On-line Shopping on B2C Markets in the Czech Republic

Pilík Michal

Abstract

The paper deals with the e-commerce theory and is aimed primarily at its usage in business-toconsumer markets. On-line purchasing management is increasing not only in the Czech Republic but also in Europe and all over the world. The customers who think rationally use on-line shopping because of money saving, speed delivery and the possibility of product comparison. This paper presents the results of a project financed by the Czech Science Foundation P403/11/ P175: The factors influencing customers' on-line behaviour in e-commerce environment on B2C and B2B markets in the Czech Republic. 89 % of respondents use e-shops for buying products in the Czech Republic. 32 % of them use the Internet for regular purchases and 57 % of them irregularly. 11 % of respondents have not used e-shops yet.

Key words: Marketing, E-Commerce, Business-to-Consumer Market, On-line Shopping, Consumer Buying Behaviour

1. INTRODUCTION

More than 85 % of the world's online population has used the Internet to make a purchase - increasing the market for online shopping by 40 % in the past two years - according to the latest Nielsen Global Online Survey on Internet shopping habits. Globally, more than half of Internet users have made at least one purchase online in the past month, according to Nielsen. Among Internet users, the highest percentage shopping online is found in South Korea, where 99 % of those with Internet access have used it to shop, followed by the UK (97 %), Germany (97 %), Japan (97 %) with the U.S. eighth, at 94 %. (The Nielsen Company, 2008)

The Internet and its tools no longer feel unfamiliar. Still the majority of its users are afraid of on-line purchases even though there are a number of advantages. Young generation is an exception. The Internet enables (together with new marketing approaches) customers as well as companies quickly and efficiently buy and sell goods or services. The area of e-commerce is still a new phenomenon in the Czech Republic and is worth exploring and developing. And it was one of the reasons to explore on-line buying behaviour in the Czech Republic. The main goal of this paper is to introduce the general view of on-line purchasing from e-shop users characteristics, their preferences, expenses, purchasing frequencies and main fears by on-line shopping acceptations point of view.

1.1 Internet Users Worldwide

Internet World Stats has reported that the estimated number of Internet users reached 2 267 233 742 on December 31, 2011 (InternetStatsToday, 2012). 32.7 % of world population has Internet connection. Table 1 shows the latest data about Internet users in world regions. As we can see most Internet users are in North America. It is not a big surprise that 78.6 % of the population has Internet connection in the Internet's birthplace.

If we compare the Czech Republic with the European average, we have to say that the situation in the Czech Republic is better than the European average. 70.9 % of Czech population has Internet connection. E-commerce potential is very high in Europe, North America and Australia.

World Regions	Population (2011)	Internet Users	Penetration	Users Growth 2000 - 2008
Africa	1 037 524 058	139 875 242	13.5 %	2 988.4 %
Asia	3 879 740 877	1 016 799 076	26.2 %	789.6 %
Europe	816 426 346	500 723 686	61.3 %	376.4 %
Middle East	216 258 843	77 020 995	35.6 %	2 244.8 %
North America	347 394 870	273 067 546	78.6 %	152.6 %
Latin America/ Caribbean	597 283 165	235 819 740	39.5 %	1 205.1 %
Australia/Oceania	35 426 995	23 927 457	67.5 %	214.0 %
World Total	6 930 055 154	2 267 233 742	32.7 %	528.1 %

Tab. 1 - World internet users and population statistics. Source: InternetWorldStats, 2012

1.2 E-commerce History and Definition

The year 1999 was one of explosive growth for e-commerce in Europe. Before 1999, in the shadow of the booming US economy, e-commerce in Europe had been overlooked and underestimated, not often commanding the same level of attention. Historically, European Internet penetration, and therefore e-commerce, has lagged behind that of the US for many reasons, including the high connection costs resulting from the slow deregulation of the European telecommunications industry, restrictive European trade and legal regulations, and language and cultural differences across Europe. Consequently, while e-commerce became a phenomenon in the US during the latter half of the 1990s, it is just beginning to attract attention in Europe (Zott et al., 2000)When the term electronic commerce was first introduced, it was understood as simple as transactions over the Internet (Sung, 2006).

