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Trust, Expertise, and E-Commerce Intermediary Adoption

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Abstract

This research investigates how the amount of trust a consumer has in an electronic commerce intermediary and the amount of expertise that consumer needs to acquire in order to be able to use the intermediary affect the intention to adopt the electronic commerce intermediary. The paper analyzes both the *direct effects of trust and expertise on adoption intention*, as well as the *indirect effects* through two mediating variables widely used in adoption studies, *usefulness* and *ease of use*. These effects are hypothesized to be further moderated by the level of *transaction complexity*. The results partially support both the *direct effects model* and the *indirect effects model*, pointing out that trust and expertise are, as hypothesized by academicians and practitioners alike, important in encouraging adoption of electronic commerce technologies. In addition, the results show that trust and expertise become more important in determining the adoption intention as transaction complexity increases.

Introduction

New developments in electronic commerce (EC) have brought about the emergence of new intermediaries that support online transactions between consumers and suppliers. As competition among intermediaries providing similar services increases, EC intermediaries have to identify factors that make consumers adopt their EC system and not that of an EC or even traditional competitor, which may be equally easy to access. Positively influencing consumers' intention to adopt is the first step in building longer-term relationships with consumer and encouraging them to return for future transactions.

Identifying the determinants of adoption for EC intermediaries requires a model that takes into account both the value associated with the specific intermediation role, as well as the characteristics of the technology that enables online transactions. To achieve this goal, this paper uses economic, organizational, marketing and information systems theories that suggest that EC intermediaries can be evaluated in terms of the amount of trust and expertise they provide to potential adopters.

First, the importance *trust* has for EC intermediaries can be gauged from their recent million-dollar brand-building and trust-building initiatives (Elkin, 2000). These companies recognize that in order to encourage adoption, they need to replicate on the Internet the trust-based relationships that consumers have with

traditional intermediaries such as travel agents or financial services institutions (*BusinessWeek*, 1998; *The Economist*, 1999). Trust, as Keen (2000) observes, seems to be the foundation of EC. *Second*, lowering the amount of *expertise* a consumer is required to have in order to use an EC intermediary is likely to be equally important for the adoption of EC intermediaries as well. When using a traditional intermediary, the consumer can easily tap into the expertise of a sales representative or service provider to clarify any misunderstandings. However, when using EC intermediaries, the consumer has to rely on self-service technologies that, although complex, cannot always replicate a human's help.

Based on these insights from theory and practice, we propose two alternative models of adoption and we test them using experimental data collected for a particular type of EC intermediary, an Internet travel agent. The analysis involves both psychometric methods for assessing consumers' perceptions about EC intermediaries and econometric methods for assessing the relationship between these perceptions and the intention to adopt the EC intermediary for future use.

Literature Review

Trust

Organizational theory provides a cross-disciplinary definition of *trust* that applies to a large range of relationships among individuals and organizations. In this definition, trust refers to the willingness of a *trustor* to be vulnerable to the actions of a *trustee* (Mayer et al., 1995). Trust implies *benevolence*, *integrity*, and *ability* in an exchange relationship (Mayer et al., 1995), as well as *predictability* (McKnight et al., 1998). Trust has an important role in establishing cooperation relationships by lowering the risk of transacting (Mayer et al., 1995). *Marketing* researchers also posit that trust reduces the transaction costs and ensures that any inequities that might occur can be resolved (Ganesan, 1994). Empirical studies confirm that trust beliefs are correlated with future interaction intentions (Doney and Cannon, 1997; Ramsey and Sohi, 1997). *Economic theory* suggests that intermediaries lower the probability of unsuccessful trades, and consequently reduce the risk associated with trading (Rubinstein and Wolinsky, 1987; Cosimano, 1996). Moreover, because intermediaries trade over longer periods of time, they have incentives to maintain their reputation by providing high quality goods and services and offering warranties (Biglaiser, 1993). Thus, intermediaries are preferred over other trading

mechanisms because they increase the user's trust in a favorable transaction outcome.

