Introduction
Over the last few years, on-line shopping has become a common part of our life. The new millennium has brought intensive growth of electronic entrepreneurship. In comparison to the traditional retailing, on-line shopping provides to the customers more values and benefits associated with time saving, wide product assortment, price and product characteristics comparison that enhance on-line shopping expansion. On-line shopping has a huge potential for the future growth which is accelerated by new technology development, clear legislation as well as the safety aspects of on-line shopping process.

Besides the sales of goods and services, on-line shopping using electronic tools enables also activities such as marketing, promotion, order confirmation, delivery, guarantee and after guarantee claim management. On-line shopping using electronic tools includes all business activities and communication between suppliers and customers, and is considered to be an electronic gate used for reaching customers (Norris, West, & Gaughan, 2001). Further differentiation of on-line shopping into the sub categories such as click-only-marketers or click-and-mortar marketers (Zamazalová, 2009) provides other specifics of on-line shopping such as a possibility to try or test the goods, which encourages some customers in their decisions to shop on-line. This fact partially disproves former statements that on-line shoppers do not have possibility well experience sensory implications during the shopping such as atmosphere, touch, aroma or flavour due to its limitations (Steward & Zhao, 2000). On the other hand, bad experience with on-line shopping gained for example by problems to return goods due to wrong size, pattern or material is responsible for creating a negative customer approach towards future on-line purchases. There is no doubt that the ease of use on-line shopping order procedure and a possibility to shop “from the table” leads to customer’s time saving, convenience and life improvement. The benefits and sacrifices offered by on-line shopping represent important attributes that can have different values and importance for different on-line shoppers. The perceived customer value offered by on-line shopping is a result of the variation between customer benefits and sacrifices that forms customer satisfaction. Each customer evaluates the attributes gained in different phases of the transaction procedure before, during and after shopping subjectively by his or her perception. It is important for companies to explore on-line shopping attributes that are important for their customers, in order to create and deliver the value to them. On-line shopping brings completely new aspects of shopping not only to customers but to companies as well. It enables companies to achieve higher effectiveness and cost reduction in supplier chain and to provide a new kind of added value for the customers. There is no surprise that companies take advantage of this new occasion and pay maximum attention to creation of value attributes that are positively perceived and appreciated by customers (Bucklin, Lattin, Ansari, Gupta, Bell, Coupey et al., 2002).

The paper explores attributes of customer value associated with on-line shopping under the condition of the Czech clothing market. The objective of the paper is to identify the most important attributes of perceived customer and explore trends for customer segmentation in terms of the identified customer value attributes in clothing on-line shopping. There are many criteria that can be applied for customer segmentation (Novotný & Duspiva, 2014). However the research focuses on demographics...
such as gender, age and education, and shopping behaviour using the online shopping frequency and the amount of money spent on clothing bought online. In correspondence with the objectives, the following hypotheses were developed to be investigated by the following data:

Hypothesis 1: The perception of customer value attributes when shopping for clothes online differ by gender, age and education of online customers.

Hypothesis 2: The perception of customer value attributes when shopping for clothes online differ by the frequency of online shopping and the amount of money spent on clothes shopped on-line.

For the purpose of the study, the research on clothing online shopping was conducted within the Czech Republic in 2014. It was an exploratory research applying a phenomenological approach.

1. Customer Value Concept

Customer value concept started to be an important phenomenon within the last decades. This concept encompasses two aspects that define customer value. Customer value can be defined as a value for customers (in literature known as perceived customer value), i.e. what customers gain by purchase or usage of products or services. Perceived customer value is an important factor for acquisition and retaining customers (Khalifa, 2004). Another approach to customer value conception reflects the value of customers to the company (known as customer life-time value), i.e. what customers bring to the company when buying its products. Both conceptual approaches are connected and interrelated. If a company offers a value to customers, they buy products, form positive experience and attitudes and what is more, they recommend products to others. Customers buying company’s products bring the value to the company by contributing to its turnover and profit.

