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## On-line design firm - Designsharing.com: Non-profit collaborative design community web site

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ROCHESTER INSTITUTE OF TECHNOLOGY

**ON-LINE DESIGN FIRM – DESIGNSHARING.COM**

- Non-Profit Collaborative Design Community Web Site -

A THESIS SUBMITTED TO  
THE FACULTY OF THE COLLEGE OF IMAGING ARTS AND SCIENCES  
IN CANDIDACY FOR THE DEGREE OF  
MASTER OF FINE ARTS

INDUSTRIAL DESIGN DEPARTMENT

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NOVEMBER 2005

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## **Abstract**

One of the most amazing inventions in the history of humankind is the internet. Nowadays, the internet environment is changing so fast that it is almost impossible to keep up with advancing technologies. It also is growing so quickly, that its use is spreading to involve almost all aspects of human life, from online banking to job searches to finding directions to researching material for children's school projects. Without the internet, many people would feel totally impotent, unable to function for a single day.

The burgeoning role of the internet, in turn, has resulted in almost unlimited growth in the possibilities of website design. Moreover, virtually anyone with access to the internet, minimal resources and perfunctory knowledge of how it works can design a website. The range of web 'designers' extends from the layperson creating a website to feature family photos to professional web designers creating multi-page electronic markets. The results of these designs are evident for everyone to see... with a simple click, one person almost immediately can view what someone else has designed, but not necessarily how. Nonetheless, by placing your work online, you are sharing your own amateur or professional design with an endless number of people you do not even know.

Designsharing.com is a web resource to which experienced designers can go to share web design ideas and practices; and a place where inexperienced designers can go to get ideas for how to start. In this thesis, I will discuss the workings of Designsharing.com and how this site may become an important player in the worldwide web design theatre.

By researching the site, anyone can extract concrete ideas about new design processes in the cyber design environment. This can reduce both the time required for and costs of designing a new site or modifying and upgrading an existing one. This new design process also has an educational function for inexperienced designers. Designers can share design concepts, including design trends, new ways to present information and design issues specific to a given country. A wide variety of designers can become registered members of Designsharing.com where they further may become involved in real design projects. Moreover, this system can serve as a real job market for those interested in futuristic cyber-space design.

Designsharing.com enhances communication between inexperienced and professional designers, a process which is mutually beneficial. For example, under most

circumstances, new designers have had relatively limited exposure to E-marketplaces, so that their ideas, though fresh, are vulnerable to inefficiency and ineffectiveness. On the contrary, as years go by, most professional designers become stereotyped. They may have tremendous experience in their field, but their ideas may have become stale and out-of-date. To prevent this, they need to maintain steady exposure to fresh ideas from the outside. As a result, this cyber design space has the potential to become a lively design community.

Many less skilled designers create design projects without researching design trends or the newest advances. Designsharing.com will feature a section on new technology and design trends, called Design News. All members may share in this information and even respond to it or make suggestions of their own. Even guests will have access to some of this information.

Design committee members are entrusted by Designsharing.com to decide on the validity of proposed projects via on-line conferences and voting with public members in each design process phase. This process is a good strategy for determining the quality and suitability of new design concepts.

Clients also have an opportunity to let their finished ideas be reviewed by the Designsharing.com membership community. Their new sites can be displayed in a simulated cyber market, in advance of their launching into the real market.

Although this design community site is a non-profit business, each design project brings with it our member's valuable ideas, skills and resources. One crucial issue in web design has been the lack of protection for images, pictures and trademarked material, an issue that has soured some developers from entering into the Web or expanding their Web presence. Security and copyright issues become a most important factor in a new online design firm. Designsharing.com will research copyrights of tangible ideas with various experts in each country. If Designsharing.com can determine how to distribute profits fairly to all members, this unique design process will be a valuable challenge to influence the current design process.

Thus, Designsharing.com is not only a design community, but also the first cyber design institute in the world. Because the web site design process is not only an issue for designers, everyone can be a member of this community site, without restrictions. This community is totally open to everyone, because purchasing is one of the design activities. You can join this design community freely and share your ideas with anyone.

## **Acknowledgements**

First, I would like to thank David Morgan and Stan Rickel for having provided invaluable guidance as I undertook this project, one which I truly enjoyed and was very interested in. I would like thank Jim ver Hague for his patience during the development of ideas as well as the actual writing of this thesis. We made it through several revisions!

I would like to thank my subjects, without whom I would have no thesis. Thanks also to the many graduate students who helped me with pilot runs of interviews and inventories, as well as just being there when I needed you.

Finally, to my beautiful wife Sumi, my daughter Lynn and son Daniel, I wish to express my sincerest love and appreciation.

# **1. Introduction**

## **1.1. Background and Motivation**

‘How does one collect, review and utilize web design concepts from many different sources in a time and effort efficient manner?’ That was the question that I asked myself, when I first started to consider undertaking this project. The sources could be web designers or not; yet even ideas from non-designers might be vibrant and applicable because even web users may have useful feedback regarding what they like and dislike about web design. I wanted to know how I could access all of this information and apply it in the creation of my own on-line designs. But how?

The internet environment is changing too fast for anyone possibly to keep up. Like a living, breathing monster with a voracious appetite, it continuously grows, swallowing up more and more of our everyday lives. Across most of the world, almost everything seems to involve the internet now. We bank on the internet; we ask for directions on the internet; we check out our children’s homework assignments and then help them do the research on the internet; and we find jobs for ourselves on the net as well.

However, the omnipresence and uncontrolled growth of the internet creates many challenges, one of which is the unlimited possibilities of website design. To help address this challenge, many designers are turning to on-line community web sites to share ideas with other, unknown and unseen designers a world away.

While researching the concept of a new forum for design-sharing, we recognized the importance of information management. By analyzing current processes of industrial design, we envisioned the shape of design firms of the future. This study presents the information structure and model from the perspective of web-based design management, using the process of designing a potential site as its main focus.

Using this new conceptualized design firm, potential web designers quickly and efficiently can elicit information regarding specific design trends, thereby reducing the time and money required for designing web products, especially because access to this on-line information is free and without restrictions.

## 1.2. What is Designsharing.com

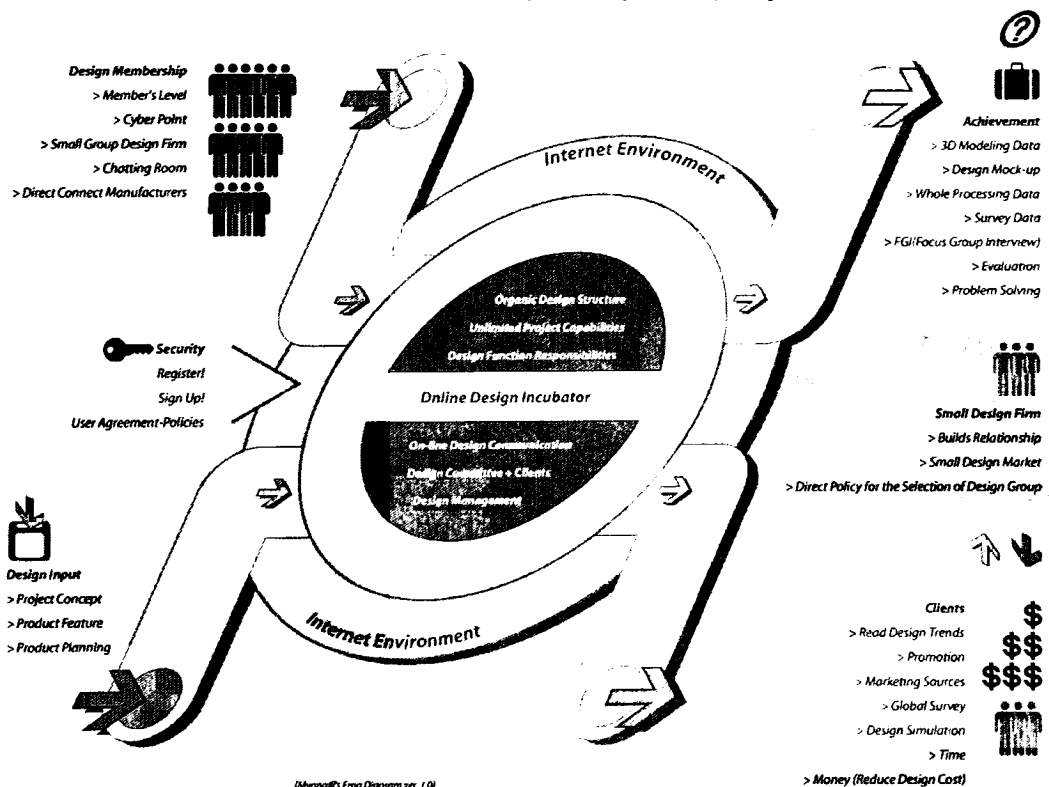
Designsharing.com is a community web site at which designers and non-designers alike will be able to congregate to share ideas regarding the internet environment and concepts on how to best fit in within that environment. Many people are willing to exchange and share design information, if there is the potential for mutual advancement. This community site, therefore, is like a university campus or research institute at which ideas are shared; a design firm where designers work together towards a common cause; and a design incubator in which new ideas are planted and allowed to grow. It also is a place where inexperienced designers can access the experience of seasoned veterans.

