RTADB's incorporate both real-time as well as active characteristics. In this paper, we study buffer management in RTADB's. Buffer management is recognized as not being a well studied area in real-time systems. So we are maintaining active database for our courier services.

VI. ANALYSIS:

Private benefit comes from the individual's contribution, whereas public benefit comes from aggregated contributions by all. For private benefit, the more the individual contributes, the more this kind of benefits he can enjoy. For example, the individual can get more recognition from others by making more contributions. Thus we can approximate it as a liner function of the individual's contribution. On the other hand, public benefit should be the summation of all individuals' contributions. For example, the public benefit in YouTube should be the total video clips There are two costs corresponding to making contribution to knowledge repository in the intra-organizational context (Waskoand Faraj, 2005). One is loss of knowledge power; the other is codification effort. Because our research subject is publicly open OC, we can ignore the first cost safely. Therefore the cost can be considered as the resources (e.g. time or effort) individuals have to spend on making contribution. Lastly, it is obvious that every individual have to face a resource constraint (e.g., time or energy).Different from traditional analysis in public goods provision where only under-contribution is the equilibrium, in our setting both possibilities, under- and over-contribution can happen. From user perspective when information is not overloaded, the marginal value of public goods is positive. Once information is overloaded, the marginal value of public goods becomes negative9. That is to say, under information under loading, public goods are good; however under information overloading, public good becomes public bad. This special property of information good is the first reason to account of Proposition 1. However, only this reason is not enough to explain the two possibilities.

At the beginning, the provision is public good, and under-provision is the equilibrium. Free riding would be better off for individuals. So we cannot understand why and how under-provision can become over-provision which requires provision level is beyond a certain level. Moreover, we cannot also understand why individuals contribute their valuable time or effort to public bad

when information is overloaded. Now, we have to turn to the second reason that the public goods provided in OCs are not pure public goods. Users' contribution produces two characteristics. One is private, the other is public. Private benefit can alleviate under-contribution to some extent, but free riding problem can still lead to under-contribution. Given that information is not overloaded, private benefit alone may not be enough to motivate users to contribute if without enough public benefits to supplement. For example, an online community without enough resources cannot draw attention and usage from users, not mention to elicit contribution from them. The extreme case is that OCs collapse or cannot sustain. So under-contribution is a possible result. On the other hand, individuals will contribute more or less due to the existence of private benefits.

Once aggregated public benefits are large enough, individual contribution will be crowded in. A positive feedback can be formed and more public goods will be provided. Also, individuals will persist their behaviors due to private benefits even if the community becomes congested. Thus over contribution is also possible. Too many individuals want to make contribution so that they can get recognition, build reputation, or establish personal identity etc. Host have to provide search engine and recommendation service to cope with this problem. Moreover, information technology (IT) enhances visibility, traceability and memory ability of individual contributions. Therefore private benefits (e.g., reputation, recognition etc.) are enlarged. Also, IT enables production capacity to be infinite because everyone who can access Internet is a potential producer.[2]

VII. CONCLUSION

Online community (or sometimes called virtual community) provides a social sphere for people to share information, daily encountering and stories, and other knowledge resources. Ever since its inception, online community has become an unprecedentedly ubiquitous phenomenon. OCs are cyberspaces supported by computer information systems and centered upon communication and interaction of participants to generate member-driven contents, which often result in prolonged social relationships.[1]

One major conclusion in this literature has been that public goods may not be sufficiently provided by voluntary individuals, and many researchers have attempted to identify conditions that facilitate or impede voluntary collective actions (see Hardin (1982) and Oliver (1993) for a review in this area). As one platform for the sharing of public goods, it is obvious that OCs would collapse or cease to exist if nobody contributes.[1]

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