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## Comparison of the factors affecting customers' satisfaction with online group buying in the Czech Republic and Canada

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### Abstract

The topic of this paper is the comparison of the factors that affect customers' satisfaction with online group-buying purchases in the Czech Republic and Canada. The social exchange theory was adopted to identify these factors, which include reciprocity, reputation, trust and the vendor's creativity in the purchase. The aim of this paper was to identify the factors affecting customers' satisfaction with online group-buying websites in Canada and to compare the results with the results of Czech customers. Overall satisfaction was considered as one of the predictors of customers' repurchase intention in this paper. The proposed model of the relations between determinants was tested using the method of structural equation modelling. The analysed data were collected in primary research, namely an online questionnaire. The results confirm that the vendor's creativity and trust are the most important factors for Canadian customers, and the same applies to Czech customers, whilst reputation and reciprocity are not important factors of satisfaction for the customers from either country. The discussion of the results and the managerial implications are also included in this paper.

### Keywords

Online group buying, satisfaction, social exchange theory, structural equation modelling.

**JEL Classification:** M31, M37

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# Comparison of the factors affecting customers' satisfaction with online group buying in the Czech Republic and Canada

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## 1. Introduction

Social commerce, including online group buying (OGB), which is popular all over the world, is a new phenomenon that takes advantage of online marketing, group-buying sites and social network influence. It is still growing across the world (Erdogmus and Cicek, 2011; Jang et al., 2013; Turban et al., 2015). Group-buying commerce refers to a sale method in which a specific product is sold at a discounted price when a certain number of potential buyers is reached within a limited amount of time. The attainment of the requested number of buyers is the necessary requirement for the transaction's realization (Jang et al., 2013; Shiau and Luo, 2012).

This paper focuses on this phenomenon in the Czech Republic and Canada. Michl (2014) and Oliveira (2012) confirm that this topic cannot be overlooked in these countries. When Czech people want to buy a discounted product or service, online group-buying websites are the third most common place for them to look, and the number of online group-buying websites is still increasing (Michl, 2014). According to Michl (2013), the most usual places to seek sales are leaflets and seasonal sales in shops. Canadians also prefer a good deal, even more than Americans. Oliveira (2012) declared that about 53 percent of Canadians are familiar with at least one online group-buying website, such as the Chicago-based originator Groupon or home-grown competitors like Dealfind, TeamBuy and WagJag. About 42 percent of the Canadians who are familiar with group-buying websites have signed up to receive daily offers via e-mail.

Oliveira (2012) and Pilík (2012) stated that both Czech and Canadian customers are very conservative. They are far more responsible in their spending than inhabitants of other countries, and online group buying is just another way to be responsible.

The prior studies have found that only a small minority of online customers return to the websites to make another purchase (Gupta and Kim, 2007; Qureshi et al., 2009). According to Zamazalová (2009), since a high consumer satisfaction rate can increase consumer loyalty to the provider significantly, online group-

buying providers should try to achieve the maximum level of user satisfaction with services, products and purchases. According to Shiau and Luo (2012), consumer satisfaction helps companies to create long-term relationships with customers and loyal customers bring substantial revenues to companies (Otim and Grover, 2006). Loyal customers help to reduce the transaction costs (Anderson et al., 1994). In addition, the success of an online group-buying website depends on the number of customers that the system is able to attract and retain. The relatively easy switching from one website to another, meaning from one online group-buying provider to another online group-buying provider offering similar products, increases the importance of the topic (Hsu et al., 2014). Therefore, the quality of service and customers' satisfaction after the purchase become issues of maximum importance (de Oña et al., 2013).

The aim of this paper is to identify the factors affecting customers' satisfaction with online group-buying websites in Canada and to compare the results with those of customers in the Czech Republic. The affecting factors were identified according to social exchange theory (SET), which was applied by Shiau and Luo (2012) for the identification of the factors that affect users' satisfaction with online shopping in China. This approach primarily presents only the egoistic perspective, which is based on economic and social exchange theories. According to these theories, human behaviour is affected by the expectation of an economic reward. The other altruistic motives are omitted in this research. However, customers of online group-buying websites have no intention to improve the welfare of other buyers and do not expect any personal returns from online group buying (Pawlasová, 2015; Shiau and Luo, 2012).

