

Privacy Policies and Users' Trust: Does Readability Matter?

Completed Research Paper

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Abstract

Over the years, a drastic increase in online information disclosure spurs a wave of concerns from multiple stakeholders. Among others, users resent the “behind the closed doors” processing of their personal data by companies. Privacy policies are supposed to inform users how their personal information is handled by a website. However, several studies have shown that users rarely read privacy policies for various reasons, not least because limitedly readable policy texts are difficult to understand. Based on our online survey with over 440 responses, we examine the objective and subjective readability of privacy policies and investigate their impact on users' trust in five big Internet services. Our findings show the stronger a user believes in having understood the privacy policy, the higher he or she trusts a web site across all companies we studied. Our results call for making readability of privacy policies more accessible to an average reader.

Keywords

Readability, Privacy Policies, Cloze Test, Trust.

Introduction

Privacy concerns constitute an important hurdle to global business nowadays, with an increasing impact on e-commerce and online platform participation (McRobb 2006; Dinev and Hart 2004, 2005; O'Neill 2001). While 90% of U.S. web sites collect personally identifying information as pointed out by Adkinson et al. (2002), privacy policies (PPs) seem to be the only popular mean for commercial websites to communicate their privacy attitude to the end user. Jensen and Potts (2003, p. 1) state that the concept of PP “*builds on the idea of fair warning and implicit consent*”. Nevertheless, as Earp et al. (2005) observe the way most privacy policies are written rather protects the organization from potential privacy lawsuits than addresses users' privacy concerns. Furthermore, Hochhauser (2001), Antón et al. (2004), McDonald et al. (2009) and (Singh et al. 2011) state that consumers often need a higher than average reading level and vocabulary of legal terms to properly comprehend the text presented to them. Struggling with readability of these lengthy legal documents, consumers have shown little interest in privacy policies (Milne and Culnan 2004), legitimately driving companies to question their effectiveness in addressing user privacy concerns as well as their role in promoting trust on the platform. However, despite a critical importance of these questions for practice, existing research provides limited insight into the connection between readability and comprehensiveness of a PP and users' willingness to trust a web site (Pan and Zinkhan 2006; Sultan et al. 2002).

Indeed, the obtained results have so far remained contradictory, causing significant confusion from the business perspective. While some studies show that increasing the readability of privacy policies may drive consumers to engage more with the platform (Pollach 2007), others have warned against explicit “privacy priming” for certain user groups (Bonneau and Preibusch 2010). This lack of sound evidence and its ambiguous nature provide strong motivation for further investigations.

To close this gap, in this study we analyze the effect of both stated and actual readability of a PP on users' willingness to trust a web site, and also search for other significant ways in which readability can effect user perceptions and behavior. Specifically, we conducted an empirical study where we presented extracts from actual policies of five big Internet services (Amazon, eBay, Facebook, Twitter and Yahoo). Participants were asked to state their trust towards those companies both before and after reading the corresponding PPs. Further, we asked participants to rate the readability of the PPs and tested how well participants actually understood them. In the concluding section of our online survey, we measured perceived as well as actual Internet privacy literacy and Internet privacy concerns of respondents to explore and control for the impact of these variables on users' trust towards a specific platform.

This paper is structured as follows: We first present the most important related work regarding PPs that our research model is based on. We then describe our research model and the hypotheses we tested. Our next section focuses on our empirical study and the evaluation of our research model. Finally, we provide a short summary, discuss the limitations of our study and provide proposals for future work.

Related Work

PP and User Behavior

The provisioning of a PP by a website was found to have a positive influence on consumers' beliefs that their privacy is protected (Li et al. 2011) and on the amount of self-disclosure irrespective of whether the participant had actually read and/or understood the presented PP (Hui et al. 2007). Moreover, Tsai et al. (2011) observed that consumers were more likely to make a purchase on more privacy-protecting commercial sites. However, the studies by Nguyen and Vu (2011) and Tsai et al. (2011) found no support for any impact of the representation of the PP on the online purchasing behavior of users.

