

EVALUATION AND COMPARISON OF SELLING TERMS IN INTERNATIONAL E-COMMERCE

Arunas Burinskas¹, Galina Merkuryeva², Aurelija Burinskienė³

¹Attorney office, ²Riga Technical University, ³Vilnius Gediminas Technical University

Abstract

The article focuses on the complex and economic evaluation and comparison of selling terms provided by the international on-line sellers. Analysis of scientific literature on electronic commerce (e-commerce) published by Oxford University Press, Cambridge University Press, Harvard University Press, Springer, M. E. Sharpe, Routledge, etc. shows that 15% of the authors analyse only selling terms. Most of these authors investigate selling terms from an economic point of view and others, only about 1, 5 %, from a legal point of view. The authors that analyse selling terms give the same attention to the international and national issues, but more attention to the United States of America than to the European Union issues. So, the results of this analysis show the importance of research, which combines economic and legal terms, and give more attention to the European Union on-line sellers. The paper presents the results of investigations in this context.

In the study, consideration of selling terms is seen as a part of the analysis of purchaser's decision process where impacts of legal and economic aspects are essential. The same is for the products being sold at international level. Results of theoretical and practical studies show that implementation of internet technologies determines the necessity to identify and analyse the following key issues. The legal and economic aspects are not analysed together in scientific literature. Most of authors, which analyse legal aspects, do not consider economic aspects; the selling terms provided by on-line sellers are not widely analysed from economic perspectives; the selling terms concerning digital products are analysed in 2,4% of the books published in the area of e-commerce.

The study presented in the paper contains four different aspects. First, purchasers' rights, concerning products purchase via the internet, are disclosed. The difference between selling terms for digital and material products is presented. The main issues of the European Union on-line sellers related to the trade in international markets are overviewed. Second, the comparison of selling terms provided by on-line sellers located in 27 European Union countries is given. For comparison, a set of criteria which describe the main legal and economic aspects is selected, and the multi-criteria evaluation method (i.e., COPRAS) is used. Two groups of criteria are defined: the positive criteria, and negative ones. Finally, the complex evaluation of the effectiveness of selling terms of the on-line sellers is performed. Third, the economic evaluation of investments, which are made with the aim to improve selling terms, is presented. The economic impact for purchasers' decisions of specific selling terms is analysed. Fourth, the selling terms of several international on-line sellers are compared; recommendations for on-line sellers are given; the selling terms concerning digital products are revised.

The article is based on the comparative and multi-criteria analysis, and economic evaluation. The results of the study show that the complex and economic analysis of selling terms is very important for understanding cross-border purchasing decisions. The main advantage of complex and economic approach is that it allows determining the impact of different aspects to the purchasers' decisions. In addition, this makes possible to identify which selling term is the most important and provides some economic evaluation that can be used for improving selling terms in the future.

Keywords:

Selling via internet terms, legal and economic aspects, multi-criteria method, comparison of selling terms.

Introduction

Under the conditions of selling goods increase over the internet, the selling terms are becoming more important. Transactions that are conducted electronically, rather than in person, carry with them an inherent uncertainty to parties involved in purchasing goods (Tonglet et al., 2001).

In addition, there may be privacy concerns, relating to how the use of any information disclosed, may be limited. Purchasers must feel unhesitatingly comfortable with the security measures that businesses put in place to ensure security and confidentiality, and, in addition, must feel confident that these security measures are effective (Tonglet et al., 2001).

So, in this study, electronic commerce (e-commerce) conditions (selling terms) are considered widely: as conditions due to which a purchaser chooses to buy from the on-line store instead of the usual one, and on the other side, as conditions, which should be offered to purchaser to serve him in the best way. On the other hand, by making them public a seller is binding legally himself, in case offered conditions are accepted. It means there is a point of considering the legal and economic aspects of e-commerce conditions at the same time.

The review of economic science literature shows the needs for analysing the legal and economic aspects together. About 15% of the authors, which published books about e-commerce (in total, the authors have found 8.254 books), analyse selling terms mainly from an economic point of view. Most of authors, which analyse the legal aspects, do not consider economic ones. Also, the analysis shows that selling terms provided by on-line sellers should be analysed from economic perspectives as well.

The research is aimed to propose a profile, which will help to understand cross-border purchasing decisions.

The research tasks are defined as follow: 1) to disclose purchasers' rights, 2) compare selling terms provided by on-line sellers, 3) analyse the economic impact for purchasers' decisions of specific selling terms, and 4) give recommendations for on-line sellers.

Research objectives are evaluation and comparison of selling terms provided by the international on-line sellers.

