

Consumer Decision-Making Styles Extension to Trust-Based Product Comparison Site Usage Model

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The paper describes an implementation of extended consumer decision-making styles concept in explaining consumer choices made in product comparison site environment in the context of trust-based information technology acceptance model. Previous research proved that trust-based acceptance model is useful in explaining purchase intention and anticipated satisfaction in product comparison site environment, as an example of online decision shopping aids. Trust to such aids is important in explaining their usage by consumers. The connections between consumer decision-making styles, product and sellers opinions usage, cognitive and affective trust toward online product comparison site, as well as choice outcomes (purchase intention and brand choice) are explored through structural equation models using PLS-SEM approach, using a sample of 461 young consumers. Research confirmed the validity of research model in explaining product comparison usage, and some consumer decision-making styles influenced consumers' choices and purchase intention. Product and sellers reviews usage were partially mediating mentioned relationships.

Key words: consumer decision-making styles, online product comparison site usage, cognitive and affective trust, products/sellers reviews, purchase intention, PLS-SEM

Introduction

Paper goal is to extend trust-based acceptance model in the context of online product comparison site by including consumer decision-making styles concept and brand choice on the example of the simulated choice of an automatic coffee machine in a quasi-experimental setting. The sample of 461 young consumers participated in an online quasi-experimental setting. As mentioned extensions were not previously analysed, research made is exploratory in nature. The main research question is which and how consumer decision-making styles influence trust toward product comparison site usage and product brand choice. Data analysis utilises PLS-SEM approach,

including PLS-MGA (multi-group analysis) for main chosen brands, as a way to explore postulated relationships.

The paper is organised in ten parts. After the short introduction, the online product comparison sites mechanics and business models are presented, with the description of trust-based technology adoption model and introduction to the concept of consumer decision-making styles. Next, conceptual research model with research questions is introduced, followed by detailed description of used sample and measures (with reliability and validity assessment). Results part is organised along main research model, its estimates, and multi-group comparisons regarding groups for main chosen brands. Obtained results are discussed in next part of the paper, ending with research implications, limitations of the study, and conclusion.

Contemporary Online Product Comparison Sites

Common access to online shopping changed buying habits of many consumers in last 20 years. The share of online retail spending (on goods) increased over the time with 15–18 percentage points growth y-o-y, up to over 10% share in total retail on mature markets as United Kingdom (the leader with about 15% share), United States or Germany (see <http://www.retailresearch.org/onlineretailing.php>). This involves a large number of decisions to find products and sellers online, with two most common alternative approaches:

- the choice of the well-known online store brands (like Amazon, Zalando etc.) or places where someone previously bought with satisfaction (without comparison of sellers), or,
- finding the best deal – often with the help of product comparison sites.

The second strategy is in the scope of presented research. Contemporary online product comparison sites evolved from simple price comparison engines introduced nearly 20 years ago. They are also working under different business model than their predecessors. Product comparison engines are working as infomediaries typically in business model assuming paid integration (via API and parsing structured XML file with offers data) of particular vendor offers with comparison engine. Solutions using bots crawling the net to seek online store and their assortment to include in comparison engine without payment and direct integration are nowadays rare – even Twenga makes possible shop integration for a fee.

In both cases, the mechanics of product comparison site working is to aggregate information from product comparison agent (or

bot), that is configured to gather product information (such as actual price, product availability, product description etc.) from online vendors and/or product information databases.

As consumer interacts with product comparison site, typically having recognizable brand, he/she is not interested about underlying technology (allowing the site to present demanded information on request) and/or nature of commercial agreements between comparison site and online vendor, this suggests that product comparison agent should be transparent to the comparison site user. Aggregated information retrieved on online shopper request is revealed to him/her in the form of ranking. By interacting with product comparison site consumers leave some traces of their behaviour, that are valuable for online vendors and comparison sites for their marketing activities. Figure 1 shows the flows between online vendor, product comparison site, and consumer.

Product comparison sites are nowadays enhanced by opinions from consumers about products and sellers (possibly so called 'trusted opinions' of non-anonymous for the site users who bought a particular product). Those opinions are usually presented as average ratings – particularly for sellers' credibility and detailed pieces of text.

Young consumers are more innovative toward information technology usage. They also are using online decision shopping aids including mobile tools more often and in the more extensive way (Maçik and Nalewajek 2013), so studying this group behaviour can be useful to make predictions by analogy for consumers later accepting new technologies. Previous research also suggests the power of online opinions and reviews for this group of consumers (Nalewajek and Maçik 2013).

The influence of online reviews on purchasing behaviour has been confirmed by many studies in the information systems and consumer behaviour fields (e.g., Forman, Ghose, and Wiesenfeld 2008; Khammash and Griffiths 2011). Typically the effect of positive and negative reviews for particular e-commerce site have been studied, and product reviews have been left from detailed consideration. Negative reviews are believed to have a stronger effect on consumer decisions than positive ones (Park and Lee 2009), as being more diagnostic and informative (Lee, Park, and Han 2008). Typically the consumer using product comparison site faces with a mix of positive and negative product reviews and seller opinions, this is known as inconsistent reviews setting (Tsang and Prendergast 2009). For this study, both types of opinions have been used: about products and about sellers.



FIGURE 1 Flows Between Online Vendor, Product Comparison Site and Consumer: Simplified Approach (numbers represent steps of flows between ecosystem members; own elaboration, loosely based on concept of Wan, Menon, and Ramaprasad (2007, 66))

Focus was on declared number of opinions read more or less precisely, leaving out of consideration their negative or positive connotations, under the assumption: the more opinions read, the greater trust to product comparison site.

Trust-Based Acceptance Model

Numerous research studies show that trust toward online business is a key driver for the success of e-commerce (Cheung and Lee 2006; Hong and Cho 2011), particularly for online retailers (Kim and Park 2013). Many studies researching consumer trust toward e-commerce site are following Komiak and Bensabat (2006) trust-based acceptance model built upon widely used in e-commerce studies theory of reasoned action (TRA) (Hoehle, Scornavacca, and Huff 2012; Komiak and Benbasat 2006). According to TRA individual's behaviour is pre-

dicted by his/her behavioural intention, while behavioural intention is formed as an effect of attitude, beliefs, and subjective norms (Fishbein and Ajzen 1975). Those connections are causal relationships, so they are typically modelled using SEM approach.

Komiak and Benbasat (2006) developed mentioned trust-based acceptance model for explaining the adoption of online recommendation agents. They examined two types of trust in the model: cognitive trust and affective trust. Cognitive trust is conceptualized as trusting beliefs while affective trust should be considered as a form of trusting attitude. In online environments, consumers often affectively evaluate trusting behaviour. High affective trust suggests having favourable feelings toward performing the behaviour. The trust-based acceptance model highlights that cognitive trust affects emotional trust, which further leads to individuals' adoption intention (Komiak and Benbasat 2006). This is convergent with TRA approach when adoption process resembles the following sequence: belief 'attitude' intention, although the subjective norm is the construct dropped in trust-based acceptance model as adoption behaviour is considered as voluntary rather than mandatory according to Komiak and Benbasat (2006).