PP and Readability

Proctor et al. (2008) conducted three studies, examining (1) the amount of personal information that is asked for by websites, (2) the readability of existing privacy policies and (3) users' comprehension of privacy policies. Study 1 revealed that websites requested a lot of personal information such as name (97%), postal address (88%), and email address (71%). Study 2 disclosed that the mean grade level required to understand these policies was at least 13 years. For study 3, 20 students were asked to read a PP and take part in a multiple-choice questionnaire. In total, only about 50% of these questions were answered correctly. These results are in line with the findings of Summeeth et al. (2010) who evaluated whether the representation of a PP in terms of privacy policy formats has an impact on its readability and revealed that participants were not able to reliably understand companies' privacy practices with any of their examined formats. In a similar vein, in an analysis of 60 financial privacy notices, Hochhauser (2001) also concludes that PPs on average require college degree reading level: The PPs were rated using the Flesch Reading Ease Score (Flesch, 1948) and all of them scored difficult to very difficult on that scale. Similar results are reported by Antón et al. (2004).

Nevertheless, Singh et al. (2011) highlight the shortcomings and limitations of some widely used readability formulae. They criticize the underlying assumption that longer sentences and words are harder to comprehend than shorter ones. Furthermore, special terms such as technical vocabulary cannot be assessed by the readability formulae. As further argued by Stevens et al. (1992), readability formulae are not an appropriate method for assessing the readability of adult-level reading material because they mainly rely on only two measures - sentence length and word difficulty - to assign a readability score. To overcome these limitations, Singh et al. (2011) speak in support of employing the cloze test (Taylor 1953), which is also seen by DuBay (2004) as an alternative to readability formulae such as the Flesch Reading Ease Score.

The cloze test works as follows: Readers are given a text where some words are replaced with blanks and have to fill in those with appropriate words. The more blanks are filled in correctly, the higher the cloze test score and the more readable that text passage is assumed to be for that specific reader (Stevens et al., 1992). A percentage of 57 in correct word replacement indicates an independent reading level for adults, i.e., readers can read the text with about 90% comprehension without any help or further instructions. A score of 44% or higher indicates an "instructional level" which corresponds to 75% comprehension level

(Fanguy et al. 2004): In this cases, a reader can understand the material if given prior instructional help, i.e., definitions for difficult concepts and terms. Singh et al. (2011) observe the cloze procedure is usually more applicable to the adult-level readers being the target group of our study and even advisable whenever access to a sample of the intended audience is available.

Interestingly, only one of the PPs Singh et al. (2011) has tested with a cloze test was considered readable, whereas all others were evaluated as “difficult” to understand. Fanguy et al. (2004) also use a cloze test to assess readability in order to address the principal question of whether consumers can read and understand privacy policies of companies without additional assistance. As an overall readability result of the four privacy statements used in the study, in 58.2% of the cases privacy policies scored as “difficult” and 10.2% as “very difficult”.