This article contains the theoretical backgrounds of satisfaction measurement and the social exchange theory. The subsequent part of this article includes the research methodology and an introduction to the method of structural equation modelling (SEM), which was applied in this study to evaluate the factors in Canada. The same method of data analysis was followed by Pawlasová (2015) to evaluate the factors in

the Czech Republic. Eventually, the results are described and the similarities and differences between Czech and Canadian customers are presented. This paper also includes a discussion of the results and a conclusion.

## 2. Theoretical background of customer satisfaction measurement and social exchange theory

The theoretical backgrounds of customer satisfaction and the social exchange theory are presented in this section.

### 2.1 Customer satisfaction measurement

The satisfaction of customers can be described as the difference between their expectation and their actual satisfaction measured after a purchase (Shiau and Luo, 2012). If customers' satisfaction is measured from the customers' perspective, the most important issue is the customers' perceptions about each indicator characterizing the satisfaction. However, it is not just important to know the perceptions of each of the factors affecting customers' satisfaction. The key issue is to identify the most important factors that exert the greatest impact on the global assessment of the purchase. It means that the key issue in customer satisfaction measurement is the identification of the rate of the importance of each factor that can affect customers' satisfaction.

The actual trend is to ask customers to express their opinions about the importance of each satisfaction attribute. This is a widely used method, but it can lead to erroneous estimations. Respondents can rate some indicators as important even though they have little impact on their overall satisfaction or these indicators may be important only at one of the moments of the assessment (meaning before or after thinking) (de Oña et al., 2013). Therefore, applying one of the derived methods of data analysis is recommended. The application of the method enables the determination of the indicators' importance by testing statistically the strength of the relations between the individual factors and the overall satisfaction (Weinstein, 2000).

For example, Aktepe et al. (2015), Hsu et al. (2014) and Shiau and Luo (2012) applied structural equation modelling to determine the importance of indicators in relation to the measurement of customers' satisfaction.

### 2.2 Social exchange theory

As mentioned above, this research applies the social exchange theory (SET) to explore the factors affecting

customers' satisfaction. These factors are related to customer psychology and relation exchanges. The factors that come from the social exchange theory have been identified as critical factors affecting both online and physical shopping. The social exchange theory has been adopted in social networking research and across different areas, such as sales performance and adoption decisions. Psychological behaviour and consumers' behaviour are important for marketers seeking to increase customers' satisfaction, loyalty and sales rates (Shiau and Luo, 2012).

The social exchange theory states that people and companies are in contact and act reciprocally to minimize their costs and maximize their rewards (Shiau and Luo, 2012). This theory also submits that individuals typically expect reciprocal benefits and economic returns when they act according to social norms. Reciprocal benefits represent those such as personal affection, trust and gratitude.

The social exchange theory proposes that reciprocity, reputation and trust are factors that affect online group-buying customers' satisfaction. According to a literature review, the vendor's creativity and indicators of satisfaction such as pleasure, contentment and delight can extend the original three factors (Shiau and Luo, 2012). The proposed relations between individual indicators and satisfaction are presented in Figure 1.

Customers' overall satisfaction with online group-buying purchases can be affected by reciprocity, reputation, trust and the vendor's creativity. These relations are validated in this research, and this part of the model is black in Figure 1. Satisfaction, trust and the vendor's creativity influence the intention of buyers to engage in online group buying (Shiau and Luo, 2012). This invalidated part is grey in Figure 1.

*Reciprocity* is frequently described as quid pro quo behaviour. *Reputation* is illative from the degree to which a person trusts that social interaction potentially enhances personal reputation. *Trust* can be defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action significant to the trustor, irrespective of the ability to monitor or control that other party. *Creativity* can be interpreted as creative products. These are often characterized by novelty and appropriateness; otherwise, they are considered as general products. Creative products also have an expected competitive advantage (Shiau and Luo, 2012).

