

Building Trust in Hospitality and Culture Exchange Travel Sites: Lessons from Heuristic Evaluation of CouchSurfing

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Abstract. Travel is gaining popularity among people and around the world. The number of people relying on social networking resources and hospitality/culture exchange travel websites is also increasing. However, there have been voices criticizing hospitality/culture exchange websites for deception, violations of privacy, and lack of dispute resolution process, etc. To address this problem and to glean design insight, our study performed Heuristic Evaluation (with six subject matter experts) on the features and interfaces of CouchSurfing (one of the most popular hospitality exchange websites). The purpose was to understand if current features and interfaces of hospitality travel websites support trust-building among users. Results of the study showed barriers in differing stages of the trust-building process. Results also revealed that the establishment of trust was challenged by the current graphic design, the structure design, as well as the social cue design of CouchSurfing. Design recommendations were made from this study for hospitality/culture exchange travel websites.

Keywords: Trust, Hospitality Exchange, Travel, and CouchSurfing.

1 Introduction

More and more people are arranging their itineraries with travel-related websites rather than guidebooks or the assistance of travel agencies. According to the world travel market global trends report, the rate for planning trips over the Internet is expected to exceed 8% [9]. The flourishing of social networking sites also enabled the phenomenon of hospitality exchange, allowing travelers to stay at strangers' places for free [15]. The tenet of hospitality exchange is different than the conventional social norm; it is a concept where strangers are welcomed into the privacy of homes [14]. Hospitality exchange websites (e.g., BeWelcome, HomeExchange.com and CouchSurfing) bring travelers in touch with people in the place they visit. They provide a platform for people to help each other when they are traveling. However, deceptions and security issues came up recently in the online traveler communities, which challenged the positive impressions/experiences people already had with these websites. Research showed that trust is more crucial in the online situations than in the offline circumstances [7] [16]. Tan discussed the definition of online trust from the users of

CouchSurfing. He found that trust defined by the users not only included physical safety, but also included building an open-minded community [15]. In addition, some scholars also put forward that friends who have known each other for a long time will be easier to be believed than friends who have known each other for a short time in CouchSurfing [3]. The hospitality exchange website, CouchSurfing, has the largest number of registered members [5] [18]. Furthermore, it is important to build trust of CouchSurfing.org between each other [15]. And we hope to increase the trust of users by identifying website-trust design factors as well as providing website-trust design reference through the assessment methods. The targets of our research are as follows: (a.) to explore the trust standard of users concerning the web; (b.) to learn about the users' trust degree on the free accommodation system based on mutual-aid memberships in CouchSurfing; (c.) to explore the mechanism of trust design of the site by the standard of security trust defined by researchers; (d.) to give advice and applications according to the trust-building among the website members. The result of this research may offer references on the improvement of trust-building issues to accommodation exchange websites and help to construct the sense of mutual trust among the site users.

2 Literature Review

2.1 Trust

Currently, a number of academics did many studies and discussions on what is trust in many fields. Anderson believes that trust is a belief that people who believe their peers will not make adverse or unpredictability behavior to themselves [2]. Coleman thinks trust can be considered a subset of risk, which requires individuals to take risks when you trust someone [4]. And some researchers think trust is an interaction between the trustor (someone who put trust in another person) and the trustee (someone who assumes the trust from the trustee) in which the trustor will achieve their promise based on the expectation of trustee's behavior [10]. Therefore, it can be concluded that trust is a kind of belief in trustor's mind based on the behavior of trustee, and any trust involves an element of risk. Some scholars have tried to find out the characteristics of trust to summarize the definition of trust. Doney thinks that there are three qualities in the trust: vulnerability, uncertainty and risk. These three points interact to affect the generation of trust. Doney and Cannon consider that the trust-building process is divided into five steps according to the process of buyers and sellers to build mutual trust [6] (Table 1).

2.2 Online Trust

With the development of Internet, many researchers have explored the website of trust in the past few years. And most researchers agree that online trust is established in the process of trust-building in the real world. Aljazzaf considers that trust is important on the Internet, and summarized 16 principles of online trust establishment based on the trust-building theories [1] (Table 2). In addition, Wang proposed a framework of

trust-inducing features from the perspective of interface design in 2005 [17]. The components of the framework are shown as follows:

Graphic Design (refers to the graphical design factors on the web site that normally gives consumers a first impression.)