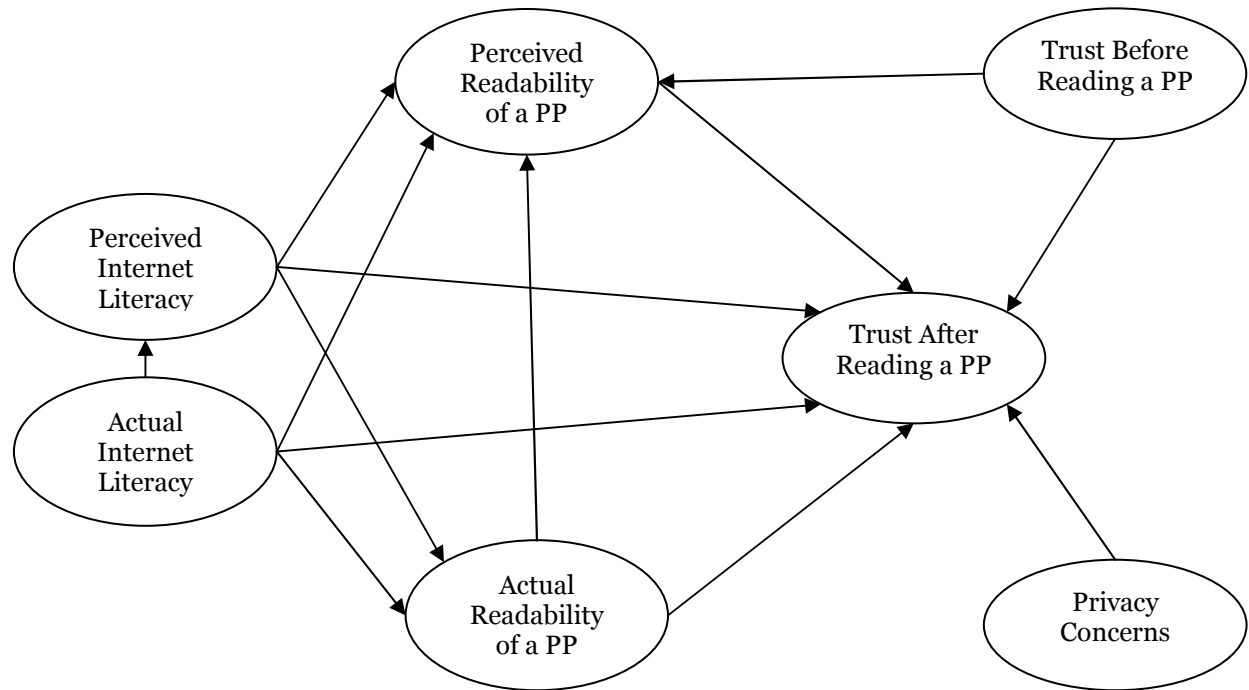


Figure 1. Conceptual Model

Model and Hypothesis

Presented in Figure 1, our exploratory research model involves seven variables. Our focal dependent variable – trust after reading a PP – is situated temporally later and is conceptualized to be causally determined by perceived and actual readability of a PP. According to Malhotra et al. (2004), trust refers to the degree people believe a company to be dependable in protecting their personal information. While many factors have been tested and found to be significant in building trust (e.g., Li 2011; Pan and Zinkhan 2006; Sultan et al. 2002), the main focus of our study is to analyze the effect of the readability and comprehensiveness of a PP in this context. So far, past research has provided controversial findings with regard to the hypothesized relationships. For example, Pan and Zinkhan (2006) tested the impact of the presence of a PP and the presentation of a PP in terms of length and terminology on consumer trust, finding that only the presence of PPs was important. In contrast, Sultan et al. (2002) found support for the hypothesis that having an easy-to-understand privacy policy predicts trust towards a web site. Our study contributes to this discussion by exploring the impact of two measures of readability – one that is focused on perceived (subjective) readability and another that is based on a cloze test to measure the level of comprehension in an objective way. Although we believe that users’ perceptions regarding the readability of some PP may not reflect whether the PP is actually readable for that person, we expect

people who better understood the PP to rank its readability higher. Hence, we conceptualize actual readability of a PP to positively influence perceived readability.

Construct	Question/Indicator/Item
Trust in x BEFORE Reading a Privacy Policy (TB) Based on McKnight et al. (2002)	Please rate the statements based on the degree of your personal consent: x is generally trustworthy. (TRUSA1) x is competent in dealing with privacy and data protection of the users. (TRUSA2) I trust that x acts in my interest. (TRUSA3) x is honest with me in its business. (TRUSA4) <i>Answer Categories: Strongly disagree - Strongly agree</i>
Trust in x AFTER Reading a Privacy Policy (TA) Based on McKnight et al. (2002)	Please rate the statements based on the degree of your personal consent: x is generally trustworthy. (TRUSB1) x is competent in dealing with privacy and data protection of the users. (TRUSB2) I trust that x acts in my interest. (TRUSB3) x is honest with me in its business. (TRUSB4) <i>Answer Categories: Strongly disagree - Strongly agree</i>
Perceived Readability of x's PP (PR)	How would you describe the contents of the currently read privacy policy? Very hard to understand (VERST1) Very indistinct (DEUT1) Very hard to read (LESEN1) Poorly formed sentences (SATZE1) <i>Answer Categories: Strongly disagree - Strongly agree</i>
Actual Readability of x's PP (AR) Based on Taylor (1953)	The ratio of correctly filled in words (CTEST_SCORE1) The ratio of correctly filled in words or synonyms (CTEST_SCORE2)
Perceived Internet Literacy (PL) Initially based on Dinev and Hart (2005)	Please rate the statements based on the degree of your personal consent: I am well informed about anonymity and privacy on the Internet. (INT_LIT1) I am aware which websites may collect and store information about my surfing habits. (INT_LIT2) I know how to find and delete a presumably "malicious" program. (INT_LIT3) I know how to reduce the risk of virus attack with the help of anti-virus software. (INT_LIT4) I know how cookies can be found and deleted. (INT_LIT5) <i>Answer Categories: Strongly disagree - Strongly agree</i>