Designsharing.com has been designed to be a non-profit site that is modeled around the academic community. It is open to everyone, regardless of experience or intent; where naïve individuals can access assistance from professionals with the click of the mouse, without fees or seeking permission, twenty-four hours every day.

## 1.3. Methodology Overview

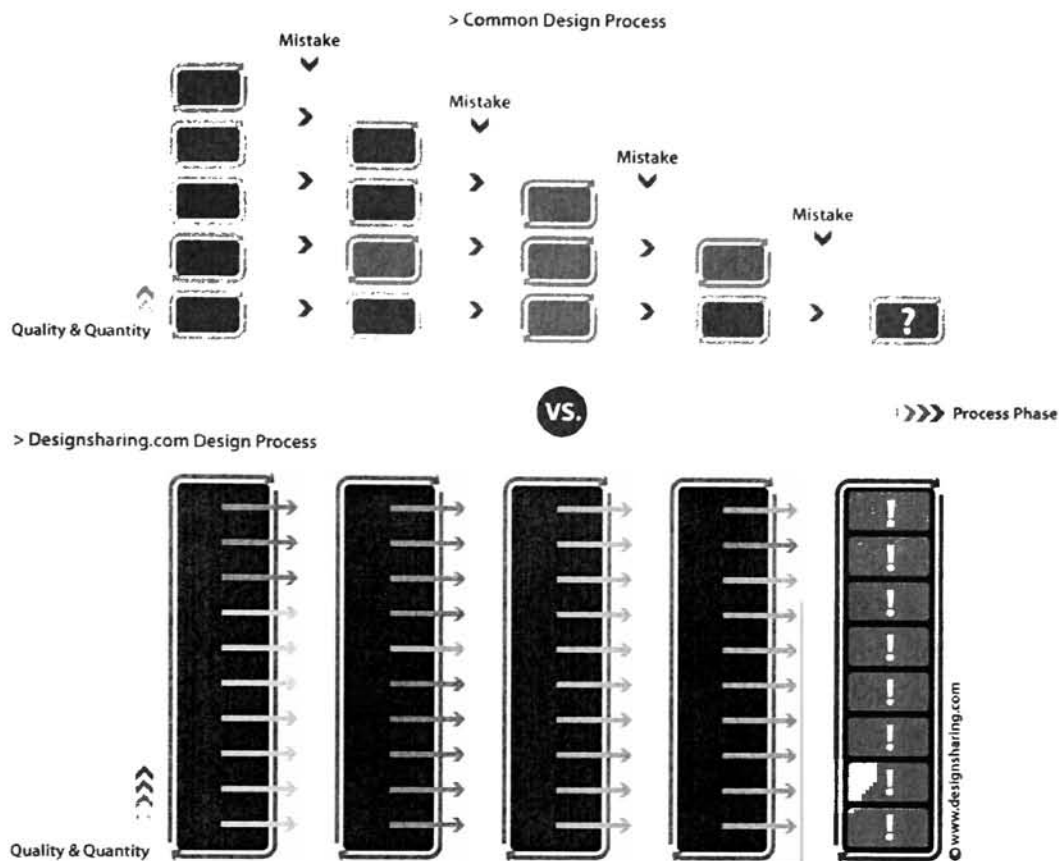
Figure 1 depicts the structure of this new conceptual design process. The collaborative design platform, Designsharing.com, is designed to provide an evolving online space for discussing, contributing and viewing design challenges, emerging solutions and resources to address the diverse problems encountered in website design.

[Thesis Project Concept Diagram]



[Figure 1] Thesis Concept Diagram

## Design Process Comparison

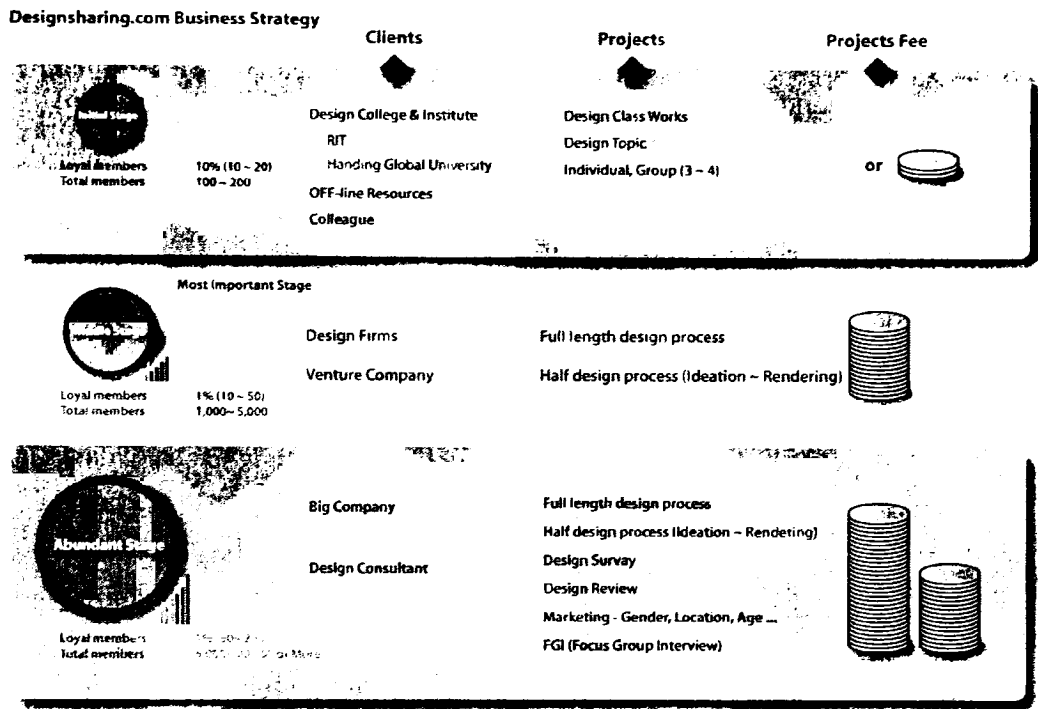


[Figure 2] Design Process Comparison

Figure 2 compares the current normal design process and that utilized at Designsharing.com. The current process is limited in many ways, including the number of concepts presented, the very small number of designers, and a poor design-screening system. Most small design firms have unskilled and inexperienced designers. Website administrators and managers often make mistakes in each design phase. At Designsharing.com, there are numerous ideas presented to address each design phase, many ideas presented by long-term, regular members who are professional designers. Utilizing their experience enhances the probability of success; moreover, this cyber design area has not only designers, but also various other professionals and non-professionals, from scientists who know the science behind the site, salespeople who know marketing strategies, and consumers who know what they want to see and buy. This futuristic design process is screened by several experts, simultaneously.