Structure Design (defines the overall organization and accessibility of displayed information on the web site.)

Content Design (refers to the informational components that can be included on the web site, either textual or graphical.)

Social Cue Design (relates to embedding social cues, such as face-to-face interaction and social presence, into web interface via different communication media.)

Table 1. Trust-building processes (adapted from Doney and Cannon, 1997)

Process	Explanation
Calculative	Trustor calculates the costs or rewards of a target acting in an untrustworthy manner.
Prediction	Trustor develops confidence that target's behavior can be predicted.
Capability	Trustor assesses the target's ability to fulfill its promises.
Intentionality	Trustor evaluates the target's motivations.
Transference	Trustor draws on "proof sources," from which trust is transferred to the target.

Table 2. The principles of online trust (adapted from Aljazzaf, Perry, and Capretz, 2010)

The principles of online trust	
Trust and risk	First party information
Trust development phases	Third party ratings
Dynamic nature of trust	Trust approaches
Trust and identity	The distinction between trust and quality of service
Categories of trust semantics	Security and privacy
Trust relationship properties	Provider's trustworthiness
Global and local rate	Trustor's preferences
Trust is based on information	Trust classes

3 Methodology

3.1 Evaluation Framework

In order to make a more comprehensive and appropriate heuristic evaluation on the hospitality exchange website, we integrate the process of trust-building, the principles of online trust and the framework of trust-inducing features to form a new framework. Some online trust principles such as trust semantics, provider’s trustworthiness and the distinction are abandoned by us in the new estimate framework for they are usually used to estimate trust-building between websites as well as their services and users

rather than trust-building in the interaction among users. Besides, we combine the principles of trust classes and trust approaches in the framework of trust-building process because the assessment range of the three principles widely contains the framework of trust-building process. What's more, the principle of third party ratings is combined into the transference process of trust-building for it is one of the evaluation parts of transference process. Table 3 shows the evaluation form of online trust principles. The framework of trust-inducing features, used in the evaluation website, assists us to promote credence among users. Based on the online trust principles, we gave up part of the framework of content design in the new evaluation framework.

Table 3. The evaluation form of online trust principles

Principles	Explanation
Information	To evaluate whether the website has the information about building the trust between parties or not, e.g. mutual friends, friends recommend, and real-time updates, etc.
First party information	The entrusted one has the means to provide information or not, e.g. complete personal information, the fields to fill security and privacy in, presented in an easy-to-understand way, to help the other party and to trust the entrusted one.
Trust development phases	Building trust: To assess whether the website helps every user develop his evaluation or not.
	Stabilizing trust: To evaluate whether the website could stabilize the long-term trust between parties or not through user interaction, observation and recommendation, etc.
	The fading trust: To evaluate whether the website could pass messages about failing evaluation and help users to rebuild their trust and reputation or not.
Trust relationship	To assess whether the website could be directed to different trust relationships (e.g. fans and fans, individuals and individuals.) to change their trust needs (e.g. limiting specific users to browse accommodations info or restrictions on posting) contra different conditions or not.
Dynamic nature of trust	To evaluate whether the website could increase or stabilize the degree of trust of the users themselves, and could change the degree of trust of the others or not, e.g. introducing, recommending and evaluating others, etc.
Global and local	To evaluate whether the website provides the evaluation of the overall (e.g. all users) and the portion (e.g. the fans in personal fans group), has a trusted third party (such as the website) to help establish the evaluation, generates individual's way of evaluating different communities and could be linked to the evaluation of overall and portion or not.
Identity	To evaluate whether the website has a good authentication or not, e.g. User Name, Password, Digital Identification and Authentication and Identity Label.
Security and privacy	To evaluate whether the website has reliable security and privacy settings or not, including making sure on the safety of the users life and property, the complete exchanging accommodation process and not disclose user information, etc.
Risk	To evaluate whether the website could reduce the risk of users' interaction or not, including providing incentives, penalties, insurance mechanisms, and remedies of the offense to users.