Table 1. Research Model Constructs and Related Questionnaire Items (x = [Amazon | eBay | Facebook | Twitter | Yahoo]) (Part 1)

Additionally, we control for and explore the role of the Internet literacy in the trust formation process (Dinev and Hart 2005; Brecht et al. 2012). Reflecting user's knowledge of the web technologies, Internet literacy was found to be positively related to the intention to transact online (Dinev and Hart 2005). Following Brecht et al. (2012), we differentiate between perceived and actual Internet literacy - self-assessed and actual knowledge - based on the assumption that individuals may overestimate or underestimate their real knowledge about the Internet and underlying technologies. Nevertheless, we expect that the more knowledgeable a person actually is, the higher he or she perceives his or her degree of knowledge. Hence we conceptualize that the actual Internet literacy positively influences perceived Internet literacy. We also assume that people who are more educated in terms of the Internet technology will exhibit a higher level of understanding of a PP. To explore these relationships, perceived and actual Internet literacy are hypothesized to influence perceived and actual readability of a PP as well as trust after reading a PP.

Finally, numerous studies underscore the negative role of privacy concerns in defining users' trust (e.g., Li 2011). Following these insights, we control for the role of general privacy concerns in the trust formation process in our study. Additionally, we control for the degree of trust participants had towards the company before reading a respective privacy policy.

Empirical Study

Study Design

In the following, the design of our online questionnaire is presented. In this initial stage of our research, our study was conducted solely in Germany so we were able to ignore cultural differences amongst the participants.

In the beginning, each participant was randomly assigned to one of the five available groups, each representing a major online service (Amazon, eBay, Facebook, Twitter and Yahoo; all in their German version). In the first section we asked questions regarding the user's trust level towards the respective web service. Answers were given on a 7-point Likert scale. Then, users were presented a small extract from the company's online privacy policy in German containing around 250 words each. The participants were asked to read through the extract. In the consequent section, users were asked to rate the policy with respect to readability, clearness and sentence structure, again measured on the 7-point Likert scale. The purpose of this was to measure the self-assessed readability for the policy extract. Therefore, this construct was used to evaluate the subjective readability. Furthermore, participants were asked to state their trust level towards the company after reading the extract of the privacy policy.

In addition to subjective readability of the privacy policy we further tested also for objective readability using the cloze test method (Taylor, 1953). Here, we presented another extract from the same privacy policy. We conducted the cloze test by eliminating those words from the privacy policy passage, which were considered as highly relevant for understanding the content of it. In total, the participants were asked to fill in 15 words. In the last part of the questionnaire, we asked our participants for their Internet privacy literacy (stated and actual) and privacy concerns.

It should be noted that questions for measuring perceived readability and perceived Internet literacy were asked before those items specified for actual readability and actual Internet literacy. In this way, we tried to make sure that the readability and Internet literacy stated by our responders are not influenced by their perceived performance in the tests aimed to assess the actual values.

In Table 2, we present our final survey instrument including previous validations.

Sampling

The survey was conducted online and invitations were spread by mailing lists of a major university. We reached a total of 443 full responses, 89 (20.09%) for the Amazon survey version, 90 (20.32%) for eBay, 102 (23.02%) for Facebook, 89 (20.09%) for Twitter and 73 (16.48%) for Yahoo. Demographic evaluation shows that 246 participants (55.53% of the whole sample) were female, 191 (43.12%) were male and 6 (1.35%) did not state their gender. The participants were aged between 18 and 83 years. The mean age was 25.13 (1st quarter 22, median 24, 3rd quarter 27). The average age is confirmed by the academic status:

392 participants (88.49%) declared to be students, 27 (6.09%) were employees, 4 (0.90%) self-employed, and the rest responded “other”. Since we conducted the survey in Germany, 406 participants (91.65%) declared German as their first language. Among other responses, there were “English” (2.93%), “Russian” (1.81%) and “other” (2.03%).