These insights, although obtained in the context of traditional intermediaries, can be applied to EC as well. Researchers posit that EC cannot take place without trust-providing intermediaries and institutional infrastructures that establish and enforce rules and regulations (Bakos, 1998; Smith et al., 2000). Such mechanisms can build trust by addressing *security and privacy concerns* (Benassi, 1999) and *quality uncertainty concerns* (Spulber, 1997; Ba et al., 1999). Trust has a positive influence on *relationship outcomes* in EC as well (Hoffman et al., 1999; Jarvenpaa et al., 2000). For example, the likelihood of Internet product purchases is influenced by the amount of consumer trust regarding the delivery of goods and use of personal information (Hoffman et al., 1999). Other research also shows that the fairness of a company's website with respect to information privacy is a significant factor in building trust and in ensuring the continuation of the relationship with that company (Culnan and Armstrong, 1999).

Expertise Requirements

Acquiring *expertise* in any domain is defined as going beyond ordinary learning from rule-based and fact-based "know that" towards *experience-based "know-how"* (Dreyfus and Dreyfus, 1986). The amount of expertise required to effectively use a technology does not simply reflect the ease of use of the technology, but much deeper, *domain-specific knowledge*. Consumers' transaction expertise requirements might include, for example, "know-how" regarding searching, marketing, matching, determining product quality, and monitoring the fulfillment of transactions (Spulber, 1997). Lowering the users' need to invest in expertise is one of the roles of intermediaries. A number of economic models propose that intermediaries exist because they can efficiently match buyers and sellers (Rubinstein and Wolinsky, 1987; Cosimano, 1996). Intermediaries lower the search costs by providing *search and matching expertise*. They can also provide *product quality expertise* (Biglaiser, 1993). This expertise required for effective transacting is too costly (in terms of time and cognitive effort) to acquire for individual consumers. Since intermediaries transact much more frequently than any individual traders, they can afford to invest in such expertise and spread its cost over many transactions. Buyers and sellers will therefore prefer to trade through an intermediary if it reduces their expertise requirements for a particular transaction.

Technology Adoption

Individual models of adoption usually involve measuring perceptions about the technology, individual and environmental characteristics and investigating their correlation with attitudes and behavioral intentions toward use and actual usage metrics. One approach to studying adoption is based on the *Innovation Diffusion Theory* (Rogers, 1983), which posits that relative advantage,

compatibility, complexity, trialability and observability, together with innovativeness and external influences affect individual adoption. Another related approach, the *Technology Acceptance Model (TAM)*, focuses on beliefs regarding perceived ease of use and perceived usefulness (Davis et al., 1989), which are hypothesized to influence individual attitudes toward technology *usage*, and therefore affect the *adoption intention*. This model was tested and validated with a variety of user samples and technologies in its extended form (Davis et al., 1989; Mathieson, 1991), and also in its simplified form that reflects the causality chain *ease of use* \Rightarrow *usefulness* \Rightarrow *usage intention* (Davis, 1989; Davis et al., 1989; Igbaria et al., 1995; Agarwal and Prasad, 1998).

Research in human-computer interaction suggests that technology acceptance is also influenced by technology *credibility*, which is defined by the amount of trust a user has in the technology, as well as by the ability of that technology to deliver correct advice (Tseng and Fogg, 1999). The users' trust, as well as their expertise in evaluating the technology's performance, are likely to influence users' perceptions and subsequent adoption (Waern and Ramberg, 1996; Tseng and Fogg, 1999).