This community site also will have business planning to assist in making profits. There will be three stages to its development. [Figure 03]. The **initial stage** will be defined as the stage that persists so long as there is an inadequate number of members for the site

to function to full potential. Consequently, community members will not share enough ideas in this phase to sustain the site. The majority of members will be students enrolled in the Design College, who join this cyber design activity within the confines of one of their design classes. We feel that utilizing this client base is a good strategy for initially increasing the number of members. In this stage, clients will not be required to pay for membership.



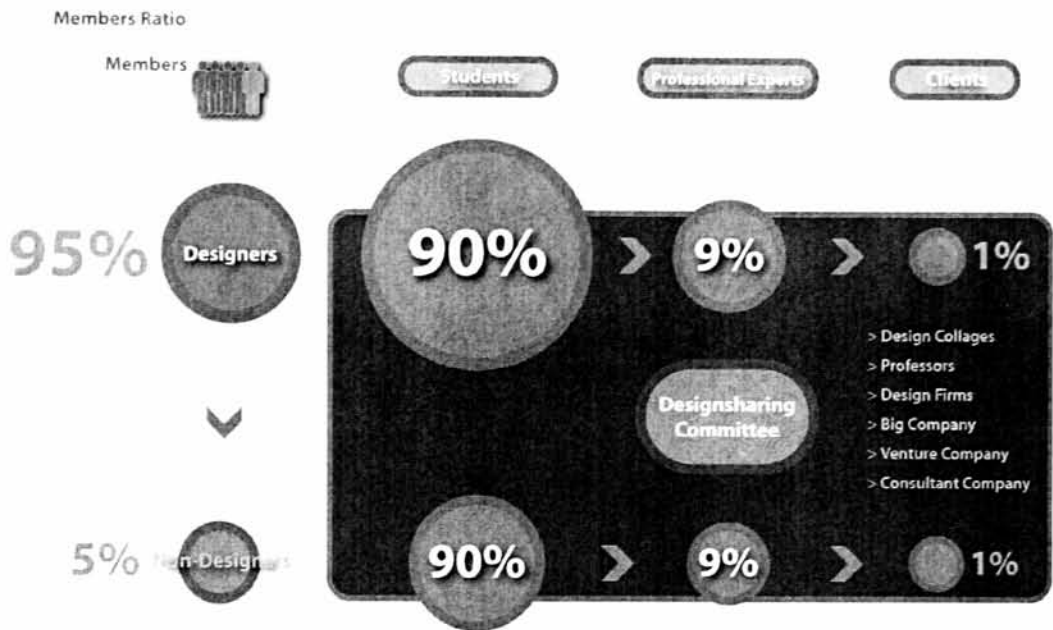
[Figure 3] Designsharing.com Business Strategy

The second, or **middle stage**, will be the most important phase of development, because the new design process will be the milestone of whether Designsharing.com can be successful or not. At this time, small companies will join the client list. This period will contain full length design processes for venture companies. We anticipate that the proportion of members who are regular will be approximately 1%, comprising between 10 and 50 members. Regular, long-term membership will be crucial to maintaining the functionality and durability of the site.

Lastly, during the **abundant stage**, the community should be vibrant and fully interactive. Major companies should be interested in this design space, because of access to so many designers here. Designsharing.com also will provide roughly two different types of project. One will be a normal design project; the other will be design marketing statistics reports. This latter project is a new business model for companies.

Most manufacturers used to perform various types of market research, including focus group interviews (FGI), research into specific market areas, and new material testing.

[How to develop this community]