Cognitive trust can be analysed in three main categories: competence, benevolence, and integrity as suggest McKnight, Choudhury, and Kacmar (2002). Trust in competence refers to the extent to which consumers perceive an online retailer or service provider as having skills and abilities to fulfil what they need (Mayer, Davis, and Schoorman 1995). Trust in benevolence is consumers' perception that the retailer/service provider will act in their interest (Hong and Cho 2011). Trust in integrity refers to consumers' perception about honesty and promise-keeping by online retailer/service provider (McKnight, Choudhury, and Kacmar 2002). Those concepts are used in this research in the context of product comparison engine usage.

Consumer Decision-Making Styles

A consumer decision-making style concept is defined as 'a mental orientation characterizing a consumer's approach to making choices' (Sproles and Kendall 1986, 268), and consumer decision-making styles can be perceived as 'basic buying-decision making attitudes that consumers adhere to, even when they are applied to different goods, services or purchasing decisions' (Walsh et al. 2001, p. 121). Consumer decision-making styles are connected to consumer personality, and research suggest that they are relatively stable constructs (Sproles and Kendall 1986; Lysonsky, Durvasula and Zotos

TABLE 1 Description of Consumer Decision-Making Styles: Extended version

Style name/short name		Description
Perfectionistic	PERF	Sensitive to high quality products, prone to spend money and/or time to get the expected quality, expecting customer care, thoroughly comparing the available options
Brand-Conscious	BC	Believing that price of branded products is appropriate to their quality, buying well-known and heavily advertised brands, often in shopping malls and specialty stores
Novelty Fashion Conscious	NFC	Willing to put extra effort to obtain a trendy, new products sooner than others; follower of fashion, always in line with current trends, often buys due variety-seeking motives
Recreational Shopping Conscious	RSC	Hedonistic, perceiving shopping environment as pleasant and desirable, spending much time on shopping
Price-Value Conscious	PVC	Prone for getting highest possible 'value for money' – sensitive to price reductions, looking for low prices, often carefully comparing products before purchase, rarely buys cheapest products
Impulsive	IMP	Relying on impulse to buy, does not plan purchases, not paying much attention to how much is spending, prone for buying on sales
Confused by Overchoice	CO	Feels the fatigue of too many products, brands and shopping options, often has trouble in deciding
Habitual Brand-Loyal	HBL	Has strong habits for buying specific brands and/or at the same places
Compulsive	COMP	Having tendency to uncontrolled spending, and addiction for shopping (style added by author)
Ecologically Aware	ECO	Prone to choose products that are ecologically safe for him/her and for environment (style added by author)

NOTES Own elaboration, including early insights by Sproles and Kendall (1986).

1995). Particular shopping activities and attitudes toward shopping can be perceived as direct outcomes of consumer's decision-making styles (Tai 2005), and tendencies revealed in particular person styles profile are modified in particular shopping process by situational factors. Consumer decision-making concept has been used in several contemporary studies (Walsh et al. 2002; Tai 2005), and proved to be useful to explain outcomes of particular shopping activities and attitudes toward shopping, including usage of online channel (Maçik and Maçik 2009).

Consumer decision-making styles are measured typically via PCS (Profile of Consumer Style) questionnaire proposed by Sproles and Kendall (1986). In this research extension and reconstruction of PCS has been used, with 2 new styles have been added on the base of pre-

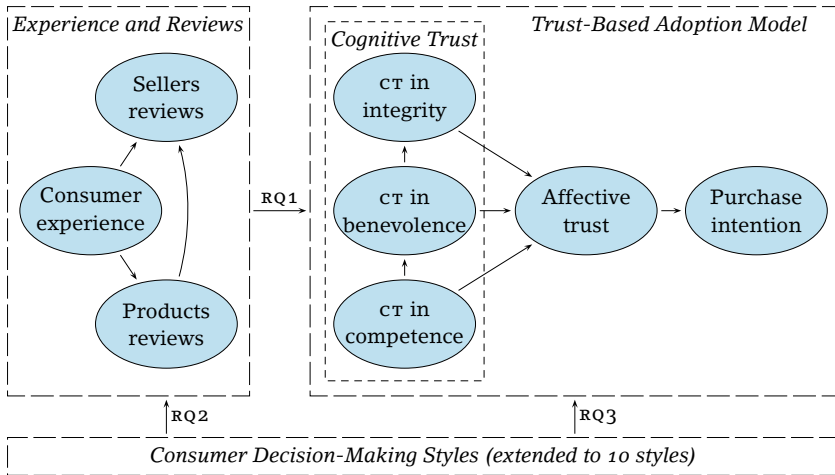


FIGURE 2 Conceptual Research Model

vious author research. In result 10 styles (including original 8) were measured by 30 items scaled as Likert-type scale with five variants of answers (short form of reconstructed by Maçik and Maçik (2015) PCS scale named SPDZ14K). Those styles are described in greater detail in table 1.

Listed styles are forming personal profile consumer decision-making styles – particular person possesses an individual combination of them, when all styles are manifesting itself on different levels, with some styles more intense or prominent (Sproles and Kendall 1986).

Conceptual Research Model and Research Questions

Mentioned concepts of trust-based adoption model and consumer decision-making styles putted in context of online product comparison sites usage were leading to propose conceptual model (figure 2).

In this approach gained with time experience in online product comparison sites usage and opinions about products and sellers are antecedents for cognitive and affective trust for online product comparison site according to trust-based adoption model, where cognitive trust measured in three sub-dimensions (trust in competence, trust in benevolence and trust in integrity) influences affective trust and later purchase intention. Experience with opinions usage and trust-based adoption model constructs are explained by some of consumer decision-making styles measured in ten dimensions (it was assumed that only selected styles will be useful).

Because of exploratory character of the study three main research questions have been formulated:

- RQ1 *How previous consumer experience with product comparison site usage and opinions about products and sellers usage are connected with trust toward product comparison site constructs from trust-based adoption model?*
- RQ2 *Which and how consumer decision-making styles are influencing the level of experience with product comparison site usage and opinions about products and sellers?*
- RQ3 *Which and how consumer decision-making styles are influencing constructs from trust-based adoption model for product comparison site usage?*

No exact hypotheses were assumed for this research, particularly the set of consumer decision-making styles included in model was exactly exploratory, and modified during the modelling. Research model derived from conceptual one has been assessed via structural equation modelling approach utilizing PLS-SEM – recommended for exploratory stages of theory extensions (Hair, Ringle, and Sarstedt 2011) – and later via multi-group analysis using PLS-MGA algorithms.