The concept of perceived customer value has been originally developed from the service quality concept since the quality is considered to be an important part and a predictor of customer value. As mentioned by Mathwick, Malhotra, and Rigdon (quoted by Lee and Overby, 2004) “service excellence is the dimension that involves quality judgment for services offered during and after the online shopping”. The other concept closely related to the perceived customer value is customer satisfaction. According to Kotler and Keller (2007) “the level of satisfaction of a customer’s expectations is linked to how the customer perceives and values the purchased product”. Customer value is a basis, a prerequisite for achieving customer satisfaction and customer loyalty. These two concepts are important factors in attracting and retaining customers. Customers who are satisfied will create their positive attitudes towards products, company or a buying process. Positive perceptions of a value delivered to customers thus influences customers’ favourable attitudes. For this reason, perceived customer value has become the key concept in marketing strategies and the factor of competitive advantage. Price is considered to be another important aspect of the customer value concept. It is often regarded as the main driver in customers’ decision making process, however not the only one. Price and quality, taken in a simplified way, are two significant dimensions representing benefits and sacrifices of perceived customer value, but similarly not the only ones. There are more dimensions such as affective and psychological ones that contribute to customer value and affect customer satisfaction.

The move from traditional 4P marketing mix to 4C marketing mix consisting of customer, cost, communication and convenience has been an important milestone from product oriented to customer oriented marketing models. New environment, knowledge and technologies require more interactive approach to customers, taking politics, public opinion, processes and individual needs into consideration. It is necessary to know the customers’ perceptions, meanings, attitudes and preferences in order to succeed in product and service sales. The driving power that determines the value is undoubtedly the customer. Companies, in response to customer’s needs and requirements, design value attributes and manage the whole customer value creation process (Vargo & Lusch, 2004). The main objective is to make customers satisfied (Novotný & Duspiva, 2014). For this reason, customer value has to be composed from customer perspective. Customer value thus becomes the key and strategic instrument of the company’s competitive advantage (Anderson, Narus, & Van Rossum, 2006).
Perceived customer value as a competitive advantage is closely related to customer shopping decision making process and satisfaction. This means that the customer compares the value attributes offered by the company not only with his or her own attribute importance and preferences, but also with the value attributes of competitors (Dědková & Blažková, 2014). From this point of view, perceived customer value can be quantified as the difference between benefits and costs of a product or service of two (or more) companies providing similar goods (Loštáková, 2009):

\[(\text{Benefit 1} - \text{Cost 1}) > (\text{Benefit 2} - \text{Cost 2})\] (1)

The company providing higher customer value usually has a better chance to succeed in the market. It may also happen that some customers do not prefer higher benefits, just the common ones. Then they will probably choose the goods with a lower price. The best alternative for the company is to offer products or services of a bigger variance between benefits and costs. Companies should be interested in searching which attributes influence customer shopping behaviour and why they are important to customers. These attributes are critical for value creation process. Knowing what factors influence and compose customer value from the customer perspective is the main tool for customer satisfaction leading to better company performance results.

There are two concepts in essence used in customer value attribute study. First concept defines the customer’s evaluation of attributes associated with benefit and sacrifice. The second multidimensional concept considers the attributes related to rational and economical evaluation on the one hand and emotional individual evaluation on the other hand. These attributes can be grouped into two dimensions: functional and affective ones. The functional dimension is defined by the rational and economic attributes including the quality of the product and service. The affective dimension includes emotional (relating to feelings and internal emotions) and social (related to the social impact of the purchase) aspects of the individuals (Červová, 2013).

Some studies focused on on-line shopping employ two types of value: utilitarian and experiential (Lee & Overby, 2004). Utilitarian value includes saving of time and money, unexceptionable services and is defined as aggregated group of functional benefits. Experiential value includes aggregated empirical benefits, which on-line shopping provides and enables to the customers (Lee & Overby, 2004). This value corresponds with emotional dimensions (Wikstrom, Carlell, & Henningsson, 2002) and includes hedonic and affective incentives of customer shopping behaviour (Babin & Attaway, 2000). The concept created by Heard (1993) specifies three factors of customer value based on product characteristics, purchase order and goods delivery, and transaction experience. From the customer’s point of view, the concept of customer value includes functional, social, emotional, epistemic and situational dimensions (Sheth, Newman, & Gross, 1991).