Conceptual Framework

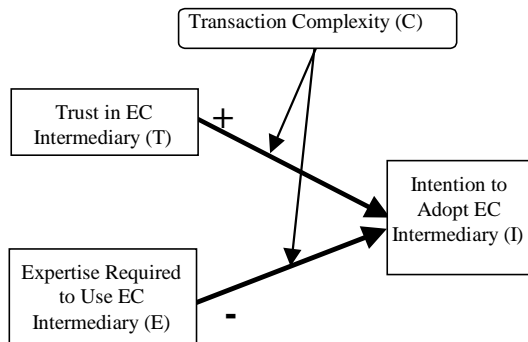
We propose to investigate in more detail the users' perceptions regarding the amount of *trust* (T) in an EC intermediary, as well as the amount of *expertise* (E) required to adopt an EC intermediary. We propose that these two factors have direct and indirect impacts on the users' intention to adopt an intermediary for a particular type of transaction, and that these effects depend on the level of *transaction complexity* (C). In the following we discuss two basic models that reflect these effects, and then examine the role of transaction complexity more closely.

Main Model (Model 1): Direct Effects of Trust and Expertise Requirements on Adoption Intention

The preceding literature review suggests that user's trust in an EC intermediary and user's expertise requirement for using the intermediary are important in users' intention to transact through that intermediary. This seems to be even more important for technology-enabled intermediaries. For information technology in general, trust and expertise are hypothesized to be related to adoption intentions. In addition, for EC technologies in particular, trust is hypothesized to have a major impact on the adoption decision. Moreover, if users need to invest in costly expertise about the transaction process in order to be able to efficiently transact through the EC intermediary, they will prefer not to trade through the EC intermediary at all, and choose instead a low-expertise requirement option, such as a traditional intermediary. Therefore we propose that the *intention to adopt* an EC intermediary (I) is positively influenced by the amount of *trust* (T) a consumer has in the EC intermediary and

negatively influenced by the amount of *expertise* (E) required to use that intermediary. We call this the *Direct Effects Model* in this research. (See Figure 1.)

Figure 1. Main model: direct effects



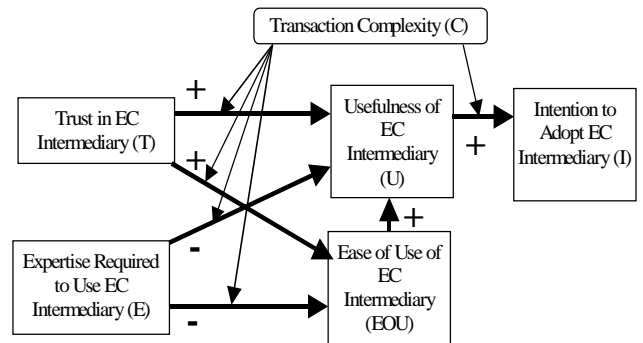
Alternative Model (Model 2): Indirect Effects of Trust and Expertise Requirements on Adoption Intention

An obvious alternative to the *Direct Effects Model* is to consider how trust and expertise affect an existing model of technology adoption. To provide a basis for comparison of our main model, we have chosen to use TAM, as discussed above. Since TAM’s ability to predict adoption intentions is fairly invariant to the technology under investigation (Davis, 1989; Igbaria et al., 1995), including World Wide Web technologies (Agarwal and Prasad, 1998), this *Indirect Effects Model* seems to be appropriate for evaluating adoption of EC intermediaries as well. We consider the simple model, involving the *ease of use* (EOU) ⇒ *usefulness* (U) ⇒ *intention to adopt* (I) relationships, and extend the beliefs set considered important for adoption with two additional technology beliefs, those of users’ trust in an EC intermediary and users’ expertise requirements for transacting through that intermediary.

EC increases the risk that the transaction will not be performed as the consumer initially intended, and therefore the *usefulness* (U) of an EC intermediary will depend on the *trust* (T) a user has in the intermediary. Irrespective of the objective capabilities of the intermediary, if the consumer does not trust that the transaction will be fair and unbiased, the intermediary will not provide value for the consumer. Therefore trust is positively related to the usefulness of the intermediary. Trust also reduces the need to understand, monitor and control the detailed actions of the intermediary. Therefore *trust* (T) positively influences the *ease of use* (EOU) of the EC intermediary. The higher the amount of *expertise* (E) required from a user in order to transact through an EC intermediary is, the lower the *usefulness* (U) of the EC intermediary will be for that user. In addition, the same costly *expertise* requirements (E) will negatively impact the *ease of use* (EOU) of the EC intermediary, since more

effort is necessary to learn how to transact through it efficiently. (See Figure 2).

