

## The Antecedents and Consequences of Customer Trust and Website Image: The Moderating Effects of Gender

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**Abstract.** This study aims to identify how the perception of trustworthiness and website atmosphere influences customer trust and website image to enhance stickiness, as well as the extent to which gender moderates the relationships between the constructs. The results confirmed that trustworthiness and website atmosphere have positive impacts on customer trust and website image. Customer trust and website image have positive impacts on stickiness. Meanwhile, the moderating effects of gender in the relationships between trustworthiness, website atmosphere and customer trust are significant. Thus, the managers should focus on trustworthiness and website atmosphere to improve stickiness through customer trust and website image.

**Keywords:** Trustworthiness, Website atmosphere, Customer trust, Website image, Stickiness, Gender.

### 1 Introduction

Developing and maintaining relationships with customers has become a key marketing strategy for service firms and retailers [1]. Li et al. [2] revealed trust to be an important predictor to stickiness intention. Unlike research on store image, few studies have examined website image. In fact, most of them focus on related concepts such as website quality or disparate characteristics that researchers use as antecedents to specific explanatory variables of purchase behavior, often lumping them together under the less accurate term of online beliefs [3] or website attributes [4].

Although trustworthiness, customer trust, and website image have played important roles in Internet shopping, few studies have discussed the factors simultaneously. Thus, this study investigates how customer trust and website image have an impact on stickiness, and which factors of trustworthiness and website atmosphere are the most important, as well as examines the moderating effects of gender in Chinese online settings.

## 2 Literature Review

Trustworthiness is described as “being honest, telling the truth, keeping promises, and being loyal so people can trust you [5]. Based on previous studies, this paper proposes the dimension of trustworthiness of Internet shopping vendor as integrity, benevolence, and predictability. Website atmosphere can be defined as “the conscious designing of website environments to create positive effects in users in order to increase favorable consumer responses” [6]. Based on previous studies, this study adopted navigation, structure, informativeness, and information content effectiveness as four dimensions of website atmosphere.

Kong and Hung [7] proposed how people form trust attitude through peripheral (reputation, disposition to trust, situational normality, structural assurance, and web site quality) and central route (ability, benevolence, integrity, and web site quality). Harris and Goode [6] further revealed that consumers’ perceptions and interpretations of online service environment exert a powerful, direct influence over trust that, in turn, is associated with consumers’ purchase intentions.

Website image is defined as “consumers’ perception of a website as reflected by associations related to the website (including sub-sites) held in memory” [8]. A website’s capacity to persuade can be affected by the characteristics that the firm creates when building the site, such as information quality, credibility of the source, the brand or the site’s capacity to handle transactions [9].

Wu et al. [10] refined stickiness as “a high frequency of returning to a website.” Chebat et al. [11] showed that mall image had a significant positive influence on mall attitude, mall patronage, and word-of-mouth communications. Eastlick et al. [12] found that trust is an important antecedent for individuals to maintain continuous and valuable relationships with e-retailers. Thus, the following hypotheses are suggested to identify the relationships between the constructs in Internet shopping of China:

- H1. Trustworthiness will have a positive effect on customer trust.
- H2. Website atmosphere will have a positive effect on customer trust.
- H3. Trustworthiness will have a positive effect on website image.
- H4. Website atmosphere will have a positive effect on website image.
- H5. Customer trust will have a positive effect on website image.
- H6. Customer trust will have a positive effect on stickiness.
- H7. Website image will have a positive effect on stickiness.

Men show more interest in Internet purchase, spend more money and feel more trusting, though women who purchase through this medium do so more frequently and have more favorable attitudes towards the content of the website [13]. Thus, we will propose that the difference in gender acts as a moderating effect.

H8. The relationship between trustworthiness and customer trust is moderated by gender.

H9. The relationship between website atmosphere and customer trust is moderated by gender.

H10. The relationship between trustworthiness and website image is moderated by gender.

H11. The relationship between website atmosphere and image is moderated by gender.

H12. The relationship between customer trust and website image is moderated by gender.

H13. The relationship between customer trust and stickiness is moderated by gender.

H14. The relationship between website image and stickiness is moderated by gender.

### 3 Methodology

The research is designed to confirm the relationships among trustworthiness, website atmosphere, customer trust, website image, and stickiness, as well as to identify the moderating effect of gender in Chinese Internet shopping.

