APPENDIX A: CONVERGENT AND DISCRIMINANT VALIDITY OF FORMATIVE CONSTRUCTS

Loch et al. [14] argue that convergent validity is obtained with their modified MTMM when indicators are significantly related to their intended composite construct. To do so, they extend the reasoning that considers that convergent validity can be assessed when measures of the same construct correlate significantly with one another, as argued by Campbell and Fiske [2].

Formative indicators are also called "cause indicators" [12] in that they "cause" rather than "reflect" the latent variable. Four decision rules [11] have been suggested to distinguish formative constructs from the reflective ones. The first criterion is that the indicators cause the construct, and therefore the causality is from the indicators to the construct. Contrariwise, reflective indicators are caused by the construct. The second criterion is that unlike reflective indicators, formative indicators should not be interchangeable. The third criterion is that the items do not necessarily covary for formative indicators while they do for reflective ones. The fourth criterion is to determine whether the indicators have the same antecedents and consequences. While reflective indicators do need to have the same antecedents and consequences, formative indicators may have different antecedents and consequences.

While loadings have to be taken into consideration for reflective measures, weights provided in appendix Table A1 play this role for formative measures [8, 22]. As the items of formative constructs represent a different facet of the construct, dropping a poorly represented item should necessarily be justified by theoretical arguments [2]. In the present study, no item has been deleted resulting from our analysis.

In order to assess convergent and discriminant validity for these constructs, we employed the modified MTMM technique used in a prior study [14]. The procedure described by Loch et al.[14] has four steps. Step 1: Normalize the data set. Step 2: Multiply the values of the data by their individual PLS weight. Step 3: Sum up the indicators of each construct, creating a weighted score for each indicator and a composite score for each construct. Step 4: Create a matrix presenting inter-items correlation and item-to-construct correlation. Our dataset consisted of Likert scales with 7 points and thus was already normalized. Therefore we implemented the three remaining steps in order to test the measurement properties of the formative constructs of our model. We also added three items that were not in the main model in order to see whether the relevant values held together better than with items that were not in the nomological model. These items were time spent by individuals to read online papers, to read and post message to newsgroups, and to make purchases on the web. The result of this procedure was the matrix shown in Table A2. The rectangles highlighted in this table correspond to the three formative constructs and suggest areas of focus for determining construct validity.

The analysis of the matrix shows that all weighted indicators load significantly on their intended composite indicator at a level of $p<0.01$. We can therefore conclude that the instrument has appropriate convergent validity.

Discriminant validity can be established when the indicators correlate more highly with each other and with their intended construct than with other measures and/or constructs. We hence compared the values of the rectangle of Institution-based Trust and Trusting Beliefs in the IT Artifact with the values of items in their rows and columns as suggested by Loch et al. [14]. We found one exception to this principle, for the Institution-based Trust construct. In particular, the correlation between INSGEN and IBT (-0.197, $p<0.01$) is smaller than the correlation of TRUST measures with IBT (from -0.221, $p<0.01$ to 0.311, $p<0.01$). Apart from this exception, the matrix provided evidences of appropriate discriminant validity. Furthermore, as argued in previous studies some non-meaningful exceptions may appear in a large matrix because of chance [2, 14]. Given the size of our matrix and the large number of items in the Institution-based Trust construct, the violations are within a reasonable level. We can thus conclude that our instrument has appropriate discriminant validity.

Another technique to assess the measurement properties of an instrument is to test multicollinearity among indicators. Low levels of multicollinearity among indicators can usually be assessed by levels of variance inflation factor (VIF) lower than 10 [22]. Our analysis showed that our constructs had all values under this threshold.

Table A1. Structural Model Results

	Standardized path coefficient (Direct effect)	T-Statistics	Indirect effect	Total effect
IBT → TRUST	0.18	3.55	0.00	0.18
PEOU → TRUST	0.33	4.10	0.00	0.33
TRUST → IU	0.49	9.67	0.00	0.49
WEBGRA → PEOU	0.37	5.78	0.00	0.37
WEBGRA → TRUST	0.21	2.11	0.12	0.33
WEBNAV → PEOU	0.37	5.19	0.00	0.37
WEBNAV → TRUST	0.29	2.87	0.12	0.41
CULTURE → TRUST	0.47	2.32	0.00	0.47
XWEBGRA → TRUST	0.20	0.95	0.00	0.20
XWEBNAV → TRUST	-0.61	2.34	0.00	-0.61