<p>Actual Internet Literacy (AL) Based on Brecht et al. (2012)</p>	<p>How can a Web site distinguish its users from another? (Multiple answers could be correct.) a) Login name. b) IP address. c) Cookie. d) Browser Version and Configuration. e) I don't know. (Solution: a, b, c, d)</p> <p>Which of the following statements are true? a) When you are surfing the Web without encryption, your Internet provider can observe the content of the Web site you are surfing to. b) When you are surfing the Web using encryption, your Internet provider can observe the content of the Web site you are surfing to. c) When you are surfing the Web using encryption, the Web server can observe the content of the Web site you are surfing to. d) When you are surfing the Web without encryption, any router on the way to the server can observe the content of the Web site you are surfing to. e) I don't know. (Solution: a, c, d)</p> <p>Which of the following protocols can provide confidentiality for e-mail transmission? (Only one answer is correct.) a) Sec4Mail. b) POPSEC. c) PGP. d) SIMAP. e) I don't know. (Solution: c)</p> <p>Which of the following protocols are used during Web surfing? (Multiple answers could be correct.) a) HTTP. b) IMAP. c) TCP. d) IP. e) I don't know. (Solution: a, c, d)</p> <p>Which of the following actions may enhance your privacy while surfing the Web? (Multiple answers could be correct.) a) Use of a Web proxy. b) Always accepting cookies. c) Deleting the browser history. d) Not revealing your personal data. e) I don't know. (Solution: a, c, d)</p> <p>What are Web proxies useful for? (Multiple answers could be correct.) a) To hide the IP address of a computer. b) To speed up access to Web sites (using caching). c) To block undesired Web sites. d) To hide the location of a computer. e) I don't know. (Solution: a, b, c, d)</p> <p>(IPL_SCORE)</p>
<p>Privacy Concerns (PC) Based on Dinev and Hart (2004) and Krasnova et al. (2009)</p>	<p>Imagine: You decide whether you share something on the Internet or not (when shopping online, on Facebook, etc.).</p> <p>To what an extent would you be concerned in such a situation that your data can ...</p> <p>... be used for commercial purposes (e.g., personalized advertising). (PRIVA1)</p> <p>... be used in a way you did not foresee. (PRIVA2)</p> <p>... be used by someone against you. (PRIVA3)</p> <p>... be misused by someone. (PRIVA4)</p> <p>... fall into the wrong hands. (PRIVA5)</p> <p><i>Answer Categories: Not concerned at all – Very much concerned</i></p>

Table 2. Research Model Constructs and Related Questionnaire Items (x = [Amazon | eBay | Facebook | Twitter | Yahoo]) (Part 2)

Methodology and Model Evaluation

In order to analyze our hypothesis-based Structural Equation Model (SEM) in an evolving research field we have chosen to apply the Partial Least Squares (PLS) method. We used SmartPLS 2.0.M3 (Ringle et al. 2005) for calculations.

Path	Amazon	eBay	Facebook	Twitter	Yahoo
Actual Internet Literacy -> Perceived Internet Literacy	0.48***	0.41***	0.39***	0.53***	0.37***
Perceived Internet Literacy -> Actual Readability of x's PP	0.29***	0.13*	0.03	0.04	0.08
Actual Internet Literacy -> Actual Readability of x's PP	-0.07	0.10	0.03	-0.14	0.33***
Perceived Internet Literacy -> Perceived Readability of x's PP	0.34***	0.24***	0.28***	0.16*	0.23***
Actual Internet Literacy -> Perceived Readability of x's PP	-0.17**	-0.06	0.03*	0.00	-0.12
Actual Readability of x's PP -> Perceived Readability of x's PP	-0.01	0.11*	-0.03	-0.02	0.22***
Trust in x BEFORE Reading a Privacy Policy -> Perceived Readability of x's PP	0.38***	-0.01	0.27***	0.17**	0.09
Trust in x BEFORE Reading a Privacy Policy -> Trust in x AFTER Reading a Privacy Policy	0.52***	0.41***	0.63***	0.07**	0.30***
Actual Internet Literacy -> Trust in x AFTER Reading a Privacy Policy	0.17***	-0.06	-0.06	0.18***	0.19***
Perceived Internet Literacy -> Trust in x AFTER Reading a Privacy Policy	0.14**	0.03	0.08***	0.03	0.20***
Actual Readability of x's PP -> Trust in x AFTER Reading a Privacy Policy	0.12**	-0.05	0.03	0.06	-0.05
Perceived Readability of x's PP -> Trust in x AFTER Reading a Privacy Policy	0.16***	0.51***	0.23***	0.33***	0.42***
Privacy Concerns -> Trust in x AFTER Reading a Privacy Policy	-0.15***	-0.03	-0.12***	-0.35***	-0.10

Table 3. Results of Structural Model Testing (t>1.96 ‘*’, t>2.576 ‘*’, t>3.29 ‘****’)**