Sample and Measures

SAMPLE

Data have been collected during March 2015 through CAWI questionnaire with e-mail invitation sent to authors students and their peers, that returned 461 usable responses from 575 sent invitations, giving response rate of 80.2%. Students were awarded small increase in course activity grade for participation and recruitment of their peers (this award was less than 4% of total possible grade).

In effect, the sample consists of 60.2% women and 39.8% men. The average age of participants is 24.5 years with standard deviation of 5.1 years (range: 18–46 years old, median: 23 years). Each 1/3rd of participants were inhabitants of different level of urbanization areas: rural areas, small towns and larger cities. All participants must be active internet users and make at least one online purchase during a year prior study. Sample structure regarding gender and age is close to population of both full-time and part-time students of public university located in the South-Eastern part of Poland, where the data have been collected.

MEASURES

Items to measure constructs used in this study were adapted from previously published research or have been developed by the au-

TABLE 2 Scales Used in Study

Construct	(1)	(2)	(3)	(4)
Consumer experience in product comparison sites usage	Consumer Experience	Own development ^a	N/A	9
Cognitive Trust in Competence	ct_Competence	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3) ^b
Cognitive Trust in Benevolence	ct_Benevolence	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3) ^b
Cognitive Trust in Integrity	ct_Integrity	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3) ^b
Affective Trust	Affective Trust	Komiak and Benbasat (2006)	reconstruction	4
Purchase Intention	Purchase Intention	Gefen, Karahanna and Straub (2003)	reconstruction	4
Product Reviews Usage	Product Reviews Usage	Own development ^a	N/A	2
Sellers Reviews Usage	Sellers Reviews Usage	Own development ^a	N/A	2
Brand Conscious Style	bc	Sproles and Kendall (1986)	reconstruction	3
Confused by Overchoice Style	co	Sproles and Kendall (1986)	reconstruction	3
Ecologically Aware Style	eco	Own development ^c	N/A	3
Perfectionistic Style	perf	Sproles and Kendall (1986)	reconstruction	3

Continued on the next page

thor. As questionnaire language was Polish, this required to translate and culturally adapt (by authors) scales written originally in English, including reconstruction procedures where needed. In effect, used scales are derived from original measures. Basic data about used scales is provided in table 2.

Data analysis for this study has been performed using SmartPLS 3.2 software (see www.smartpls.com), as most of the measurement variables were not normally distributed. Bootstrap procedure (resampling with replacement, sample size equal of original sample size – 461 observations) with 10000 repetitions for PLS procedure and 5000 repetitions for PLS-MGA algorithm has been utilised to get inference statistics for measures and evaluated models.

TABLE 2 *Continued from the previous page*

Construct	(1)	(2)	(3)	(4)
Price-Value Conscious Style	PVC	Sproles and Kendall (1986)	reconstruction	3
Recreational Shopping Conscious Style	RSC	Sproles and Kendall (1986)	reconstruction	3

NOTES Column headings are as follows: (1) name in tables and diagrams, (2) items derived from, (3) level of adaptation, (4) number of items. Only consumer decision-making styles included in model are shown in table, other four excluded. ^aUsed also in Maçik and Maçik (2016b). ^bOne item dropped due to low factor loading. ^cUsed also in Maçik and Maçik (2016a). Only consumer decision-making styles included in model are shown in table, other four excluded.

RELIABILITY AND VALIDITY OF MEASURES

Reliability of measures in this study has been assessed by two commonly used measures: Cronbach's Alpha coefficient and Composite Reliability (CR) measure, as they represent lower and upper boundaries of true scale reliability respectively (Henseler, Ringle, and Sarstedt 2015). Using both criterions reliability of most constructs meets typical requirements – values of CRs are all over suggested value 0.7 (Hair, Ringle, and Sarstedt 2013, 7), with some Alphas for CO, PERF and PVC lower than desired – tables 3 and 4.

TABLE 3 Reliability of Measures: Cronbach's Alpha

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.802	0.801	0.020	39.344	0.000	0.758	0.837
BC	0.719	0.718	0.024	29.446	0.000	0.667	0.762
CO	0.618	0.616	0.035	17.797	0.000	0.542	0.679
CT in Benevolence	0.713	0.710	0.029	24.506	0.000	0.649	0.763
CT in Competence	0.732	0.730	0.027	27.218	0.000	0.675	0.779
CT in Integrity	0.777	0.775	0.023	33.363	0.000	0.726	0.817
Consumer Experience	0.928	0.928	0.006	157.430	0.000	0.916	0.938
ECO	0.788	0.788	0.020	39.697	0.000	0.746	0.824
PERF	0.566	0.565	0.031	18.258	0.000	0.501	0.623
PVC	0.617	0.615	0.036	17.283	0.000	0.541	0.680
Product Reviews Usage	0.788	0.788	0.025	31.112	0.000	0.735	0.834
Purchase Intention	0.797	0.796	0.021	37.739	0.000	0.750	0.833
RSC	0.867	0.866	0.012	74.794	0.000	0.841	0.888
Sellers Reviews Usage	0.835	0.834	0.021	40.181	0.000	0.791	0.872

NOTES (1) original sample (O). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) *t*-statistics ($|O/STERR|$), (5) *p*-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 4 Reliability of Measures: Composite Reliability (CR)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.871	0.870	0.012	75.399	0.000	0.846	0.891
BC	0.840	0.829	0.035	23.985	0.000	0.662	0.852
CO	0.787	0.772	0.047	16.631	0.000	0.569	0.810
CT in Benevolence	0.839	0.838	0.014	61.789	0.000	0.810	0.863
CT in Competence	0.849	0.848	0.013	66.398	0.000	0.822	0.872
CT in Integrity	0.871	0.870	0.012	74.503	0.000	0.845	0.891
Consumer Experience	0.940	0.940	0.005	198.685	0.000	0.930	0.948
ECO	0.870	0.848	0.083	10.531	0.000	0.263	0.885
PERF	0.770	0.762	0.024	31.480	0.000	0.678	0.789
PVC	0.794	0.789	0.019	42.068	0.000	0.736	0.816
Product Reviews Usage	0.904	0.904	0.010	87.166	0.000	0.884	0.924
Purchase Intention	0.868	0.867	0.012	72.181	0.000	0.841	0.889
RSC	0.915	0.909	0.036	25.182	0.000	0.850	0.926
Sellers Reviews Usage	0.924	0.923	0.009	104.208	0.000	0.906	0.940