*Total effect= direct effect + indirect effect

Table A2: Modified Multitrait Multimethod Matrix

	AB	BEN	INT	TRUST	INSAB	INSGEN	INSST	INSBEN	INSINT	IBT	READ	NEWS	PROD	SHOP
AB	1													
BEN	.560**	1												
INT	-.361**	-.434**	1											
TRUST	.958**	.771**	-.392**	1										
INSAB	.222**	.236**	-.196**	.247**	1									
INSGEN	-0.092	-0.052	0.091	-0.086	-.502**	1								
INSST	.261**	.165**	-.164**	.254**	.558**	-.564**	1							
INSBEN	.134*	.204**	-.156*	.170**	.621**	-.441**	.451**	1						
INSINT	.204**	.243**	-.227**	.235**	.733**	-.645**	.637**	.595**	1					
IBT	.289**	.270**	-.221**	.311**	.742**	-.197**	.802**	.516**	.707**	1				
READ	0.012	0.122	-0.108	0.048	0.043	-0.049	-0.041	-0.032	0.058	-0.022	1			
NEWS	0.006	0.087	-0.077	0.032	-0.062	.130*	-0.098	-0.015	-0.025	-0.018	.544**	1		
PROD	-0.003	0.064	-.151*	0.014	0.057	-0.043	-0.007	0.055	.133*	0.042	.547**	.445**	1	
SHOP	0.032	0.09	-.172**	0.05	0.074	-0.094	0.051	0.058	.134*	0.056	.567**	.473**	.807**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Legend			
AB—Trusting Beliefs-Ability	BEN—Trusting Beliefs-Benevolence	INT—Trusting Beliefs-Integrity	TRUST—Trusting Beliefs
INSAB—Institution-based Trust (Situation Normality—Ability)	INSGEN—Institution-based trust (Situation Normality—General)	INSST—Institution-based trust (Structural assurance)	INSBEN—Institution-based trust (Situation Normality—Benevolence)
INSINT—Institution-based Trust (Situation Normality—Integrity)	IBT—Institution-based Trust	READ—Time spent reading online newspapers	NEWS—Time spent reading or posting messages to newsgroups
PROD—Time spent accessing information on the Web about products and services		SHOP—Time spent shopping (i.e., actually purchasing something) on the Web	

APPENDIX B: DESCRIPTIVE STATS, MODIFIED MTMM, AND INSTRUMENTATION

Table B1: Descriptive Statistics for Subsamples

		USA (N=135)		France (N=116)	
		Mean	Std. Dev	Mean	Std. Dev
Institution-based trust	INSGEN1	5.6	0.9	4.7	1.4
	INSGEN2	6.0	1.1	4.7	1.6
	INSBEN1	4.9	1.3	5.6	1.3
	INSBEN2	4.5	1.2	3.6	1.1
	INSBEN3	4.1	1.3	3.5	1.0
	INSINT1	5.0	1.2	4.1	1.2
	INSINT2	5.4	1.0	4.5	1.1
	INSINT3	4.9	1.3	4.2	1.0
	INSAB1	5.1	1.0	4.3	1.1
	INSAB2	5.3	1.0	4.3	1.0
	INSAB3	5.1	1.0	4.4	0.9
	INSST1	4.9	1.4	4.4	1.3
	INSST2	4.4	1.6	4.5	1.4
	INSST3	5.0	1.4	4.6	1.4
	INSST4	4.8	1.4	4.8	1.3
Trust	AB1	4.5	1.4	4.7	1.3
	AB2	4.8	1.3	4.9	1.2
	AB3	4.6	1.3	5.0	1.1
	AB4	4.8	1.3	4.5	1.2
	BEN1	4.2	1.2	4.0	1.2
	BEN2	4.3	1.2	4.0	1.2
	BEN3	4.2	1.3	4.1	1.4
	INT1	4.1	1.4	3.8	1.5
Intention	INTENT1	3.6	1.5	3.3	1.6
	INTENT2	3.7	1.7	3.1	1.6
	INTENT3	3.8	1.6	3.4	1.6
Visual Appeal	WEBGRA1	4.2	1.5	4.0	1.5
	WEBGRA2	4.4	1.4	4.1	1.5
	WEBGRA3	4.4	1.4	4.0	1.6
Navigational Structure	WEBNAV1	4.2	1.3	4.2	1.3
	WEBNAV2	3.8	1.4	3.9	1.4
	WEBNAV3	4.7	1.3	4.7	1.3
Others	READ	2.8	1.7	2.1	1.3
	NEWS	1.9	1.5	1.9	1.3
	SHOP	2.5	1.6	2.0	1.2
	AGE	31.6	6.5	22.8	4.1
	YRSCOL	6.3	2.3	4.4	1.1
	PROD	3.2	1.8	2.3	1.4