The article is based on a comparative and empirical analysis, multi-criteria analysis (based on the COPRAS method), and economic analysis (based on the discounted cash flow method).

Scientific novelty of the study could be defined as follow. The complex and economic evaluation approach was used for understanding cross-border purchasing decisions. The multi-criteria analysis method, COPRAS, was applied for comparison of selling terms, provided by international on-line sellers; the discounted cash flow method was applied for economic evaluation of investments, which are made to improve selling terms.

Theoretical aspects related to cross-border purchasing decisions

Traditionally, vendors are selected from among many suppliers (i.e. domestic and international suppliers) on their ability to meet the purchasing requirements (Sevкли et al., 2008).

In the literature, various factors are mentioned as criteria, which are important during purchasing process, such, as price, delivery performance, reputation in the industry, size of the enterprise, geographical location, quality, environmental compliance, capacity, services, lead-time, packaging, etc. Phusavat et al. (2009) claim that the most important criteria for purchasing decisions are quality, cost, delivery, responsiveness, management, technical service, and environment/safety.

Jabbour et al. (2009) insert the environmental criteria, such as recovery of products into the supplier selection process.

Wu (2009) divides all research studies into two streams. The first stream of studies examines with each other related variables, such as cooperation, satisfaction, trust, and commitment. The second one focuses on the criteria for choosing suppliers, such as quality, on-time delivery, and costs.

Wu (2009) considers that the problem of choosing supplier so, that benefit can be maximized, is the most critical.

To identify the on-line seller selection problem, we conducted a detailed literature survey (mainly based on the works of Buyukozkan (2004); Choy et al. (2003); Kaklauskas et al. (2005); Stockdale et al. (2002)). Services presented in the on-line stores affect their sales. This means that on-line stores need to be well managed and functional. The products and services should be more effective and developed, and detailed in time. Thus, purchaser' market information and perfection are also related to this factor (Buyukozkan, 2004). Stockdale et al. (2002) point legislation, controlling the purchasing across the on-line seller.

By interviewing individual experts, who go in detail into purchasing from on-line stores, the following three categories are deduced for our study:

- Expected economic value of purchase. This provides motivation of a purchaser to buy; for example, a reasonable difference in prices comparing with the price, provided by national sellers, and costs, related to receiving purchase, including delivery costs, VAT and other taxes, custom clearance costs, etc.;
- Level of electronic process fulfilment. This includes privacy, payment and security issues; time-spent for searching a specific product in the on-line store and for its purchasing; currency exchange possibilities, etc.;
- Level of physical process fulfilment. This includes information about specifics of a purchaser' market

such as legislation, taxes, delivery, imports possibilities, etc.

The literature survey also showed that usually multi-criteria evaluation methods mentioned in the works of Aissaoui et al. (2007); Ng (2008); Sevkli et al. (2008); Vaidya et al. (2006); Wu (2009) are used for understanding purchasing decisions. In particular, the analytical hierarchy process (AHP) method is often used. It introduces a hierarchical structure to evaluate trade-offs between different criteria (Wu, 2009). Some researchers use the AHP approach to analyse costs, but the characteristics of the cost dimension need to be further investigated (Wu, 2009).

From the traditional point of view, the cost is the predominant criterion for buyers in the decision-making process because keen competition forces sellers to do the best in order to reduce buying and selling costs (Wu, 2009).

In our study for understanding purchasing decisions main attention is given to the costs for a purchaser (i.e., consumer).

For understanding purchasing decisions based on multi-criteria evaluation methods, the complex proportional assessment method, COPRAS, is used. It assumes direct and proportional dependences and weights of the criteria, as well as oppositely directed criteria.

Legal and economic aspects of the international e-commerce

International e-commerce, as a subset of the total e-commerce, generally involves on-line commitment to import or export of goods and services. For all the parties involved in the international e-commerce, such as an on-line seller (which is an exporter) and a purchaser (as an importer) the legal and economic aspects are important.

Many legal areas are affected by e-commerce practices. Purchaser's protection and users' agreements are both related to electronic transactions (Fustos et al., 2004).

There are two types of products, which are sold by enterprises:

- Material products; these products are physically shipped to a consumer;
- Digital products; these products are downloadable. Digital products appeared when material products had changed their type into digital (for example, books).

Of course, selling terms related to digital and material products have specifics. Some of them are stated in the Directive 1997/7/EC, which is called as "The protection of purchasers in respect of distance contracts".

There are also regulations for some of cross-border issues.

All conditions such as after-sales service, delivery complications, the application of guarantees/requests for refunds, and complaint-handling, have a regulatory dimension. These regulations are mentioned in the European Union (EU) purchaser's protection rules and their application in national law (Commission of the European Communities, 2009).