2. On-line Shopping in the Czech Republic

The beginning of commercial use of Internet is associated with the first electronic advertising banner created in 1994 (Langdorf, 2000). At that period, Internet was considered to be mainly a new communication channel used by companies. With a rapid increase of the Internet user base, companies have realized the power of Internet as the biggest information and communication phenomenon. Subsequently they have integrated it as a distribution channel to their sales strategies, as well. The statistics show that the share of on-line connected population has been increasing. Around 40 percent of the world population has an Internet connection these days. In 1994, it was just 0.40 percent. Twenty years later, in 2014, the number of Internet connections has reached the third billion. About 48 percent of all Internet users worldwide live in Asia, 22 percent in North and South America and 19 percent in Europe. China represents 22 percent of the total Internet users in the world. The highest share of population connected to Internet is in the United States, France, UK, Germany, Japan and Canada. More than 80 percent of population in mentioned countries has Internet connection. However, the biggest annual growth of Internet connected population (about 17 percent) is in Uganda, Angola and Zimbabwe (Internet live stats, 2014).

Trends in the Czech Republic are similar to the EU countries. The number of households connected to Internet increased from 19
percent in 2004 compared to 56 percent in 2011 and 67 percent in 2012 (ČSÚ, 2013). It is obvious that firms need to respond to those trends and meet their customers where they are on-line. By now, 94 percent of the Czech Internet users have completed shopping via Internet. Statistics showed that there were more men than women shopping on-line in the period of 2009-2011 (ČSÚ, 2012). However, the differences in on-line shoppers by gender have almost diminished in last years. Women on maternity leave have formed strong on-line shopping group representing 54 percent of the on-line shopping population. They make more on-line purchases than students and retired persons together (ČSÚ, 2013). The Marketing Journal introduced the following figures related to on-line services used by the Czech on-line shoppers in 2012. About 74 percent of Internet users purchased services on-line, 51 percent of them used the price comparative portals, 31 percent used the discount portals and 9 percent did not recognized or did not know which services they had actually used (Michl, 2012). According to the Ecommerce 2013 research, about 90 percent of the Czech internet users shopped on-line at least once a year, 47 percent of them shopped on-line at least once a month. Almost all on-line shoppers (99 percent of them) had a positive experience and were satisfied with their shopping on-line (Marketingové noviny, 2013, September).

The most common goods bought on-line are clothing, shoes, electronic, computers, notebooks, hardware and sport equipment (Marketingové noviny, 2014, October), (Marketingové noviny, 2013, September). Shopping clothing on-line is rapidly growing. Whereas in 2010 clothing was the most frequently bought merchandise online for 36 percent of online shoppers, in 2013 more than 43 percent and a year later 48 percent of online shoppers reported that had bought clothes on-line. On average, people buy clothing on-line about four times a year. Customers appreciate mainly wide assortment, good selection of fashionable brands and price (Marketingové noviny, 2013, March). The amount of money spent on on-line shopping is growing, as well. The turnover of e-shops was 67 billion CZK (Marketingové noviny, 2015, July).

There are about 2,500-3,000 e-shops specialising in clothing assortment in the Czech Republic. Aukro.cz with more than 2.5 million customers and the annual turnover of more than 405 million Czech crowns is probably one of the largest e-shops selling clothing on-line in the Czech Republic. Aukro operates its own outlet offering the brands such as Guess, D&G, Tommy Hilfiger, Ed Hardy and others. More than 77 percent of their customers buy clothing on-line regularly (Marketingové noviny, 2012, February).

3. Conceptual Framework of the Study

Customer value concept used in the research was defined and measured in terms of functional and affective dimensions. The functional attributes included aspects of the web site design, assortment, price, goods payment and shipping. The affective attributes concerned the customer’s impression of the website, ease of use, communication and trust related aspects. The perception of selected customer value attributes was measured as customer satisfaction, i.e. as a result of a congruence between the perceived and evaluated reality (benefits and sacrifices offered by on-line shopping), and customer expectations. The attributes evaluated the best were those that contributed to customer satisfaction the most and thus represented important attributes of customer value dimensions. Customer satisfaction and loyalty are important factors influencing customer shopping behaviour. Satisfied customer will not only repeat the purchase, but will also spread positive references related to the firm or brand.

4. Research Methodology

The objective of the research was to explore customer value perception towards clothing on-line shopping in the Czech Republic and identify trends for market segmentation. For this purpose, an exploratory research using survey as a research strategy was conducted in the period of March-May 2014. Data were collected by electronically-administered questionnaires using social networks, as well.