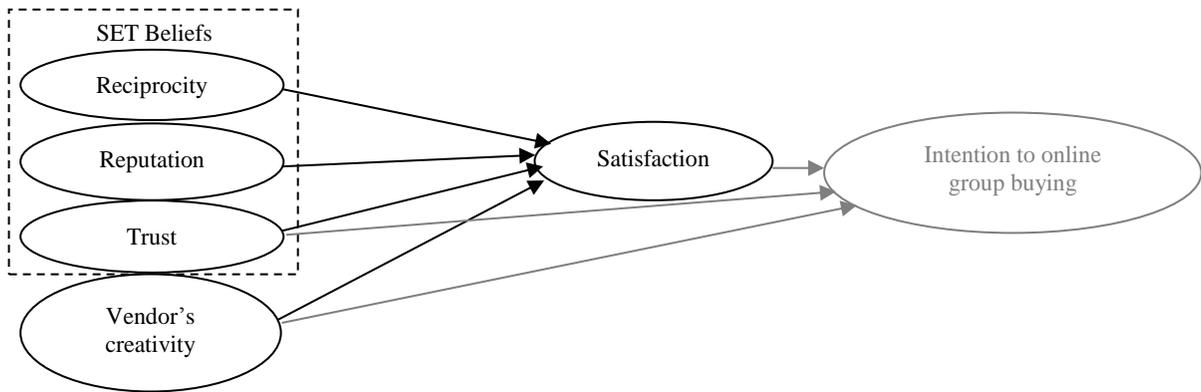


Figure 1 Original model by Shiau and Luo (2012)

3. Data collection and research method

The purpose of this research was to identify the indicators affecting customers' satisfaction with online group buying in Canada and to compare the results with those from the Czech Republic. The indicators of the social exchange theory, extended to include the vendor's creativity, were applied.

3.1 Data collection

The data were obtained via an online questionnaire conducted in January 2015 in Canada. This method was chosen because of its connection with the research concern. The population contained all users of online group-buying websites, meaning everyone who has ever bought from these websites. The sample consisted of 426 Canadian respondents. The control variables were frequency of online group-buying purchases, gender, age and education. See Table 1. The respondents expressed their satisfaction regarding statements about the indicators affecting satisfaction with online group buying, which were adopted from Shiau and Luo (2012).

The respondents expressed their satisfaction with factors using a Likert scale from 1 to 5, where 1 corresponded to a positive statement and 5 corresponded to a negative statement.

3.2 Research method

Structural equation modelling (SEM) was performed to evaluate the proposed model of the behaviour of Canadian customers of online group-buying websites. These results were then compared with the results of the same proposed model obtained from Czech customers of online group-buying websites presented by Pawlasová (2015).

Structural equation modelling

Structural equation modelling (SEM) is a method that permits researchers to describe the latent constructs that really appear in a phenomenon in which some latent factors are present due to respondent subjectivity. SEM is similar to regression modelling but more advanced (de Oña et al., 2013). A general structural model consists of two parts: a measurement model and a structural model; see Nachtigall et al. (2003).

The measurement model describes the relations between the observed and the latent variables. If a latent variable is measured by several observed variables, it is called an indicator. The measurement model does not infer the residual segment of the variance. The residual variance can be considered as an unobserved variable (Urbánek, 2000).

The measurement model can be defined algebraically as two systems of equations in matrix form (de Oña et al., 2013):

$$\vec{x} = \Lambda_x \vec{\xi} + \vec{\delta}, \tag{1}$$

Table 1 Structure of the sample of respondents (n = 426)

Frequency of online group-buying purchases		Gender		Age		Education	
Once a fortnight	4.4%	Male	31.7%	18–34	52.4%	Primary	20.1%
Once a month	27.9%	Female	68.3%	35–54	37.1%	High school	46.1%
Quarterly	37.5%	Total	100.0%	55+	10.5%	University	33.8%
Less often	30.2%			Total	100.0%	Total	100.0%
Total	100.0%						

$$\vec{y} = \Lambda_y \vec{\eta} + \vec{\varepsilon}, \quad (2)$$

where  $\vec{x}$  stands for the vector of the indicator for the vector of unobserved variable  $\vec{\xi}$ ,  $\vec{y}$  is the vector of the indicator for the vector of unobserved variable  $\vec{\eta}$ ,  $\vec{\xi}$  stands for the vector for the unobserved exogenous variable,  $\vec{\eta}$  is the vector for the unobserved endogenous variable,  $\Lambda_x$  and  $\Lambda_y$  stand for the matrixes of the structural coefficients for the relations of variables' vectors  $\vec{x}$  and  $\vec{\xi}$  and variables  $\vec{y}$  and  $\vec{\eta}$ , and  $\vec{\delta}$  and  $\vec{\varepsilon}$  are the vectors of residual variables for the vectors  $\vec{x}$  and  $\vec{y}$ .