The survey of the Commission of the European Communities (2009) statistics shows that purchasers have worries about receiving or returning goods, complaints and redress (21%), payment card (15%), and delivery times being too long or delivery at home being problematic (8%). Because of this, the clearly stated selling terms for purchasers are very important.

There are a number of factors that restrain purchasers from shopping on-line. The first category of constraints has to do with trust. Trust is a vital factor for purchasers – they need to be assured that companies will protect their personal information. This means that sites required taking all necessary steps to protect the purchasers' personal data (Tran et al., 2002). In the report of the Commission of the European Communities (2009), it is stated that a major factor inhibiting purchasers is the fear of giving a credit card or personal details over the internet.

The second category of constraints involves purchasers' preferences. The main reasons, why purchasers are satisfied with the on-line stores, are the possibility to compare prices, the wider range of offers, the affordability of products and the choice of alternative suppliers. However, purchasers are less enthusiastic about aspects such as product information, the protection of privacy, the trustworthiness of the staff and the possibility to return goods (Commission of the European Communities, 2009).

The purchasers' rights are considered to be prominent issues (Stoney et al., 2003).

In the Directive 1997/7/EC is stated that "for any distance contract the consumer shall have a period of at least seven working days in which to withdraw <.> without penalty and without giving any reason. The only charge that may be made to the consumer <...> is the direct cost of returning the goods". It is also stated that "in any event the following must be provided: written information on the conditions and procedures for exercising the right of withdrawal. The consumer may not exercise the right of withdrawal provided for in respect of contracts: for the supply of goods made to the consumer's specifications or clearly personalized or <...> expire rapidly, for the supply of audio or video recordings or computer software which were unsealed by the consumer, for the supply of newspapers, periodicals and magazines, for gaming and lottery services".

Additionally, in Directive 1997/7/EC is mentioned that the consumer shall be provided with the following

information:

- (a) The identity of the supplier and an address for complaints;
- (b) The main characteristics of the goods or services;
- (c) The price of the goods or services including all taxes (This is also specified in the 2005/29/EC so: “the price inclusive of taxes, or where the nature of the product means that the price cannot reasonably be calculated in advance, the manner in which the price is calculated, as well as, where appropriate, all additional freight, delivery or postal charges or, where these charges cannot reasonably be calculated in advance, the fact that such additional charges may be payable”);
- (d) The arrangements for payment, delivery or performance;
- (e) The information on after-sales services and guarantees which exist.

The results of the survey of the Commission of the European Communities (2009) show that 71% of purchasers think it is harder to resolve problems such as complaints, returns, price reductions when on-line sellers are located in other EU countries. The complaints handled by the network of European Purchaser Centres show that most cross-border e-commerce complaints concern delivery (50% of cases handled in 2007, of which 88% concerned non-delivery), 11% of cases concerned problems with the terms of the sales contract (such as unfair contract terms, etc), and 6% of cases concerned prices and payments (for example, the imposition of supplementary charges, incorrect price during payment, etc.)

Cross-border e-commerce has the potential to enable purchasers to obtain products or services not available in their own country. But the results of the survey of the Commission of the European Communities (2009) show that purchasers have lack of information about cross-border transactions.

Based on information of the Custom department of Lithuania (2009), it is evident that the country of origin of purchased item cannot always match with the country of the shop. Sometimes goods, purchased in EU on-line stores, are delivered from Far East. So, this means that an item, which has a value between 21 and 350 Euro, will be additionally charged by 2,5-3,5% of import taxes, sometimes also by excise, and by VAT.

It is striking to consider that for a third of the EU purchasers the attractiveness of price savings would prompt them to purchase products on-line in another country. But the problem that it is difficult for purchasers to know what they will be charged for deters them to buy.

Usually, the final price of the product has to contain such details as VAT, shipment costs, taxes, etc. The survey of YouGovPsychonomics (2009) shows that

the final price of the item, which is purchased from the international on-line store has to be at least 10% lower than retail price of the same item presented at purchaser country.

Finally, practical implications show that purchasing decisions encompass the allocation of a limited amount of purchaser's money. Furthermore, the cross-border problems and the economics of parcel delivery may mean that in some instances, it simply may not be worth to purchase at all.

Comparison of selling terms by using multi-criteria method COPRAS

Costs of purchaser depend on solutions made by purchaser that's why all possible variants of decisions (when selling terms, provided by international on-line sellers, are evaluated) must be compared. The alternative solution of a purchaser differs in the price paid; guarantee period, delivery options and other aspects. Each decision-maker has own preferences and in most of cases is interested in economic aspects. Quantitative evaluation of such and other aspects allows us to determine their impact to the final purchasing decision.