Respondents were Internet users experienced with on-line shopping. They were men and women of different age and income levels.
Since there was no population framework of population buying clothing on-line in the Czech Republic available, non-probability quota sampling method was used. The sample followed the structure of on-line shopping population identified by previous research (Marketingové noviny, 2013, March), (Marketingové noviny, 2013, May). Clothing is the product category bought online by women the most often (Marketingové noviny, 2013, March). According to NMS Market Research (Marketingové noviny, 2013, March), women represent the largest proportion (57 percent) of all shoppers who bought clothing online. The number of women shopping online increases every year. Since 2007 the proportion of on-line shopping women tripled. The share of Czech women shopping on-line is larger compared to the proportion of women in Slovakia, Hungary, Poland, France or Germany (Marketingové noviny, 2013, May). The structure of on-line shopping population differs by age, education and income, as well. It is known that the number of on-line shopping customers increases with their education and income. In terms of age, the largest proportion (49 percent) of on-line shopping customer is in age of 21-30 years in comparison to the age category of 51-60 years, of which only 14 percent shop on-line. On-line shopping and on-line video have become an important part of daily life for about 40 percent within all economically active women (in group age of 20-60 years) and for almost all women in age up to 35 years (Marketingové noviny, 2013, May).

The sample reflects general characteristics of the Czech online shoppers profile presented by the previous research conducted in the Czech Republic so far, and thus can be considered as representative. The sample included 334 respondents, of which 57 percent were women and 43 percent men. The average age of the respondents was 32.67 years. About 75 percent of the respondents were employed, the rest of the respondents were students. Approximately 34 percent of the respondents completed the secondary level of education and 47 percent of them achieved the university degree.

Descriptive analysis was used to interpret the findings of the research. Means were used to get descriptive information and understand the perception of the selected customer value attributes for respondents when shopping clothes on-line. Multivariate data analysis, in particular factor analysis was used to identify the main elements of customer value in regards to their importance. A principal components analysis and orthogonal Varimax rotation were used in the analysis to obtain factors that respondents considered to be the attributes of the perceived customer value for shopping clothes on-line. Attributes identified by factor analysis were statistically tested by ANOVA and t-test in order to explore differences in their perception by gender, age and income categories, shopping frequency category and the category of money spent on clothing bought on-line (Kozel et al, 2006, p. 100-102).

5. Findings of the Research
On average one respondent made about 7 on-line purchases and spent annually CZK 5,625 on clothes. About 49 percent of respondents made less than 5 purchases, 36 percent made 6-9 purchases a year. Most of them (61 percent) spent on clothes bought on-line CZK 1,000-5,000 a year. About 10 percent of them spent between CZK 10,000 and 20,000. In general, most of respondents (78 percent) were satisfied with their purchases of clothes on-line. Only 12 percent respondents stated that shopping on-line did not meet their expectations.

5.1 Customer Value Attributes towards Shopping Clothes On-line
The attributes of customer value used in the study were generated by the focus group interview carried with 12 respondents. In total, 25 attributes considered to be important for on-line shopping were selected for the questionnaire and explored further in the primary research. The attributes were grouped into seven dimensions such as website appearance, technical aspect of website, assortment, price, communication, shipping, and trust. The dimensions included attributes of benefits (e.g. product assortment and selection, shopping convenience, goods return policy and references from other on-line shoppers) and sacrifices (e.g. price, risk related to goods order and payment, anonymity of the seller – no personal contact, complicated claim policy and lack of physical contact in terms of product presentations).

Customer value attributes towards shopping clothes on-line were evaluated by a five-point Likert scale where 1 meant very unsatisfied, 5 very satisfied. The table 1 shows the mean
scores for each customer value dimension measurement.

The findings of the research on customer value attribute evaluation in clothing on-line shopping have shown that all dimensions of customer value were evaluated well. Respondents expressed rather good satisfaction with all dimensions of the customer value. The best evaluated attributes were associated with the technical aspects of the website (3.79), communication with customers (3.70), shipping (3.66), the web site appearance and the impression the web site makes on respondents (3.65). Attributes related to a product assortment and selection, trust and reputation, and price received lower mean scores. Respondents were slightly less satisfied with those attributes.

