The inference of stickiness to trust repair in virtual community

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1. Introduction

In Virtual Community users, according to ComScore Media Metrix's data in 2010 July, in Asia Pacific the virtual community's user up to 2 billion 67 million people, it's grow 3% compare with last year. In individual social network, Facebook's member is the most, 89.7 million members, the second one is Yahoo! Social Media, 78 million members and the third is Baidu Space only 37.1 million members in Asia Pacific. Facebook's site of statistics "checkFacebook.com" shows that current register member is close to 7.6 million people in Taiwan.

Over the past the researcher mostly focus on trust, and relatively less research of the trust transfer and repair (Kim et al., 2009) Kim et al. (2006) starts a series related research of the trust repair, other related researcher also proposed different methods of the repair, ex: apology, deny, commitment or explain etc (Bottom et al., 2002; Nakayachi & Watabe, 2005; Ferrin et al., 2007, Xie & Peng, 2009), but the emphasis of these researches still focus on single construct and lack of integrated model.

2. Literature review and hypotheses

This study examines the public trust in the Internet community for the change in the results, whether by way of the restoration of trust and confidence in community restorative viscosity is associated. The integration of study, reference Xie & Peng (2009) of the construct and lack of integrated model. The way of trust repair divided to emotional, functional and informational (McKnight & Chervany, 2002; Mayer et al., 1995), this study Structure shown in Figure 1.

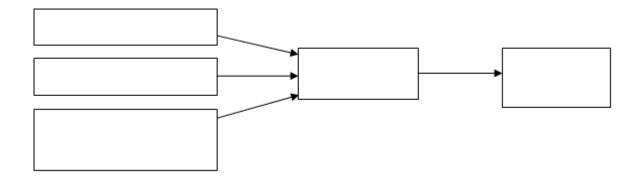
2.1. **Trust repair and Stickiness**

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¹**Abstract.** In this research we investigate that user's stickiness of virtual community would affect the trust and the stickiness is mediator between trust repair and trust. The questionnaire through "Happy Farm"from the Facebook, we used the Structural equation modeling (SEM) to analyze the data, in order to understand repair methods and the community trust the persons concerned after the stickiness of the impact of trust. The result shows that functional and informational of trust repair has positive relationship with stickiness.

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The current study focused on the various trust repair to explore the way of repair. Such as: Bottom (2002); Kim (2004); Nakayachi & Watabe (2005); Schweitzer et al (2006), Ferrin (2006). Such studies have a variety of scenarios for business in the trust made to repair the consumer is valid, and enterprise customers willing to trust again. The ability and necessity of trust repair is an important issue with the value of theoretical.

How to know the customer are stick on the website, we can see whether the websites provide the information is interesting and satisfy the customer's needs or not; this is an important factor in maintaining customer's loyalty (Brock, 1997). When customers spends more than average time browsing on the same website, it means this website has stickiness with customer.

After the destruction of trust the repair response, including an apology (Kim et al., 2004; Tomlinson et al., 2004), denied (Kim et al., 2004), excuses (Tomlinson et al., 2004), Make commitments (Schweitzer et al., 2006), compensation (Bottom et al., 2002), according to the law of compensation (Josang, Ismail, & Boyd, 2007), mortgage (Nakayachi & Watabe, 2005), or even no response (Ferrin et al., 2007) and so on. Some researchers (Kim, 2007) further pointed out that an apology and deny the advantages and disadvantages, etc., they think of different types of trust in the face of damage to the trust should be repaired using different methods.

H₁_a: Trust repair of emotional repair has positive effects on the stickiness

H₂_b: Trust repair of functional repair has positive effects on the stickiness

H_{3c}: Trust repair of informational repair has positive effects on the stickiness

2.2. Virtual Community

Rheingold(1993) define the virtual community is a group who use the internet to conformation a groups to community and known each other, share knowledge and information and treat each other as friends. A virtual community can provides some business and social functions, that vendors are able to grasp market trends and consumer preferences. The major business of virtual community are increasing active participation, attracting members and interaction, creating business value, establishing website stickiness, Hagel and Armstrong (1997).

Community stickiness mainly with the view persistence, browse the depth of the three indicators of the number of visits, while the community site, the degree of customization, real-time interactive capabilities, site promotion activities is to maintain and enhance the stickiness of the way with community (Allison et al., 1999), and the community can be used to measure the stickiness of the main site to keep users in virtual community, or to attract users to visit again in the future (Beddoe-Stephens, paul, 1999.), the community trust and stickiness All affect the user will re-visit the site.