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t -statistics ($|o/STERR|$), (5) p -values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 5 Convergent Validity of Measures: Average Variance Extracted (AVE)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.628	0.627	0.024	26.461	0.000	0.580	0.672
BC	0.637	0.624	0.036	17.838	0.000	0.444	0.658
CO	0.558	0.546	0.038	14.834	0.000	0.390	0.590
CT in Benevolence	0.635	0.634	0.023	27.447	0.000	0.587	0.678
CT in Competence	0.652	0.651	0.022	29.196	0.000	0.607	0.694
CT in Integrity	0.692	0.691	0.022	31.513	0.000	0.645	0.731
Consumer Experience	0.636	0.636	0.019	33.588	0.000	0.598	0.672
ECO	0.691	0.667	0.072	9.558	0.000	0.238	0.721
PERF	0.534	0.528	0.022	24.125	0.000	0.464	0.558
PVC	0.564	0.560	0.026	22.127	0.000	0.497	0.601
Product Reviews Usage	0.825	0.825	0.017	47.873	0.000	0.792	0.859
Purchase Intention	0.622	0.621	0.024	25.756	0.000	0.572	0.667
RSC	0.782	0.772	0.042	18.623	0.000	0.646	0.807
Sellers Reviews Usage	0.858	0.858	0.015	56.201	0.000	0.827	0.887

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t -statistics ($|o/STERR|$), (5) p -values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

Convergent validity for used measures assessed via Average Variance Extracted (AVE) is very good – all constructs are meeting the cri-

TABLE 6 Discriminant Validity of Measures: Fornell Larcker Criterion

Const.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)	0.792													
(2)	0.171	0.798												
(3)	-0.039	0.150	0.747											
(4)	0.609	0.096	-0.026	0.797										
(5)	0.747	0.161	-0.022	0.657	0.807									
(6)	0.633	0.099	-0.035	0.691	0.700	0.832								
(7)	0.246	0.086	0.067	0.100	0.205	0.167	0.798							
(8)	0.132	-0.013	0.081	0.047	0.069	0.019	0.210	0.831						
(9)	0.070	0.310	-0.020	-0.018	0.111	0.014	0.220	0.125	0.731					
(10)	0.188	0.181	0.156	0.152	0.232	0.175	0.162	0.199	0.233	0.751				
(11)	0.262	0.110	0.173	0.121	0.185	0.121	0.327	0.145	0.142	0.074	0.908			
(12)	0.739	0.191	0.022	0.500	0.597	0.504	0.285	0.148	0.039	0.209	0.223	0.788		
(13)	0.188	0.171	0.073	0.143	0.162	0.148	0.040	0.090	0.069	0.336	0.053	0.198	0.884	
(14)	0.228	0.143	0.033	0.202	0.209	0.140	0.327	0.057	0.169	0.072	0.571	0.211	0.013	0.926

NOTES Constructs: (1) Affective Trust, (2) BC, (3) CO, (4) CT in Benevolence, (5) CT in Competence, (6) CT in Integrity, (7) Consumer Experience, (8) ECO, (9) PERF, (10) PVC, (11) Product Reviews Usage, (12) Purchase Intention, (13) RSC, (14) Sellers Reviews Usage. Numbers on matrix diagonal are square roots from AVE for constructs; numbers off-diagonal are correlations between them, this is alternative form to report Fornell-Larcker Criterion (Henseler, Ringle, and Sarstedt 2014, 117).

terion of AVE value higher than 0.5 as suggested by Fornell and Larcker (1981) – table 5. Even for constructs having lower internal consistency in terms of Cronbach's Alpha (CO, PERF and PVC) the AVE values are at least satisfactory.

Discriminant validity of used measures is also at very good (table 6). The Fornell-Larcker Criterion stating that AVE for each construct should be higher from all squared correlations between particular construct and other measures (Fornell and Larcker 1981) is met for all constructs (see also note for table 6, as in mentioned table this criterion is reported in alternative form).

Results

WHOLE SAMPLE MODEL

On the base or conceptual model shown on figure 2 and initial data analysis structural equations model presented on figure 3 has been estimated using SmartPLS 3.2 software. Previous analysis (Maçik and Maçik 2016) confirmed the validity of trust-based adoption model to explain purchase intention in product comparison site environment. In structural model depicted on figure 3 consumer experience explains both reviews constructs, that are also interconnected – as in virtual channel product choice is typically made earlier than vendor/seller choice, so it was assumed that product review usage should explain sellers review usage, also because of similar factors influencing reviews following as a whole – persons more often using

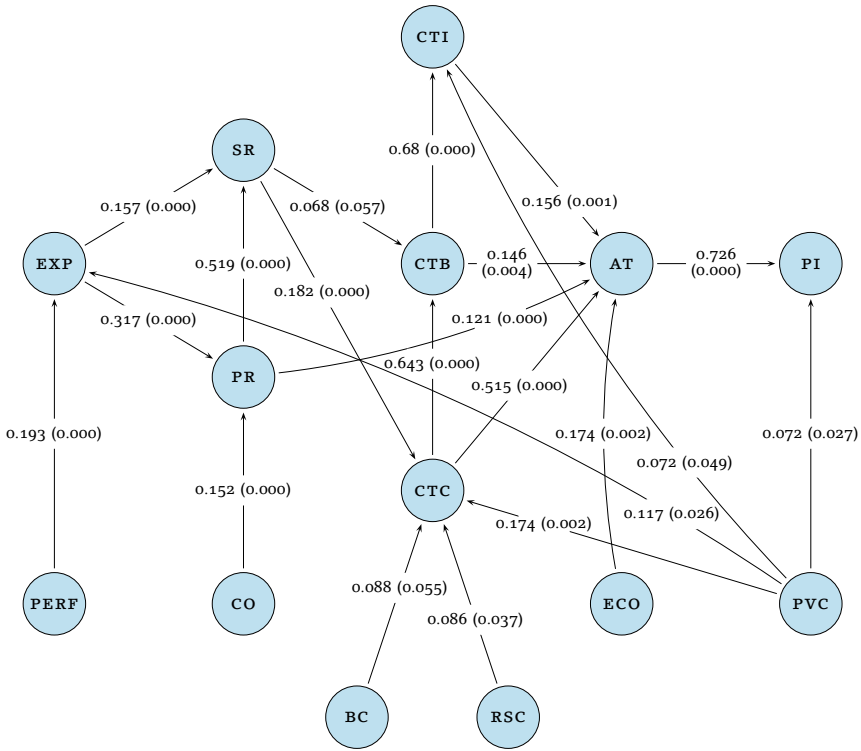


FIGURE 3 Research Model with Results Obtained via PLS-SEM (values on paths are standardized path coefficients with bootstrap obtained *p*-values reported in parentheses)

product reviews inside product comparison engine are more likely more heavily relying on sellers reviews, to establish sellers credibility.

