CUSTOMER SATISFACTION AND LOYALTY DETERMINANTS IN FMCG ON-LINE RETAIL STORES

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Abstract: *Globalization and free movement of goods have significantly limited price competition among FMCG on-line retailers. A relationship with a customer becomes more dependent on non-price factors such as: usability of e-commerce systems and trust in a company. One of the goals of the research described in the article was to determine the influence on customer's satisfaction and loyalty by such factors as: customer value, web-usability and trust. The article presents the outcome of the research conducted in Poland on the customers of Polish FMCG on-line retailers.*

Keywords: E-COMMERCE, WEB-USABILITY, USER EXPERIENCE, CUSTOMER LOYALTY, CUSTOMER TRUST

1. Introduction

In recent years, both in Poland and worldwide, one could notice that significance of e-commerce has been increasing. Polish B2C e-commerce sector, which value in 2014 was approximately 7.2 billion euros, is growing most rapidly in Europe, with its annual growth rate reaching approx. 17%. However, following the period of tremendous development, the first symptoms of market stabilization are occurring, including evidently lower dynamics of launching new online shops. The existing on-line stores attempt to take over as much of the demand as it is possible, however, high competition has caused a decrease in trade margins, which makes competing on price more and more difficult. In the light of this fact, two main methods aimed at higher effectiveness of e-commerce has become more significant: capturing more web-traffic (i.e. prospect clients) and retaining the biggest possible number of customers in a sales funnel until the moment of purchase [1].

While analyzing the literature on e-commerce, one may notice that one way of building a competitive advantage is to ensure high usability of sales systems. According to some authors, the usability of websites has a considerable impact on users' satisfaction [2][3], but it is not connected with their loyalty [2]. It has also been proved that web-usability influences the perception (assessment) of a website by a user [4]. In the research concerning online banking, Hamid and Aziati proved a dependency between the usability of banks' websites and the loyalty and level of trust of their clients. Besides, they claim that the level of trust is related to the loyalty of clients, and usability has more influence on client loyalty than the level of trust [5]. Moreover, Sam and Tahir proved that web-usability is a factor influencing the decisions on the purchase of air tickets on specialized air ticket booking websites. They also noticed a dependency between usability and the level of trust in a website [6]. The significance of usability was also observed in another research (Alhelalat et al.). According to its authors, the usability of hotels' websites impacts user satisfaction and his intent to return to the website, which constitutes a tangible benefit for a business [7].

2. Prerequisites - the research model

Basing on the literature research, it was assumed that customers' satisfaction with the transaction conducted and their loyalty are elements of competitive advantage of e-commerce systems. The most frequently indicated factors which influence them include: customer value, trust and usability of e commerce solutions. The aim of the research de-scribed in the present article was to check the dependency between the above-mentioned factors in the case of Polish internet supermarkets on the basis of the survey of their users. The first stage was to determine measures for all the factors. The adopted measures are presented in Table 1.

Table 1: Measures for the analyzed factors.

Criteria	Subcriteria
Customer Value (KO)	Attractive price level (KO1) Attractive promotions/partner programs (KO2)
	Appropriately broad range of products (KO3) Satisfactory availability of products or substitutes (KO4) Beneficial payment and delivery conditions (KO5)
Trust (ZA)	Proper discharge of obligations to customers (ZA1) Fair information about products and prices (ZA2) No abuse of data provided (ZA3)
Usability (UZ)	Easy searching for products/information needed (UZ1) No troubles while using a website (UZ2) Additional features facilitating shopping (UZ3)
Satisfaction (SA)	Customer satisfaction with the shop where products were purchased (SA1) Customer's will to recommend a shop to his friends (SA2)
Loyalty (LO)	Internet supermarket most frequently chosen by a customer (LO1) Shop where a customer spends more money than in any other internet supermarket (LO2) Intent to do shopping again in a given shop (LO3)

Web-benefit

The sense of economic benefit experienced by a user of e-commerce website seems to be the most obvious factor influencing his satisfaction and loyalty. This is one of the most frequently indicated elements of competitive advantage, and the price level is not the only aspect here: other elements that confirm a user's belief that he made a right economic decision while choosing a shop are also important. In the case of internet supermarkets these are: other economic benefits (promotions, loyalty programs, attractive delivery prices, convenient payment options), range and current availability of products. Therefore, the following research hypotheses were proposed:

H1: The sense of economic benefit impacts the satisfaction of internet supermarkets' customers.

H2: The sense of economic benefit impacts the loyalty of internet supermarkets' customers..

Trust

Trust to the business undertaking is often mentioned in literature as a determinant influencing internet client experience. For the purpose of this research, it was assumed that trust is expressed by the client's belief that the shop where the purchase was made properly fulfilled its responsibilities, such as providing fair information about the products and prices, and did not abuse the data provided. The study of this client experience was to be a basis for testing the following hypotheses:

H3: Customer trust impacts the satisfaction of internet supermarkets' customers.

H4: Customer trust impacts the loyalty of internet supermarkets' customers.