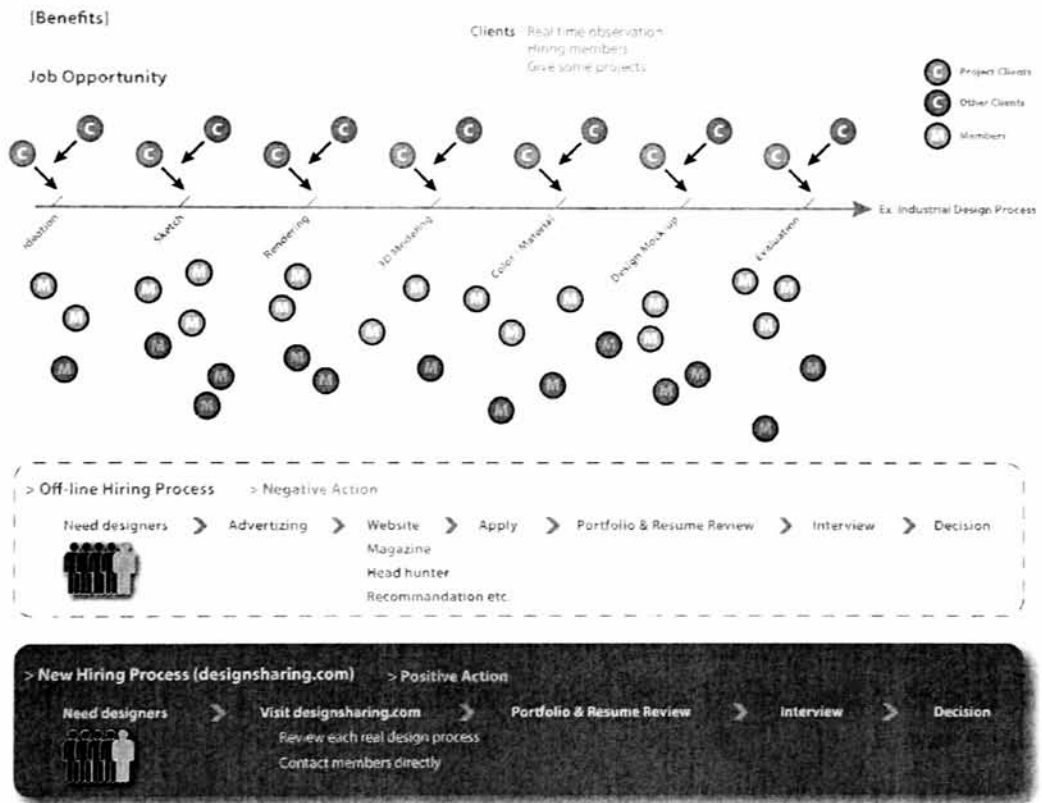


[Figure 4] Community Development

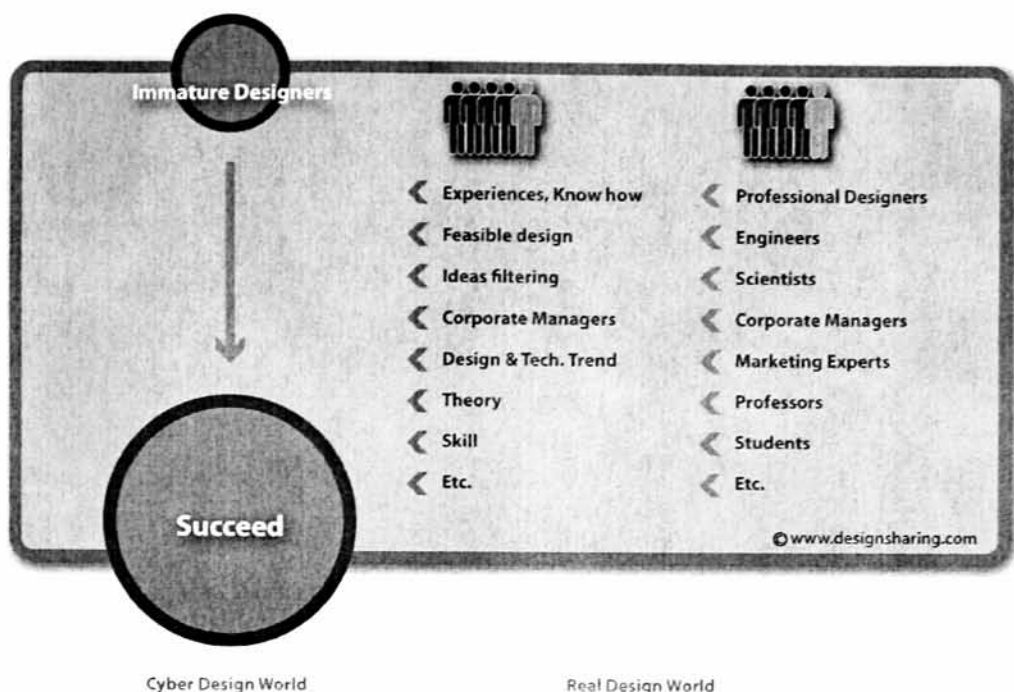
Figure 4 demonstrates the envisioned designer to non-designer membership ratio. Likely, the proportion of membership comprised by designers will approximate 95%, because this community site mostly will share design concepts. The 5 percent, therefore, will be comprised of non-designers who, nonetheless, have an interest in the field of web-space design. Every design project, by its very nature, requires expertise outside of web design itself to supply website content; commonly, this expertise will be in the areas of marketing, scientific research, and manufacturing.

#### 1.4. Benefits

Designsharing.com has many benefits for members. First, loyal members will have job opportunities, because this space is not only open to prospective members, but also to clients seeking designers. Similarly, non-designer clients will have access to up-to-date web designs and opportunities to hire quality designers. This is an advantage over the usual hiring process, because prospective clients will be able to observe, first-hand, the work of multiple designers all at one site. They then will be able to contact designers directly, and can choose, based upon their needs and budget, whether to hire less or more-experienced designers.



[Figure 5] Job Opportunity

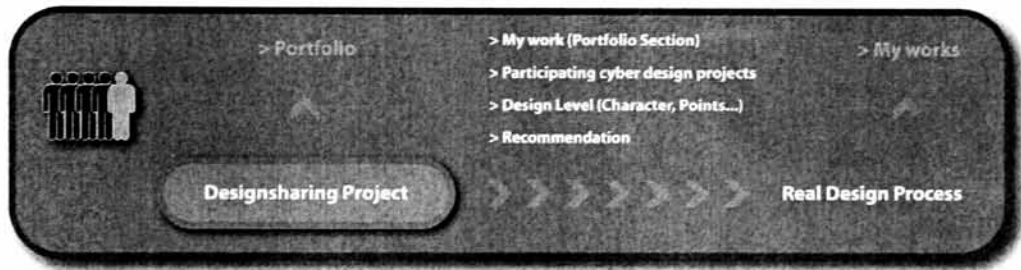


[Figure 6] Design Educational Program

Less-experienced members will have access to assistance from experienced, professional designers and design committee members at Designsharing.com. In this way, the site will be structured like an on-line educational institute on web design. Members will share their own design information and know-how. Moreover, the membership will be comprised of designers, scientists, engineers, marketing experts and so on. Designers invariably require outside expertise to address website content; for example, to create a website to promote a complex manufacturing process. This interaction between professional designers and professionals outside of website design may be the most beneficial function of Designsharing.com. These interactions form the basis of the community site concept.



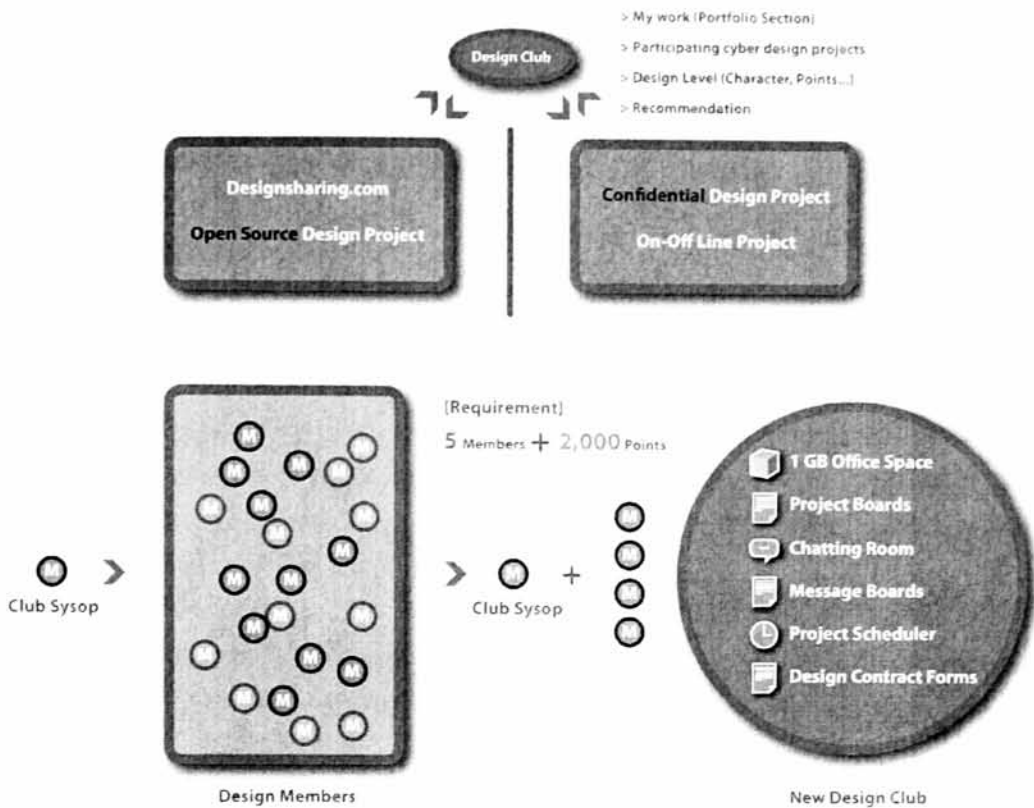
Self-Promotion



[Figure 7] On-line Design Community & Self-Promotion

Currently, most members are familiar with the internet environment and on-line community sites. They also openly share their own professional experiences and resources. Some members are able to provide job opportunities, as well. Less-experienced designers may receive useful design guidance from experts.

Designsharing.com also provides a forum for self-promotion. In the Design Club menu section, the 'My Works' menu provides portfolio space for all members. Any member can post his or her design work, including pictures, graphics, text files and weblinks. This function is similar to that of Coroflot ([www.coroflot.com](http://www.coroflot.com)), the best known portfolio site in the world. Managers seeking to hire designers easily can access portfolios from a large number of experienced designers by screening this section. This page presents practical information about each design member. For example, the My Works section provides information on each member's education and experience, an account of membership points, each member's portfolio homepage, and samples of past projects.



[Figure 8] Design Club

Designsharing.com provides design club space for loyal members. Any member can create a design club, but the club must meet certain requirements, such as having four members in addition to the person registering the club, and 2,000 total member points. A Designsharing.com design club has valuable functions that include providing 1GB office space, project boards, chatting rooms, message boards, project schedulers and downloadable design contract forms.

If any member wants to register a design club, he or she has to complete the on-line request form at the community web site. The design club only is available to club members, so that members of the club may conduct confidential design projects. The cyber design office also provides a chat room. As a result, each private design project will be conducted confidentially among club members. Another critical issue addressed by Designsharing.com is how members can share design project revenues.

## 1.5. Advertising Strategies

Most web-based community sites constantly are considering ways to increase their membership, both of casual and regular members. Generally, Designsharing.com has two types of ad-strategies: on-line and off-line.

