# The role of post-adoption phase trust in B2C e-service loyalty: towards a more comprehensive picture

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Abstract. Despite the extensive interest in trust within information systems (IS) and e-commerce disciplines, only few studies examine trust in the post-adoption phase of the customer relationship. Not only gaining new customers by increasing adoption, but also keeping the existing ones loyal, is largely considered important for e-business success. This paper scrutinizes the role of trust in customer loyalty, focusing on B2C e-services by conducting a three-sectional literature review stemming from IS, e-commerce and marketing. The key findings of this study are: 1. Literature discussing the role of trust after the adoption phase is relatively scarce and fragmented 2. In the empirical testing trust is mostly viewed as a monolith 3. Quantitative research methods dominate the field 4. Since trust may play a role during the whole relationship, also dynamic ways to scrutinize trust would be appropriate. Implications of these findings are discussed and ideas for further research suggested.

#### 1 Introduction

Trust has been viewed as one important factor affecting e-commerce adoption within the information systems (IS) and e-commerce disciplines [1, 2, 3]. The nature of trust has been widely discussed and its importance acknowledged also in e.g. e-commerce and marketing research streams [4]. Traditionally IS has been interested in adoption

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of technologies, such as Internet or e-commerce. However, from a customer relationship perspective the adoption represents only the first steps. The role of trust in post-adoption phase business-to-consumer (B2C) relationships has not been extensively discussed within the IS and e-commerce disciplines. Therefore, one can ask to what extent adoption alone is enough to explain customer relationships in the e-environment? One can also ponder whether consumers automatically continue usage after the adoption of the service and whether the same factors influencing adoption behavior play a role in the post-adoption phase? [5]

The importance of customer loyalty has been widely acknowledged and discussed in the marketing literature (see e.g. [6-9]). Customer loyalty is viewed as one of the most important factors for e-business' success [see. e.g. 10, 11].

In this study, the customer means an individual consumer, not a corporate customer. With respect to loyalty, the term customer loyalty instead of consumer loyalty or service loyalty is used. Examples of the usage of the term customer loyalty in similar contexts can be found from the e-commerce body of research (cf. e.g. [26, 28, 39]).

In this study, B2C e-services are viewed in a rather wide sense as services that are delivered by commercial organizations to consumers via the Internet. Hence, services that are delivered using other electronic channels than the Internet are excluded from this study.

An increasing share of services is delivered using virtual channels. Hence, the service encounters are moving away from face-to-face interaction towards virtual encounters. Since service encounters are important for the relationship, organizations need to consider how to maintain and develop their customer relationships without the face-to-face component. As a result, understanding the post-adoption behavior requires further scrutiny. The contribution of the paper is three-fold; firstly, it investigates the role of trust in post-adoption phase of B2C relationships in the online environment. Secondly, the paper scrutinizes the academic discussion around trust to identify topical areas of research and provides some longitudinal perspective on the development of the research. Thirdly, it attempts to identify possible paths for further research around trust and e-commerce.

# 2 Research Approach

The main focus of this paper is to discuss the role of trust in customer relationships of business-to-consumer (B2C) e-services, particularly in customer loyalty. As pointed out by Pavlou and Fygenson [12], consumer behavior has understandably largely ignored IT issues, since they have not been relevant in traditional physical business environment. Thus, this paper is positioned to contribute in narrowing the gap between IS and consumer behavior research as regards the role of trust.

A three-sectional literature review was conducted for this study. Figure 1 illustrates the areas and focus of the review. The first section focused on literature on trust in the Internet environment. To ascertain that the quality of the reviewed literature is sufficient, the top ten IS journals based on the Association for Information Systems Journal Rankings were included to the review. Because the idea

is to investigate trust in online environment, articles published prior 1995 were excluded since the commercial usage of the Internet was rather limited before 1995.

The second part of the review concentrated on e-commerce and e-services literature to find and investigate the studies discussing the role of trust in post-adoption behavior, particularly in customer loyalty. The third section of the literature review focused on studies around trust and loyalty in consumer behavior literature within the marketing discipline.

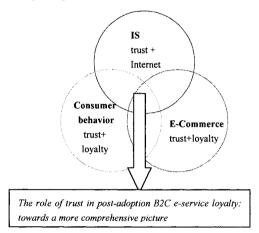


Figure 1. The structure of the study

# 3 Background

Trust has been in the interest of several disciplines. Trust has a central role in human interactions and hence in the society and economic exchange. The construct of trust can be approached from several directions using various theoretical frameworks. (cf. e.g. [1, 2, 3].)

In the IS literature trust has been discussed in relation to e.g. e-commerce adoption [13], electronic marketplaces [14] and virtual teams [15]. In their studies, McKnight and Chervany [16] and McKnight et al. [2] have strived for bringing the dispositional, institutional and interpersonal aspects of trust into a single framework.