H2: The community stickiness has mediation between trust repair and trust.

3. Research method

3.1. Research object

The study object selection, there is still a questionnaire within one month of exposure to farm the game fun, and experienced users trust the success of restoration as the main object, by a simple game, users can not

only derive a sense of achievement, you can also use water or stealing food alternative functions and friends interact, and thus attracted more and more friends to join Facebook. In summary, this study selected the Facebook with Happy Farm, as the research object.

3.2. research design

When survey respondents were entered web page, it will be the text of the questionnaire study and study, and answer approach. After filling out the questionnaire, respondents were pressing "Send" button, the information respondents will be paid directly into the server database. Respondents answer questions in order to avoid missing items, the survey will answer the program checks whether the tainted items, if tainted information reported by respondents will answer, "please answer complement". Finally, to improve the community members will fill out the questionnaire, so the way will be donated raffle prizes as incentives for its, hoping to improve sample recovery.

Recycling survey is complete, the virtual community for the Facebook game- Happy Farm and removed the invalid questionnaires and repeat respondents, then analysis the data by AMOS to explore the trust repair, virtual community and trust of related research and questionnaire with five scale, from strongly disagree (1 point) to strongly agree (5 points).

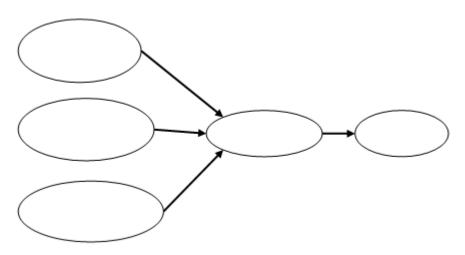
4. Result

We analyzes by structural equation modeling (SEM) to test the overall hypothesis is goodness of fit with the model. The following table shows that, GFI, AGFI and RMSEA is an absolute fit index, and GFI = 0.914, AGFI = 0.890 and RMSEA = 0.061, index coefficients were higher than the test criteria, this study shows the overall fit of a certain structure Level. The Incremental Fit Indices are CFI=0.948, NFI=0.932, and IFI= 0.948. The Parsimonious Fit Indexes are: PGFI=0.715, PNFI=0.796, PCFI=0.809. The overall goodness of fit index is shown in table 1.

Statistics		Criteria	Index
Goodness-of-fit	X^2	P>0.05	NO, p=0.000
	X^2/df	< 3.00	Yes, p=0.914
	GFI	>0.9	Yes, p=0.914
	AGFI	>0.8	Yes, p=0.890
	RMSEA	< 0.08	Yes, p=0.061
	NFI	>0.9	Yes, p=0.932
	CFI	>0.9	Yes, p=0.948
	RMR	< 0.05	Yes, $p=0.048$

Table 1. Overall goodness of fit index

From the above analysis that the overall structure of this study were goodness of fit through certain criteria, will be to test the causal relationship between SEM and path coefficient, the results shown in Figure 2.



The path analysis and the detailed information organized into the following table 2, fixed by the table, the way that trust repair (emotional repair, functional repair, informational repair) have positive impact of stickiness, P-values were lower than 0.05 and 0.001, stickiness have a high degree of confidence to the trust, P-values less than 0.05 and 0.001, so this hypothesis 1a, 1b, 1c, and assumption 2 are all set up.

Table 2. Standardized parameter estimates of the hypothesized paths.

Hypotheses	Path	Estimate	C.R.	P -value	Result
H1a	Emotional repair → Stickiness	0.03*	0.33	< 0.05	supported
H1b	Functional repair → Stickiness	0.207***	2.004	< 0.001	Supported
H1c	Informational repair → Stickiness	0.128***	2.201	< 0.001	Supported
Н2	Stickiness → Trust	0.426***	11.491	< 0.001	Supported

5. Discussion and conclusion

The trust repair model from the three trust modes: Emotional, Functional, Informational to measure three construct and lack of integrated model of the game users trust the Internet community after the game whether there are effects, Functional model and information model after all the trust has a positive impact, the user on the happy farms are a very high stickiness willing to spend time in the happy farm, these data indicated that the stickiness of the trust should be as a mediation.

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