Each alternative in the quantitative evaluation is described by several criteria. Various criteria are used in an assessment of alternatives. The criteria can be qualitative and quantitative. They usually have different measurement scales and differ in optimization direction (Turskis et al., 2009).

For many decades authors are dealing with multi-criteria problems. Multi-criteria decisions are taken in various areas of human activities. Numerous methods have been developed and new methods are continuously being created (Peldschus, 2009). One of such methods is the method of COMplex PROportional ASsessment of alternatives (COPRAS) that was first announced in 1994 by Zavadskas and Kaklauskas (1999). This method assumes direct and proportional dependences and adequately describes the alternatives, values and weights of the criteria (Turskis et al., 2009), and oppositely directed criteria (Ginevičius et al. 2008a). In scientific literature, the COPRAS method is well known and widely used (Andruškevičius, 2005; Ginevičius et al., 2009; Ginevičius et al., 2008a; Ginevičius et al., 2008b).

Based on this and other similar methods, the multi-criteria problem is represented by a matrix containing the alternatives (rows) and the criteria (columns). In order to avoid the difficulties caused by different dimensions of the criteria, the normalization procedure is used (Turskis et al., 2009).

The application of multi-criteria decision-making methods largely depends on the calculation of the criteria weights based on expert evaluation. The results obtained can be used for practical purposes, if experts'

judgments are in a good agreement (Podvezko, 2005). This may be determined by the concordance coefficient (Ginevičius et al., 2008a).

After expert evaluation, the decision matrix is normalized. The sum of normalized criteria values is always equal to one. The normalization aims at obtaining comparable scales of criteria values (Turskis et al., 2009).

The impact of normalization techniques on the decision results has been investigated by Migilinskas et al., 2007; Turskis et al., 2009; Zavadskas et al., 2008). They stated that it is hardly possible to evaluate the effect of various normalization methods to the decision matrix (Turskis et al., 2009). Thus, the classic normalization method is used in the case study.

For the problem of comparison of selling terms, it is hardly possible to rank the selling terms for international on-line sellers. This is because of the nature of the provided criteria, which could be better in some regions and worse in the others. Therefore, to get a generalizing solution of the considered problem, these criteria should be integrated into a single one (Ginevičius et al., 2009).

The situation is also complicated due to the fact that the criteria are of various dimensions or scales and directions. They are either maximizing or minimizing, implying that the growth of the value of some criteria means a higher value, while for other criteria it shows a lower value (Ginevičius et al., 2009).

In order to compare selling terms of on-line sellers, the above mentioned COPRAS is used. Complex evaluation of selling terms allows integrating criteria values into a single value; to evaluate criteria with different dimensions and directions and to include weights for them.

For comparison of main selling terms, the following criteria are introduced:

- Availability of terms and conditions (percentage of all offers);
- Information on right of withdrawal (percentage of all offers);
- Right of withdrawal: average length of period (in days);
- Unclear offers, Offer is not clear if VAT is included in the initial price (percentage of all offers);
- Orders, where final price is not given (percentage of all offers);
- Information on refunding (percentage of all offers).

Bellow (see Table 1), the type of each criteria, criteria direction - maximizing or minimizing (i.e. max or min in column 2, correspondingly) and its weight are defined.

All criteria used in decision matrix are quantitative. The criteria weights are based on expert evaluation. The criteria, which represent information about refunding, received the highest experts' interest. The coefficient of concordance is calculated by using Podvezko (2005)

guidelines. It is equal to 0,81 and shows that experts' judgments are in a good agreement.

Table 1. The basic information about criteria

Criteria	Criteria direction	Criteria weight
Availability of terms and conditions	Max	0,19
Information on right of withdrawal	Max	0,16
Right of withdrawal: average length of period	Max	0,09
Offers are not clear: if VAT is included in the initial price or not	Min	0,15
Orders, where final price is not given	Min	0,20
Information on refunding	Max	0,21

The latest statistical available data were used for comparison of selling terms. These data were collected by YouGovPsychonomics (2009) for survey "Mystery shopping evaluation of cross-border e-commerce in EU". Used statistical data covers international on-line sellers, located in 27 EU countries (according to the suffix or the registration of the company; in case the suffix is ".com", ".org", ".net", etc.). The above mentioned survey gives a very broad coverage of e-commerce in the EU, covering 4.000 different on-line retailers. In total, based on the mentioned survey, 10.964 cross-border offers for 400 on-line sellers were tested. 52% of on-line sellers were represented by one offer, 17% of stores - by two offers (from different product groups), and other on-line stores - by three offers.