The measurement model also contains the covariation matrixes  $\Theta_\delta$  and  $\Theta_\varepsilon$  of the vectors of the residual variables. These matrixes are usually diagonal, and residual variables do not correlate in the model (de Oña et al., 2013).

The *structural model* interprets the relations between the latent variables. This model detects which unobserved variable is independent (exogenous) and which unobserved variable is dependent (endogenous). An exogenous variable is a variable that is not influenced by any of the independent variables, whilst an endogenous variable is influenced by other variables.

The structural model can be interpreted as follows (de Oña et al., 2013):

$$\vec{\eta} = B\vec{\eta} + \Gamma\vec{\xi} + \vec{\zeta}, \quad (3)$$

where B and  $\Gamma$  stand for the matrixes of the structural coefficients of the unobserved endogenous (exogenous) variables and  $\vec{\zeta}$  are the measurement errors.

The *validity of the proposed model* can be confirmed with multiple chi-squared tests. CFI, NFI and Cronbach's Alpha were applied in this data analysis. The rate of change of a conditional mean is interpreted as a regression coefficient. Standardized regression coefficients should take values of 0.5 and higher if the relations between the variables are significant (Byrne, 2009; Hair et al., 2010).

The comparative fit index (CFI) can be calculated algebraically as

$$CFI = \frac{P_N}{P_{N_b}}, \quad (4)$$

where  $P_N$  and  $P_{N_b}$  stand for the parameters of non-centrality for the estimated and the basic model. The estimated model presents the proposed tested model, and the basic model presents the null model in which the unobserved variables do not correlate. The CFI should be close to 1.000 for the optimal model. This

index does not vary much with the sample size (Urbánek, 2000).

The normed fit index (NFI) can be interpreted as

$$NFI = 1 - \frac{F}{F_b}, \quad (5)$$

where  $F$  stands for the minimum value of the loss function for the estimated model and  $F_b$  is the value of the loss function as the minimum for the basic model (Urbánek, 2000). The NFI index should be close to 1.000 as well as the CFI (Hooper et al., 2008).

Another coefficient employed is Cronbach's Alpha, which is one of the most frequently applied coefficients of reliability. It computes reliability as internal consistency. It is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results. Cronbach's Alpha can be computed as

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_t^2} \right), \quad (6)$$

where  $k$  stands for the number of estimated (free) parameters,  $\sigma_i^2$  stands for the variance of component  $i$  for the current sample and  $\sigma_t^2$  is the variance of the observed total test scores. The actual value of Cronbach's Alpha should be higher than 0.7 for each latent variable in the optimal case. The latent variable is valid if the Cronbach's Alpha of the latent variable exceeds 0.7 (Urbánek et al., 2011).

#### 4. Model analysis and results

There were 38 variables in the proposed model: 16 observed variables and 22 unobserved variables, including 17 residual variables. There were 5 latent variables, namely Reciprocity, Reputation, Trust, Vendor's creativity and Satisfaction.

The first latent variable, *Reciprocity*, was measured by three observed variables, Rec1–Rec3. These variables evaluate the belief that sharing information with an online group-buying vendor will lead to future requests for knowledge being met. Specifically, the following factors were measured:

- Rec1 When I share my information about online group buying, I believe that I will receive other information from online group-buying vendors.
- Rec2 When I share my information about online group buying, I expect to receive the response that I need from online group-buying vendors.
- Rec3 When I share my information about online group buying, I believe that my queries for information on online group-buying vendors will be answered in the future.

Another latent variable, *Vendor's creativity*, was created by four observed variables, Cre1–Cre2. These observed variables measure the vendor's creativity,

which involves coming up with new ideas and new products to meet consumers' demands. To be precise, the respondents expressed their perceptions about the following:

- Cre1 The online group-buying vendor suggests new product ideas.
- Cre2 The online group-buying vendor often has new ideas about how to promote products.
- Cre3 The online group-buying vendor often has a new approach to selling products.
- Cre4 The online group-buying vendor develops new ways to meet consumer demands.