5.2 The Main Customer Value Dimensions Identified by the Research

To summarise the findings presented above and reduce them into a smaller number of factors in order to identify the underlying dimensions in customer value, factor analysis was used. Six factors with eigen values larger than or equal to one explaining almost 64 percent of the total variance in the data were extracted in terms of customer value components. The results of principal component analysis are presented in the table 2 below.

Orthogonal Varimax rotation assuming that resulting factors are uncorrelated was used to identify factors that could represent the main attribute dimensions of customer value for shopping clothes on-line. The factor analysis was conducted on twenty five variables. The variables with factor loadings lower than 0.5 showing relatively low correlations of the variables with the factors were excluded and the analysis was repeated again. Finally, there were six factors including 17 variables (KMO = 0.748, p = 0.000) gained by the factor analysis. The contribution of each variable to the identified six factors of customer value in terms of benefits and sacrifices was specified by the correlations of the variables with the factors. The factors were named and described according to the highest (rotated) factor loadings that showed relatively high correlations of the variables with the factors. The table 3 displays coefficients (loadings) that relate variables to the six rotated factors.

The first extracted factor explaining 14 percent of the total variance of perceived customer value includes four variables that are associated with the website design and appearance. It concerns the functional aspects of the website such as web design and affective aspects related to the website impression, i.e. how easy or difficult as well as pleasant/unpleasant is to browse the web site to find a product or to use the website, at all. Another important aspect of this factor is communication with customers and fast response to the customer’s order. Customers wish to be informed on their orders processing and shipping.

Another important factor for shopping clothes on-line is shipping – general shipping terms, the need for fast and flexible shipping
### Tab. 2: Results of Principal Component Analysis (Rotation sums of squared loadings)

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
<th>Percentage of variance</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.084</td>
<td>14.054</td>
<td>14.054</td>
</tr>
<tr>
<td>2</td>
<td>1.697</td>
<td>12.121</td>
<td>26.175</td>
</tr>
<tr>
<td>3</td>
<td>1.563</td>
<td>10.423</td>
<td>36.599</td>
</tr>
<tr>
<td>4</td>
<td>1.322</td>
<td>10.117</td>
<td>46.716</td>
</tr>
<tr>
<td>5</td>
<td>1.105</td>
<td>8.907</td>
<td>55.622</td>
</tr>
<tr>
<td>6</td>
<td>1.035</td>
<td>7.940</td>
<td>63.562</td>
</tr>
</tbody>
</table>

Source: own

### Tab. 3: Varimax Rotated Component Matrix

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Factor</th>
<th>Web site</th>
<th>Shipping</th>
<th>Annoyance</th>
<th>Assurance</th>
<th>Product presentation</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web impression</td>
<td></td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web design</td>
<td></td>
<td>0.680</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast response</td>
<td></td>
<td>0.647</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-shop communication</td>
<td></td>
<td>0.608</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.751</td>
<td></td>
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<tr>
<td>Flexible shipping</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.678</td>
<td></td>
</tr>
<tr>
<td>Fast shipping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.631</td>
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<td>Shipping conditions</td>
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<td></td>
<td></td>
<td>0.586</td>
<td></td>
</tr>
<tr>
<td>Goods return and money-back policy</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.811</td>
</tr>
<tr>
<td>Difficult to use</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.669</td>
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<tr>
<td>Transaction security</td>
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<td></td>
<td>0.823</td>
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<tr>
<td>Customer care (service)</td>
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<td></td>
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<td></td>
<td></td>
<td>0.745</td>
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<tr>
<td>Information reliability</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.609</td>
</tr>
<tr>
<td>Pictures of products</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.851</td>
</tr>
<tr>
<td>Product description</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.733</td>
</tr>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.698</td>
</tr>
<tr>
<td>Relevant information</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.603</td>
</tr>
<tr>
<td>Percentage of variance</td>
<td></td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Extraction method: Principal component analysis  
Rotation method: Varimax with Kaiser normalisation

Source: own
allowing a choice of different courier companies. Since many customers prefer to pay at the delivery, the payment terms and a choice of the payment method are also important. The factor of shipping explains more than 12 percent of the total variance of the perceived value for online clothing shopping.