The case study performed of authors shows that in the EU:

- Terms and conditions are available for 87% of cross-border offers;
- Information on right of withdrawal is available for 84% of cross-border offers;
- Offers are not clear: if VAT is included in the initial price or not, for 34% of cross-border offers;
- Orders, where final price is not given, for 85% of cross-border offers;
- Information on refunding is given for 64% of cross-border offers;
- The observed period of right on withdrawal lasts 13 days;
- The legal period of right on withdrawal is equal from 7 to 14 days (depends on country of shop).

The results of comparison of selling terms for the international on-line sellers in 27 EU countries, shows that on-line sellers from Slovenia, Germany and France, have more clearly stated selling terms than sellers located in other EU countries (see Table 2). In the last case, on-line sellers have to clarify their selling terms.

Table 2. Comparison results for on-line sellers

Country of shops	Comparison results	Rank
Slovenia	4,80%	1
Germany	4,71%	2
France	4,51%	3
Cyprus	4,48%	4
Ireland	4,47%	5
Austria	4,44%	6
Czech Republic	4,42%	7
United Kingdom	4,40%	8
Belgium	4,37%	9
Luxemburg	4,34%	10
Netherlands	4,33%	11
Slovakia	4,29%	12
Poland	4,26%	13
Hungary	4,23%	14
Sweden	4,22%	15
Denmark	4,19%	16
Italy	4,15%	17
Spain	4,03%	18
Greece	4,02%	19
Portugal	3,99%	20
Romania	3,98%	21
Finland	3,96%	22
Estonia	3,81%	23
Malta	3,71%	24
Bulgaria	3,24%	25
Lithuania	3,00%	26
Latvia	2,70%	27

The results of the study show that the comparison of selling terms provided by the international on-line sellers is very important for understanding cross-border purchasing decisions.

Economic evaluation of investments made to improve selling terms

Nowadays, many companies establish on-line stores with the focus on attracting new purchasers, and consequently, to generate new revenues (Bergendahl, 2005).

These on-line sellers have to answer a question – what the main goal of their activity is. Is it purchasers' needs satisfaction? Is it the growth of turnover? Is it profit? Or is it international expansion?

There are many reasons for enterprises to invest into e-commerce activity. Such investments serve purchasers by providing them with an alternative that is more comfortable and less time consuming (Bergendahl, 2005).

Degree of success depends upon various factors:

- The designed application have to suit to the electronic fulfilment;
- It is assumed that implementation of e-commerce (business-to-consumer (B2C)) technologies will help to deliver an economic value to a purchaser and

to increase sales of on-line stores;

- It is assumed that the physical fulfilment level will help to provide purchasers' needs satisfaction.

In the study of Bergendahl (2005), where he analysed, how investments into marketing effect on-line sales, is mentioned that the larger marketing investments are, the faster growth of on-line sales is expected.

The study of Abed et al. (2009) relates to the empirical tests of a set of hypotheses concerning the link between selling strategies and sales performance, and shows that selling strategies stimulate individual-level behaviours that have a direct impact on purchasers.

In the study of Owen (1993) is mentioned that while maximising the purchaser' satisfaction the following linkages are assumed:

- Service performance can be measured objectively in various ways, e.g., by errors, willingness to cooperate, on-time delivery, etc.;
- Service performance is a key determinant of the purchaser' satisfaction;
- Purchaser' satisfaction itself determines buying behaviour;
- Buying behaviour strongly determines profitability (Owen 1993).

Green et al. (2007) suggest using the integrated problem-solving initiatives on improving quality and facilitating timeliness to purchasers. Green et al. (2007) suggest the selling strategy that incorporates on-site relationships with purchasers and full understanding of consumers' purchasing processes.

In practice, the price of item presented at traditional stores at the purchaser' country usually includes wholesale and retail mark-up. Based on the data of Statistics department of Lithuania (2009), it is calculated that on average wholesale mark-up is equal to 17% and retail mark-up – to 33%. This means that on-line stores (especially) of manufacturers can offer the attractive prices, which means price savings for purchasers.

The practical analysis of US on-line stores, such as *Amazon.com*, *PC Mall Inc.*, *PC Connection*, *Insight Enterprises Inc.*, and *BIDZ.com*, show that on average operating expenses and revenue ratio in on-line stores is equal to 11-16% (calculated according data of Yahoo Finance (2009)), which comparing to retail stores, is 3-8% lower (data about US retail stores from Yahoo Finance (2009)). This means, that each on-line store can additionally spend 5% on marketing, which includes collection of data related to the purchaser' market and consumers' service (i.e., advices and other services to purchasers).