The third latent variable, *Trust*, was created by the observed variables Tru1–Tru2. These observed variables elicited trust, trust being consumers' confident belief in the online group-buying vendor's honesty towards the consumer. Specifically, we explored the respondents' perceptions about the following:

- Tru1 Online group buying gives me a feeling of trust.
- Tru2 I have trust in online group-buying vendors.
- Tru3 The online group-buying vendor gives me a trustworthy impression.

The fourth latent variable, *Reputation*, was formed by three observed variables, Rep1–Rep3. These variables measured whether the feeling of an increase in reputation is due to the sharing of information on an online group-buying vendor. To be precise, the following factors were measured:

- Rep1 Sharing my information on online group-buying vendors improves my image.
- Rep2 People in our life who share their information on online group buying have more prestige than those who do not.
- Rep3 Sharing my information on online group-buying vendors improves others' recognition of me.

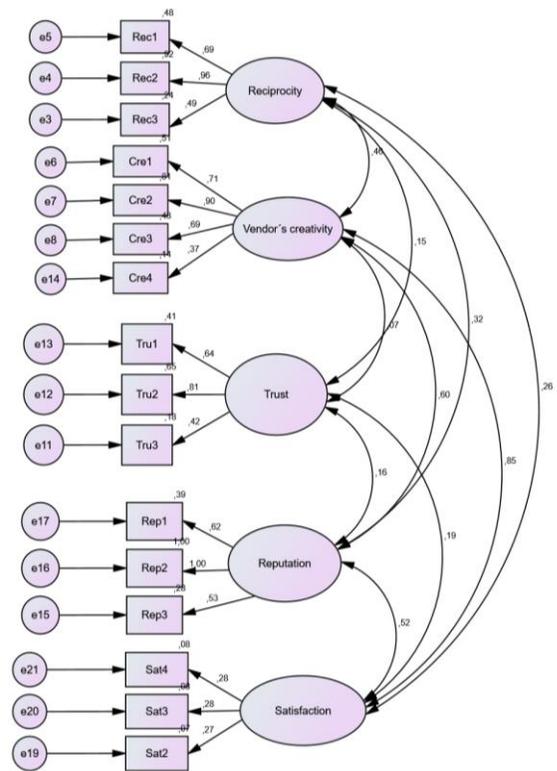
The last latent variable, *Satisfaction*, was measured by three observed variables, Sat1–Sat3. This indicator describes the consumers' perceptions of their prior shopping experience with the online group-buying vendor. To be precise, the following factors were evaluated:

- Sat1 I feel very satisfied with my overall shopping experience with online group-buying vendors.
- Sat2 I feel very pleased with my overall shopping experience with online group-buying vendors.
- Sat3 I feel very contented with my overall shopping experience with online group-buying vendors.

**4.1 Validity of the measurement model**

The results of the measurement model indicate that the chi-square equals 270,094 with 94 degrees of freedom. Figure 2 shows the relations between the variables in the measurement model calculated according to (1) and (2). The presented values of the standardized regression

coefficients were calculated in SPSS Amos 20. The significance level of 0.05 was applied.



**Figure 2** The measurement model

The relations between the observed and the latent variables are shown in Table 2. All the observed variables in the model are statistically reliable at the significance level of 0.05, except the variable *I feel very pleased with my overall shopping experience with online group-buying vendors* (Sat2, sig. = 0.174). See Table 2. This variable can produce a lower model fit with the data.

If we consider 0.5 as the minimum value for a significant relation between variables, there are observed variables with weak relations to their latent variable. Their actual values of the standardized regression coefficients are lower than 0.5, and these are the variables *I feel very satisfied with my overall shopping experience with online group-buying vendors* (Sat1, 0.412), *I feel very pleased with my overall shopping experience with online group-buying vendors* (Sat2, 0.251) and *I feel very contented with my overall shopping experience with online group-buying vendors* (Sat3, 0.331), measuring the latent variable *Satisfaction*. The variable *The online group-buying vendor gives me a trustworthy impression* (Tru3, 0.225) is not significant. In addition, the relation between the latent variable *Vendor's creativity* and *The online group-buying vendor develops new ways to meet consumer demands* (Cre4, 0.369) is not significant, the

same as the relation between the latent variable *Reciprocity* and *When I share my information about online group buying, I believe that my queries for information on online group-buying vendors will be answered in the future* (Rec4, 0.488).