Estimated model exhibits reasonable fit – proportion of variance explained, measured with R^2 statistics is over 0.5 for main explained variables, particularly 0.612 for Affective Trust and 0.551 for Purchase Intention. The level of coefficients of determination (R^2) for all constructs playing roles of dependent variables are presented in table 7. Also low SRMR (Square Root of Mean Residuals) value on the level of 0.039 suggests reasonable model fit to the data. Table 8 presents in detail path coefficient values in original sample and inference statistics for paths obtained via bootstrapping. Path coefficients from original sample with significance levels are also shown on figure 3.

In general, consumer experience with product and sellers reviews

TABLE 7 Coefficients of Determination for Dependent Variables in Estimated Model (R^2 Values)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.612	0.617	0.034	17.974	0.000	0.559	0.691
ct in Benevolence	0.436	0.438	0.046	9.528	0.000	0.352	0.530
ct in Competence	0.106	0.119	0.029	3.676	0.000	0.086	0.207
ct in Integrity	0.482	0.483	0.044	11.005	0.000	0.401	0.571
Consumer Experience	0.061	0.071	0.025	2.462	0.014	0.038	0.143
Product Reviews Usage	0.130	0.137	0.030	4.267	0.000	0.090	0.215
Purchase Intention	0.551	0.555	0.041	13.311	0.000	0.482	0.640
Sellers Reviews Usage	0.348	0.351	0.040	8.603	0.000	0.279	0.436

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t -statistics ($|o/STERR|$), (5) p -values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 8 Path Coefficients in Estimated Model

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust → Purchase Intention	0.726	0.726	0.032	22.941	0.000	0.663	0.786
bc → ct in Competence	0.088	0.097	0.046	1.916	0.055	0.024	0.206
co → Product Reviews Usage	0.152	0.159	0.043	3.529	0.000	0.089	0.256
ct in Benevolence → Affective Trust	0.146	0.146	0.051	2.866	0.004	0.045	0.245
ct in Benevolence → ct in Integrity	0.680	0.678	0.033	20.335	0.000	0.607	0.737
ct in Competence → Affective Trust	0.515	0.513	0.049	10.578	0.000	0.411	0.603
ct in Competence → ct in Benevolence	0.643	0.642	0.038	16.957	0.000	0.567	0.714
ct in Integrity → Affective Trust	0.156	0.157	0.049	3.208	0.001	0.064	0.257
Consumer Experience → Product Reviews Usage	0.317	0.317	0.042	7.529	0.000	0.235	0.402
Consumer Experience → Sellers Reviews Usage	0.157	0.158	0.044	3.600	0.000	0.074	0.245
eco → Affective Trust	0.069	0.072	0.033	2.073	0.038	0.015	0.142
PERF → Consumer Experience	0.193	0.202	0.050	3.849	0.000	0.120	0.313
pvc → ct in Competence	0.174	0.176	0.056	3.107	0.002	0.071	0.288
pvc → ct in Integrity	0.072	0.074	0.037	1.967	0.049	0.005	0.149
pvc → Consumer Experience	0.117	0.119	0.053	2.222	0.026	0.020	0.227
pvc → Purchase Intention	0.072	0.074	0.033	2.218	0.027	0.015	0.143
Product Reviews Usage → Affective Trust	0.121	0.121	0.033	3.678	0.000	0.057	0.186
Product Reviews Usage → Sellers Reviews Usage	0.519	0.519	0.039	13.342	0.000	0.442	0.594
rsc → ct in Competence	0.086	0.091	0.041	2.091	0.037	0.020	0.181
Sellers Reviews Usage → ct in Benevolence	0.068	0.068	0.036	1.907	0.057	-0.003	0.136
Sellers Reviews Usage → ct in Competence	0.182	0.181	0.044	4.122	0.000	0.090	0.265

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t -statistics ($|o/STERR|$), (5) p -values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

usage are loosely connected with trust-based adoption model constructs. Also the direct influence of six selected (on the base of correlation analysis) consumer decision-making styles is not so strong, although those relationships are statistically significant. Magnitude of consumer decision-making styles influence increases when total effects (including indirect effects) are taken into account.

As the model is quite complicated, some indirect effects are pres-

TABLE 9 Total Effects in Estimated Model

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust → Purchase Intention	0.726	0.726	0.032	22.941	0.000	0.663	0.786
*BC → Affective Trust	0.060	0.066	0.032	1.872	0.061	0.015	0.143
*BC → CT in Benevolence	0.057	0.062	0.030	1.895	0.058	0.014	0.134
BC → CT in Competence	0.088	0.097	0.046	1.916	0.055	0.024	0.206
*BC → CT in Integrity	0.039	0.042	0.021	1.852	0.064	0.009	0.093
*BC → Purchase Intention	0.043	0.048	0.024	1.825	0.068	0.010	0.106
*CO → Affective Trust	0.030	0.031	0.010	2.960	0.003	0.014	0.053
*CO → CT in Benevolence	0.015	0.015	0.005	2.669	0.008	0.006	0.027
*CO → CT in Competence	0.014	0.015	0.005	2.629	0.009	0.006	0.027
*CO → CT in Integrity	0.010	0.010	0.004	2.679	0.007	0.004	0.018
CO → Product Reviews Usage	0.152	0.159	0.043	3.529	0.000	0.089	0.256
*CO → Purchase Intention	0.021	0.022	0.007	2.994	0.003	0.010	0.038
*CO → Sellers Reviews Usage	0.079	0.083	0.023	3.465	0.001	0.045	0.134
CT in Benevolence → Affective Trust	0.252	0.252	0.046	5.496	0.000	0.164	0.343
CT in Benevolence → CT in Integrity	0.680	0.678	0.033	20.335	0.000	0.607	0.737
*CT in Benevolence → Purchase Intention	0.183	0.183	0.035	5.286	0.000	0.117	0.252
CT in Competence → Affective Trust	0.676	0.675	0.035	19.395	0.000	0.601	0.739
CT in Competence → CT in Benevolence	0.643	0.642	0.038	16.957	0.000	0.567	0.714
*CT in Competence → CT in Integrity	0.437	0.436	0.042	10.424	0.000	0.352	0.516
*CT in Competence → Purchase Intention	0.491	0.490	0.039	12.588	0.000	0.412	0.564
CT in Integrity → Affective Trust	0.156	0.157	0.049	3.208	0.001	0.064	0.257
*CT in Integrity → Purchase Intention	0.113	0.114	0.035	3.209	0.001	0.046	0.184
*Consumer Experience → Affective Trust	0.084	0.083	0.018	4.678	0.000	0.050	0.119
*Consumer Experience → CT in Benevolence	0.060	0.059	0.017	3.510	0.000	0.027	0.092
*Consumer Experience → CT in Competence	0.059	0.059	0.017	3.396	0.001	0.025	0.093
*Consumer Experience → CT in Integrity	0.041	0.040	0.012	3.501	0.000	0.018	0.062
Consumer Experience → Product Reviews Usage	0.317	0.317	0.042	7.529	0.000	0.235	0.402
*Consumer Experience → Purchase Intention	0.061	0.061	0.013	4.608	0.000	0.036	0.086
Consumer Experience → Sellers Reviews Usage	0.322	0.323	0.045	7.180	0.000	0.236	0.409
ECO → Affective Trust	0.069	0.072	0.033	2.073	0.038	0.015	0.142
*ECO → Purchase Intention	0.050	0.052	0.024	2.076	0.038	0.010	0.103
*PERF → Affective Trust	0.016	0.017	0.005	2.998	0.003	0.008	0.029
*PERF → CT in Benevolence	0.012	0.012	0.005	2.500	0.012	0.004	0.022
*PERF → CT in Competence	0.011	0.012	0.005	2.429	0.015	0.004	0.022
*PERF → CT in Integrity	0.008	0.008	0.003	2.506	0.012	0.003	0.015
PERF → Consumer Experience	0.193	0.202	0.050	3.849	0.000	0.120	0.313
*PERF → Product Reviews Usage	0.061	0.064	0.018	3.371	0.001	0.034	0.106
*PERF → Purchase Intention	0.012	0.012	0.004	2.965	0.003	0.006	0.021
*PERF → Sellers Reviews Usage	0.062	0.066	0.020	3.094	0.002	0.034	0.113
*PVC → Affective Trust	0.139	0.140	0.041	3.345	0.001	0.063	0.225
*PVC → CT in Benevolence	0.119	0.120	0.037	3.226	0.001	0.052	0.195
PVC → CT in Competence	0.181	0.183	0.057	3.197	0.001	0.076	0.296