3.2 Participants

In this study, in order to discover the problems of strange users in the trust-building process on CouchSurfing.org, we choose six postgraduates whose major is Industrial Design from NCKU to be our estimators according to the description of outstanding

estimators by heuristic evaluation [11], [12]. All of them are well experienced in the interface web design and aware of the usability knowledge. Before starting, we would prepare assessment criteria for estimators in advance. And our observer will record the evaluation process of the evaluators.

3.3 Targeted Website: CouchSurfing.org

CouchSurfing.org is a reciprocal tourism website with more than six million users that offers users exchangeable hospitality and social websiteing services. It provides users a platform to "surf" on couches by staying as a guest at a host's home, host travelers etc. After registering, everyone can use the various features for free. The main features of CouchSurfing include finding a host, inviting guests, participating in activities, joining the community, commenting, member certification and guaranteeing [5], [18].

Table 4. The evaluation form of online trust-inducing features

Item	Features
Graphic Design	Use of dynamic, 3D, and big size picture.
	Symmetric use of moderate pastel color of low brightness and cool tone.
	Use of well-chosen and good-shot photos.
Structure Design	Implementation of easy to use navigation, e.g., simplicity, consistency.
	No inaccessible information, e.g., no broken links and missing pictures.
	Inclusion of navigation reinforcement, e.g., guides, tutorials, instructions.
Social Cue Design	Application of web page design techniques, e.g., white space, margin, and visual density.
	Inclusion of representative photo or video.
	Inclusion of synchronous communication tools, e.g., instant messaging, video telephony.

3.4 Procedure

We chose evaluators according to the standard above and used the heuristic evaluation to evaluate the data of trust situation that are built by “CouchSurfing.” The evaluators were asked to freely operate the interfaces and then evaluated the website based on the provided evaluation forms. There were three focuses of the evaluation:

- Firstly, experts need to analyze whether the ways, used to build trust between users, offered by CouchSurfing website really helpful. Then, they should rate the website services based on principles of the trust-building process.
- Secondly, the experts need to assess whether the services provided by the website are in accordance with the online trust principles when the user communicates with others. A detailed rating from the experts is required during this assessment.
- At last, the experts need to assess whether the website delivers some features of trust-inducing, which help users build trust easily. Also, they should rate the whole framework of trust-inducing features on CouchSurfing.org.

Through the heuristic evaluation, we got the trust problems of CouchSurfing.org among the users of the website, and we checked the problem that users think they are appeared during the users making it one by one. Then, according to disadvantage that the users think, we will offer the suggestion for the website and make it better.

4 Result and Discussion

It is important to enhance user's willingness of hospitality exchange tourism through improving trust-building among the strange users. The aim of research is to create a new trust-building evaluation framework, to reduce the barriers of trust-building among the users, and to help more people who are willing to select the hospitality exchange tourism. Heuristic evaluation was chosen for the study methods, because it can quickly and easily find out the usability issues on the web [8], [11]. Based on the results, we have found out that there are still many issues in online trust-building. We have summarized those problems and recommendations, and showed those data into three parts.

4.1 The Evaluation of Trust-Building Process

In the first stage of evaluation, we discovered that CouchSurfing failed to deliver good service of trust-building during the whole process of encouraging trust between users. According to trust-building problem and rating (the full mark is 5, 1 stand for minimum score, 5 stand for maximum score.) that experts think, it is difficult to meet the needs of users about online trust-building except capability and transference process. And most of issuers was found in the process of calculation (Mean=2.5, SD=0.55) and prediction (Mean=2.33, SD=0.82). It may be a result of the lack of good behavioral norms and no way to confirm the authenticity of the users' information on CouchSurfing.org. Through testing, evaluators have suggested that it is vital to show more trustworthy information to users who want to communicate with others. Thus video features have been proposed to help users understand each other easily, as is shown in Table 5.

4.2 The Evaluation of Online Trust Principles

Based on our estimation of online trust principles, we summarized some similar problems or recommendations, and have found 13 problems and 17 pieces of advice. Experts discovered that the most serious problems of online trust-building are concentrated on several principles, such as information (Mean=2.67, SD=0.82), trustee's information (Mean=2.33, SD=0.82) and risks (Mean=2.33, SD=0.52). The possible reasons are that the website does not have a good mechanism to encourage users to upload personal information and there is insufficient dangerous warning to the users during their communication. So, they feel that the enhancement of the comment system, the feature of member certification, web alert of risk, etc. are required (Table 6).