The impact of the observed variable *Online group buying gives me a feeling of trust* (Tru1, 0.639) on its latent variable *Trust* is average. Furthermore, the impact of the observed variable *The online group buying vendor often has a new approach to selling products* (Cre3, 0.692) on its latent variable *Vendor's creativity* is average, and the same applies to the relation between the observed variable *When I share my information about online group buying, I believe that I will receive other information from online group-buying vendors* (Rec1, 0.692 measuring the latent variable *Reciprocity*). The latent variable *Reputation* is measured by two variables with an average impact: the variable *Sharing my information on online group-buying vendors improves my image* (Rep1, 0.626) and *Sharing my information on online group-buying*

*vendors improves others' recognition of me* (Rep3, 0.529).

In the model there are also observed variables with a strong impact on their latent variable. These are *The online group-buying vendor often has new ideas about how to promote products* (Cre2, 0.897), *The online group-buying vendor suggests new product ideas* (Cre1, 0.711) and the variable *Vendor's creativity*. In addition, the impact of the variable *I have trust in online group-buying vendors* (Tru2, 0.804) on the latent variable *Trust* is strong. The same is true of the impacts of the variable *When I share my information about online group buying, I expect to receive the response that I need from online group-buying vendors* (Rec2, 0.954) on the latent variable *Reciprocity* and the observed variable *People in our life who share their information on online group buying have more prestige than those who do not* (Rep2, 0.999) on the latent variable *Reputation*. These are the variables for which the most important impact on the Canadian customers' satisfaction with online group buying is expected.

**Table 2** Values of standardized regression coefficients in the measurement model (sig. = significance)

Latent variable	Observed variable	Sig.	Standardized regression coefficients
Trust	The online group-buying vendor gives me a trustworthy impression. (Tru3)	0.000	0.255
	I have trust in online group-buying vendors. (Tru2)	0.015	0.804
	Online group buying gives me a feeling of trust. (Tru1)	0.007	0.639
Satisfaction	I feel very satisfied with my overall shopping experience with online group-buying vendors. (Sat1)	0.000	0.412
	I feel very pleased with my overall shopping experience with online group-buying vendors. (Sat2)	0.174	0.251
	I feel very contented with my overall shopping experience with online group-buying vendors. (Sat3)	0.019	0.331
Vendor's creativity	The online group-buying vendor often has a new approach to selling products. (Cre3)	0.000	0.692
	The online group-buying vendor often has new ideas about how to promote products. (Cre2)	0.000	0.897
	The online group buying vendor suggests new product ideas. (Cre1)	0.000	0.711
	The online group buying vendor develops new ways to meet consumer demands. (Cre4)	0.000	0.369
Reciprocity	When I share my information about online group buying, I expect to receive the response that I need from online group-buying vendors. (Rec2)	0.000	0.954
	When I share my information about online group buying, I believe that my queries for information on online group buying vendors will be answered in the future. (Rec3)	0.000	0.488
	When I share my information about online group buying, I believe that I will receive other information from online group-buying vendors. (Rec1)	0.000	0.692
Reputation	Sharing my information on online group-buying vendors improves my image. (Rep1)	0.000	0.626
	People in our life who share their information on online group-buying have more prestige than those who do not. (Rep2)	0.000	0.999
	Sharing my information on online group-buying vendors improves others' recognition of me. (Rep3)	0.000	0.529

The goodness-of-fit indexes, specifically the comparative fit index (CFI) and the normed fit index (NFI), were applied to validate the proposed model. The CFI index was calculated using (4) and the NFI index was calculated using (5) in SPSS Amos 20; see Table 3.

**Table 3** Values of CFI and NFI for the tested model

Model	CFI	NFI
Default model	0.745	0.667

The CFI of the tested model takes the value of 0.745, which is a high value. In addition, the NFI, which takes the value of 0.667, shows that the proposed model fits the real data with a score of 67%.

These indexes show that there are some possibilities to improve the model fit with the data. We can expect there to be some variables that are not statistically reliable and significant.

The internal consistency as reliability was measured by Cronbach's Alpha, which was calculated for each latent variable in accordance with (6) in SPSS 20; the actual values are shown in Table 4.