Based on *Amazon.com* data (2010) was calculated that investments into marketing brings 10,9% increase in sales during next year.

Before the detail analysis of the on-line store' income data, it is necessary to mention that the initial

investments concern two separate types of activities - instalments of a system for web-services and actions for marketing with an emphasis on advertising and consumer' service. Further these initial investments have to be matched with the growth of net revenues. For investments to become profitable, money spent for web-servers and marketing have to be covered by an increase of discounted net revenues (Bergendahl, 2005).

For analysing revenues, initial investments, and results, the method of discounted gross operating cash flow (cash flow before interest and taxes) is used. Cash flows are defined as the inflows and outflows of cash and cash equivalents, created within a certain period of time out of the investment activities of the company (Mackevičius et al., 2006).

Below, the results of simulation with *Amazon.com* (2010) data are presented (see Table 3). Several of its on-line stores are operating in Europe (i.e. in United Kingdom and Germany).

Table 3. Amazon.com data (actual and generated)

Amazon.com mln. US dol.	Actual			Generated		
	2008	2009	Total	2008	2009	Total
Revenue	18.900	24.168		18.900	29.228	
Main operating expenses	2.179	3.415		2.179	3.415	
Investments into B2C technology	-2.273			-2.273		
Marketing expenses	-482			-945		
Costs of goods sold	14.388	18.282		14.388	22.110	
Revenue before interest and taxes	2.333	2.471		2.333	3.703	
Investments	-2.755	0		-3.218	0	
Net income value	2.121	2.042	4.163	2.121	3.061	5.182
Initial investments	-2.755	0	-2.755	-3.218	0	-3.218
Results received by using discounted cash flow method			1.408			1.964

The results of simulation show that by investing 5% into consumers' service the on-line seller may expect the increase of the total net present value by 39% (when discount rate is 10%).

Comparison of main selling terms provided by international on-line sellers

In order to revise selling terms the following on-line stores were investigated:

- The international on-line store placed in Germany that sells digital products – wide range of software (www.softwarebox.de);
- The international on-line store placed in Lithuania that sells digital and material products – packed and downloadable software such as project analytic solutions (www.investsign-home.com);
- The international on-line store placed in Germany that sells digital and material products – material IT products and packed and downloadable software such as painting solutions (eu.shop.wacom.eu).

All three stores are selling in-side and out-side the EU. The selling terms (in total, 21) were analysed out

of EU purchasers' positions, which receive international offers. Due to the difference in assortment the prices of products were not compared.

Table 4. Comparison of main selling terms provided by international on-line sellers

Selling terms	investsign-home.com	wacom.eu	softwarebox.de
Standard shipment, Eur	15	6	11-57
Standard shipment, days	14	3-5	2
Express shipment, Eur		6	
Express shipment, days		1	
Payment methods	3 (card, pre-payment, paypal)	3 (card, pre-payment, paypal)	2 (pre-payment, paypal)
Currency	Eur, Lt, \$	Eur	Eur
Shipping costs included in the price	x	x	x
VAT included in the price	?	x	x
Cancellation period for consumer, days		14	14
Return costs, Eur		40	?
Warranty, months		24	German law
Withdrawal or price reduction in case of damages		x	withdrawal
Contact information	x	x	x
No returns after the moment when download is initiated	x	x	x
Updates, based on price listed for the day on which the e-store is visited	x	x	for free during licence period
Help-desk	no charge		
Service for unsuccessful download	x		
Language of software	3 (LT, RU, EN)	3 (DE, FR, EN)	3 (DE, EN, ML)
Language of e-store	1 (EN)	6 (DE, FR, IT, NL, EN, ES)	2 (EN, DE)
Secured by	GeoTrust	SSL	GeoTrust

The analysis of selling terms related to digital and material products shows some specifics. For example, the shipment costs are excluded from the price of digital products; there is no return possibility after the moment when download is initiated; and the service in case of unsuccessful download is necessary.

The results of the study also show that all on-line sellers from time to time have to revise selling terms. It is also evident that that the best way to improve them is to test them in practice through mystery shopping.