The Internet is an extremely important new technology, and it is no surprise that it has received so much attention from entrepreneurs, executives, investors, and business observers (Porter, 2001). It has become an essential business platform for trading, distributing and selling products between organisations, among organisations and consumers, and even between consumers. This has brought e-commerce to an entirely new level. (Corbit et al., 2003) The investments to this new media and e-commerce profits are continuously increasing every year and that is one of the reasons to follow this new technology and try to describe and analyse Internet users' behaviour.

Modern organizations are under increasing pressure from stakeholders to find new ways to compete effectively in dynamic markets and changing customer preferences (Phillips, Wright, 2008). The marketplace has never been as dynamic and muddled as we enter the twenty-first century. This dynamism is a result of great changes in the following:

- The structure of markets.
- The mobility of individuals and the great increase in global travel.
- The growth of information technology and its impact on marketing.
- The nature of marketing segments.
- Strategic alliances and networks between organizations. (Ranchhod, 2004)

Ranchod (2004) predicted the impact of information technology on marketing. We can add the impact on business in general because the growth of new technologies enables to make business faster than before.

Electronic commerce is the use of advanced electronic technology for business. Both parties of business information, product information, sales information, service information and electronic payment and other activities are achieved with mutually agreed trading standards through the network, the advanced information processing tools, and the computer. Online shopping or online retailing is a form of electronic commerce whereby consumers directly buy goods or services from a seller over the Internet without an intermediary service. (Tao, Li, Dingjun, 2011) Ramanathan et al. (2012) describes previous interpretation of e-commerce simply as transactions over the Internet. However, over the years, e-commerce has been interpreted to include a variety of organisational activities including selling, buying, logistics, and/or other organization-management activities via the Web or doing business over information networks. (Ramanathan et al., 2012)

The emergence of e-commerce as a way of doing business has created an environment in which the needs and expectations of business customers and consumers are rapidly changing and evolving. (Clarke, Flaherty, 2005)

In the last decade, the growth and generalization of Internet use has made it possible to increase sales through e-commerce websites. (Iglesias-Pradas et. al, 2012) Whether on- or offline, consumers are individuals who buy products or services for personal consumption. (Chaffey et. al, 2006)

1.3 Consumer Behaviour on the Internet

All marketers try to identify consumers' buying behaviour. But they are in opposite to sophisticated customers who are able to use and analyse more information sources than before and to make the best buying decision. They are more comfortable than in previous years because they are used to having better services now. The effectiveness of advertising is decreasing and it is more difficult to persuade customers to buy company's products. The combination of these factors can influence the final price.

The analysis of consumer behaviour is a key aspect for the success of an e-business. However, the behaviour of consumers in the Internet market changes as they acquire e-purchasing experience. (Hernándes et al., 2010) Hernándes et al. (2010) claims that the growth of e-commerce has made it clear that customer behaviour has evolved. Customer behaviour does not necessarily remain stable over time since the experience acquired from past purchases means that perceptions change.

Consumer decision process is so generic that it can be applied to consumer behaviour in any channel, including the Internet. (Roberts, 2008) A model of Internet consumer behaviour might

be illustrated as follows – see Figure 1. It has all the elements of the traditional model, although they are arranged differently. It also includes elements of relationship building after the initial sale.



Fig. 1 – Model of Internet consumer behaviour. Source: Roberts, 2008

Each customer decision is influenced by many factors. Figure 2 shows the chosen groups of factors influencing on-line buying behaviour. These factors were analysed during the research.



Fig. 2 – Factors influencing on-line buying behaviour. Source: own survey

2. ON-LINE SHOPPING IN THE CZECH REPUBLIC

2.1 Research Goals and Methodology

Quantitative marketing research was used for collecting primary data. An on-line questionnaire survey was used during the period June - September 2012. The questionnaire included 41 questions and the main goal was to get to know the current situation in the area of on-line buying in the Czech Republic focusing on factors influencing on-line buying behaviour. SPSS software was used for data evaluation.

The main goal for purpose of this paper is to present the general view of on-line purchasing in the Czech Republic.

2.2 Sample Selection and Demographics

Pseudo random selection of respondents was used. 557 respondents participated in the research and 455 completed questioners were evaluated. As we can see in Table 2, the sample includes 180 men (39.6 %) and 275 women (60.4 %). Further we can see other characteristics of the respondents.