**Table 4** Values of Cronbach's Alpha for each latent variable

Latent variable	Cronbach's Alpha	N of items
Reciprocity	0.709	3
Vendor's creativity	0.712	4
Reputation	0.719	3
Trust	0.757	3
Satisfaction	0.771	3

According to the actual values of Cronbach's Alpha, all the latent variables are valid, because each actual value of Cronbach's alpha for each latent variable is higher than 0.7; thus, it is possible to state that this model is valid.

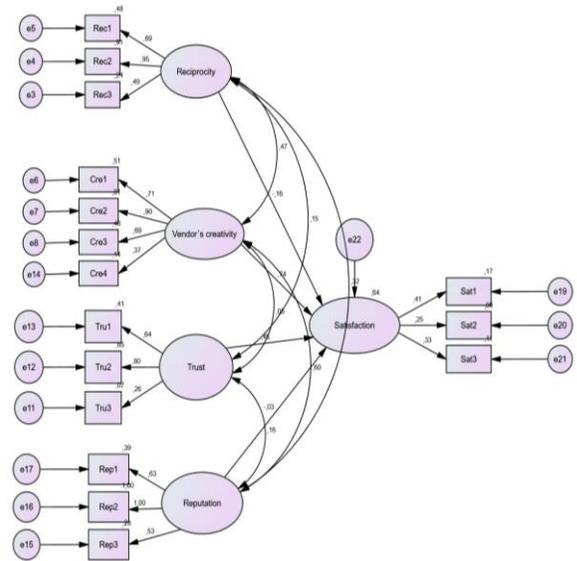
**Validity of the structural model**

The results of the structural model indicate that the chi-square equals 277,824 with 95 degrees of freedom. Figure 3 shows the relations between the observed and the latent variables calculated according to (1) and (2). In addition, the relations between the latent endogenous and the latent exogenous variable that were calculated according to (3) are shown in Figure 3. The presented values of the standardized regression coefficients were calculated in SPSS Amos 20, applying the significance level of 0.05.

The following Table 5 shows the values of the standardized regression coefficients in the structural model.

If we consider the significance level of 0.05, the relations between the latent variables *Reciprocity* and *Reputation* and the latent variable *Satisfaction* are not

statistically reliable and significant. The relation between the latent variable *Trust* and the latent variable *Satisfaction* and the relation between the latent variable *Vendor's creativity* and the latent variable *Satisfaction* are statistically reliable. The variable *Vendor's creativity* is the most important factor affecting Canadian customers' satisfaction with online group-buying purchases (0.735), followed by the variable *Trust* (0.454). The relation between the variables *Trust* and *Satisfaction* is weak, but the relation between the variables *Vendor's creativity* and *Satisfaction* is strong. These variables explain 64.5 % of the variability of the variable *Satisfaction* according to the coefficient of determination.



**Figure 3** The structural model

**Table 5** Values of standardized regression coefficients in the structural model (sig. = significance)

Latent endogenous variable	Latent exogenous variable	Sig.	Standardized regression coefficients
Satisfaction	Reciprocity	0.403	-0.161
Satisfaction	Reputation	0.873	-0.034
Satisfaction	Vendor's creativity	0.006	0.735
Satisfaction	Trust	0.000	0.454

The goodness-of-fit indexes, specifically the comparative fit index (CFI) and the normed fit index (NFI), were applied to validate the proposed model. The CFI index was calculated as (4) and the NFI index was calculated as (5) in SPSS Amos 20; see Table 6.

**Table 6** Values of CFI and NFI for the tested model

Model	CFI	NFI
Default model	0.735	0.657

The CFI of the tested model takes the value of 0.735, which is a high value. In addition, the NFI, which takes the value of 0.657, shows that the proposed model fits the real data with a score of 66%. These indexes show that there are some possibilities to improve the model's fit with the data. The variables producing a lower model fit with the data are those variables discussed above that are not statistically reliable and significant.

**5. Discussion about the factors affecting Czech and Canadian online group-buying satisfaction**

The comparison of the factors affecting customers' satisfaction with online group-buying purchases in Canada and in the Czech Republic is shown in the following Table 7.