The e-commerce literature has generally focused more on the institutional [17, 18] than dispositional aspect of trust, yet the importance of dispositional trust in e-commerce is also acknowledged [13]. From a managerial perspective, influencing dispositional trust may be challenging since it stems from values and personality whereas institutional trust is built on structures such as laws, regulations, standards etc. that reduce the perceived risk. As a result, creating trust-building mechanisms to nurture trust is often faster and technically easier than trying to influence the psychological dimension of trust.

Most of the online trust-building techniques are based on institution-based trust. Intuitively, institution-based trust seems effective also with B2C e-services. Structural assurances such as escrow services [17], privacy statements [19, 20] and feedback mechanisms [21, 14] are examples of commonly used trust-building techniques in e-commerce. In the case of e-services, the delivery of the service is automated. This reduces the risk of human errors and 'bad' service from the supplier side. On the other hand, the role of the customer in the e-service delivery is amplified. Therefore, achieving a high level of situational normality requires a technical environment where the customer is able to deliver the service without errors.

The view of trust in the literature has also somewhat evolved within the scrutinized period. In the early days, the focus was perhaps more on the security aspects to reduce the risk of fraud or misuse of personal data. The fundamental issue has shifted from convincing people that conducting transactions in the Internet is generally safe, towards lubricating the exchange and minimizing potential causes of inconvenience.

A topical trend is the critical evaluation of trust-building mechanisms [21, 22]. Issues related to feedback rating manipulations in electronic marketplaces and lack of customer attention and awareness of 3<sup>rd</sup> party assurance seals and privacy policy statements [23, 20] may indicate that trust aspects will remain in the agenda. Increasing customer awareness of the reliability issues of feedback ratings in electronic marketplaces may underscore the significance of appropriate and transparent trust-building measures in the future.

Another topical issue is related to the cultural issues of trust in e-commerce. Traditionally, a vast majority of studies on trust in e-commerce have used populations of US students in the empirical research. Some recent studies have investigated the cultural differences concluding that cultural aspects are an issue that influences trust in e-commerce. [24, 25.]

## 5 Trust and B2C e-service relationships

IS and e-commerce have discussed trust rather extensively but trust after the adoption phase has this far drawn less attention in these disciplines. Yet, signs of increasing interest towards post-adoption behaviors, e.g. customer loyalty have occurred in the recent IS and e-commerce literature [26, 27]. Table 1 illustrates the articles discussing trust and loyalty in the online B2C context. The articles are found from databases EBSCOhost, Emerald, Elsevier, ProQuest/ABI Inform using search terms 'trust' AND 'loyalty'. Additional search terms, 'web', 'customer/consumer loyalty' and 'e-loyalty' were used to ensure that the most of relevant content is included in the search. From this group, articles focusing on online context and having trust as a variable or otherwise explicitly discussing trust were included. As can be seen from table 1, e-commerce/IS literature scrutinizing trust in B2C e-services is sparse. Traditionally, customer loyalty has been discussed within consumer behavior in marketing and service loyalty within services marketing.

Table 1. Articles on trust and customer loyalty

Article	Area	Theoretical framework & Methods	View of trust	Key Ideas
Luarn & Lin (2003) [28]	E-Service	Quantitative Trust- commitment theory (Morgan & Hunt 1994) Proposed loyalty model	Set of specific beliefs (integrity, benevolence, competence and predictability) Monolith	Commitment as a powerful mediator between trust, satisfaction, perceived value and loyalty Correlation between trust and commitment weaker that satisfaction or perceived value Conceptualization of "traditional" customer loyalty in e-service context
Li et al. (2006a) [5]	E-commerce / web site	Investment model for interpersonal relationships & commitment- trust theory Quantitative	Monolith, however the authors discuss that trust is not undimensional Trust and commitment the predictors for stickiness intention	Commitment is a stronger predictor for stickiness than trust. The impact of trust also mediated by commitment
Flavián & Guinalíu (2006) [29]	E-commerce	Quantitative Proposes a model that relates trust, privacy and security with loyalty to a web site	Monolith	Direct correlation between trust and loyalty, not only intention to buy but also preference, cost and frequency of visits. Perceived security as an important antecedent of trust
Harris & Goode (2004) [30]	E-commerce & E-service (Books.com & Flights.com)	Applying Oliver's (1997) sequential loyalty chain in an online context	Monolith	Trust as a central driver of loyalty, direct correlation notified Oliver's loyalty model is reliable and valid in the online context. nature of online exchange rather relational than transactional