For each platform a separate evaluation has been conducted. First, the Measurement Model (MM) was assessed for each platform. To ensure Indicator Reliability all items that loaded less than 0.7 on their factors were excluded from further analysis (Hulland, 1999): i.e., INT_LIT2, LESEN1, PRIVA1, VERST1 for Amazon, INT_LIT2, PRIVA3, PRIVA4, PRIVA5 for eBay, INT_LIT1, INT_LIT2 for Facebook, INT_LIT2, PRIVA1 for Twitter INT_LIT4, INT_LIT5 for Yahoo. Internal Consistency was assessed via Cronbach's Alpha (CA) and was higher than the threshold of 0.7 (Nunnally, 1978); Composite Reliability (CR) values for all constructs were also higher than threshold of 0.6 (Ringle, 2004); the Average Variance Extracted (AVE) values for all constructs were higher than the required level of 0.5 (Ringle, 2004) (see Table 7, Table 8, Table 9, Table 10, Table 11). Hence, Convergent Validity was ensured. Discriminant Validity is fulfilled if the value of the AVE for a variable is higher than the squared correlation between

this variable and any other variables in the model (Fornell and Larcker, 1981). This criterion was fulfilled, as summarized in Tables 3 -7.

	AVE	CR	R ²	CA	AL	AR	PL	PR	PC	TA	TB
AL	1.00	1.00	0.00	1.00	1.00						
AR	0.95	0.98	0.07	0.95	0.07	0.98					
PL	0.72	0.91	0.23	0.87	0.48	0.26	0.85				
PR	0.60	0.75	0.23	0.35	-0.02	0.08	0.25	0.78			
PC	0.81	0.95	0.00	0.92	0.12	0.03	-0.11	-0.07	0.90		
TA	0.75	0.92	0.52	0.89	0.19	0.18	0.28	0.41	-0.29	0.87	
TB	0.75	0.92	0.00	0.89	-0.05	0.02	-0.04	0.38	-0.27	0.61	0.86

Table 4. Internal Consistency and Discriminant Validity of Constructs for Amazon

	AVE	CR	R ²	CA	AL	AR	PL	PR	PC	TA	TB
AL	1.00	1.00	0.00	1.00	1.00						
AR	0.93	0.97	0.04	0.93	0.15	0.97					
PL	0.63	0.87	0.17	0.80	0.41	0.17	0.79				
PR	0.65	0.88	0.07	0.82	0.05	0.14	0.24	0.80			
PC	0.78	0.87	0.00	0.82	0.30	0.09	0.25	-0.05	0.88		
TA	0.78	0.93	0.44	0.91	-0.09	0.06	0.08	0.51	-0.16	0.88	
TB	0.67	0.89	0.00	0.84	-0.12	0.09	-0.06	0.00	-0.20	0.41	0.82

Table 5. Internal Consistency and Discriminant Validity of Constructs for eBay

In the next step, the structural model was assessed for each platform in our focus. **Error! Reference source not found.**-7 show that the variance in web site trust after reading PPs is significantly explained to from 33% up to 58%. **Error! Reference source not found.** demonstrates that, on all platforms, both trust before reading PPs and perceived readability of PPs exert a positive effect on trust after reading the PP. Furthermore, actual Internet literacy is found to have a positive impact on perceived Internet literacy, which in its turn positively influences perceived readability. According to the results, Yahoo is the single platform where actual Internet literacy has an influence on actual readability. Actual readability influences trust after reading the PP only on Amazon. Perceived readability is influenced by actual readability on eBay and Yahoo and by trust before reading the PP on the three remaining platforms, i.e., Amazon, Facebook and Twitter.

Furthermore, on Amazon, Facebook and Twitter, privacy concerns can reduce trust after reading the PP. As with Yahoo and Amazon, trust after reading the PP can be increased by perceived Internet literacy on Facebook and by actual Internet literacy on Twitter. Interestingly, actual Internet literacy negatively influences perceived readability on Amazon and positively on Facebook. Perceived Internet literacy correlates with actual readability on Amazon and eBay.