Table B2: Survey Instrument Items

Construct	Subconstruct	Code	Items	Author
			Scale : 1- Strongly disagree … 7- Strongly agree	
Institution-based trust	Situational normality-general (IG)	INSGEN1	I feel good about how things go when I do purchasing or other activities on the Internet.	McKnight et al. 2002
		INSGEN2	I am comfortable making purchases on the Internet.	
	Situational normality-benevolence (IB)	INSBEN1	I feel that most Internet vendors would act in a customers' best interest.	
		INSBEN2	If a customer required help, most Internet vendors would do their best to help.	
		INSBEN3	Most Internet vendors are interested in customer well-being, not just their own well-being.	
	Situational normality-Integrity (II)	INSINT1	I am comfortable relying on Internet vendors to meet their obligations.	
		INSINT2	I feel fine doing business on the Internet since Internet vendors generally fulfill their agreements.	
		INSINT3	I always feel confident that I can rely on Internet vendors to do their part when I interact with them.	
	Situational normality-Competence (IC)	INSAB1	In general, most Internet vendors are competent at serving their customers.	
		INSAB2	Most Internet vendors do a capable job at meeting customer needs.	
		INSAB3	I feel that most Internet vendors are good at what they do.	
	Structural assurance (ISA)	INSST1	The Internet has enough safeguards to make me feel comfortable using it to transact personal business.	
		INSST2	I feel assured that legal and technological structures adequately protect me from problems on the Internet.	
		INSST3	I feel confident that encryption and other technological advances on the Internet make it safe for me to do business there.	
		INSST4	In general, the Internet is now a robust and safe environment in which to transact business.	
Trusting Beliefs in the IT artifact	Trusting Beliefs—Competence	AB1	This mobile website is competent and effective in facilitating browsing.	McKnight et al. 2002
		AB2	This mobile website is competent and effective in facilitating purchasing.	
		AB3	This mobile website performs its role of facilitating mobile commerce very well.	
		AB4	Overall, this mobile website is a capable and proficient mobile commerce facilitator.	
	Trusting Beliefs—Benevolence	BEN1	This mobile website puts my interests first.	Wang and Benbasat (2005b)
		BEN2	This mobile website keeps my interests in mind.	
		BEN3	This mobile website wants to understand my needs and preferences.	
	Trusting Beliefs—Integrity	INT1	This mobile website provides unbiased product recommendations.	
Perceived Ease of Use	Ease of Use Perceptions	PEOU1	My interaction with the mobile web site is clear and understandable.	Wang and Benbasat (2005b)
		PEOU3	Learning to use the mobile web site was easy.	
		PEOU5	Overall, I found that the mobile web site is easy to use.	
Intention to Use	Intention to adopt	INTENT1	I am willing to use this mobile website as an aid to help with my decisions about which product to buy.	Wang and Benbasat (2005b)
		INTENT2	I am willing to let this mobile website assist me in deciding which product to buy.	
		INTENT3	I am willing to use this mobile website as a tool that suggests to me a number of products from which I can choose.	
Visual Appeal	Visual Appeal perceptions	WEBGRA1	I like the look and feel of the mobile website.	Montoya-weiss et al. (2003)
		WEBGRA2	The mobile website is attractive	
		WEBGRA3	I like the graphics on the mobile website	
Navigational Structure	Navigational Structure perceptions	WEBNAV1	It is easy to find what I am looking for on the mobile website.	Montoya-weiss et al. (2003)
		WEBNAV2	It is easy to move around online using the mobile website.	
		WEBNAV3	The mobile website offers a logical layout that is easy to follow.	

Table B3: Factor Loadings and Cross-Loadings

Constructs	Item	1	2	3	4	5	6	7	8	9	10	11
1. Trust in the IT artifact-Competence	AB1	**0.85**	0.53	0.10	0.09	0.01	0.15	0.17	0.42	0.52	0.47	0.43
	AB2	**0.89**	0.52	0.19	0.12	0.07	0.18	0.23	0.40	0.62	0.49	0.45
	AB3	**0.89**	0.49	0.14	0.11	0.10	0.12	0.22	0.34	0.52	0.41	0.44
	AB4	**0.89**	0.58	0.32	0.14	0.13	0.24	0.28	0.43	0.61	0.50	0.44
2. Trust in the IT artifact-Benevolence	BEN1	0.56	**0.89**	0.23	0.20	0.08	0.25	0.22	0.43	0.41	0.41	0.39
	BEN2	0.54	**0.90**	0.23	0.22	0.07	0.25	0.15	0.49	0.42	0.43	0.36
	BEN3	0.40	**0.72**	0.14	0.09	-0.01	0.13	0.04	0.29	0.30	0.26	0.28
3. Institution-based trust—situational normality-Competence	INSAB1	0.19	0.19	**0.88**	0.63	0.43	0.63	0.48	0.21	0.28	0.15	0.08
	INSAB2	0.24	0.28	**0.92**	0.57	0.46	0.69	0.49	0.24	0.27	0.19	0.09
	INSAB3	0.16	0.19	**0.91**	0.53	0.48	0.67	0.56	0.25	0.27	0.16	0.15
4. Institution-based trust—situational normality-benevolence	INSBEN1	0.08	-0.02	0.25	**0.56**	0.27	0.25	0.32	0.00	0.08	-0.05	0.12
	INSBEN2	0.08	0.19	0.59	**0.86**	0.43	0.55	0.38	0.21	0.10	0.15	0.05
	INSBEN3	0.15	0.25	0.55	**0.84**	0.30	0.51	0.34	0.27	0.12	0.12	0.12
5. Institution-based trust—situational normality-general	INSGEN1	0.07	0.04	0.47	0.39	**0.95**	0.61	0.53	0.07	0.17	0.12	0.04
	INSGEN2	0.09	0.08	0.49	0.45	**0.95**	0.61	0.53	0.06	0.19	0.11	0.08
6. Institution-based trust—situational normality-Integrity	INSINT1	0.17	0.25	0.64	0.56	0.56	**0.88**	0.55	0.19	0.28	0.23	0.16
	INSINT2	0.17	0.20	0.65	0.51	0.65	**0.91**	0.61	0.19	0.34	0.19	0.16
	INSINT3	0.18	0.22	0.61	0.48	0.46	**0.80**	0.51	0.27	0.25	0.23	0.10
7. Institution-based trust—Structural assurance	INSST1	0.18	0.16	0.53	0.42	0.51	0.59	**0.83**	0.10	0.19	0.12	0.11
	INSST2	0.24	0.15	0.42	0.36	0.35	0.44	**0.84**	0.16	0.11	0.05	0.13
	INSST3	0.25	0.18	0.51	0.36	0.58	0.60	**0.88**	0.11	0.21	0.09	0.07
	INSST4	0.23	0.11	0.48	0.40	0.46	0.57	**0.90**	0.13	0.22	0.06	0.15
8. Intention to Use	INTENT1	0.42	0.43	0.22	0.20	0.07	0.19	0.14	**0.90**	0.46	0.52	0.46
	INTENT2	0.41	0.45	0.29	0.23	0.13	0.28	0.15	**0.95**	0.45	0.55	0.42
	INTENT3	0.42	0.45	0.19	0.20	0.00	0.21	0.11	**0.90**	0.41	0.54	0.41
9. Perceived Ease of Use	PEOU1	0.52	0.39	0.29	0.15	0.21	0.30	0.16	0.36	**0.81**	0.47	0.47
	PEOU2	0.52	0.45	0.26	0.07	0.17	0.24	0.18	0.47	**0.78**	0.47	0.57
	PEOU3	0.50	0.25	0.24	0.08	0.15	0.29	0.14	0.28	**0.82**	0.46	0.48
	PEOU4	0.49	0.34	0.22	0.13	0.09	0.24	0.20	0.44	**0.73**	0.32	0.52
	PEOU5	0.57	0.36	0.22	0.11	0.14	0.28	0.18	0.37	**0.87**	0.48	0.54
10. Visual Appeal	WEBGRA1	0.54	0.43	0.19	0.13	0.12	0.26	0.11	0.54	0.56	**0.92**	0.56
	WEBGRA2	0.47	0.42	0.16	0.09	0.11	0.20	0.07	0.57	0.52	**0.93**	0.54
	WEBGRA3	0.44	0.36	0.17	0.11	0.10	0.21	0.07	0.49	0.41	**0.89**	0.44
11. Navigational Structure	WEBNAV1	0.44	0.37	0.12	0.09	0.05	0.15	0.15	0.43	0.62	0.42	**0.89**
	WEBNAV2	0.43	0.36	0.11	0.13	-0.01	0.10	0.09	0.51	0.48	0.54	**0.85**
	WEBNAV3	0.43	0.35	0.09	0.10	0.11	0.17	0.09	0.30	0.59	0.53	**0.87**