In the final evaluation stage, we have found out certain inadequacies in terms of graphic design, structure design and social cue design (Table 7). For graphic design of CouchSurfing.org, the evaluators have considered that the evaluation principles of use of dynamic, 3D, and big size picture (Mean=2.67, SD=0.52) and the color and hue (Mean=2.67, SD=0.82) of website decreases the possibility of trust establishment among users. Some problems also exist in the structural design within the principles of implementation of easy to use navigation (Mean=2.33, SD=0.52) and use of navigation reinforcement (Mean=2.67, SD=0.82), such as poor usability of web and lack of adequate navigation. In addition, a lack of adequate communication media (Mean=2.67, SD=0.82) affects online trust-building in the social cue design as well. We have summarized the main recommendations, and proposed a number of ideas which includes improving the interactivity and dynamics of pictures, reducing usage complexity, and diversifying communication media.

Table 5. The evaluation form of trust-building process

Process	Problems	Recommendation	Mean (SD)
Calculative	<ul style="list-style-type: none"> No clear reward and punishment to encourage users build trust. 	<ul style="list-style-type: none"> Deliver rewards to the hosts with a good reputation, like member integral. Punishment for malicious users, such as closing the account. 	2.5 (0.55)
	<ul style="list-style-type: none"> Difficult to confirm the authenticity of the users' data. 	<ul style="list-style-type: none"> To add more certification, addresses certification, academic qualifications, etc. Regularly publish the good/poor credibility users. 	2.33 (0.82)
Capability	<ul style="list-style-type: none"> Difficult to assess user's ability to perform promises because of lack info. 	<ul style="list-style-type: none"> Increase the protocol functions for discussing more details of hospitality exchange tourism. Encourage to upload the hospitality exchange data. 	3.00 (0)
	<ul style="list-style-type: none"> Difficult to detect whether other users have bad intentions. 	<ul style="list-style-type: none"> Help to users distinguishing the liar's motivation through regularly publishing their chats in some interfaces. 	2.67 (0.52)
Transference	<ul style="list-style-type: none"> Difficult to provide the trusted third party advice in the comment system. 	<ul style="list-style-type: none"> The pictures of hospitality exchange experience are encouraged to join in the comment system. Add the function of friends' advices which could recommend the trustworthy users. To recommend some users who have higher credibility and your friends when you search the hosts of targeted cities. 	3.33 (0.82)

Table 6. The evaluation form of trust-building process

Principles	Problems	Recommendation	Mean (SD)
Information	<ul style="list-style-type: none"> The arrangement of info is unreasonable on the website. 	<ul style="list-style-type: none"> The beginners might need some info that they are familiar with, e.g. some people who are related to oneself according to the destination could be recommended. 	2.67 (0.82)
	<ul style="list-style-type: none"> Users can't see if their friends are using this web. 		

Table 6. (continued)

First party information	<ul style="list-style-type: none"> The personal information of trustee is too simple. 	<ul style="list-style-type: none"> The recommendation function should be improved, which may include the suggestion level for users, such as 1 is very weak and 5 is very strong. The website asks users to fill out their addresses and then certificate in the personal info page. The website should also provide the users privacy settings to protect their personal info. 	2.33 (0.82)
Trust development phases	<ul style="list-style-type: none"> Users don't know how to rebuild trust afterwards in case they lost trust via this website. 	<ul style="list-style-type: none"> Should have an official team to help users to rebuild trust. 	3.83 (0.41)
Trust relationship	<ul style="list-style-type: none"> Not found Related functions of trust relationship 	<ul style="list-style-type: none"> Adding a function of fans group could be taken into consideration, which will make the website more vividly. 	3.33 (0.82)
Dynamic nature of trust	<ul style="list-style-type: none"> Users don't know how to increase their own level of trust by other users. 	<ul style="list-style-type: none"> It's suggested to refine the levels of users' trust, such as separating host and guest rating scales "Proposed" function could be added in user recommendation, which allows users recommend some users to others. 	3.67 (0.82)
Global and local	<ul style="list-style-type: none"> Just provides the function of giving general comment instead of detailed comment. 	<ul style="list-style-type: none"> Improve the function of mutual-comment, such as increasing the@ function, and showing more useful info on personal info page. 	3.33 (0.41)
Identity	<ul style="list-style-type: none"> Errors occurred when using Facebook account to login. Applying for an account without requiring identity authentication is too simple. 	<ul style="list-style-type: none"> Reduce the possibility of occurrence of login errors. Users need to be encouraged to do the authentication of identification. 	3 (0.63)
Security and privacy	<ul style="list-style-type: none"> There is a risk of leaking out privacy if the users want to use Facebook account to log in. 	<ul style="list-style-type: none"> Prevent data leakage in terms of private info, other ways (e.g. private message) should be used to communicate accommodation details. Add the function of mobile-phone certification Allows users to set personal info to be public or confidential. 	3 (0.63)
Risk	<ul style="list-style-type: none"> Few tips on interaction risk for the users. The identity authentication function is poor, which leads to frauds. There is no mechanism to protect personal data from being messily filled. 	<ul style="list-style-type: none"> Add the function of Blacklist for users, and regularly publish the Blacklist on the website. More pages should show the info of interaction risk on the website. Only those who have more than fifty friends can successfully login though CouchSurfing.org when they want to use Facebook account to log in. 	2.33 (0.52)