### 1.5.1. On-line Advertising

According to Rick E. Brunner (Author of *The Decade in Online Advertising*, 1994-2004, Doubleclick.com, 2005) Online advertising has come a long way since those first ad banners on HotWired in 1994. The Internet, virtually unheard of just over a decade ago, today is a vital daily part of most Americans' lives. The list below includes good examples of online design community sites. Designsharing.com can get valuable ideas from researching these sites. One good strategy for advertising is the banner exchange. This is an example of free advertising.

- On-line design community site
  - > Search engine (Portal, Design portal...)
  - > Design DB
  - > Coroflot
  - > Core77
  - > Dexitner.com
  - > Etc.
- Exchange banner

According to Bled, Slovenia (*Electronic Commerce: The End of the Beginning*, 2000), when comparing a virtual retail site to other types of sites, one can argue that banner-ads, as well as other forms of advertisement, are more effective within an e-shop environment, for the following reasons:

1. Interactions and responses to a banner-ad can be translated directly into sales.
2. Users are guided through all the stages of the buying process (Vrechopoulos et al.)
3. Demographic information on consumers is directly available, allowing for personalized service and one-on-one marketing communication.
4. Advertising effectiveness can be compared directly with sales effectiveness, based upon on-line sales data.

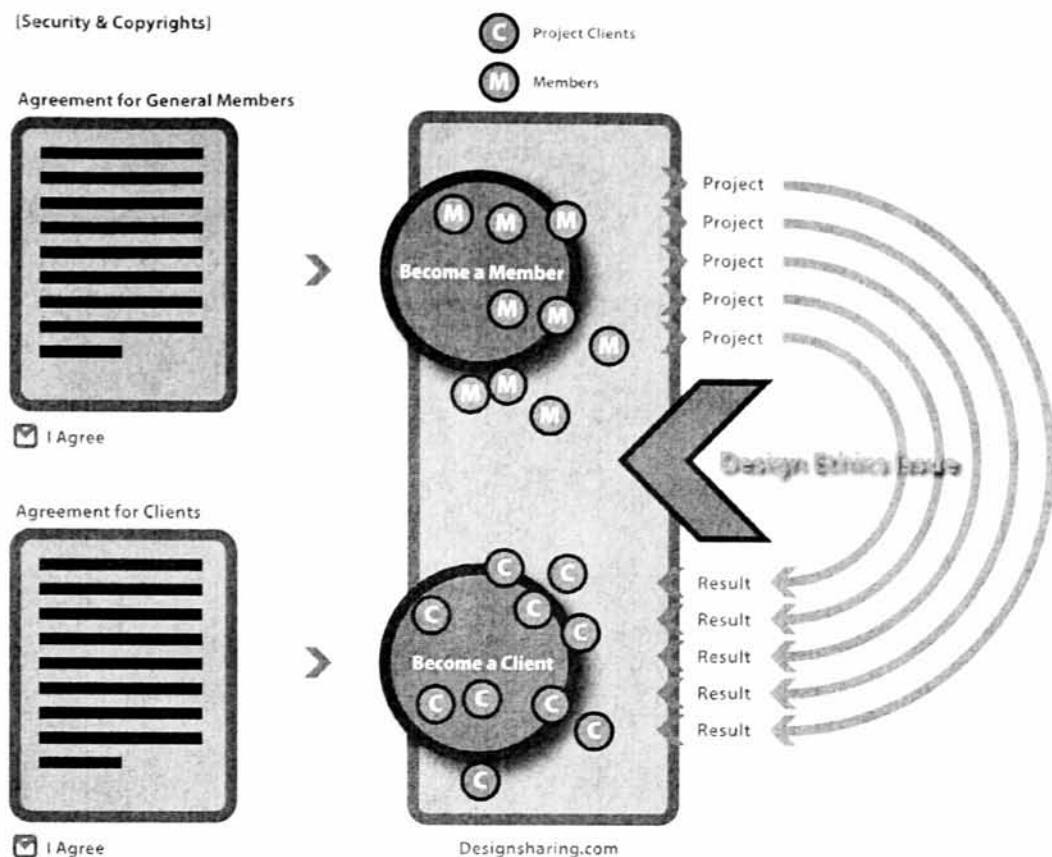
### **1.5.2. Off-line Advertising**

Designsharing.com also could choose an Offline advertising strategy. There are two ways to accomplish this. One is by advertising at a wide-distribution design magazine and another is by using actual client websites for each design project. Despite being costly, design magazine advertising is the most effective way to access stakeholders.

- Design magazine (ID, Domus...)
- Rochester Institute of Technology  
Taegu University  
Handong Global University
- Samsung Design Membership
- Eastman Kodak Company – Design Usability Division
- Samsung Electronics Co.,Ltd.

### **1.6. Security and Copyright**

Security and copyright issues are crucial in a site like Designsharing.com. All registered users who agree to the license agreement may use images they access directly from this site, so long as they follow site regulations. There are ethical considerations involved in sharing design concepts that must be observed and respected. Although Designsharing.com is a non-profit community site, participating members regularly post valuable information on design concepts and resources. Therefore, there must be some mechanism in place to prevent the unlawful access to and sharing of information posted on Designsharing.com. Despite Designsharing.com's claim to be an open source of design concepts, all members must follow the acknowledged user agreement to protect member copyrighted or patented material. By joining, members verify that they control the rights of any material they post, and that their use of the material does not infringe upon the copyright or other rights of other parties.



[Figure 9] Security and Copyrights

### 1.7. Research Aims

Most design activities are conducted by very small design groups, sometimes even a single designer; however, the products themselves (for example, a cell phone) may be used by many people with numerous variable preferences and tastes. It seems to be impossible to satisfy all people. Sharing design concepts is important not only when initiating a project, but also when marketing the product. Current marketing groups remain alert to many different aspects of consumer behavior. DesignSharing.com may be very useful when planning new product lines or when reviewing old products.

## 1.8. Research Setting

Designsharing.com evolved from effective business concepts utilized at other design community sites. The following are examples of pre-existing design community web sites: Core77.com, Productdesignforums.com, Danda.be, Conceptcar.co.uk and Designaddict.com.

### - Examples of other effective on-line design community sites



www.core77.com



www.productdesignforums.com



www.danda.be



www.conceptcar.co.uk



www.designaddict.com

[Figure 10] On-line Design Community Sites

## - Examples of local design firms

Designsharing.com also utilized, in its design, design architectures from current off-line design firms such as: RKS design, Design continuum, Brooks Stevens design, Frogdesign, Ideo and Designmadi, Inc. These design firms have proven effective design strategies. For example, Design Continuum has a case study section; their catch phrase is: "From delivering innovative technology, to building better processes, to creating new categories, we work with our clients to propel their businesses forward."



www.rksdesign.com



www.designcontinuum.com



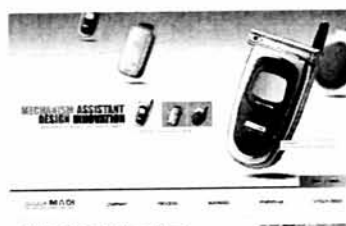
www.brooksstevens.com



www.frogdesign.com



www.ideo.com



www.designmadi.com

[Figure 11] Local Design Firms

## - Internet Café



www.cyworld.com

[Figure 12] Internet Café

## - Portfolio

Self-promotion generation (Blog culture)

Coroflot,



www.coroflot.com

[Figure 13] Self-Promotion Web Site

## 2. Designsharing.com platform structure

### 2.1. Roles of the community site

Despite variations from case to case in design community sites, natural organizational structures and off-line design activities will play an important role in Designsharing.com, because a large segment of the population seems to be addicted to communicating with persons unknown in the internet environment. Therefore, maintaining cyber-space etiquette is one of the principal challenges of our day. Computerinternettraining.com provides examples of proper internet etiquette. The site states: "Cyber etiquette refers to the generally accepted conduct rules when using the Internet. Following the cyber etiquette guidelines, the user helps make the Internet a more appropriate and polite place to communicate and share ideas." Also, this site recommends that "The rules of Cyber etiquette are applied to electronic mail, mail listings, newsgroups, Telnet & FTP. Many organizations have their own "Acceptable Usage Policy" (AUP) and their "Frequently Asked Questions" specifically for their organizations or group network."