Usability

In recent years, the usability of user interfaces perceived from various angles has be-come one of the significant elements of competitive advantage. It affects not only a customer (by contributing to the actions aimed at conversion path optimization), but also the effectiveness of marketing actions (by the increasing importance of website positioning in search engines). In the research concerning the measurement of the usability level of online shops, the following measures were used: easy searching for products/information needed, no troubles while shopping, additional features facilitating shopping. The results of this measurement were used to examine the following hypotheses:

H5: Website usability impacts the satisfaction of internet supermarkets' customers.

H6: Website usability impacts the loyalty of internet supermarkets' customers.

Satisfaction vs. loyalty

In addition, measures of customer satisfaction and loyalty were also determined in the research. They were used to analyze the extent to which each of these qualities is related to the sense of benefit, trust and usability, and what is a direct connection between them. To achieve this goal, the following hypothesis was examined:

H7: Satisfaction of internet supermarkets' customers with the transaction conducted impacts their loyalty.
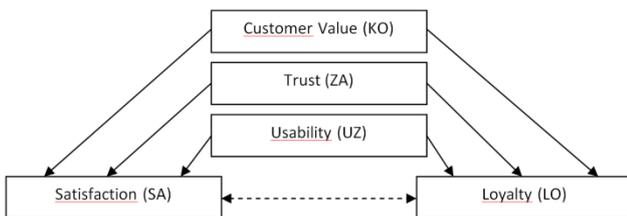
The research model is presented on Figure 1.

Fig. 1 Research model

3. Implementation of the research

The quantitative research was conducted on the group of 246 customers of Polish internet supermarkets, with the use of an online survey. The respondents were questioned about: demographics, shopping habits, the assessment of the internet supermarket, where they purchased products (according to the measures presented in Table 1) and additional usability issues. The assessment of a shop was given according to each subcriterion in the 5-level Likert scale. There were 215 complete answers obtained which were appropriate to be statistically processed.

To evaluate the adequacy of the assessment subcriteria, the dependencies (correlation coefficient) between average assessments for each criterion and assessments for sub-criteria were analyzed. In all cases at least a moderate dependency was identified, which confirms the adequacy of the subcriteria [8]. In addition, The consistency of the measurement scales (subcriteria for a given criterion) was verified, using Cronbach's alpha. The results are presented in Table 2.

Table 2: Consistency analysis results.

Criteria	Cronbach's alpha	Number of subcriteria
Customer Value (KO)	0.769	5
Trust (ZA)	0.730	3
Usability (UZ)	0.768	3
Satisfaction (SA)	0.890	2
Loyalty (LO)	0.867	3

For all criteria Nunnally's condition ($\alpha C > 0,7$) is satisfied, which means that the consistency of the measurement scales is satisfactory [9].

4. Results of the research

At the first stage, the dependency between average user assessments for all pairs of the criteria (srKO, srZA, srUZ, srSA, srLO) was tested. The results are presented in Table 3.

Table 3: Dependency of average assessments for pairs of the criteria ($\alpha=0.05$; $p=0.001$).

srKO – srSA	r=0.64	srKO – srLO	r=0.74
srZA – srSA	r=0.55	srZA – srLO	r=0.51
srUZ – srSA	r=0.75	srUZ – srLO	r=0.67
srSA – srLO	r=0.69		

In order to analyse the power of influence of Customer Value, Trust and Usability on Satisfaction and Loyalty, the multiple regression analysis was conducted. The results are presented in Tables 4 and 5.

Table 4: Multiple regression analysis for dependent variable srSA ($\alpha=0.05$; $p=0.001$)

Model summary		ind. ftr.	b	b err.	Beta	t	p
R	0.829	(const.)	-1.412	0.233	-	-6.048	<0.001
R^2	0.687	srKO	0.330	0.065	0.245	5.105	<0.001
R^2 adj.	0.683	srZA	0.374	0.061	0.263	6.165	<0.001
st. err.	0.571	srUZ	0.670	0.061	0.516	10.913	<0.001
F	154.414						

Table 5: Multiple regression analysis for dependent variable srLO ($\alpha=0.05$; $p=0.001$)

Model summary		ind. ftr.	b	b err.	Beta	t	p
R	0.824	(const.)	-1.603	0.242	-	-6.629	<0.001
R^2	0.679	srKO	0.663	0.067	0.482	9.906	<0.001
R^2 adj.	0.674	srZA	0.290	0.063	0.200	4.612	<0.001
st. err.	0.592	srUZ	0.434	0.064	0.327	6.829	<0.001
F	148.514						

5. Conclusions

On the basis of the analysis conducted, it was stated that the hypotheses H1 – H7 should be accepted with the following remarks: the relations srUZ – srSA and srKO – srLO should be considered as strong, while the relations srKO – srSA, srZA – srSA, srZA – srLO, srUZ – srLO, srSA – srLO as medium-strong. The proposed models of multiple regression for the de-pendent variables srSA and srLO are characterized by a high indicator of goodness of fit to the data model (variability of a dependant variable was explained by the regression in 68.3% and 67.4% respectively). Besides, the research conducted showed that website usability essentially impacts the satisfaction of a customer with the transaction conducted, while customer loyalty is the most influenced by customer value.

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