N.B. Values larger than 0.50 in our Average Variance Extracted (AVE) matrix [5] indicate convergent validity. Furthermore, the square root of the AVE should be larger for an intended construct than correlations with unintended constructs [8], yielding proof of discriminant validity. Moreover, values in the AVE diagonal should be larger than values outside the diagonal. Therefore, relying on evaluations of factorial validity and AVEs, we can conclude that the reflective indicators of our model show both convergent and discriminant validity.

Table B5. Model Loadings, T-Statistics & Average Variance Extracted (AVE) for Reflective Indicators

Construct	Item	Original Sample	Sample Mean	Standard Deviation	Standard Error	T Statistics	AVE
1. Trust in the IT artifact-Competence	AB1	0.84	0.84	0.02	0.02	35.03	0.76
	AB2	0.88	0.88	0.02	0.02	46.40	
	AB3	0.89	0.88	0.02	0.02	45.08	
	AB4	0.88	0.88	0.02	0.02	49.32	
2. Trust in the IT artifact-Benevolence	BEN1	0.89	0.89	0.01	0.01	63.88	0.69
	BEN2	0.88	0.88	0.02	0.02	39.57	
	BEN3	0.72	0.71	0.05	0.05	14.02	
3. Institution-based Trust—situational normality-Competence	INSAB1	0.88	0.88	0.02	0.02	47.13	0.82
	INSAB2	0.93	0.93	0.01	0.01	81.48	
	INSAB3	0.91	0.91	0.01	0.01	72.96	
4. Institution-based trust—situational normality-benevolence	INSBEN1	0.56	0.56	0.07	0.07	7.53	0.58
	INSBEN2	0.85	0.85	0.02	0.02	41.30	
	INSBEN3	0.84	0.84	0.03	0.03	28.16	
5. Institution-based Trust—situational normality-general	INSGEN1	0.95	0.95	0.01	0.01	110.48	0.90
	INSGEN2	0.95	0.95	0.01	0.01	94.09	
6. Institution-based Trust—situational normality-Integrity	INSINT1	0.88	0.88	0.02	0.02	49.27	0.75
	INSINT2	0.91	0.91	0.01	0.01	72.07	
	INSINT3	0.81	0.81	0.03	0.03	29.00	
7. Institution-based Trust—Structural Assurance	INSST1	0.83	0.83	0.02	0.02	33.46	0.75
	INSST2	0.84	0.84	0.03	0.03	26.76	
	INSST3	0.88	0.88	0.02	0.02	49.38	
	INSST4	0.90	0.90	0.01	0.01	66.29	
8. Intention to Use	INTENT1	0.89	0.89	0.02	0.02	41.58	0.83
	INTENT2	0.95	0.95	0.01	0.01	123.86	
	INTENT3	0.89	0.89	0.02	0.02	49.38	
9. Perceived Ease of Use	PEOU1	0.80	0.80	0.03	0.03	31.46	0.63
	PEOU2	0.77	0.77	0.03	0.03	22.07	
	PEOU3	0.81	0.80	0.03	0.03	24.74	
	PEOU4	0.71	0.71	0.06	0.06	12.83	
	PEOU5	0.86	0.86	0.03	0.03	33.04	
10. Visual Appeal	WEBGRA1	0.92	0.92	0.01	0.01	76.52	0.83
	WEBGRA2	0.92	0.92	0.02	0.02	55.32	
	WEBGRA3	0.89	0.89	0.02	0.02	37.07	
11. Navigational Structure	WEBNAV1	0.88	0.89	0.01	0.01	61.76	0.75
	WEBNAV2	0.84	0.84	0.03	0.03	28.65	
	WEBNAV3	0.88	0.87	0.02	0.02	41.53	