Figure 2. Alternative model: indirect effects



Transaction Complexity Impacts

We expect that the impact of trust and expertise requirements in both models will be more pronounced as the *complexity* (C) of the transactions performed using EC intermediaries increases, without a similar increase in the ability of the intermediary to assist the complex transaction. (See Figures 1 and 2). Simple transactions do not require much “hand holding” and therefore their outcome using EC intermediaries is easier to predict and monitor. However, complex transactions are likely to involve uncertain outcomes, and therefore they will be more likely to be performed only through a trusted EC intermediary. The consumers are less likely to be able to predict or verify the quality of the product or service in a complex EC transaction because of their limited ability to deal with complexity (Simon, 1997). This is not just an issue of ease of use; to fully understand an EC transaction process requires more knowledge than a typical non-EC transaction because many details are hidden in the EC software systems.

Methods

Research Setting

The hypotheses are tested using data from two experiments involving 43 MBA students at a major Midwestern university during two weeks in Fall 1999. The experimental tasks consisted of making travel reservations using an EC intermediary, namely the Internet-based travel agent Trip.Com. We selected Trip.Com, a largely unknown EC travel intermediary, in order to minimize the effect of past interactions the subjects might have had with more popular Internet travel agents such as Expedia.com or Travelocity.com. The experiment we report on in this research consisted of making travel reservations (without actually buying any tickets) for a *simple transaction* (simple round-trip travel request with clearly specified time constraints) and a *complex transaction* (multiple destination trip with two stopovers and flexible travel times) using the EC

intermediary. The results were recorded using a web questionnaire in a database, and additional qualitative data was obtained from written evaluations of all experiments. Out of 43 responses for the simple task and 41 responses for the complex task, we identified 39 usable responses for each complexity level. Based on self-reported experience measures, we estimate that this sample is representative of people who travel infrequently, such as leisure travelers, and use traditional intermediaries more than EC ones.

Construct Operationalization

New instruments were developed for the trust and expertise constructs based on literature search and previously validated constructs in order to ensure *content validity*. Instrument purification resulted in 3-item scales for each construct. Usefulness and ease of use were measured using the 5-item scales developed by Davis (1989). Intention to adopt, which can be used as a proxy for actual adoption behavior (Davis, 1989), was measured by one item and was further verified with qualitative usage intention data from the process description provided by each subject¹. All items used 7-point Likert scales with "strongly agree" and "strongly disagree" as anchors. *Construct validity* analyses were conducted and the scale *reliability* (Cronbach's alpha over 0.75), and construct *convergent and discriminant validity* were confirmed for all constructs using the recommended statistical procedures (Nunally, 1978; Bagozzi et al., 1991), then summary average scores were computed for each construct (Churchill, 1979).²

Results

The models are tested using econometric analysis of the experimental data, with special attention given to tests for departures from the assumptions of ordinary least squares (OLS) regression models (Greene, 2000). We report heteroskedasticity-consistent estimates for all parameters of our models where appropriate, as well as adjusted R^2 s for each of the regressions. We also check for multicollinearity of the independent variables, which proved not to be a problem in any of the regressions. In addition, we point out that our sample has enough observations ($n=39$) to ensure appropriate statistical power for each of the equations we use for model testing (Baroudi and Orlikowski, 1991). A summary of the results is provided in Table 1.