Table 7. The problems and recommendations of online trust-inducing features

Dimensions	Principles	Problems	Recommendations	Mean (SD)
Graphic Design	Use of dynamic, 3D, and big size picture	<ul style="list-style-type: none"> The picture is too small, words are too much and the title is unclear. The picture lacks dynamic. 	<ul style="list-style-type: none"> Encourage users make more use of high quality pictures. More interaction between users and pictures on web-site. 	2.67 (0.52)
	Symmetric use of moderate pastel color of low brightness and cool tone	<ul style="list-style-type: none"> The dominant hue of this homepage is bright orange, and there are strong color contrasts on CouchSurfing.org. The website tends to warm tones. 	<ul style="list-style-type: none"> To adjust the dominant hue of website based on the principles of graphic design, such as light blue. 	2.67 (0.82)
	Use of well-chosen and good-shot photos	<ul style="list-style-type: none"> Most users just upload several photos, because the picture lacks interaction. No mechanism to encourage users to upload high-quality photos. Most users do not upload the photos of home. 	<ul style="list-style-type: none"> Encourage users to upload high-resolution photos of person and family. Encourage guests to take and upload the photos with hosts, and link to the host's info page. 	3 (0.63)
Structure Design	Implementation of easy to use navigation	<ul style="list-style-type: none"> Overall, the user is not easy to find the info one needs because of the visual effects of interface design are complex. Hard to find the function of group on the website. Only text comments and the rate of success to live. Need to spend much time finding some useful comments, and comments are easy to be operational. 	<ul style="list-style-type: none"> To re-arrange the whole info on the website. It needs to be arranged in the order of the info of richness and credibility in the comments list. Strengthen the evaluation and transparent evaluation in this regard. Suggested to do better on district web consulting area, and guide the user to find out the info easily. 	2.33 (0.52)
	No inaccessible information	<ul style="list-style-type: none"> Several meaningless pictures in some pages. 	<ul style="list-style-type: none"> None. 	3.83 (0.75)
	Inclusion of navigation reinforcement.	<ul style="list-style-type: none"> Interface design is not easy to use for novice, register and finds other parts of the suffer process with navigation are not. 	<ul style="list-style-type: none"> Increase more navigation. Make a demonstration to introduce how to find sofa process using website. 	2.67 (0.82)
	Application of web page design techniques.	<ul style="list-style-type: none"> The website of info presented visually is confusing, so users can't find the info they need. 	<ul style="list-style-type: none"> None. 	3 (0.62)

Table 7. (continued)

Social Cue Design	Inclusion of representative photo or video.	<ul style="list-style-type: none"> • The graphic on behalf of the other info is too little. 	<ul style="list-style-type: none"> • Encourage users to upload some videos or photos to introduce themselves. 	3.17 (0.75)
	Inclusion of synchronous communication tools.	<ul style="list-style-type: none"> • Just find the function of leaving messages. 	<ul style="list-style-type: none"> • To provide many types of communication functions, such as video telephony. 	2.67 (0.82)