The following two factors named annoyance and assurance are the factors that considerably influence customers’ purchase intentions. Annoyance factor is associated with goods return and money-back policy and ease or difficulty to use the website and to follow the navigation to make an order online. This, to some extent, depends on customer’s computer skills and his or her skills prior experience with Internet and/or online shopping. Annoyance factor represent aspects that may discourage customers from shopping online. However, the factor named assurance is even more important. It represents perceived uncertainty and risk attributes associated with the purchase online. Transaction security (security of payment, financial security, loss of privacy due to information provided when shopping online), providing true and reliable information, and good customer service represent a sacrifice factor that may limit the willingness of customers to shop online, as well. These two factors explain almost 21 percent of the total variance of the perceived customer value toward shopping clothes online.

Subsequent extracted factor explaining almost nine percent of the total variance of customer value toward shopping clothes online is associated with a product presentation on the website. The product photographs and description are the only attributes to catch customer attention and persuade him or her to make a purchase. A customer cannot see and touch the product physically. What is more in terms of purchasing clothes online, a customer cannot try on selected clothes and may have a difficulty to imagine how he or she would look like when wearing the clothes.

The sixth factor titled trust is related to the customer e-shop perception, its reputation and image. This factor can be considered to be another sacrifice factor that may lower the benefits of online shopping. Providing relevant information such as an address of the e-shop, telephone number and e-mail address enabling a personal contact with a customer, references and certain quality certificates may reduce a risk and increase trust of the customers.

The variables constituting six customer value attributes extracted by the factor analysis are presented in the table 4 below.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Number of variables</th>
<th>Customer evaluation</th>
<th>Variability percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>4</td>
<td>3.72</td>
<td>14.054</td>
</tr>
<tr>
<td>Shipping</td>
<td>4</td>
<td>3.64</td>
<td>12.121</td>
</tr>
<tr>
<td>Annoyance</td>
<td>2</td>
<td>3.69</td>
<td>10.423</td>
</tr>
<tr>
<td>Assurance</td>
<td>3</td>
<td>3.47</td>
<td>10.117</td>
</tr>
<tr>
<td>Product presentation</td>
<td>2</td>
<td>3.46</td>
<td>8.907</td>
</tr>
<tr>
<td>Trust</td>
<td>2</td>
<td>3.60</td>
<td>7.940</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>3.60</td>
<td></td>
</tr>
</tbody>
</table>

In comparison to the customer value dimensions (technical aspects of the website, communication with customers, shipping, first impression on the website, assortment, trust and reputation, and price) used in the conceptual framework of the study, the factor analysis identified six dimensions of perceived customer value toward shopping clothes online (see Tab. 4), and reduced the number of variables from 25 to 17. Whereas three factors (web site appearance, shipping and product presentation) are functional and can be attributed to the benefits that customers expect to get when shopping clothes online, the other three extracted factors (annoyance, assurance and trust) are affective and risk related ones,
and can be labelled as attributes of sacrifice.

Attributes identified by factor analysis were statistically tested by ANOVA and t-test in order to explore differences in on-line shopper perception by gender, age and income categories, shopping frequency category and the category of money spent on clothing bought on-line. Statistically significant differences in on-line shopper customer value attribute perception by gender were found in perception of web design (F = 4.405, p = 0.036) and providing relevant information (F = 7.996, p = 0.005). Women were more satisfied with the web design and provided information than men.

In terms of age (F = 3.291, p = 0.006), it was statistically proved that older people were satisfied with the speed of the e-shop response to a greater extent rather than younger people and people in productive age. Exploring differences in on-line shoppers perception by education, it was found that the overall web impression (F = 2.939, p = 0.033) and flexibility in shipping (F = 3.648, p = 0.013) were perceived by on-line shoppers differently. Shoppers with the secondary and higher education had more positive web impression and were more satisfied with the e-shop flexibility in shipping. Testing differences in customer on-line value attributes perception by on-line shopping behaviour, the findings show that online shoppers who spend more on clothing bought on-line are also more satisfied with the delivery speed (F = 5.722, p = 0.001). On-line shopping frequency had no influence on on-line shoppers perception of customer value attributes.

Conclusions
This article attempts to identify perceived customer value dimensions of on-line clothes shoppers as the key antecedents that are likely to influence consumer purchase process in B-to-C e-commerce. There is a clear indication in the literature that customer satisfaction is influenced by customer value and customer value contributes to an increase of customer satisfaction. These facts were considered in the research design. The variables used in the study on perceived customer value attributes were evaluated in terms of customer satisfaction instead of using a scale that enables respondents to express their views or perceptions of the selected items.