N.B. To further test reflective measurement properties, we ran a PLS bootstrap with N=200 resampling [10]. The above table provides the loadings, t-statistics and average variance extracted (AVE) for the independent variables. The loadings represent the strength of the ties between items and their construct. For reflective indicators, convergent validity can be assessed when items load significantly on their latent construct. The level of significance for t-values in the outer model loadings is reached when $t > 1.96$. As can be seen from this table, all t-statistics are well above the 1.96 threshold for all three reflective constructs and are thus significant at the .05 alpha protection level. All the reflective items load highly on their own construct and at significant levels. Therefore we can conclude that the reflective constructs employed in this study demonstrate convergent validity.

Values larger than 0.50 in our Average Variance Extracted (AVE) matrix [5] indicate convergent validity. Furthermore, the square root of the AVE should be larger for an intended construct than correlations with unintended constructs [8], yielding proof of discriminant validity. Moreover, values in the AVE diagonal should be larger than values outside the diagonal. Therefore, relying on evaluations of factorial validity and AVEs, we can conclude that the reflective indicators of our model show both convergent and discriminant validity.

Table B6. AVE Statistics

Construct	CR	CA	1	2	3	4	5	6	7	8	9	10	11
1. AB	0.93	0.90	**0.87**										
2. BEN	0.87	0.77	0.10	**0.83**									
3. INSAB	0.93	0.89	0.01	0.10	**0.91**								
4. INSGEN	0.95	0.89	0.09	-0.05	-0.04	**0.95**							
5. INSST	0.92	0.89	0.02	0.09	1.00	-0.03	**0.87**						
6. ISBEN	0.80	0.63	0.00	0.17	0.48	0.15	0.48	**0.76**					
7. ISINT	0.90	0.83	-0.02	0.18	0.70	0.02	0.70	0.88	**0.87**				
8. IU	0.94	0.90	0.42	0.09	0.03	0.08	0.03	0.11	0.06	**0.91**			
9. EOU	0.89	0.85	0.57	0.08	-0.02	0.22	-0.03	0.04	0.04	0.45	**0.79**		
10. WEBGRA	0.93	0.90	0.51	0.11	0.08	0.11	0.08	0.13	0.14	0.57	0.55	**0.91**	
11. WEBNAV	0.90	0.83	0.48	0.03	-0.02	0.05	-0.02	-0.10	-0.11	0.49	0.55	0.50	**0.87**

Appendix C. Application of Carte and Russell Moderation Tests

Table C1. Carte and Russell's Moderation Guidelines and their Application to the Current Study

Error	Solution	Application to Current Study
1. Interpreting b_3 instead of ΔR^2	Use ΔR^2 as the index of moderator effect size after establishing statistical significance using either a t-test of H0: b3 = 0 or H0: $\Delta R^2 = 0$	As recommended, we used ΔR^2 as the index of moderator effect size. Applying the F-test formula proposed by Carte and Russell [3, p. 481], we found that the significance of ΔR^2 for the moderation of Visual Appeal → Trust was insignificant, as expected (since the effect of Visual Appeal on Trust was insignificant). However, the ΔR^2 for the moderation of Navigational Structure → Trust was also insignificant. To verify this result, we ran a pseudo F-test proposed by Mathieson et al [16] which is designed to test the change in R^2 of the moderation effect size in PLS and consists of comparing models with and without the moderation [1]. Effect sizes (f^2) are calculated as $(R^2_{Model 1}-R^2_{Model2})/(1-R^2_{Model2})$ [6, 16]. Multiplying f^2 by (n-k-1), where n is the sample size and k is the number of independent variables, yields a pseudo-F test for the change in R^2 with 1 and n - k degrees of freedom [16]. Applying the pseudo F-test, we found that the ΔR^2 for the moderation of Navigational Structure → Trust is significant (F=7.90, p < .005), though the effect size is small at .03 [7]. Thus, we conclude that the moderation effect of culture on the relationship between Navigational Structure and Trust is significant, although the effect size is small. These results are acceptable given the exploratory nature