We summarized the users' interfaces of CouchSurfing.org based on those trust establishment problems and recommendations among the users which the experts have founded through heuristic evaluation. We suggest to redesign the login page, personal page, profile page and searching page of CouchSurfing in order to increase possibility of online trust among the unfamiliar users:

- **The web login page:** In the login page, we will change the original bright orange into light blue due to the suggestions of graphic design. And we add the new sign in Twitter or Google account, which will attract more users who used to login with social network accounts as well as helping users of CouchSurfing find reliable information easily. Besides, it reduces the failure possibility if users use social website login.
- **The personal page:** On the CouchSurfing personal page, available interactive photo wall will take place of unavailable photo that can view information of other user in the photo wall, and surf their personal information page by a click. Moreover, the photo wall in personal page will refresh regularly so that different users' portraits are shown up. Our design could improve the interactivity and dynamics of photo wall.
- **The profile page:** In order to increase the online trust for other users, we will improve the album function that shows three pieces of small-size personal pictures on the right hand side of the location of big size photo, and encourages the users to upload family photos, and the photos which were taken with other hosts or guests in the profile page. Besides, the big-sized pictures of album in profile page will also refresh frequently so that different photos will be shown up, as is shown in Figure 1.
- **The searching page:** In order to enhance the user trust in others, two more features are included in the searching page. One is host recommendations and the other is the member certification in search of host list. In the recommendation feature, the searching system will automatically recommend several people with higher credit or the friends of the user of the travel places where user chooses. The icon of identity authentication will be displayed in the hosts' information of search list. If the users authenticate their identity, and then it can influence users click the host of search list and affect the user to build the network trust in the first sight, as is shown in Figure 2.

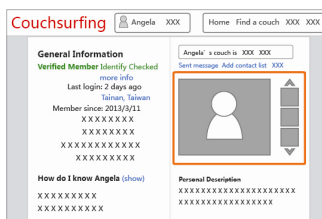


Fig. 1. The Profile Page of CouchSurfing Redesign

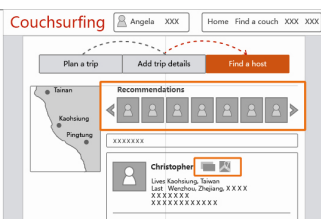


Fig. 2. The Searching Page of CouchSurfing Redesign

Tan think users who want to establish mutual sense of trust on the CouchSurfing should build a kind of open-minded atmosphere in it, which is related to reinforce more and more reliable information of our recommendations on the website [15]. In addition, Overgoor consider the trust behaviors of CouchSurfing that between users further rely on every reliable behavior of trustees [13]. Increasing video communication function and reinforcing prediction process, so as to it is easier to judge trust behaviors are whether reliable, which it is consistent with our suggestion. Besides the problem of trust-building among the users on the CouchSurfing, some limitations occurred in this study are: 1. We only considered trust-building among CouchSurfing users other than issues like brand positioning and cost. So part of our result may be not suitable for practical application; 2. We find it difficult to find some experts who have rich experience in usability testing to take part in our experiment due to practical limitations. Six evaluators are found in industrial design students to do this. Although they have web design experience and some usability knowledge, it's their first time to participate in heuristic evaluation. And they came up with a few difficulties in the process of heuristic evaluation because of lack of experience. To sum up, we find that there are many trust-building problems in the process of trust-building and trust-inducing features of CouchSurfing. These problems would affect the trust-building for both hosts and suffers. Based on the process of trust-building and trust-inducing features, the construction of the trust-building evaluation is built to improve the trust building problem of the users on CouchSurfing.org. In this way, more and more uses would be willing to join hospitality exchange tourism.