### 2.2. Cyber design area



[Figure 14] Main menu

#### 2.2.1. Main page

The main page of Designsharing.com has three sections of organized structure. The left-side menu comprises most of the significant functions for members. It contains the member's login status, the site counter, the member's rank, the sponsor's banner and the Google search icon. The second, top menu has more specific contents such as projects, clients, Design News and Design Clubs. The project section has two sub menus: Current Projects and Design Archives.



[Figure 15] Design projects

### 2.2.2. Design projects

The Current Projects screen shows projects that currently are being processed. When a project is completed, all related design files may be transferred to the Design Archives section automatically. When registered members click any design project button on the list, all design members can participate in any real design activity or design project.



[Figure 16] Current project

### 2.2.3. Current project

The Current Process phase is located in the bottom area of the page. Members can indicate the current stage of each project. If they want to see past stages of the project, members just click wherever they want to go.

All members may download project sheet PDF files anytime in the detailed *Current Project* section. This section contains more specific design directions and descriptions. This file also is created by clients.

Designsharing.com provides information about current processing design projects and the design phase at the same time. This is a good example of user-interface design. When members click the current or past design phase menu, they immediately see the design work place. Members also may enter their comments and suggestions. Designsharing.com would be mixed with members thinking styles such as appropriate sketch images, rendering and even 3D modeling files for sharing ideas. These ideas may be motivated by other members. This is a totally advanced design process. Each design phase should have many thinking threads of shared ideas.

#### 2.2.4. Project requests



[Figure 17] Current Project Phase



[Figure 18] Project Request

Designsharing.com provides a *design request* function so any member can request any project. However, the design committee will select appropriate projects among those requested.

Designsharing.com allows any type of design project, including product, graphic, architectural and marketing projects. Many experienced designers may be involved in any given project.

Designsharing.com also categorizes members by location, ethnic group, age, specialty and so on. This concept can conduct not only design projects but also marketing research projects. For example, FGI's (Focus Group Interviews) or research of customer reaction through testing the prototype which is provided by clients.

There are two categories in the project request section. One is client information. The other is project information.

The client information section is important, because designsharing.com will not permit ghost clients and projects; hence, this information must be verified clearly. The project information section has a very simple structure that is radio buttons for project category and simple design description. If clients already have a design concept sheet, they can request information directly by E-mail.

### 2.2.5. My work

Designsharing.com reserves part of its Design Club section for member portfolios. This may be the most useful segment for members within the Project section. Any member can upload his or her great design achievements.

On-line design portfolio sites have become a common way for designers to display their design skills. The *My Work* section not only allows members to discuss and present their own work, it also permits them to communicate their ideas about design trends and quality with other members. This section also serves as a way for designers to connect with potential non-member clients.



[Figure 19] My Work – List



[Figure 20] My Work – Detailed

### 2.2.6. Members' Rank

[Figure 21] Members' Rank

All members are assigned design levels and cyber points. If anyone creates a design account for a joint application, they start at level 7 and with zero points. Designsharing.com features an up-to-date list of all members and their current design levels and points. This creates a relatively easy way for others to find out how regular and participatory any given designer has been. Even non-members can access this list with a simple click of the

mouse. The Members Rank section includes various information about designers, including member identification number, the date they joined Designsharing.com, their design level and number of cyber points, posts from the designer him or herself, and comments about them offered by others. When someone viewing this section clicks on any ID number, they quickly access information about that member via a popup window, so long as they themselves have logged in.

2.2.7. Brainstorming



[Figure 22] Brainstorming – List

This space is a totally free web board for approved members. The brainstorming board is open for discussion of any issue with other members. For example, half-developed ideas may be shared with other members freely. Ideas may be developed gradually and steadily by community members.



[Figure 23] Brainstorming – Detailed

## 2.2.8. Design News & Events



[Figure 24] Design News – Main Page

Verified members of the design committee and design level 2 or higher members can provide information on new design trends and the most current design issues at any time. The Design News section will be the most valuable information source at Designsharing.com because design trends are changing so quickly, and there is so much diversity among designers. On the very first page of the Design News section, there will be design news and events information.

The very latest information will be presented and headlined. On the right-hand side of the page will be lists of design news and events sorted by date. All items on the lists can be moved to the more-detailed information board.



[Figure 25] Design New & Events – List

## 2.2.9. Sitemap



[Figure 26] Sitemap

glossary.html> Using this menu, all members can locate the page they want directly.

Most web sites provide a sitemap function to allow for easy searches.

Designsharing.com also will provide a categorized sitemap function. According to ElevateIT.org, "Sitemap is an overview of all pages of a website in short form. The pages are listed according to title. If a short description of the page is available, it will also be displayed. Every page title will be displayed as a link, through which you can navigate to the page."

<[http://www.elevateit.org/documentation/](http://www.elevateit.org/documentation/glossary.html)

## 2.2.10. About

The *About* menu will have three sub menus: Design Curriculum, Terms & Conditions; and Site Description. This section will provide substantial information about Designsharing.com.

## 2.2.11. Design Curriculum



[Figure 27] Design Curriculum

Designsharing.com includes an easy to understand diagram in the Design Curriculum section. The unique design concept is illustrated on the same page. All members should be able to understand the visible design concept by viewing this diagram.

Designsharing.com also has its own terms and conditions for site management.

## 2.2.12. Terms and Condition



[Figure 28] Terms & Condition

By joining Designsharing.com, Members agree to abide by the Terms of Service, listed below. These rules are used to enable us to maintain the highest standards of our site for members' personal use and enjoyment. If somebody encounters another member who is in violation of these rules, he/she can contact the site administrator via E-mail anytime. This is an important condition to allow all members to share valuable ideas and resources.

### 2.2.12.1. Acceptance of Terms of Use

Designsharing.com is provided free of charge to you by The Designsharing.com under these Terms of Service. Upon registering as a member of our club or signing on and browsing as a guest, these Terms of Service will govern your use of Designsharing.com. By accessing the Designsharing.com web site, you are attesting your agreement to be obligated to these Terms of Service, as such terms may be modified from time to time. Designsharing.com shall not be liable to you for any violation of these Terms of Service. If you disagree with any of these Terms of Service, do not register with or enter the Designsharing.com web site. The Terms of Service link will be available at the bottom of all pages at Designsharing.com. Please review this information prior to utilizing Designsharing.com to conclude whether a modification has been made to these Terms of Service. If you disagree with these changes in the Terms of Service as they occur, please terminate your registration with Designsharing.com at once: first, by notifying Designsharing.com of your reluctance to accept the changes of the Terms of Service; and second, by discontinuing your use of Designsharing.com. Any continued use of Designsharing.com will indicate your acceptance of any and all changes in the terms and conditions set forth herein.

### 2.2.12.2. Registration & Privacy Policy

When you register with Designsharing.com, you will be required to provide Designsharing.com with the following information: your name, phone number, address, zip code, email address, gender, ages, member name and password. Additionally you may choose to provide Designsharing.com with other helpful information that will

enable us to provide appropriate content for our site. Designsharing.com will not sell to any third party your name, phone number, address, email address, unless you provide your consent, except to the extent necessary to comply with applicable laws, police investigations, or in legal proceedings where such information is relevant. Designsharing.com allows access to database information by third parties providing technical services. Such third-party is also bound by these terms. Your informed consent shall be in the manner of an "opt in" or similar policy. You understand and agree that Designsharing.com may disclose to third party all data compiled in the form of aggregated information. Designsharing.com reserves the right to offer you third party services and products based on the preferences that you identify during the registration process and based on your subsequent preferences.