The attributes identified by factor analysis are the attributes of benefits and sacrifices. The research showed relatively high satisfaction with all identified customer value dimensions in clothing online shopping. If customers are satisfied even with the sacrifice attributes, it shows that the negative impact of those attributes on perceived customer value and customers’ purchase intention was eliminated by e-shops to such extent that it might be ignored by customers, or what is more, it is perceived as a benefit. For example, if there is almost no risk associated with the payment, transaction security, shipping or goods return in case the clothes do not fit, these attributes can be perceived as benefits and certainly encourage customers to on-line shopping.

The most important dimensions that represent attributes of the perceived customer value concept for shopping clothes on-line identified by the study are as follows: website appearance and design, shipping, product presentation, trust, assurance and annoyance caused mainly by the goods return and money-back policy. All those attributes including the sacrifice ones received a positive evaluation in terms of respondents’ satisfaction when shopping clothes on-line. Whereas the benefit dimensions of perceived customer value consist of functional attributes, the sacrifice dimensions are affective ones. They relate to the emotional and psychological aspects associated with trust and assurance.

It is important to mention that price was not identified as an attribute or even a variable composing a perceived customer value attribute. Price was among the variables that were excluded by factor analysis. Unfortunately there is no clear explanation for this finding. This would certainly require more attention and further exploration in another research study. One could only speculate why customers neglect the price when shopping for clothes on-line. One of the possible clarifications could be the fact that it is difficult to compare and look for lower price of clothes simply because internet offers such a big variety of clothing therefore it is difficult or almost impossible to find two exactly the same pieces of clothing on internet and choose the one with the lower price.

Nevertheless, the findings of the research study suggest that providing a user friendly web site with a good product presentation, favourable shipping conditions as well as reducing perceived risk by trust, assurance and favourable shopping experience are the
attributes that enhance perceived customer value in on-line shopping for clothes.

Another conclusion drawn from the findings gained by testing the stated hypothesis is that the Czech clothing online market is still rather homogenous. The number of identified customer value attributes perceived differently by on-line shoppers according to their gender, age and education was very low. There were one or two attributes out of seventeen perceived differently by each demographic category. There was one customer value attribute perceived significantly different by on-line shopper according to their spending on clothing bought online. There were no significant differences in customer value attribute perception found by the frequency of online shopping. The future research shows whether the identified differences will form the base for customer segmentation of the Czech clothing on-line market.

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ATTRIBUTES CONTRIBUTING TO PERCEIVED CUSTOMER VALUE IN THE CZECH CLOTHING ON-LINE SHOPPING

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This paper, based on the literature study, presents findings of the research focused on the concept of customer value in on-line shopping for clothes. It examines and identifies attributes of perceived customer value in terms of benefits and sacrifices by applying a multi-attribute model.

Customer value concept used in the research was defined and measured in terms of functional and affective dimensions. The perception of selected customer value attributes was measured as customer satisfaction, i.e. as a result of a congruence between the perceived and evaluated reality (benefits and sacrifices offered by on-line shopping), and customer expectations. The attributes evaluated the best were those that contributed to customer satisfaction the most and thus represented important attributes of customer value dimensions. In total, 25 attributes considered to be important for on-line shopping were selected for the questionnaire and explored further in the primary research. A principal components analysis and orthogonal Varimax rotation were used in the analysis to obtain factors that respondents considered to be attributes of the perceived customer value for shopping clothes on-line. The factor analysis identified six dimensions of perceived customer value toward shopping clothes on-line: three factors (web site appearance, shipping and product presentation) are functional and can be attributed to the benefits that customers expect to get when shopping clothes on-line, the other three extracted factors (annoyance, assurance and trust) are affective and risk related ones, and can be labelled as attributes of sacrifice.

The number of identified customer value attributes perceived differently by on-line shoppers according to their gender, age, education and shopping behaviour was very low. This means that clothing online market is rather homogenous. The future research will show whether the identified differences will form the base for customer segmentation of the Czech clothing on-line market.

Key Words: On-line shopping, clothing, customer, customer value, attributes, Czech Republic.

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