	AVE	CR	R ²	CA	AL	AR	PL	PR	PC	TA	TB
AL	1.00	1.00	0.00	1.00	1.00						
AR	0.93	0.96	0.00	0.94	0.04	0.97					
PL	0.72	0.88	0.15	0.80	0.39	0.04	0.85				
PR	0.69	0.90	0.15	0.85	0.13	-0.06	0.27	0.83			
PC	0.68	0.91	0.00	0.90	0.09	-0.05	-0.01	-0.16	0.83		
TA	0.71	0.91	0.58	0.86	-0.03	-0.07	0.06	0.42	-0.31	0.84	
TB	0.79	0.94	0.00	0.91	-0.03	-0.14	-0.08	0.25	-0.24	0.71	0.89

Table 6. Internal Consistency and Discriminant Validity of Constructs for Facebook

	AVE	CR	R ²	CA	AL	AR	PL	PR	PC	TA	TB
AL	1.00	1.00	0.00	1.00	1.00						
AR	0.97	0.98	0.02	0.97	-0.12	0.98					
PL	0.72	0.91	0.28	0.87	0.53	-0.04	0.85				
PR	0.69	0.90	0.06	0.85	0.08	-0.04	0.16	0.83			
PC	0.82	0.95	0.00	0.93	-0.03	0.01	0.14	-0.15	0.91		
TA	0.69	0.90	0.33	0.85	0.23	0.02	0.13	0.41	-0.40	0.83	
TB	0.84	0.96	0.00	0.94	0.00	-0.07	-0.02	0.17	-0.02	0.13	0.92

Table 7. Internal Consistency and Discriminant Validity of Constructs for Twitter

	AVE	CR	R ²	CA	AL	AR	PL	PR	PC	TA	TB
AL	1.00	1.00	0.00	1.00	1.00						
AR	0.90	0.95	0.13	0.89	0.36	0.95					
PL	0.66	0.85	0.13	0.74	0.37	0.20	0.81				
PR	0.68	0.90	0.10	0.85	0.03	0.20	0.23	0.83			
PC	0.74	0.93	0.00	0.93	-0.04	-0.11	-0.02	-0.06	0.86		
TA	0.72	0.91	0.43	0.87	0.24	0.10	0.35	0.48	-0.17	0.85	
TB	0.93	0.98	0.00	0.97	-0.08	-0.16	-0.01	0.06	-0.12	0.33	0.96

Table 8. Internal Consistency and Discriminant Validity of Constructs for Yahoo

Error! Reference source not found. shows that each of the hypothesized paths may be significant and some of them are significant in several of the cases. Trust after reading a PP was shown to be positively associated with users' trust before reading the PP and their assessment to what extent the PP is

readable in all five tested cases, with perceived and actual Internet literacy and negatively with privacy concerns in three of five cases. In only one case, people with better results of the cloze test stated more trust after reading the PP.

In all cases, the extent to which people perceived PPs as readable turned out to be influenced by people's trust towards the company before they read its PP and by the extent to which they were Internet-experienced from their subjective point of view, and indirectly, over the previously mentioned construct of perceived Internet literacy, how we objectively identified them to be.

Conclusion, Limitations and Future Outlook

In this study, we analyzed the effect of readability and comprehensiveness of a PP on the users' willingness to trust a web site. Using the Partial Least Squares (PLS) method, we used an empirical study where we presented extracts from actual policies of five big Internet services (Amazon, eBay, Facebook, Twitter and Yahoo) to study participants. We obtained heterogeneous results for the platforms in terms of path significance what made us to conclude that every one of the hypothesized paths may be significant and some of them are significant in several of the cases.

With respect to our main research questions, our results indicate that in general the perceived readability of PPs plays a role in the formation of trust after reading PPs. For companies, our study demonstrates the importance of establishing trust among its real and potential customers as well as improving the readability of PPs. Interestingly, trust before reading a PP does not only positively influence the level of trust after the privacy policy was read; it may also improve the subjective assessment of the readability of PPs, which turned out significant in three of five tested cases.

It should be in the interest of companies that technical Internet knowledge of its users is strengthened. In all cases, perceived Internet literacy, which is being positively influenced by actual Internet literacy in all cases as well, was shown to have a positive impact on how the readability of PP was perceived. In three cases, perceived and actual Internet literacy affected trust after reading PPs even directly.

Our study involves several limitations which we are going to address in our future studies. In the presented work, we used two different abstractions for measuring perceived and actual readability of PPs based on the assumption of their similarity. The items we used to measure actual Internet literacy can only to some limited extent capture the variety of Internet knowledge, which may have distinct roles in trust formation. The same applies for actual readability. We will further try to generalize our model, where we are going to investigate and search for reasons to explain the differences across platforms¹.

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