#### **2.2.12.3. Termination**

Designsharing.com reserves the right, at its sole discretion, to immediately, without notice, suspend or terminate all services provided by Designsharing.com.

#### **2.2.12.4. Modifications of These Terms of Service**

Designsharing.com may modify these Terms of Service from time to time by its sole discretion. Each time you log on to Designsharing.com, you will be assumed to have accepted any such modifications.

#### **2.2.12.5. Registration and Password**

You are accountable for maintaining the confidentiality of your Information and Password. You shall be responsible for all uses of your registration number, whether or not authorized by you. You agree to immediately notify the Designsharing.com webmaster of any unauthorized use of your registration number or password.

#### **2.2.12.6. Use of Designsharing.com**

All Designsharing.com documents (excluding downloadable scripts and files) may not be modified or altered in any way with the purpose of profit or business gain. Any copy of the document or portion thereof must include the copyright notice above and this permission notice. Except as specifically permitted herein, no portion of the information, files, or data on this Web site may be reproduced or redistributed in any form or by any means with the purpose of profit or business gain without prior written permission from Designsharing.com. You agree not to send or post any material that is unlawful, harassing, libelous, abusive, threatening, racially offensive or objectionable in any way. You concede that Designsharing.com may acquire Rights to use any posted materials as described as follows. Upon submitting content to any "public area" of

Designsharing.com, you grant Designsharing.com and its affiliates a royalty-free, perpetual, irrevocable, non-exclusive right and license to use, resell, reproduce, modify adapt, publish and translate all uses, whatsoever partial or whole, for the full term of any Rights that exist in such content. You also warrant that the holder of any Rights has completely and effectively waived all such rights and validly and irrevocably granted to you the right to grant the license stated above.

#### **2.2.12.7. Modification of Designsharing.com**

Designsharing.com may modify or discontinue Designsharing.com with or without notice to you and without liability to you or any third party.

#### **2.2.12.8. Third Party Services**

You may order services or products through Designsharing.com from other entities not associated with Designsharing.com ("seller"). All transactions concerning the merchandise and services desired from the seller, including but not limited to purchase terms, payment terms, warranties, guarantees, maintenance and delivery, are solely between you and the seller. Designsharing.com makes no warranties or representations whatsoever with regard to any goods or services provided by sellers. You will not consider Designsharing.com nor will Designsharing.com be construed as a party to such transactions, whether or not Designsharing.com may have received some form of revenue or other compensation in connection with the transaction or be liable for any costs or damages arising, either directly or indirectly, out of you or any other person related to the transaction.

Designsharing.com may include special routing icons which may be located within Designsharing.com, the activation of which will allow you to access and learn more about Designsharing.com and other services provided by Designsharing.com or its affiliates, whereby the use of such icons is free of additional charge to you.

## 2.2.13. Site Description

### 2.2.13.1. What is Designsharing.com?



[Figure 29] Site Description

Designsharing.com is community web site at which designers and non-designers alike are able to congregate to share ideas regarding the internet environment and concepts on how to best fit in within that environment. Many people are willing to exchange and share design information, if there is the potential for mutual advancement. This community site, therefore, is like a university campus or research institute at which ideas are shared; a design firm where designers

work together towards a common cause; or a design incubator in which new ideas are planted and allowed to grow. It is a place where inexperienced designers can access the experience of seasoned veterans.

Designsharing.com is non-profit and academic design community. It is not only open to everyone even though some of them are not designers, but it also facilitates real design project with design experts so you can be involved in any project anytime without restriction.

### 2.2.13.2. Goal

My personal objective is that all design information has can be shared with everybody on the on-line system. This structure plays the dual role of client advocate and on-line designer advocate.

### 2.2.13.3. Contents

Designsharing.com serves as a project design space, providing a shared online site to upload design contributions and discuss the project with members and other contributors. Some basic project management features as well as search and multiple views may be provided.

Design Threads is a working collaboration sub-space. Threads contain alternative design paths or different categories of contributions. Each Design project section will have a primary design thread where all contributions and discussions are placed by default. Members of Designsharing.com would be able to create additional threads at any time (or simply create one while creating a new note). Each thread would elicit

rationales for its creation and will group a set of notes within it, hence providing a meta-level reasoning for the evolving design space. Threads can have a hierarchy of sub-threads, some of which can be designated as private, if needed by the design club. Threads also serve as a convenient and coherent unit of analysis for examining design rationale and processes over time.

A Design Phase can be created within any thread and categorized as a resource, question, design concept, etc. This procedure normally consists of seven processes for each design project, including: Ideation, Sketching, Rendering, 3D modeling, Color/material, Design Mock-up and Evaluation. Notes can have links to online sites, files or images. Notes can be moved between threads at any time, as new threads are created. Links also can be created to other related notes.

Messages are part of ongoing conversations posted to Designsharing.com or within specific threads. Situating messages within threads helps maintain linkages between the context of discussions and design artifacts submitted. All members are permitted to leave messages and image files with respect to any design project at any time.

#### **2.2.13.4. Benefits**

Designsharing.com provides many benefits through each design project. For example, when any design project is finished, Designsharing.com may provide Demographic and Statistical Data that are calculated and presented automatically by Designsharing.com. These files are transferred to the Design Archives section. Because of the collaborative design process, design processing fees are negligible, essentially just direct expenses. The list below itemizes examples of benefits obtained by doing a project through Designsharing.com.

- Demographic and Statistical Data
- Competitive Data
- User Surveys
- Focus Groups
- Usability Testing
- Save design processing time
- Save design cost

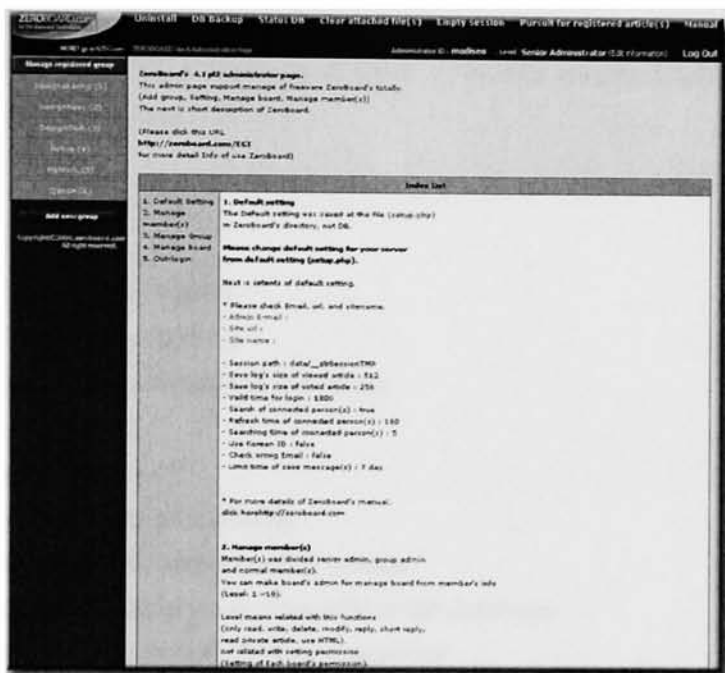
#### **2.2.13.5. Unique Feature**

New design management concept

## 2.3. Administration area

Designsharing.com has an applied Zeroboard bulletin board system. This system provides customizable administration functions for efficiency management. For example, the facilitative board serves by creating and maintaining bulletin boards, managing community members and running DB menu.

### 2.3.1. Zeroboard Overview



[Figure 30] Zeroboard Admin - Main page

A Zeroboard is an award-winning scalable bulletin board system that was developed in Korea, allowing you to effortlessly build, manage and promote any online community. It is a high-powered, fully scalable, and highly customizable open source bulletin board package. Zeroboard has a user-friendly interface, a straightforward administration panel, and helpful FAQ. Based upon the powerful PHP server language and your choice of MySQL, MS-SQL, PostgreSQL or Access/ODBC database servers, Zeroboard is the ideal, free community solution for all web sites.