Based on results of the presented study, the following recommendations, according the above mentioned categories of constraints, to on-line sellers are given:

- Recommendations related to the first category of constraints, such as trust. The survey of VeriSign (2009) proves that many purchasers request on-line sellers to use additional security technologies. Many consumers are familiar with www.visa.com or VeriSign security technologies (which, for example, are used by banks in Lithuania). Following the

guidelines of other studies the authors recommend for the on-line sellers to inform consumers, which SSL certificate is used;

- Recommendations related to the second category of constraints, such as comparison of prices and the choice of alternative suppliers. In the report of Commission of the European Communities (2009) stated that consumers are visiting price comparison web-sites, that one-third of Europeans make price comparisons online. Following these guidelines and other studies the authors recommend for on-line sellers:
 - To present not country-based, but a standard international shipping rate that can help consumers to make easily price comparison for international offers;
 - To clarify information about VAT. The rate of VAT is significant and different in the EU countries. For example, in Germany it is 19%, in Lithuania – 21%. This means that the rate of VAT can significantly change the item price;
 - To clarify information related to warranty and other questions. First, the purchasers are not familiar with the law of another country; second, the purchaser should find all necessary information easily and in one place. Such information can be important during purchasing decision process.

Finally, the on-line sellers have to remember that the purchasing in on-line store have to be an alternative which is more comfortable and less time consuming.

Conclusions

The theoretical analysis shows that in many cases for analysing purchasing decisions based on multi-criteria evaluation methods, AHP method is used.

The results of the comparison of selling terms of on-line sellers located in 27 EU countries show that on-line sellers of Slovenia, Germany, and France, have more clearly stated selling terms than on-line sellers located in other EU countries. This also means that the on-line sellers located in these countries have more clarify the selling terms.

The results of the study performed show that all on-line sellers from time to time have to revise selling terms and to test them in practice through mystery shopping.

Also the following conclusions based on three categories of constraints are made:

- The consumer has to receive an expected economic value of purchase. This means that the final price (including VAT, taxes, shipment costs, etc.) of the item, which is purchased from international on-line store, have to be at least 10% lower than retail price of the same item presented at the purchaser country. The practical analysis show that on-line stores, especially of manufacturers, can offer the attractive prices, which means price savings for purchasers;

- The electronic fulfilment level of the process have to be especially secured; and comfortable to find products, analyse prices, revise all necessary information, which is important in the purchasing decision process;
- The physical fulfilment level of the process can help to increase consumers' satisfaction. The products and services can be more effective, if they are more developed and detailed in time. The country of origin of goods can support purchasers to make right purchasing decisions. Then, the authors suggests to the on-line sellers to improve selling terms. The authors calculated an economic effect of investments made to improve selling terms.

Finally, the results of the study show that the complex and economic analysis of selling terms is very important for understanding cross-border purchasing decisions. The main advantage of this approach is that it allows determining the impact of different factors to purchasers' decisions.

References

- Abed, G.M., Haghghi, M. (2009). The effect of selling strategies on sales performance. *Business Strategy Series*, 5(10): 266-282.
- Aissaoui, N., Haouari, M., Hassini, E. (2007). Supplier selection and order lot sizing modelling: a review. *Computers & Operations Research*, 34: 3516-3540.
- Amazon.com. News release. 2010. On-line: <http://www.amazon.com/>
- Andruškevičius, A. (2005). Evaluation of contractors by using COPRAS – the multiple criteria method. *Technological and Economic Development of Economy*, 3 (11): 158–169.
- Bergendahl, G. (2005). Models for investment in electronic commerce – financial perspectives with empirical evidence. *Omega*, 33: 363-376.
- Buyukozkan, G. (2004). Multi-criteria decision making for e-marketplace selection. *Internet Research*, 2(14): 139-154.
- Choy, K.L., Fan, K.K.H., Lo, V. (2003). Development of an intelligent purchaser-supplier relationship management system: the application of case-based reasoning. *Industrial Management & Data Systems*, 4(103): 263-274.
- Commission of the European Communities. Report on cross-border e-commerce in the EU. Brussels. 2009. 74 p. On line paper: http://ec.europa.eu/purchasers/strategy/docs/com_staff_wp2009_en.pdf
- Custom department of Lithuania. General information. 2009. On-line: <http://www.cust.lt/lt/>