		Ν	%
Gender	Male	180	39.6
	Female	275	60.4
Age	16-24	114	25.1
	25-34	178	39.1
	35-44	80	17.6
	45-54	42	9.2
	55-64	24	5.3
	65+	17	3.7
Study Level	Primary education	6	1.3
	Secondary school without graduation	31	6.8
	Secondary school with graduation	133	29.3
	University degree	285	62.6
Level of PC	Beginner	30	6.6
Literacy	Common user	301	66.2
	Advanced user	110	24.1
	Professional	14	3.1

Tab. 2 - Sample demographics. Source: own survey

2.3 Research Questions

Survey methodology was used to test the research questions. The following research questions had been set prior to the research:

- RQ1: There are still more than 15 % of people who do not purchase on-line in the Czech Republic.
- RQ2: The most regular customers purchase on-line more than once a month.

- RQ3: Worry about misuse of personal data has the great impact on on-line shopping.
- RQ4: The on-line buying frequency influences customers' expenses.

3. MAIN RESULTS

3.1 On-line Shopping in the Czech Republic

Figure 3 describes the current situation on the Czech on-line market. As we can see, 89 % of Czech Internet users use this medium for purchasing products or services. But only 32.1 % buy on-line regularly. It means that most Czech Internet users buy on-line but only irregularly and still prefer brick and mortar shops for majority of shopping.



Fig. 3 - Internet buying in the Czech Republic in %. Source: own survey

If we compare Internet penetration in the Czech Republic (70.9 %) with the European average (61.3 %), we can evaluate this situation in the field of on-line purchasing positively. People who buy on-line (regardless whether regularly or irregularly) buy mostly once in a quarter year (32.3 %). The second rate of buying frequency is once in month (23.9 %). Other frequencies are presented in Table 3 below. (Note: the basis for this statistics was generated from regular and irregular on-line buyers totally and separately for each group. Non-buyers were not counted.)

	Total regular and irregular on-line customers		Regular on-line customers		Irregular on-line customers	
On-line Buying Frequencies	%	Cumulative %	%	Cumulative %	%	Cumula- tive %
Once a week	2.2	2.2	4.1	4.1	1.2	1.2
2-5times a week	0.5	2.7	1.4	5.5		
Once a month	23.9	26.6	42.5	48.0	13.5	14.7
2-5times a month	14.0	40.6	29.5	77.5	5.4	20.1
6-10times a month	1.0	41.6	1.4	78.9	0.8	20.9
11-20times a month	0.2	41.8	0.7	79.6		
Once in three moths	32.3	74.1	17.8	97.4	40.4	61.3
Once in six moths	17.8	91.9	0.7	98.1	27.3	88.6

Tab. 3 - On-line buying frequencies in %. Source: own survey

Once a year	4.4	96.3	0.7	98.8	6.5	95.1
Other frequency	3.7	100.0	1.2	100.0	4.9	100.0
Total	100.0		100.0		100.0	

If we look at the results separately (comparing regular and irregular on-line customers), we can see the obvious difference. Regular on-line customers purchase on-line mostly once a month (or 2-5 times a month) and irregular on-line customers use Internet for purchasing products and services mostly once a quarter year (or once a half year). Therefore their on-line buying behaviour is very much different from this point of view.

3.2 On-line Auctions

Other possibility how to use the Internet for purchasing products or services are Internet auctions. This business e-commerce model is called customer-to-customer model (C2C) and we can define it as transactions between consumers. Here, a consumer sells directly to another consumer. The most common example of C2C is an online auction. eBay.com and Aukro.cz (in Czech Internet auction environment) are common examples of online auction.

Internet auctions are not so popular in the Czech Republic despite their growing popularity in foreign countries in general. The usage of Internet auctions by Czech on-line customers is presented in Table 4 below. Only 41 % of respondents use Internet auctions. Almost 60 % of respondents do not use Internet auctions due to:

- Distrust of sales and auctions portals in general;
- Bad personal experience;
- Bad experience of friends and family members;
- Time-consumption (bidder has to monitor the auction regularly);
- Aversion to buying used products.

It is surprising that some respondents give as a reason for not using Internet auctions their lack of knowledge of Internet auctions.