		of this theorized interaction.
2. Interpreting b_1 and b_2 When X and Z are interval scale measures	Develop ratio scale measures of X and Z or do not use or develop models requiring interpretation of b_1 and b_2.	The moderating variable in our study—Culture—was captured as nominal data (with possible values 0 or 1). Therefore, although we theorize a moderating and a main effect, this guideline regarding interval data does not apply.
3. Confounding of X*Z with X^2	Partial out X^2 effects by adding X^2 term to MMR analyses.	This guideline refers to the possibility of the moderating variable being too similar to the independent variable, potentially leading to a nonlinear or quadratic effect, rather than a moderated effect. In our study, the moderating variable Culture is conceptually quite different from either Navigational Structure and Visual Appeal, the moderated independent variables. We therefore did not attempt to partial out quadratic effects from the model.
4. Incorrect specification of the X→Y versus → X causal sequence	1. Careful consideration of theory or rationale justifying causal sequence to ensure correct sequence is selected. 2. Examine the moderation effects in both causal sequences as part of exploratory effort that might lead to theory development.	Independent variables with moderated effects in our model are system quality characteristics Navigational Structure and Visual Appeal. The endogenous variable they affect is Trusting Beliefs in the IT Artifact. Manifestly, trusting beliefs alone cannot directly affect system quality characteristics. A reverse causal connection is not really feasible. Consequently, no further analysis on this point was performed.
5. Low power of random effects designs	Solution: 1. Estimate sample size required to reject H0: $\Delta R^2 = 0$ with X, Z combinations that are expected to be observed in the data. 2. Take extra care before "trimming" any outliers.	This guideline applies chiefly to “survey research where investigators measure independent variables using survey instruments” [3, p. 487]. Our study employed an experiment with a fixed effect, viz., Culture. For this reason, the problems of statistical power described in this guideline do not apply. Even if they did apply, our

		statistical power is reasonable, given the decent sample size.
6. Dependent variable scale is too coarse	Investigate number of levels of X and Z expected and select method of operationalizing Y that meets or exceeds their product.	This guideline refers to the scenario of a survey or experimental participant reporting values for both the independent and moderating variables. In our case however, the moderating variable is a function of the experimental group the participant belongs to (US or France, i.e., 0 or 1) and is not a self-reported value. Therefore, this criterion does not seem to apply. Even if it did, the possible values for the moderation are 8 and that of the DV is 7. These are very close and thus the DV is likely not too coarse.
7. Nonlinear, monotonic Y transformations	Do no transformations without a theoretical rationale. Bootstrap estimates of confidence interval around ΔR^2 if parametric assumptions are not met.	This guideline also applies to studies using a random effects design. Our design called for an experiment with a fixed effect, namely Culture. Therefore, this guideline does not directly apply. Regardless, we tested for homoscedasticity and found that our data do not violate any parametric assumptions.
8. Influence of measurement error on X*Z	First, estimate expected ΔR^2 by simulating X*Z interaction and adjusting obtained ΔR^2 for measurement error in X and Z. Second, estimate sample size required to reject H0: $\Delta R^2 = 0$ when the expected MMR effect size is the adjusted estimate of ΔR^2.	The psychometric properties of the instrument are acceptable and so measurement error is low. Thus, measurement error for the moderation is also low. For measurement error for the independent variables, we performed several tests for measurement error which are described in the . Given the affirmative results of these tests, we conclude that measurement error did not impact the X*Z moderation.

9. Gamma differences between two groups in PLS	Test for differences between Inter-item correlation matrices between two groups using Hotelling T^2 and/or assess factor loading similarities using coefficient of concordance (Harman 1976). If no differences exist, scales derived from the items must be arrived at in the same way for all observations. If differences exist, explore for possible differences in latent construct domain tapped by items.	This issue arises when moderation is tested by using PLS to compare the path coefficients in two sub-groups. In contrast, our method tested moderation by incorporating Culture as a construct in the model. In addition, two interactions terms, NAV*Culture and GRA*Culture, were also added to the model. These interaction terms were calculated by multiplying the indicator values for NAV and GRA by the Culture dummy variable. These interaction terms were then connected to the Trust construct in the model. Moderation was then tested by assessing the significance of the path coefficients leading from this interaction constructs to the Trust construct.

Appendix D. Description of Common Methods Bias Tests

To test for common methods bias we performed the technique described in "Controlling for the effects of a single unmeasured latent method factor" [23, p. 894]. While this kind of test is generally applied with covariance-based SEM approaches such as LISREL, some have adapted this technique to be implementable via PLS [13]. As recognized by these authors, PLS allows items to load only on one construct. Further, PLS does not provide random error statistics. To adapt Podsakoff's common methods bias technique, researchers using PLS must first convert individual items into single indicator constructs. Consistent with prior research, the resulting path analysis should be equivalent to a factor loading [15]. This conversion allows the common method variance factor to be assigned to all individual items. Second, we then linked the original constructs to the single indicator constructs. The paths were from the original latent variable to the single indicator construct modelling thus reflective constructs. Third, we linked the common methods variance factor to all single indicator constructs (from CMV factor to individual indicator constructs). Finally, we ran the PLS bootstrap with 200 resamples. According to Liang et al.:

> For each single-indicator construct […], we examined the coefficients of its two incoming paths from its substantive construct and the method factor. These two path coefficients are equivalent to the observed indicator's loadings on its substantive construct and the method factor and can be used to assess the presence of common method bias. […]The squared values of the method factor loadings were interpreted as the percent of indicator variance caused by method, whereas the squared loadings of substantive constructs were interpreted as the percent of indicator variance caused by substantive constructs. If the method factor loadings are insignificant and the indicators' substantive variances are substantially greater than their method variances, we can conclude that common method bias is unlikely to be a serious concern [13].