**Table 1.** Confirmatory factor analysis

Construct	Items	Std. Estimate	S.E.	C.R.	Composite reliability	AVE	Cronbach's $\alpha$	
Trustworthiness	Ability	Ab1	0.771					
		Ab2	0.814	0.091	11.519	0.837	0.63	0.831
		Ab3	0.797	0.078	11.203		1	
	Integrity	In1	0.810					
		In2	0.908	0.069	15.274	0.889	0.72	0.882
		In3	0.840	0.064	13.791		9	
	Benevolence	Be1	0.880					
		Be2	0.910	0.058	18.043	0.881	0.71	0.865
		Be3	0.735	0.079	12.577		4	
	Predictability	Pr1	0.712					
Pr2		0.788	0.127	9.905	0.779	0.54	0.781	
Pr3		0.703	0.126	8.987		1		
Navigational cue	Nc1	0.867						
	Nc2	0.900	0.060	17.335	0.893	0.73	0.888	
	Nc3	0.803	0.061	14.378		5		
Web Site atmosphere	Structure	St1	0.843					
		St2	0.837	0.067	14.833	0.890	0.72	0.891
		St3	0.881	0.065	16.004		9	
	Informative-ness	If1	0.921			0.926	0.86	0.925
		If2	0.936	0.047	21.173		2	
	Information Content effectiveness	Ice1	0.836					
Customer trust	Ice2	0.840	0.073	14.418	0.871	0.69	0.867	
	Ice3	0.821	0.072	13.902		3		
	Ct1	0.945						
Website image	Ct2	0.937	0.039	24.356	0.910	0.77	0.903	
	Ct3	0.741	0.050	14.224		3		
	Wi1	0.816						
	Wi2	0.853	0.074	14.382	0.89	0.72	0.895	
Stickiness	Wi3	0.889	0.075	15.279		8		
	St1	0.907			0.94	0.82	0.904	

Stickiness	St2	0.909	0.058	17.124	4
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Model Fit Indices:  $\chi^2(364)=561.835$ ,  $p=0.000$ ,  $CMIN/DF=1.544$ ,  $RMR=0.048$ ,  $GFI=0.857$ ,  $CFI=0.963$ ,  $TLI=0.953$ ,  $RMSEA=0.052$

## 4 Findings

**Table 2.** Results of hypothesis testing

Hypothesis Path	Std. Estimate	S.E.	t-value	p-value	Results
H1: Trustworthiness → Customer trust	0.618	0.136	6.761	0.000	Accepted
H2: Website atmosphere → Customer trust	0.145	0.086	2.044	0.041	Accepted
H3: Trustworthiness → Website image	0.012	0.076	0.166	0.868	Rejected
H4: Website atmosphere → Website image	0.419	0.055	6.517	0.000	Accepted
H5: Customer trust → Website image	0.518	0.052	7.042	0.000	Accepted
H6: Customer trust → Stickiness	0.306	0.089	3.341	0.000	Accepted
H7: Website image → Stickiness	0.463	0.132	4.825	0.000	Accepted

Model Fit Indices:  $\chi^2(403)=634.587$ ,  $p=0.000$ ,  $CMIN/DF=1.575$ ,  $RMR=0.055$ ,  $GFI=0.847$ ,  $AGFI=0.814$ ,  $NFI=0.890$ ,  $CFI=0.957$ ,  $TLI=0.950$ ,  $RMSEA=0.053$

In addition, the results of the moderating effects of gender showed that H8 and H9 are significant at the levels of 0.05 and 0.01 through a Chi-square ( $\chi^2$ ) value comparison for the free model and the constrained model. However, the moderating effects of H10, H11, H12, H13, and H14 are not significant at the level of 0.05

## 5 Conclusions

The conclusion is the primary research contribution, that is, customer trust and website image should be simultaneously considered in one model as indicators to predict stickiness, as well as focus on the roles of trustworthiness and website atmosphere to enhance customer outcome. Internet shopping vendors should consider market segmentation by gender, which has a different effect on customer trust. The vendors should also deploy effective strategies to build trustworthiness and website atmosphere. For future research, it will necessary for a longitudinal research to accurately track consumers' perceptions of trustworthiness and website atmosphere.

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