	%	Cumulative %
Regular usage of Czech and foreign Internet auctions	8.8	8.8
Regular usage only of Czech Internet auctions	29.1	37.9
Regular usage only of foreign Internet auctions	3.0	40.9
No usage of Internet auctions	59.1	100.0
Total	100.0	-

Tab. 4 - Internet auction usage. Source: own survey

3.3 E-shop Selection Criteria and Expenses

Chaffey (2006) defines the key areas where customers have high expectations of on-line retailers. The main areas are:

- Logistics
- Security and privacy of information

- Timeliness
- Availability
- Convenience
- Customer service

Criteria for choosing an on-line shop differ from customer to customer. The most frequent criteria were chosen for the analysis and the results are illustrated in Figure 4. Czech on-line customers choose an e-shop mainly based on references, clarity and menu navigation, terms of delivery, graphic design and additional services of the e-shop. It seems that graphic design is not very important for Czech on-line customers when selecting an e-shop.

Sophisticated customers read discussions on the Internet before they spend their money on-line. It is obvious when customers who are not able to orientate themselves in the e-shop (confusing menu or navigation, the customer is not able to find the product quickly and easily) leave e-shop very quickly. Customers use e-shops because they do not want to waste their time visiting brick and mortar shops but they need to have products quickly available. Furthermore, delivery conditions are very important for customers as well. It is quite surprising that Czech on-line customers do not verify e.g. e-shops' participations in Internet associations, e-shop's history; or they do not read delivery and sales terms.



Fig. 4 - E-shop selection criteria in absolute numbers. Source: own survey

Figure 5 illustrates the main information sources which are relevant for e-shop selection. As we can see, references are the most important source of information when looking for the best e-shop. 70 % of respondents use references from their friends as the most significant information source. Positive or negative word-of-mouth influences on-line business more strongly than traditional businesses because it is something intangible for customers and they need to trust this business. Internet discussions are vital for 46 % of respondents. They are similar to word-of-mouth because real customers and users discuss e-shops, products or services and give recommendations to potential customers. Official reviews influence 45 % of on-line buyers. On-line customers are more sceptical to official reviews because they are prepared by professionals and not by real customers and users.



Fig. 5 – Information sources significant for e-shop selection in %. Source: own survey

Table 5 shows on-line expenses. It's evident that most on-line customers spend between 1,000 and 10,000 CZK a year. About 92.6 % of on-line customers spend 30,000 CZK or less in the Czech Republic. Other results are shown in Table B below. (Note: the basis for this statistics was generated from regular and irregular on-line buyers totally and separately for each group. Non-buyers were not counted.)

	Total regular and irregular on-line customers		Regular on-line customers		Irregular on-line customers	
On-line Expenses	%	Cumulative %	%	Cumulative %	%	Cumulative %
Less than 1000 CZK	4.9	4.9	0.7	0.7	7.3	7.3
1001 - 5000 CZK	31.8	36.7	14.4	15.1	41.5	48.8
5001 - 10 000 CZK	32.3	69.0	28.1	43.2	34.6	83.4
10 001 - 30 000 CZK	23.6	92.6	40.4	83.6	14.2	97.6
30 001 - 50 000 CZK	4.7	97.3	10.2	93.8	1.5	99.1
50 001 - 100 000 CZK	2.0	99.3	4.1	97.9	0.9	100.0
100 001 and more	0.7	100.0	2.1	100.0	-	-
Total	100.0	-	100.0	-	100.0	-

Tab. 5 – On-line expenses by Czech on-line customers. Source: own survey

The relationship between on-line buying frequencies and on-line expenses is weak (-0.411, p = 0.01). Correlation is significant at 0.01 level. There is a weak negative relationship between these two variables. It might be interpreted that customers who buy on-line frequently spend less money there. Determination coefficient is 17 % and it represents weak tightness of these variables.

	, 0 1	1
	On-line Buying	On-line Expenses
	Frequencies	
On-line Buying Frequencies	1	-0.411
On-line Expenses	-0.411	1

Tab. 6 - Correlations between on-line buying frequencies and on-line expenses. Source: own survey

We can illustrate this result in Figure 6. The negative relationship between these two variables is visible.