**Table 7** Comparison of the relations between variables for Czech and Canadian customers

<i>Latent exogenous variable</i>	<i>Latent endogenous variable</i>	<i>Czech customers (Pawlasová, 2015)</i>	<i>Canadian customers</i>
Reputation	Satisfaction	Rejected	Rejected
Reciprocity	Satisfaction	Rejected	Rejected
Trust	Satisfaction	Accepted	Accepted
Vendor's creativity	Satisfaction	Accepted	Accepted

As mentioned in Table 7, the results of the comparison of customers' behaviour are very similar. According to Pawlasová (2015), Czech customers' satisfaction with purchases from online group-buying websites is affected the most by trust. Trust is the second most important factor for Canadian customers of online group-buying websites. It was found that both Czech and Canadian customers need to have trust in online group-buying providers and that the online group-buying provider has to give them a trustworthy impression. These are the most important indicators of Czech and Canadian customers' satisfaction. Therefore, online group-buying providers in both countries should increase customers' trust in this method of buying.

There is another similarity between the indicators that influence customers' satisfaction with online group buying in the Czech Republic and Canada. Whilst the vendor's creativity is the second most important indicator influencing the satisfaction of Czech customers according to Pawlasová (2015), the vendor's creativity is the most important factor for Canadian customers. The online group-buying vendors need to have new ideas about how to promote products and they have to suggest new product ideas.

Except for the similarity mentioned above, Canadian and Czech customers claim that reputation

and reciprocity are not important factors for them. This indicates that customers from these countries are more introverted and less grouped.

**5.1 Managerial implications and suggestions**

If the management of online group-buying websites wants to create a trustworthy impression and establish trust between the websites and their customers, it is possible to recommend money refunds if there is a problem with the service, insurance for vouchers or the possibility to withdraw from the contract after a longer period than 14 days. The providers can also set up security gates for payment, certificates of quality and security certificates, and they can become members of associations of online group buying.

Canadian customers also greatly appreciate the online group-buying provider developing new ways to meet consumers' demands and often having new ideas about how to promote products or new approaches to selling products. Managers should keep in mind that their customers like online group buying, which is quite a new way of purchasing. This follows the assumption that customers prefer novelty in every area of product purchasing.

As well as this method of customer satisfaction measurement, managers of online group-buying websites can also use additional product quality controls, for example mystery shopping.

**5.2 Research limitations**

The potential limitations of this research lie in the application of the social exchange theory as well as the other factors affecting customer satisfaction with online group-buying purchases. Therefore, it is recommended to apply another theoretical base to identify other important indicators. This could be for example the social capital theory, the theory of planned behaviour or DeLone and McLean's information success model.

This quite new way of buying is interesting mainly for young people and probably also for people who like novelty. It is possible that the vendor's creativity could be one of the important factors affecting customers' satisfaction for this reason.

**6. Conclusion**

This paper focuses on the indicators affecting customers' satisfaction with purchases made on online group-buying websites, because the prior studies have found that only a small minority of online customers return to the websites to make another purchase (Gupta and Kim, 2007; Qureshi et al., 2009) and that there is an expectation that a high consumer satisfaction rate can increase consumers' loyalty to the provider significantly (Zamazalová, 2009).

First, the factors influencing customers' satisfaction with online group buying in Canada were identified and then a comparison of the results with those from the Czech Republic was conducted. The social exchange theory was used to identify these indicators. The indicators, such as reciprocity, reputation and trust, are groups of variables that affect customers' satisfaction with online group buying according to this theory. According to the literature review, the indicators coming from this theory can be extended with the vendor's creativity.

The aim of this paper was to identify the factors affecting customers' satisfaction with online group-buying websites in Canada and to compare the results with those of Czech customers. This paper includes the theoretical backgrounds of online group buying and the social exchange theory, which is the base of the tested model. Structural equation modelling was conducted to evaluate the proposed model in the Canadian conditions and to find the optimal model with the most significant indicators. The theoretical background of this method, including the forms that were used for calculating the results, are also part of this paper.

This research demonstrated that the vendor's creativity is the most important factor affecting Canadian customers' satisfaction with online group-buying purchases and the second most important factor affecting Czech customers' satisfaction with online group-buying purchases. Czech and Canadian customers also agree that reciprocity and reputation are not important indicators for them. A further difference between indicators that influence customers' satisfaction with online group buying in the Czech Republic and Canada was found. Whilst trust is the most important indicator influencing the satisfaction of Czech customers, it is the second most important indicator for Canadian customers.

Managerial implications, suggestions and research limitations are also mentioned in this paper. The online group-buying providers in both countries should create a trustworthy impression and increase customers' trust in this method of buying.

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