Direct Effect Model Results (Model 1)

To test the *Direct Effects Model*, we regress adoption intention variable on trust and expertise requirements. Our analysis shows that trust has a direct positive and significant effect (at 0.01 level) on the adoption intention. The direct effect of expertise

requirements is negative as expected, but it is significant (at the 0.01 level) only for the complex transactions. The model fits the complex transaction data better, with an adjusted R^2 of 53.7%, as opposed to an adjusted R^2 of only 10.4% for simple transactions. Overall, the effect of trust and expertise on adoption intention is verified for complex transactions, but only partially verified (due to lower R^2 and non-significant effect for expertise). These results also confirm that, as predicted, the complexity level of the transaction impacts the paths between the independent variables and the dependent variable in the *Direct Effects Model*.

Indirect Effects Model Results (Model 2)

For this model, we start by testing the simplified version of TAM, i.e. the relationships *ease of use* \Rightarrow *usefulness* \Rightarrow *intention*). We find that usefulness is a significant predictor of adoption intention for both simple ($R^2=42\%$) and complex ($R^2=71\%$) transactions. The coefficients are positive, as expected, and significant at the 0.01 level. Usefulness, in turn, is positively influenced by ease of use, with coefficients significant at the 0.01 level ($R^2=31.5\%$ for simple transactions and $R^2=67\%$ for complex transactions). This confirms that TAM, in its initial formulation, is appropriate for evaluating the adoption of EC intermediaries.

We next test the effects of trust and expertise on usefulness and ease of use. We find that trust has a positive and significant effect (at 0.01 level) on usefulness, and that expertise has a negative and significant effect (at 0.1 level) on usefulness for both simple and complex transactions. When ease of use is introduced as an additional independent variable, we can find significant effects (at 0.01 level) only for trust, and only in the case of complex transactions. In addition, ease of use is positively influenced by trust (at 0.05 level for simple and 0.01 level for complex transactions) and negatively influenced by expertise (significant effect at 0.05 level only for complex trips) as expected. This suggests that for complex transactions, ease of use might be a mediator for the impacts of expertise requirements on usefulness, while trust has a direct effect only (Baron and Kenny, 1986). For simple trips, trust and expertise have only direct effects on usefulness, and the role of ease of use as a mediator is not confirmed.

Direct Effects Vs. Indirect Effects Model

To test for the mediating effects (Baron and Kenny, 1986) of usefulness, we also regress usefulness, trust and expertise requirements on adoption intention. We find that expertise has a negative and significant effect on adoption intention over and above usefulness (at 0.05 level) only for complex transactions, with the other direct effects of expertise and trust not significant. Combined with the results obtained for the *Indirect Effects Model*, this suggests that, although expertise also influences usefulness, its direct effects on intention cannot be ruled out. Therefore usefulness does not perfectly

¹ This check did not change the coding of the adoption intention.

² More details about instruments and validity checks are available from the first author of this paper.