- “Directive 1997/7/EC of the European parliament and of the Council of 20 May 1997 on the protection of purchasers in respect of distance contracts”. On-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=celex:31997L0007:en:html>
- “Directive 2005/29/EC of the European parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market”. On-line: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:149:0022:0039:en:pdf>
- Fustos, J.T., Lopez, L.M. (2004). Legal aspects of e-commerce practices in the United States and the European Union. *Competitiveness Review: an International Business Journal incorporating Journal of Global Competitiveness*, 1/2: 96-101.
- Ginevičius, R., Podvezko, V. (2009). Evaluating the changes in economic and social development of Lithuanian counties by multiple criteria methods. *Technological and Economic Development of Economy*, 15(3): 418-436.
- Ginevičius, R., Podvezko, V. (2008a). Multicriteria evaluation of Lithuanian banks from the perspective of their reliability for clients. *Journal of business economics and management*, 4(9): 257-267.
- Ginevičius, R., Podvezko, V. (2008b). Multicriteria graphical-analytical evaluation of the financial state of construction enterprises. *Technological and Economic Development of Economy*, 14(4): 452-461.
- Green, K.W., Inman, A. (2007). The impact of JIT-II-selling on organizational performance. *Industrial Management & Data Systems*, 7(107): 1018-1035.
- Jabbour, A.B.L.S., Jabbour, C.J.C. (2009). Are supplier selection criteria going green? Case studies of companies in Brazil. *Industrial Management & Data Systems*, 4(109): 477-495.
- Kaklauskas, A., Urbanavičienė, V. (2005). Intelcity and multiple criteria web-based negotiation decision support system for real estate [in lithuanian]. *Technological and Economic Development of Economy*, 3(11): 183-189.
- Mackevičius, J., Senkus, K. (2006). The system of formation and evaluation of the information of cash flows. *Journal of business economics and management*, 4(7): 171-182.
- Migilinskas, D., Ustinovichius, L. (2007). Normalisation in the selection of construction alternatives. *International Journal of Management and Decision Making*, 5/6(8): 623-639.
- Ng, W.L. (2008). An efficient and simple model for multiple criteria supplier selection problem. *European Journal of Operational Research*, 3(186): 1059-1067.
- Owen, D. (1993). Calculating purchaser happiness. *Managing Service Quality*, 2(3): 445-448.
- Peldschus, F. (2009). The analysis of the quality of the results obtained with the methods of multi-criteria decisions. *Technological and Economic Development of Economy*, 15(4): 580-592.
- Phusavat, K., Jaiwong, P., Sujitwanich, S., Kanchana, R. (2009). When to measure productivity: lessons from manufacturing and supplier-selection strategies. *Industrial Management & Data Systems*, 3(109): 425-442.
- Podvezko, V. (2005). Agreement of expert estimates [in lithuanian]. *Technological and Economic Development of Economy*, 2(11): 101-107.
- Sevкли, M., Koh, S.C.L., Zaim, S., Demirbag, M., Tatoglu, E. (2008). Hybrid analytical hierarchy process model for supplier selection. *Industrial Management & Data Systems*, 1(108): 122-142.
- Statistics department of Lithuania. On-line database. 2009. On-line: <http://db1.stat.gov.lt/statbank/>
- Stockdale, R., Standing, C. (2002). A framework for the selection of electronic marketplaces: a content analysis approach. *Internet Research*, 3(12): 221-234.
- Stoney, M.A., Stoney, S. (2003). The problems of jurisdiction to e-commerce – some suggested strategies. *Logistics Information Management*, 1(16): 74-80.
- Tonglet, M., Johnstone, P. (2001). E-Commerce Risks in the “Open and Competitive Market”. *Journal of Financial Crime*. 3(8): 218-225.
- Tran, E., Atkinson, M. (2002). Security of personal data across national borders. *Information Management & Computer Security*, 5(10): 237-241.
- Turskis, Z., Zavadskas, E.K., Peldschus, F. (2009). Multi-criteria optimization system for decision making in construction design and management. *Engineering Economics*, 1(61): 7-17.
- Vaidya, O.S., Kumar, S. (2006). Analytic hierarchy process: an overview of applications. *European Journal of Operational Research*, 169: 1-29.
- VeriSign. E-commerce, trust, and SSL. 2009. On-line: <http://www.verisign.com/ssl/ssl-information-center/e-commerce-trust-ssl/index.html>

- Wu, L. (2009). Supplier selection under uncertainty: a switching options perspective. *Industrial Management & Data Systems*, 2(109): 192-205.
- Yahoo Finance. Income statements. 2009. On-line: <http://finance.yahoo.com/>
- YouGovPsychonomics. Mystery shopping evolution of cross-border e-commerce in the EU. 2009. 105 p.
- Zavadskas, E.K., Turskis, Z. (2008). A New Logarithmic Normalization Method in Games Theory. *Informatika*, 19(2): 303-314.
- Zavadskas, E.K., Kaklauskas, A. (1999). A new method of complex evaluation of project based on multiple criteria analysis and the principle of proportionality / 5th international Conference “Integrating technology and human decisions: global bridges in 21st century” proceedings, 2: 1297 – 1299.

The article has been reviewed.

Received in April, 2010; accepted in May, 2010.

Copyright of European Integration Studies is the property of European Integration Studies: Research & Topicalities and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.