Continued on the next page

ent. As total effect is the sum of direct effect and indirect effect(s), only direct and total effects are reported (tables 8 and 9). The indirect effect, in this case, is easy to calculate as the difference between total and direct effects (or as multiplication of particular path coefficients). In the case of lack of direct relationship total effect equals indirect effect – such cases are marked with asterisk table 9.

TABLE 9 Continued from the previous page

*PVC → CT in Integrity	0.153	0.155	0.052	2.939	0.003	0.057	0.262
PVC → Consumer Experience	0.117	0.119	0.053	2.222	0.026	0.020	0.227
*PVC → Product Reviews Usage	0.037	0.038	0.017	2.122	0.034	0.005	0.074
PVC → Purchase Intention	0.173	0.176	0.044	3.942	0.000	0.097	0.269
*PVC → Sellers Reviews Usage	0.038	0.039	0.018	2.064	0.039	0.005	0.077
Product Reviews Usage → Affective Trust	0.194	0.193	0.036	5.334	0.000	0.122	0.263
*Product Reviews Usage → CT in Benevolence	0.096	0.095	0.024	3.957	0.000	0.047	0.142
*Product Reviews Usage → CT in Competence	0.095	0.094	0.025	3.829	0.000	0.045	0.143
*Product Reviews Usage → CT in Integrity	0.065	0.065	0.017	3.936	0.000	0.031	0.095
*Product Reviews Usage → Purchase Intention	0.141	0.140	0.027	5.301	0.000	0.088	0.191
Product Reviews Usage → Sellers Reviews Usage	0.519	0.519	0.039	13.342	0.000	0.442	0.594
*RSC → Affective Trust	0.058	0.061	0.028	2.045	0.041	0.013	0.125
*RSC → CT in Benevolence	0.055	0.058	0.027	2.027	0.043	0.012	0.119
RSC → CT in Competence	0.086	0.091	0.041	2.091	0.037	0.020	0.181
RSC → CT in Integrity	0.037	0.040	0.019	1.961	0.050	0.007	0.083
*RSC → Purchase Intention	0.042	0.045	0.021	1.989	0.047	0.009	0.093
*Sellers Reviews Usage → Affective Trust	0.140	0.139	0.031	4.540	0.000	0.075	0.197
Sellers Reviews Usage → CT in Benevolence	0.185	0.184	0.045	4.148	0.000	0.094	0.269
Sellers Reviews Usage → CT in Competence	0.182	0.181	0.044	4.122	0.000	0.090	0.265
*Sellers Reviews Usage → CT in Integrity	0.126	0.125	0.031	4.123	0.000	0.061	0.181
*Sellers Reviews Usage → Purchase Intention	0.102	0.101	0.023	4.409	0.000	0.053	0.144

NOTES Column headings are as follows: (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) *t*-statistics ($|o/STERR|$), (5) *p*-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up. * indirect effect only.

MULTI GROUP COMPARISONS REGARDING CHOSEN BRAND

In this study, consumers were expected to make choice of an automatic coffee machine (as a suggestion for a neighbour buy) in product comparison site environment. This choice has been recorded on the level of particular product recognizable by exact type (described as producer alphanumeric code). To form groups for comparison chosen brand has been used.

Study participants can choose any of brands available in product comparison site although better-known brands (of large general

TABLE 10 Structure of Brand Choices Made by Research Participants with Size of Groups for PLS-MGA

Groups of brands	Brand name	Group size (n)	Share (%)
Included for PLS-MGA analysis	Saeco	150	32.5
	De Longhi	107	23.2
	Krups	75	16.3
	Bosch	63	13.7
	Siemens	42	9.1
Excluded from PLS-MGA analysis	Severin	3	0.7
	Zelmer	3	0.7
	other	18	3.9