The results for the analyses are shown in Table D1. Of the 23 paths from CMV to single indicator constructs, 7 were significant, indicating a small amount of common methods variance.

Table D1. Common Methods Bias Path Coefficients

	Paths/Loadings	Original Sample (O)	Squared Factor Loadings (R^2)	T-statistic (|O/STERR|)
Common Methods Variance (CMV) Factor loadings	CMV → AB	0.01	0.12	0.56
	CMV → BEN	-0.02	0.14	0.70
	CMV → INT	-0.08	0.28	**1.96**
	CMV → CULT	0.00	0.00	0.00
	CMV → INSAB	0.08	0.27	1.76
	CMV → INSBEN	-0.03	0.16	0.51
	CMV → INSGEN	-0.08	0.28	1.35
	CMV → INSINT	0.08	0.28	2.24
	CMV → INSST	-0.07	0.27	1.45
	CMV → IU1	-0.01	0.11	0.26
	CMV → IU2	0.00	0.04	0.04
	CMV → IU3	0.01	0.11	0.23
	CMV → PEOU1	0.22	0.46	**2.04**
	CMV → PEOU2	0.31	0.56	**3.80**
	CMV → PEOU3	0.11	0.34	0.60
	CMV → PEOU4	-0.49	0.70	1.83
	CMV → PEOU5	-0.50	0.71	**2.35**
	CMV → WBGRA1	0.08	0.28	1.47
	CMV → WBGRA2	0.04	0.21	1.04
	CMV → WBGRA3	-0.13	0.36	**2.43**
	CMV → WBNAV1	0.00	0.04	0.03
	CMV → WBNAV2	0.05	0.22	0.91
	CMV → WBNAV3	-0.17	0.41	2.02
Substantive constructs factor loadings	IU → IU1	0.90	0.95	21.63
	IU → IU2	0.95	0.97	35.68
	IU → IU3	0.88	0.94	19.95
	INSTITU → INSAB	0.81	0.90	30.42
	INSTITU → INSBEN	0.77	0.88	22.47
	INSTITU → INSGEN	0.80	0.89	23.98
	INSTITU → INSINT	0.86	0.93	38.37
	INSTITU → INSST	0.83	0.91	23.97
	PEOU → PEOU1	0.62	0.79	6.63
	PEOU → PEOU2	0.55	0.74	5.74
	PEOU → PEOU3	0.62	0.79	2.95
	PEOU → PEOU4	0.92	0.96	7.17
	PEOU → PEOU5	0.96	0.98	16.87
	TRUST → AB	0.91	0.95	27.20
	TRUST → BEN	0.86	0.93	36.51
	TRUST → INT	0.11	0.34	0.35
	WEBGRA → WBGRA1	0.85	0.92	18.37
	WEBGRA → WBGRA2	0.88	0.94	21.17
	WEBGRA → WBGRA3	1.00	1.00	25.38
	WEBNAV → WBNAV1	0.89	0.94	22.68
	WEBNAV → WBNAV2	0.85	0.92	18.57

	WEBNAV → WBNAV3	0.38	0.61	1.34
	CULTURE → CULT	1.00	1.00	0.00
Path coefficients	CULTURE → TRUST	0.10	0.31	1.90
	INSTITU → TRUST	0.14	0.38	2.46
	PEOU → TRUST	0.27	0.52	3.02
	TRUST → IU	0.50	0.71	10.76
	WEBGRA → PEOU	0.32	0.56	4.72
	WEBGRA → TRUST	0.30	0.55	4.27
	WEBNAV → PEOU	0.35	0.59	4.84
	WEBNAV → TRUST	0.18	0.43	2.06

In order to further analyze common method bias, we also conducted Harman's single factor test [23]. We ran an exploratory factor analysis in which we included all first order constructs of the model and then examined the unrotated factor solution. The first factor explained 30.47 percent of the variance, indicating that common methods bias is not substantial in our analyses. Indeed, Podsakoff et al. point out that if there is a significant level of common method bias, "(a) a single factor will emerge from the factor analysis or (b) one general factor will account for the majority of the covariance among the measures" [23, p. 889]. Since more than one factor emerged to explain the variance in our analysis, we can conclude that according to that test common methods bias in this case is not significant.

Finally, the correlation matrix (See Table 6. AVE statistics) shows moderate correlation among factors, indicating that factors measure different constructs. Indeed, the highest correlation was .57, while, according to previous studies, high correlations providing evidence of common methods variance would be above .90 [21]. Therefore, while the first test detected a small amount of common method bias, two subsequent tests showed that common methods bias does not significantly affect our analyses.