Table 1. Direct and indirect effects model results

Models and Equations		Transaction Complexity (C)							
		Simple Transaction				Complex Transaction			
Direct Effects Model (1)	Variables	Estimate	t-ratio	p-value	R ² adj.	Estimate	t-ratio	p-value	R ² adj.
I=T+E	Constant	2.298	1.59	0.120	10.40%	2.246*	1.73	0.093	53.70%
	T	0.588***	2.85	0.007		0.800***	4.79	0.000	
	E	-0.087	-0.65	0.520		-0.564***	-3.61	0.001	
Indirect Effects Model (2)	Variables	Estimate	t-ratio	p-value	R ² adj.	Estimate	t-ratio	p-value	R ² adj.
I=U	Constant	2.005***	2.94	0.006	42.00%	-0.645	-1.49	0.144	71.00%
	U	0.642***	5.42	0.000		1.010***	8.99	0.000	
U=EOU	Constant	-0.649	-0.60	0.555	31.50%	0.236	0.62	0.541	67.00%
	EOU	0.948***	5.44	0.000		0.840***	10.79	0.000	
U=T+E	Constant	3.022**	2.24	0.031	17.80%	2.095	1.46	0.154	49.30%
	T	0.536***	2.74	0.009		0.744***	4.32	0.000	
	E	-0.260***	-1.88	0.068		-0.329*	-1.89	0.067	
U=T+E+EOU	Constant	0.355	0.28	0.785	33.70%	-0.051	-0.05	0.959	66.90%
	T	0.105	0.47	0.642		0.328***	3.01	0.005	
	E	-0.209	-1.63	0.111		-0.083	-0.62	0.540	
	EOU	0.807***	3.49	0.001		0.640***	5.70	0.000	
EOU=T+E	Constant	3.307**	2.44	0.020	26.40%	3.353**	2.16	0.038	45.50%
	T	0.534**	2.40	0.022		0.650***	3.20	0.003	
	E	-0.063	-0.98	0.335		-0.384**	-2.34	0.025	
Direct vs. Indirect Effects (Model 1 vs. Model 2)	Variables	Estimate	t-ratio	p-value	R ² adj.	Estimate	t-ratio	p-value	R ² adj.
I=U+T+E	Constant	0.448	0.35	0.727	41.40%	0.621	0.48	0.631	74.50%
	U	0.612***	4.44	0.000		0.776***	4.84	0.000	
	T	0.260	1.21	0.235		0.223	1.32	0.194	
	E	0.072	0.67	0.507		-0.308**	-2.06	0.047	

Legend: T=Trust in the EC intermediary, E=Expertise required to use the EC intermediary, I=Intention to adopt the EC intermediary, U=Usefulness of the EC intermediary, EOU=Ease of use of the EC intermediary
 Significance levels: *=0.10, **=0.05, ***=0.01
 (Note: all estimates are corrected for heteroskedasticity; n=39 for all models and within the boundaries specified in Baroudi and Orlikowski (1991))

mediate this direct relationship, and support is provided for the *Direct Effects Model* regarding the role of expertise. We also find that trust does not have any significant effects on intention to adopt when we control for usefulness. This suggests that usefulness mediates the relationship between trust and adoption intention, and that the *Indirect Effects Model* can also be used when studying the impacts of trust on adoption intention.

Transaction Complexity Impacts

Both models fit the complex transaction data better (based on the magnitude of the adjusted R²). These results point out that complexity influences not only the trust and expertise impacts, but also the ease of use and usefulness impacts. They also suggest that complexity associated with performing a task with a specific system might explain the variance in the predictive power of TAM reported in previous tests involving different information technology applications (Davis, 1989).

To test that differences in construct levels due to transaction complexity indeed exist, we perform repeated-measures analysis of variance that investigates within-

subject differences between the trust, expertise, usefulness, ease of use and intention to adopt constructs. (See Table 2.)

We find that mean differences for each of the above-mentioned constructs are significant at the 0.01 level and have the expected signs. Adoption of EC intermediaries is likely for simple transactions (mean =5.28 on 7-point scale), but unlikely for complex ones (mean=3.74), which are harder to perform online. Trust in EC intermediaries for simple transactions is on average 5.59, significantly higher than this construct’s mean value

Table 2. Transaction complexity impacts

Construct	Simple Transaction Mean Value	Complex Transaction Mean Value	Simple vs. Complex Mean Difference
Adoption Intention (I)	5.28	3.74	1.538***
Trust (T)	5.59	4.95	0.632***
Expertise (E)	3.51	4.39	-0.872***
Usefulness (U)	5.11	4.34	0.764***
Ease of Use (EOU)	6.87	4.34	1.179***

Significance levels: *=0.10, **=0.05, ***=0.01; n=39

for complex trips (4.95), as expected. Similarly, the mean expertise requirement for simple transactions is only 3.51, significantly lower than the corresponding value for complex trips, 4.39. This indicates that complex transactions require more travel-specific expertise than simple transactions, as hypothesized. Ease of use and usefulness are significantly higher for simple transactions (mean values 6.87 and 5.11 respectively) than for complex transactions (4.89 and 4.34 respectively). We find again, as expected, that EC intermediaries are harder to use and less useful for complex transactions than for simple transactions.