TABLE 11 Path Coefficients in Five Analysed Brand Groups

Paths (direct effects)	Coefficient estimates					p-values (from bootstrapping)				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Affective Trust → Purchase Intention	0.707	0.744	0.639	0.773	0.638	0.000	0.000	0.000	0.000	0.000
BC → ct in Competence	0.001	0.052	0.208	0.071	0.246	0.993	0.693	0.172	0.493	0.274
CO → Product Reviews Usage	0.318	-0.018	0.260	0.183	0.244	0.003	0.872	0.325	0.024	0.152
ct in Benevolence → Affective Trust	0.197	0.304	-0.033	0.211	0.019	0.147	0.001	0.718	0.033	0.939
ct in Benevolence → ct in Integrity	0.680	0.644	0.523	0.722	0.818	0.000	0.000	0.000	0.000	0.000
ct in Competence → Affective Trust	0.511	0.390	0.579	0.562	0.385	0.000	0.000	0.000	0.000	0.023
ct in Competence → ct in Benevolence	0.764	0.565	0.473	0.696	0.614	0.000	0.000	0.000	0.000	0.000
ct in Integrity → Affective Trust	0.179	0.102	0.295	0.020	0.359	0.179	0.265	0.007	0.816	0.111
Consumer Experience → Product Reviews Usage	0.114	0.372	0.286	0.398	0.030	0.420	0.000	0.023	0.000	0.878
Consumer Experience → Sellers Reviews Usage	0.229	0.235	0.115	0.199	-0.131	0.043	0.006	0.353	0.009	0.435
ECO → Affective Trust	0.048	0.055	0.093	0.145	0.046	0.567	0.539	0.397	0.010	0.776
PERF → Consumer Experience	0.314	0.311	0.073	0.163	0.020	0.002	0.000	0.784	0.085	0.943
PVC → ct in Competence	0.411	0.121	0.287	0.124	-0.029	0.004	0.448	0.030	0.325	0.850
PVC → ct in Integrity	0.223	0.000	0.089	0.041	0.199	0.036	0.998	0.395	0.602	0.061
PVC → Consumer Experience	0.260	0.155	0.082	0.037	0.360	0.065	0.226	0.657	0.773	0.037
PVC → Purchase Intention	0.078	0.059	0.261	-0.038	0.150	0.366	0.410	0.003	0.646	0.412
Product Reviews Usage → Affective Trust	0.195	0.215	-0.032	0.079	0.325	0.016	0.001	0.682	0.149	0.002
Product Reviews Usage → Sellers Reviews Usage	0.543	0.411	0.555	0.527	0.538	0.000	0.000	0.000	0.000	0.000
RSC → ct in Competence	-0.033	0.167	0.120	0.141	-0.212	0.845	0.089	0.366	0.095	0.413
Sellers Reviews Usage → ct in Benevolence	0.006	0.083	0.169	0.029	0.146	0.949	0.289	0.087	0.621	0.303
Sellers Reviews Usage → ct in Competence	0.298	0.222	-0.074	0.305	-0.199	0.006	0.011	0.495	0.000	0.282

NOTES (1) Bosch, (2) DeLonghi, (3) Krups, (4) Saeco, (5) Siemens.

TABLE 12 Significance of Differences Between Groups: PLS-MGA Non-Parametric Test *p*-Values

Paths (direct effects)	Significance of diff. between path coeff. in groups: <i>p</i> -values (from PLS-MGA test)									
	(1)-(2)	(1)-(3)	(1)-(4)	(1)-(5)	(2)-(3)	(2)-(4)	(2)-(5)	(3)-(4)	(3)-(5)	(4)-(5)
Affective Trust → Purchase Intention	0.621	0.281	0.714	0.331	0.102	0.649	0.196	0.944	0.525	0.132
BC → ct in Competence	0.604	0.857	0.664	0.853	0.819	0.544	0.830	0.169	0.618	0.836
CO → Product Reviews Usage	0.022*	0.544	0.131	0.356	0.779	0.914	0.909	0.292	0.382	0.708
ct in Benevolence → Affective Trust	0.752	0.072	0.549	0.257	0.006*	0.244	0.141	0.965	0.567	0.227
ct in Benevolence → ct in Integrity	0.349	0.103	0.674	0.915	0.152	0.827	0.967	0.963	0.993	0.864
ct in Competence → Affective Trust	0.227	0.657	0.614	0.283	0.912	0.910	0.522	0.434	0.150	0.168
ct in Competence → ct in Benevolence	0.047*	0.022	0.250	0.174	0.244	0.909	0.658	0.963	0.798	0.318
ct in Integrity → Affective Trust	0.312	0.748	0.157	0.769	0.919	0.253	0.858	0.020*	0.631	0.913
Consumer Experience → Product Reviews Usage	0.938	0.820	0.964	0.359	0.288	0.596	0.058**	0.788	0.135	0.041*
Consumer Experience → Sellers Reviews Usage	0.508	0.248	0.401	0.047	0.215	0.373	0.035*	0.712	0.124	0.048*
ECO → Affective Trust	0.541	0.635	0.831	0.480	0.610	0.818	0.458	0.645	0.388	0.263
PERF → Consumer Experience	0.485	0.220	0.126	0.180	0.219	0.105	0.178	0.527	0.438	0.356
PVC → ct in Competence	0.079**	0.262	0.956**	0.018*	0.799	0.502	0.241	0.168	0.063**	0.213
PVC → ct in Integrity	0.067**	0.183	0.084**	0.441	0.732	0.624	0.909	0.346	0.773	0.886
PVC → Consumer Experience	0.290	0.225	0.125	0.705	0.380	0.256	0.852	0.412	0.874	0.928
PVC → Purchase Intention	0.430	0.933	0.165	0.644	0.960	0.185	0.684	0.012*	0.291	0.830
Product Reviews Usage → Affective Trust	0.580	0.022*	0.115	0.840	0.009*	0.055**	0.820	0.877	0.996	0.982
Product Reviews Usage → Sellers Reviews Usage	0.144	0.540	0.442	0.510	0.875	0.838	0.800	0.402	0.478	0.557
RSC → ct in Competence	0.856	0.777	0.832	0.293	0.382	0.405	0.100**	0.547	0.147	0.118
Sellers Reviews Usage → ct in Benevolence	0.734	0.881	0.580	0.793	0.754	0.287	0.648	0.111	0.441	0.779
Sellers Reviews Usage → ct in Competence	0.284	0.010*	0.507	0.018*	0.017*	0.769	0.030*	0.998	0.268	0.012*

NOTES Groups numbered as in table 11. * $p < 0.05$, ** $0.05 < p < 0.1$.

appliances producers or coffee machine specialists) were selected more frequently than others (structure of brand choices, with aggregation rules used). This led to forming five groups for main brands and excluding less popular ones. The largest group was for Saeco brand – $n = 150$ (at the time of research it was presented on products in two forms: Saeco and Philips Saeco), and smallest one – for Siemens brand ($n = 42$).

Standardized path coefficients with significance levels coming from bootstrapping for five analysed groups are varying between groups. To compare groups PLS-MGA non-parametric test, not requiring distributional assumptions has been performed (Henseler 2012). Results of group comparison are gathered in table 11.

As brand formed groups are differing in size (including one group with size below 50), there is greater chance to obtain statistically insignificant estimates, also differences between groups must be relatively large to be significant.

As is visible in table 12, the number of significant differences and statistical tendencies between groups is rather low – this suggests that on general level brand choice not changes substantially the values of particular paths in estimated model, and the most of the differences apply to sellers reviews usage and cognitive trust in competence path.

Discussion

On the base of model estimation (on the whole sample and on groups level) it is easily confirmed that concept of trust-based adoption model is valid. As predicted cognitive trust constructs (particularly cognitive trust in competence – directly and indirectly) are explaining well the affective trust (with about 61.2% of variance explained) and later – purchase intention (about 55.1% of variance explained). This is convergent with results of other studies utilising trust-based adoption model by Komiak and Benbasat (2006), and findings from the case of online retailer (Zhang, Cheung, and Lee 2014). Also in group-wise estimation standardised path coefficients are similar, without significant differences between groups formed on a base of chosen product brand, although lack of corresponding research does not allow for direct comparison with other authors studies.