Appendix E. Review of Trust in IT via Anthropomorphization

One approach used to apply trust constructs of integrity, benevolence, and competence to IT artifacts is to recognize the human tendency to ascribe human characteristics to inanimate objects, including IT artifacts. A body of research has found that people consciously and unconsciously place trust in technology through anthropomorphization, attributing to technology human characteristics such as agency [9]; personality, friendliness, and helpfulness [24]; morality or responsibility [18, 19, 20] as well as, it is argued, benevolence and credibility [4, 25]. Utilizing these findings, Wang and Benbasat [25] found evidence supporting the extension of McKnight et al.'s [17] trust constructs of integrity, benevolence, and competence to online recommendation artifacts [25].

An incorporation of anthropomorphization into the evaluation of trust in IT may be appropriate for IT artifacts that rely on recommendation agents, as in Wang and Benbasat [25], and/or where the artifacts are designed to appear or behave in human-like ways. However, the justification for applying anthropomorphization to all conceptualizations of trust in other IT artifacts appears to be more tenuous. Wang and Benbasat [25] observe that although anthropomorphic attributes apply well to online recommendation agents, other conceptualizations of trust may be more suitable for other forms of technology. Thus they express the need for future research to identify other aspects of trust that may be unique to technology artifacts and that are not presented as if they were taking on human-like qualities [25]. Accordingly, the present research does not examine trust in IT artifacts through anthropomorphization, but rather seeks to identify elements of trust that are "unique" to IT artifacts.

Appendix F. Screenshot Simulation of Amazon Anywhere M-commerce Portal

1.

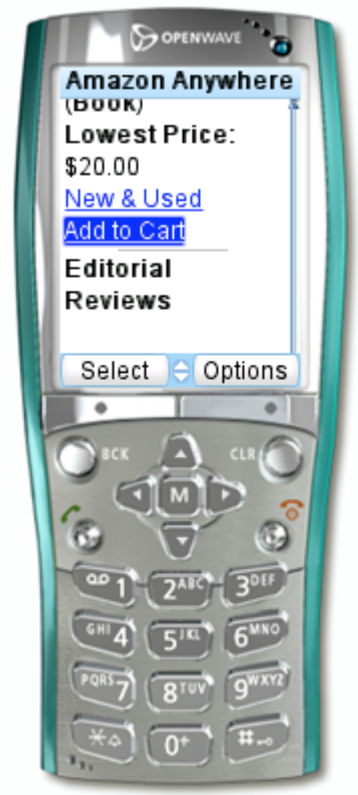
2.

3.

4.


OPENWAVE
Amazon Anywhere
DA VINCI CODE
DAN BROWN
The Da Vinci Code, Special Illustrated Edition
Options

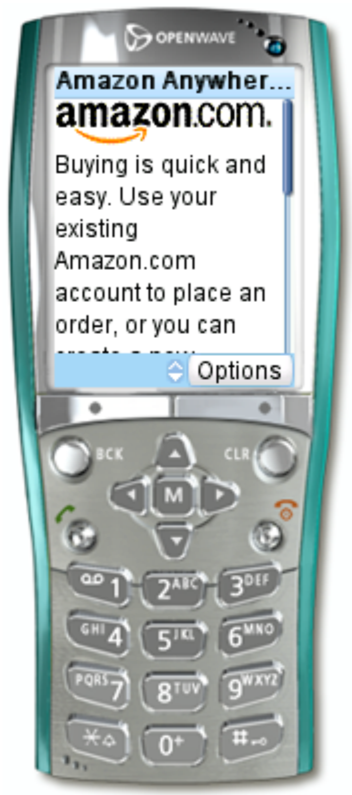
5.


OPENWAVE
Amazon Anywhere
Lowest Price:
$20.00
New & Used
Add to Cart
Editorial Reviews
Select
Options

6.


OPENWAVE
Amazon Anywhere
Total Unique Items:
1
Sub Total: $20.00
Checkout Now
Amazon.com
Select
Options

7.


OPENWAVE
Amazon Anywher...
amazon.com
Buying is quick and easy. Use your existing Amazon.com account to place an order, or you can
Options
BCK
CLR
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8.


OPENWAVE
Amazon Anywher...
order, or you can create a new account.
Email Address:
I am a new
Edit
Options
BCK
CLR
M

9.


OPENWAVE
Amazon Anywher...
Email Address:
I am a new customer
I am a customer
Pick
Options
BCK
CLR
M

10.


OPENWAVE
Amazon An... Abc
Email Address:
MC@GMAIL.COM
I am a new customer
I am a customer
Done
Options

11.


OPENWAVE
Amazon An... ABC
I am a new customer
I am a customer
****
Sign-In
Done
Options

12.


OPENWAVE
Amazon Anywher...
amazon.com.
Review the information, then click "Place your order."
Place Order
Select
Options

13.


OPENWAVE
Amazon Anywher...
amazon.com.
Review the information, then click "Place your order."
Sending
Options

14.


OPENWAVE
Amazon Anywhere
amazon.com.
Welcome!
Apparel
Search
Select
Options

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