### 2.3.2. Zeroboard Features

#### 2.3.2.1. Version (Zeroboard 4.1 pl2 English version)

Zeroboard is based on PHP, the fastest growing server-side scripting language on the web, which results in one of the fastest, feature-rich bulletin board systems available

anywhere. In addition, Zeroboard is open-source software, so it has no fees, no subscriptions and no restrictions on modifications, other than just representing Zeroboard copyrights.

#### **2.3.2.2. Install**

Simple installation will have you up and running on your PC within minutes.

#### **2.3.2.3. Database Server Support**

Zeroboard uses a database abstraction layer to enable seamless support of several database servers, including:

- PHP

- MySQL

  - PostgreSQL 7.x,

  - Microsoft SQL Server 7/2000

  - Microsoft Access (via ODBC)

...with more databases available in the future.

#### **2.3.2.4. Security**

Designed with security as a priority

- Powerful and extensive authorization system

- Strong encryption to keep passwords safe in the database

- Support for both cookie and URI-based sessions

#### **2.3.2.5. Unlimited Forums & Categories**

- Unlimited forums can be organized into as many categories as you like

  - Private forums and those only for specified user groups

  - Powerful search facility

#### **2.3.2.6. Posting Messages**

Message formatting with various font styles and sizes as well as allowing quoting, code display, image posting and automatic URL linking

- Support of standard and extended BBCode tags and controlled HTML tags

- Polls can be simply added to posts

  - Email notification of replies to your topics

  - Powerful topic subscription capability

- Original emoticons to portray emotions

#### **2.3.2.7. Versatile User Groups & Forum Permissions**

- Powerful forum, user and group permission management
- Control forum access to specified user groups
- Control all aspects of the posting experience
- Allow limited access to viewing, posting, replying and many other options

#### **2.3.2.8. Member Features**

- Unlimited members
- Personal profile creation
- Post counting and administrator-definable ranks for users
- Email-like private messaging system
- Supports local, remote and up loadable avatars

#### **2.3.2.9. Moderation Features**

- Topic editing
- Mass delete/move/lock/unlock of posts
- Topic splitting
- Option of auto-pruning of old or unanswered messages on a per-forum basis

#### **2.3.2.10. Easy to Use Administration Center**

- General configuration
- Forum & category setup
- Easy database backup and restore
- Disallowed usernames
- User authorization
- Word censoring
- Complete member management
- Emoticon setup
- Optional new post verification
- Extensive ban management, ban by email address, username or single/multiple IP address or hostname
- IP tracking of posts and posters
- Mass emailing of groups and users by the administrator

#### **2.3.2.11. Support**

All the above is supported by an increasingly large, thriving and friendly community of members from all over the world, ready to help with any problems, provide suggestions, and just be available for general discussion!

## **2.4. Project Committee**

Designsharing.com has design committee members who are made up of various experts such as professional designers, engineers, inventors, and lawyers Etc. They will decide what design ideas shift to next design phase. All members can participate to select good design ideas by a survey.

## **3. Design Process in the Virtual Space**

### **3.1. Project Request**

If anybody has a project, he or she easily can make a request to the Webmaster, using a simple form that is available on-site.

#### **3.1.1. Project Request Process**

1. Members will complete a Project Request form and Project Concept sheet (MS Word or PDF file)
2. Applicant will receive an immediate E-mail response
3. The Webmaster and design committee will make a decision as to what projects are suitable.
4. The webmaster will create new project space and notify the site and the applicant via E-mail.

### **3.2. Project Posting**

The webmaster can create new project space easily through the Zeroboard Admin site.

### **3.3. Design Project Phase**

Each project has its own project process. Design project phases can be changed, depending upon what the project is, but most design processes have almost the same phases: idea development, idea concretization, appearance models and evaluation.

The typical Industrial design project phase is demonstrated below.

#### **3.3.1. Ideation (Normal, Question, Answer)**

Sharing member ideas about a project can be mixed with feedback even from non-members, akin to a melting pot.

This represents a space for totally open ideas and brainstorming.

Anybody can share ideas about a project.

#### **3.3.2. Sketch (Thumbnail, Detailed)**

This is a very common stage in developing ideas. Some members will consider self-

promotion of their own creative skills in this space.

### **3.3.3. Rendering (by Hand, by Computer)**

This phase relates more to refining unclear ideas. Most members will be able to understand what this process is for. Some members will download to start 3D modeling.

### **3.3.4. 3D Modeling (Alias, SolidWorks, Rhino, 3DSmax, Etc)**

This phase needs many skillful members who are 3D computer modelers or technical engineers, because the 3D modeling process is almost a final appearance model step; so one of the members who is skillful in 3D rendering could provide a definitive shape. This would make understanding the project easier for all members.

### **3.3.5. Color / Material (Color, Material)**

This step is a more specialized phase than the others because color and material trends are changing so quickly. Designsharing.com needs these specialists to allow for the successful completion of projects. These specialists will include fashion designers, textile specialists, vendors, suppliers and so on.

### **3.3.6. Design Mock-up (Soft, Hard)**

Most local design firms have a proto-type infrastructure and standard equipment. Seeing Designsharing.com projects accomplished, any member then easily can replicate the models, on-line, using perfect 3D modeling data. Some members provide real design mock-ups for Designsharing.com. This can result in the member handling this process being paid real money.

### **3.3.7. Evaluation (Normal, Question, Answer)**

When a project is completed on Designsharing.com, design project applicants will receive the products of their work. This will consist of an entire data-based file, a physical model, permanent project archives, and so on.

## **3.4. Products and Ideas Pre-Review**

### **3.4.1. FGI (Focus Group Interview)**

This function groups and categorizes members by ages, gender, location, job, and so on. This will be of potential value to corporate entities with limited resources to pay. Sometimes, design activities will be performed confidentially. Designsharing.com not only serves as a private / secure communication space, but also sorts randomly or organizes members for the FGI.

### **3.4.2. Reviewing New Products**

All members also are customers, so they may be great sources for planning new products. Marketing members should have opportunities to estimate the likely success of new products via Designsharing.com.

### **3.4.3. Vote**

This is one of the common ways to make decisions. All members can vote on any project, but each member only has one chance to select a design idea. This concept will apply to any design project and any design phase.

## **4. Case Study**

### **4-1 Kodak Digital Camera Venus (USA) - Processing**

### **4-2 HanDong Global University (Korea) - Processing**

### **4-3 Rochester Institute of Technology (USA) - Processing**

## **5. Discussion and Conclusions**

Designsharing.com is the first open-source design community site in the world. To date, it has yet to be determined how valuable this community site can be, but we are confident that most designers want to share their own design creations and abilities with others.

Designsharing.com is a web resource to which experienced designers can go to share web design ideas and practices; and a place where inexperienced designers can go to get ideas for how to start. In this thesis, I will discuss the workings of Designsharing.com and how this site may become an important player in the worldwide web design theatre.

By researching the site, anyone can extract concrete ideas about new design processes in the cyber design environment. This can reduce both the time required for and costs of designing a new site or modifying and upgrading an existing one. This new design process also has an educational function for inexperienced designers. Designers can share design concepts, including design trends, new ways to present information and design issues specific to a given country. A wide variety of designers can become registered members of Designsharing.com where they further may become involved in real design projects. Moreover, this system can serve as a real job market for those interested in futuristic cyber-space design.

This sharing space will be helpful. To quote John R. Patrick: "Customers also have the power of the click of a mouse or a personal digital assistant to signal what they want, when they want it, and the terms of business under which they want to operate."

No designer has divine powers. Designers constantly must improve and expand their skills and design concepts by viewing the work and hearing the ideas of others. Designsharing.com allows this, the open sharing of ideas, skills and resources among designers worldwide. Join this design community site and freely share your ideas with others.

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