5 Conclusion

The purpose of this study aims to create a framework which combines the framework of trust-building process, trust-inducing features and the principles of online trust. Based on this model, we summarized the shortcomings of trust-building on the hospitality exchange web (CouchSurfing) via the heuristic evaluation, and have found the section of web design is not perfect. We found that more or less some deficiencies are existed in 5 processes of trust-building. And most of problems are concentrated in the process of calculative, prediction and intentionality among whole trust-building

process. It leads to the problem which is hard to verify users' personal information and comment authenticities without favorable reward and punishment mechanism. Furthermore, it also is hardier to assess trustees' real intention on account of lack detailed information. Thus we recommend CouchSurfing.org to improve the norm of reward and punishment and add more verification process to help build trust among users. On the assessment section of online trust principles, a number of problems were found in the principles of information, first party information and risk. Arrangements of page information are too disorder and have no detail comment. Too simple trustees' information and lack identity authentication are the primary difficulties that encountered in the process of establishing network trust. So we believe it could facilitate the trust-building process among users by encouraging them to upload more information and popping up sufficient risk warnings in some interfaces on the website. In the assessment of the framework of trust-inducing features, color and hue of website is excessively warm, pictures on website lack of interactivity and dynamic, interface visual is too complicated, short of appropriate navigation functions and diversified communication media have an impact on establishing sense of trust between users. So we suggest the website to have a more proper layout design and hue mixing in order to provide a better visual experience. And it needs to improve its pictorial interactivity and dynamics, as well as add the video function to increase users' mutual trust. At last but not least, we are surprised to find that there are many trust-building problems on the CouchSurfing (as a most population hospitality exchange web). Therefore, we can conclude that it's more similar than other hospitality exchange webs. So we believe that this framework could apply the evaluation of trust-building to others, and could help users build trust easily. It could affect more travelers to join on the hospitality exchange tourism, and experience humanistic culture of travel.

References

1. Aljazzaf, Z.M., Perry, M., Capretz, M.A.: Online trust: Definition and principles. In: 2010 Fifth International Multi-Conference on Computing in the Global Information Technology (ICCGI), pp. 163–168. IEEE, Valencia (2010)
2. Anderson, J.C., Narus, J.A.: A model of distributor firm and manufacturer firm working partnerships. *The Journal of Marketing* 42–58 (1990)
3. Bialski, P., Batorski, D.: Trust Networks: Analyzing the Structure and Function of Trust. In: International Network of Social Network Analysis SUNBELT Conference, Corfu (2007)
4. Coleman, J.: Characterization of *Escherichia coli* cells deficient in 1-acyl-sn-glycerol-3-phosphate acyltransferase activity. *Journal of Biological Chemistry* 265, 17215–17221 (1990)
5. CouchSurfing, <http://www.CouchSurfing.org/about>
6. Doney, P.M., Cannon, J.P.: An examination of the nature of trust in buyer-seller relationships. *The Journal of Marketing* 35–51 (1997)
7. Harris, L.C., Goode, M.M.: The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing* 80, 139–158 (2004)

8. Hvannberg, E.T., Law, E.L.C., Lérusdóttir, M.K.: Heuristic evaluation: Comparing ways of finding and reporting usability problems. *Interacting with Computers* 19, 225–240 (2007)
9. International, E.: *World Travel Market Global Trends Report*. Travel Report (2013)
10. Madhok, A.: Opportunism and trust in joint venture relationships: an exploratory study and a model. *Scandinavian Journal of Management* 11, 57–74 (1995)
11. Nielsen, J.: *Usability engineering*. Morgan Kaufmann, San Francisco (1994)
12. Nielsen, J., Molich, R.: Heuristic evaluation of user interfaces. In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 249–256. ACM, Seattle (1990)
13. Overgoor, J., Wulczyn, E., Potts, C.: Trust Propagation with Mixed-Effects Models. In: *ICWSM*, Dublin (2012)
14. Rosen, D., Lafontaine, P.R., Hendrickson, B.: CouchSurfing: Belonging and trust in a globally cooperative online social network. *New Media & Society* 13, 981–998 (2011)
15. Tan, J.-E.: The leap of faith from online to offline: An exploratory study of couchsurfing.org. In: Acquisti, A., Smith, S.W., Sadeghi, A.-R. (eds.) *TRUST 2010*. LNCS, vol. 6101, pp. 367–380. Springer, Heidelberg (2010)
16. Verbiest, N., Cornelis, C., Victor, P., Herrera, V.E.: Trust and distrust aggregation enhanced with path length incorporation. *Fuzzy Sets and Systems* 202, 61–74 (2012)
17. Wang, Y.D., Emurian, H.H.: An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior* 21, 105–25 (2005) Wikipedia, <http://en.wikipedia.org/wiki/CouchSurfing>