Thataban 0	E 00m======	TDA	Tought in the	Eviatina es14i
Thatcher &	E-commerce	TRA Quantitative	Trust in the	Existing marketing
George		Quantitative	Internet Monolith	models relevant are
(2004) [31]			1.10.10.11.	for Web shopper
			Trust in the Internet	behavior.
			not correlated to	Social involvement
		!	loyalty, once	magnifies the
			consumers gain a	relation between
			sufficient level of	commitment and
			experience to form	loyalty to a vendor.
			a committed	
			relationship to a	
			vendor -> threshold	
			level?	
Flavián et	Website	Quantitative	Trust as set of	The effect of
al. (2006)	loyalty	Explore the	beliefs	usability on loyalty
[32]		influence of	Monolith	seems to be
		perceived		conditioned by trust
		website usability		and satisfaction
		on trust and		
1		satisfaction and		
		the incidence of		
		these 3 variables		
		on loyalty	)	
Li et al.	E-	The investment	Monolith	Trust has a direct
(2006b)	Commerce	model	(focus on	impact on
[33]	site	Organizational	commitment)	behavioral intention
		commitment		(return to the site) and indirect via
1		theory		and indirect via
		Commitment-		commitment
		trust theory  Ouantitative		Trust between web
		Quantitative		site and customer
				increases likelihood
İ				
Cummoni	Services	CEDVOLLAI	Monolith	for use intentions.  Service quality-
Gummerus	l.	SERVQUAL Satisfaction-	Trust as a mediator	trust-satisfaction-
et al. (2004)	Marketing Online	i	between service	loyalty chain
[34]	health-care	loyalty link  Ouantitative	quality dimensions	Trust as an
	service	Quantitative	and customer	important mediator
1	SCIVICE		satisfaction	of customer loyalty
Cyr et al.	E-Service	TAM (applied)	Monolith, yet the	Trust mediates
(2007) [35]	E-Service	Quantitative	multidimensional	between perceived
(2007) [33]		Quantitative	nature of trust is	social presence and
			discussed	e-loyalty
Anderson	E-commerce	Loyalty &	Monolith	Trust mediates
&	Leominetee	Satisfaction	1.1011011111	between E-
Srinivasan		Quantitative		satisfaction and e-
(2003) [10]				loyalty
Ribbink et	Services	Loyalty	Trust viewed only	E-trust has a
al. (2004)	Marketing	literature	as trust to an e-	moderate direct
[36]		Quantitative	tailer, yet other	impact on e-loyalty,
	L			

			aspects i.e. dispositional, system-based and interpersonal are discussed.	but weaker than e- satisfaction has. E- trust also mediates between e- satisfaction and e- loyalty
Pitta et al. (2006) [37]	Marketing	Conceptual paper Marketing literature	Multi-dimensional	Trust needs to be nurtured throughout the whole customer relationship to keep customer loyal
Ha (2004) [38]	Marketing	Quantitative web survey Marketing literature	Brand trust Monolith	Brand trust an important factor for relationship length Community keystone for brand trust Brand trust affects commitment
Gefen et al. (2003) [13]	Online shopping	TAM Quantitative	Multi-dimensional	Trust in repeat purchasing
Floh & Treiblmaier (2006) [39]	Internet Banking	Multigroup analysis Quantitative	Monolith	Trust mediates the impact of service quality and web site quality on loyalty

#### 6 Discussion

#### 6.1 Implications for research

Literature discussing trust after the e-service adoption and its influence on customer loyalty is scarce and fragmented across marketing and e-commerce. In the studies investigating the role of trust with other relationship constructs such as satisfaction, perceived value or commitment, trust is largely viewed as a monolith. This approach leaves the multi-dimensional, complex nature of trust reported in numerous studies largely, ignored in the empirical testing.

Quantitative research methods are dominant within the area of trust and customer loyalty, yet the recent literature also contains a qualitative example [40]. Quantitative methods enable measuring correlations between the key constructs. In the light of previous studies, trust seems to correlate with numerous relationship components. In addition, quantitative methods are only able to provide a static picture leaving the dynamics of trust, also acknowledged by scholars, without further scrutiny.

Due to varying setting of hypotheses in different studies it is problematic to interpret how trust in positioned among the other related constructs such as perceived value, service quality, satisfaction and loyalty. This either underscores the complex,

multi-faceted nature of trust, or reflects that capturing 'the true nature' of trust can be challenging.

For this paper the literature review discussing trust and customer loyalty was not conducted systematically but using search terms. This can be viewed as a limitation for the study since it is possible only with a systematic review to ensure that the relevant articles are included. However, if the literature discussing the topic is fragmented across several disciplines and journals, as it is in this case, conducting a systematic, holistic literature review can be somewhat challenging.

#### 6.2 Implications for business

Trust appears to be a central component of customer relationship during the whole customer lifecycle, not only a factor affecting the adoption. However, the relationship between trust and other relationship components may require further clarification. A 'trust threshold' that businesses need to exceed to convince customers may not be static, but shifts over time. As a result, trust management is an ongoing process.

#### 6.3 Future research

Widening the view of trust from monolith to multi-dimensional would draw a more comprehensive picture of trust in the post-adoption phase. Extending the array of methodological choices from strictly quantitative analysis to other methods, such as case study approach or ethnographical research, could potentially enrich the picture of trust in the post-adoption phase. It could also include a longitudinal perspective to better grasp the dynamic nature of trust.

### 7 Conclusions

This paper has scrutinized the role of trust in post-adoption phase of B2C e-services. Based on the findings of this study, trust seems to be an important, yet multi-faceted factor after adoption, since it correlates with several relationship elements such as commitment and loyalty. Therefore, the development and increasing adoption of e-commerce and e-services have not reduced the importance of trust in understanding online consumer behavior. In this light, further research on post-adoption trust seems appropriate.

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