Taking into account part of the model including connections between consumer experience in product comparison sites usage and product/sellers reviews usage, the results are suggesting the stronger influence of experience on product reviews usage than sellers review usage, although the latter is quite well explained by the first

one. This is consistent with two stages approach in the decision of buy online – many consumers are choosing product first (including its brand and other characteristics), and later are selecting the seller from who they are deciding to buy. Comparing groups for this connections leads to finding that choice of Siemens brand (comparing to other ones) has been made by consumers for whom connection between their experience and both types of reviews usage, in reality, disappeared – this can be effect of automatic choice of previously used and preferred brand of electric appliances for other product categories. For all groups connection between product reviews and sellers reviews usage is clear and significant.

Answering research question 1 (RQ1) where there was focus on what connects previous consumer experience with product comparison site usage and opinions about products and sellers usage with trust toward product comparison site constructs from trust-based adoption model, one can tell that those connections are weak – obtained values of standardised path coefficients are significant, but rather low. Only paths connecting sellers review usage with two cognitive trust constructs (in competence and in benevolence), as well as path connecting product review usage directly with affective trust are significant in the whole sample, but not always in groups.

Three consumer decision-making styles affected directly mentioned constructs of consumer experience and product reviews usage – this allows to provide an answer to research question 2 (RQ2). Consumer experience has been in part explained by perfectionistic style (stronger) and rather obviously by price-value conscious style. The higher level of those styles the greater consumer experience in product comparison site usage, that is consistent with the description of shopping outcomes of people with those style pronounced (Sproles and Kendall 1986). Perfectionistic consumers are seeking perfect products and easily retrieve and compare information provided by product comparison site. Similarly, it is much easier find good deals and receive expected value for money or low price by using extensively product comparison engines. Exactly opposite meaning has the connection between confused by overchoice style and usage of product reviews – the more confused by overchoice consumer, the more important is for her/him obtaining easy comparisons and suggestions what to buy from product comparison site, that takes from consumer burden of retrieving much information. The indirect influence of PERF and CO styles on purchase intention via trust constructs is relatively low but significant.

Research question 3 (RQ3) was about the nature of connections

of consumer decision styles with trust-based adoption model constructs. There is clear that consumer decision-making styles are connected in greater extent with cognitive trust in competence of product comparison site. Such service makes easier to find good deals – so the highest path coefficient is for connection with price-value conscious style. Perceived competence of product comparison engine makes shopping decisions easier and more pleasant – this explains the path from the recreational (hedonic) style. As one of the most important concerns of consumers in online retail is the authenticity of merchandised products from excellent and desirable brands, brand conscious style positively influences cognitive trust in competence – the higher brand consciousness, the more positive evaluation of product comparison sites competences.

Direct connection with affective trust has been found for ecologically aware consumers – the higher *eco* style level, the more positive affective trust toward product comparison site. Similarly, price-value conscious style level directly influences cognitive trust in integrity and purchase intention (that was expected). In general, the biggest influence on trust toward product comparison sites and purchase intention (directly and indirectly) from all of consumer decision-making styles has obviously the price-value conscious style – table 9.

Looking into differences between groups (chosen brands), there is the largest number of significant differences for sellers review usage and cognitive trust in competence. For consumer decision-making styles there are very rare situations when the choice of particular brand changes relationships between constructs in research model. Such approach has not been found in the literature up to date.

In previous research (Maćik and Nalewajek 2013, 116), where intention to use of virtual sales channel and actual usage of internet shopping aids, was studied, gave suggestion about influence of three consumer decision-making styles on those constructs – price-value consciousness (*pvc*), novelty-fashion consciousness (*nfc*), and compulsive tendencies (*comp*) significantly explained virtual channel usage. Different construct than in this study has been explained by different consumer decision-making styles. The only style present in both studies is price-value consciousness (*pvc*), confirming that seeking possibly lowest prices is one of most important motives to use virtual channel by consumers.

On more general level, connections of consumer decision-making styles and intention to use as well as actual use of virtual channel have been studied on two different samples by Maćik and Maćik (2009, 1281–2). Obtained results include relatively strong influence

of perfectionistic style (PERF), weaker of habitual brand-loyal style (HBL) on intention to use of virtual channel. There were also found: negative influence of price-value consciousness (PVC) and positive influence of compulsive buying tendencies (COMP) on actual use of internet shopping. So those results are mostly inconsistent with current study results, although different constructs were explained in both cases, as well as virtual channel usage significantly increased at the time between both studies.

Implications, Further Research and Limitations

Research results, confirming conceptual model of relationships, are implying that to create purchase intention with product comparison site help, as high as possible affective trust toward such site is needed. Affective trust is created mostly from cognitive trust in competence, explained by sellers review usage and price-value conscious (PVC) consumer decision-making style, linked with brand consciousness (BC) and hedonic style (RSC). For product comparison sites operators valuable is knowledge that exist specific combination of consumer decision-making styles that encourage favourable trust beliefs toward product comparison sites. For instance promoting possible finding lowest possible price and certainty of branded products originality should attract more intensive usage of mentioned sites. Also, because of influence of products and sellers review usage intensity on trust constructs, there should be promoted more intensive usage of both types of reviews, particularly among consumers confused by overchoice and perfectionistic individuals.

Using one product category is important limitation of this study, although the choice of automatic coffee machine for this research was conditioned by the generally low level of this product expertise among consumers. Other limitation is relatively homogenous sample in terms of participants' demographic background – university students and their working or studying peers only were surveyed. This suggests that some of the influences in more diversified sample – particularly in terms of age – can be different than obtained, e.g. influence of previous experience in product comparison site on cognitive trust should be higher and more direct for older consumers. Also, different typical profiles for older consumers can lead to the slightly changed set of consumer decision-making styles explaining constructs of trust-based adoption model.

Further research can include changing and/or adding other product categories to validate model in different settings, as well as com-

binning used constructs with other approaches of technology acceptance measurement.

Conclusion

Research results are generally confirming conceptual model as well as their measurement reliability and validity. Main paths of influences: cognitive trust – affective trust – purchase intention – choice satisfaction is confirmed by relatively high standardised path coefficients, although the effect of selected for model antecedents of trust-based adoption model constructs is significant but lower than expected. So main relationships in product comparison site usage are similar to those found in the case of online retailer (Zhang, Cheung, and Lee 2014). Also incorporating consumer decision-making styles to the model gave valuable insights – far from obvious – about their influence on purchase intention and brand choice. Comparison across chosen brands generally confirms that observed relationships are generally stable, with minor differences across product specialist brands and more diversified ones.

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