Discussion

The results we present in this paper suggest that trust and expertise requirements have significant direct and indirect effects on the adoption decision for EC intermediaries, and cannot be omitted from models of adoption. For both models, we found that the significance of the effects is quite high, despite the small sample (n=39). Moreover, the signs of the coefficients were consistent with the models' predictions. This increases our certainty that the results do not simply capitalize on chance, but reflect relationships among variables that are likely to hold on different samples as well.

Our results also show that transaction complexity seems to have a consistent effect on how well the models fit the data for the two models proposed in this paper, as well as for the basic TAM model. We find that intentions to adopt EC intermediaries for complex transactions can be evaluated either using the *Direct Effects Model* (Model 1) (which is more parsimonious) or the *Indirect Effects Model* (Model 2) (which is more complex). In the case of simple transactions, the *Indirect Effects Model* (Model 2) is probably more appropriate, since the *Direct Effects Model* (Model 1) does not have a very good fit to the data. These findings also suggest that other studies of technology adoption should consider the role of complexity as well.

This research points out that high levels of trust and low expertise requirements play a much more important role in the adoption of EC intermediaries for performing complex transactions, were the risk associated with the transaction outcomes is greater, and the ability to verify the transaction outcomes is lower. While it is possible that over time users will gain more expertise and build trust through repeated use of the EC intermediary, in the initial stages of the relationship trust levels are likely to be low and expertise requirements high for complex transactions. To differentiate themselves and encourage adoption of their system, EC intermediaries should therefore focus on system features such as reliability and fairness (which increase trust) and intelligent search technologies and help (which lower expertise requirements).

It is possible that reduced transaction costs due to lower prices or search time improvements (Bakos, 1998) also affect the decision to adopt EC intermediaries.

While space limitations prevent us from pursuing these factors in more detail here, we have also measured time and cost savings, and did not find significant improvements in the explanatory power of either *Direct Effects Model* or *Indirect Effects Model*.

The *Direct Effects Model* has advantages over the *Indirect Effects Model* when it comes to providing actionable recommendations for the design of EC intermediation technologies, too. Because it shows the direct effects of trust and expertise on the adoption intention, the *Direct Effects Model* can provide immediate feedback regarding design choices related to trust-building and lowering the expertise requirements. The *Indirect Effects Model*, on the other hand, relates only usefulness directly to adoption intention. Since trust, expertise, usefulness and ease of use interact with each other and possibly with other variables as well, it would be harder to judge what impact various design choices related to trust and expertise would have on the adoption intention. In addition, the *Direct Effects Model* is more parsimonious while still providing comparable explanatory power relative to the *Indirect Effects Model* with respect to trust and expertise impacts.

Conclusions and Limitations

This paper provides evidence regarding the importance of trust and expertise in the decision to adopt an EC intermediary. We find evidence that trust and expertise have direct effects on this intention, as well as indirect effects through two other beliefs important in adoption, usefulness and ease of use. We also provide evidence of the moderating role of transaction complexity on these relationships. These findings provide a starting point for the investigation of the role of trust and expertise in EC. They also provide insights for practitioners regarding the importance of building trust and lowering the expertise requirements for users of EC intermediaries.

One limitation of this study concerns its external validity (Lynch, 1982). Although graduate business students are appropriate for technology evaluation in corporate settings (Briggs et al., 1994) and have been consistently used in adoption models testing, they may not be representative of the population to which EC intermediaries actually target their service, and thus may skew the results. The results presented here should also be interpreted with caution in light of the experience characteristics of the sample. Future work needs to investigate consumer choices among multiple intermediation options, as well as multiple complexity levels. The relationship between the risk-propensity of subjects and trust should also be analyzed. A longitudinal study of EC intermediaries is also likely to provide a better understanding of how consumers' trust and expertise requirements evolve over time, and how these changes impact the adoption decision.

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