Fig. 6 – Correlation between on-line buying frequencies and on-line expenses. Source: own survey

3.4 Shopping Agents

Shopping agents or shopbots facilitate customers to orientate themselves in current on-line bids. Table 7 shows the results of shopping agents usage in the Czech Republic by regular and irregular on-line customers. More than half (61.6 %) of regular on-line customers use shopping agents regularly. A positive finding is that 83 % of on-line customers use shopping agents. The significance of relation between these variables is presented in Table 8.

	Total regular and irregular on-line customers		Regular on-line customers		Irregular on-line customers	
Shopping Agents Usage	%	Cumulative %	%	Cumulative %	%	Cumulative %
Regular	48.8	48.8	61.6	61.6	41.5	41.5
Irregular	34.2	83.0	29.5	91.1	36.9	78.4
No	17.0	100.0	8.9	100.0	21.6	100.0
Total	100.0	-	100.0	-	100.0	-

Tab. 7 – Shopping agents usage in the Czech Republic. Source: own survey

The relationship between on-line buying and shopping agents usage is weak (0.211, p = 0.01). Correlation is significant at 0.01 level (2-tailed). There is a weak positive relationship between these two variables. Determination coefficient is 4.5 % and it represents weak tightness of these variables.

Tab. 8 - Correlations between shopping agents usage and on-line buying. Source: own survey

	Shopping Agents Usage	On-line Buying
Shopping Agents Usage	1	0.211
On-line Buying	0.211	1

The relationship between on-line buying frequencies and shopping agents usage is weak (0.152 p = 0.01). Correlation is significant at 0.01 level (2-tailed). There is a weak positive relationship between these two variables. Determination coefficient is 2.3 % and it represents weak tightness of these variables.

Tab. 9 – Correlations between shopping agents usage and on-line buying frequencies. Source: own survey

	Shopping Agents Usage	On-line Buying Frequencies
Shopping Agents Usage	1	0.152
On-line Buying Frequencies	0.152	1

3.5 E-product Selection Criteria

It is often very hard for customers to choose the best product. Internet becomes the first step in an on-line decision process for most of them. Sophisticated customers look on-line for information. They use all possible sources to get the best information and make the best decision. It is harder than before because all e-products are intangible. Customers cannot touch the product, cannot smell it, nor cannot test it. Criteria for choosing the best e-product are presented in Table 10 below. It is clear that price is the most important criterion. It is not surprising because better price is a general advantage of on-line shops. For 87.2 % of respondents price is the most important criterion. More than half of respondents (51.7 %) marked product availability as a significant criterion. 42.4 % of respondents consider discounts or sales as relevant. On-line customers do not find product graphic design as an important criterion for choosing e-product. (Note: the basis for this statistics was generated from regular and irregular on-line buyers totally. The basis was 406 on-line buyers. Non-buyers were not counted. Each respondent could choose more criteria.)

Criteria – product	%
Price	87.2
Product Availability	51.7
Discount, Sales	42.4
Product Graphic Design	13.3
Other	6.2

Tab. 10 - E-product selection criteria. Source: own survey

3.6 Fears by Internet Shopping in The Czech Republic

All on-line users have some worries about purchasing on-line. It does not signify if they purchase on-line regularly or irregularly. The main worries are presented in Figure 7. We can see that most people are afraid of complaints products or their testing (61 %). 37 % of respondents marked misuse of personal data and security as an important barrier against Internet shopping acceptance. It is surprising that only 44 % of respondents marked misuse of personal data as a relevant worry because the fear of security and personal information is generally very high in the society. On the other hand, this information is also positive because it seems that Czech on-line customers start to trust this medium.

If we compare the approach of regular, irregular and non- online buyers, we can see that all of these segments have the same worries. The impossibility of product testing, problems with complaints, problems with product return and misuse of personal data are the main worries about on-line purchasing.



Fig. 7 – Fears by Internet shopping in the Czech Republic. Source: own survey

4. CONCLUSION AND DISCUSSION

In recent years, a great number of e-commerce websites have emerged to provide product and information service to customers. Customers, however, have to be far better versed in the offer

of on-line shops. There are general rules which customers should follow when selecting either the very e-shop or product, and the actual shopping on-line. We assumed (RO3) that the safety and concerns about the possible misuse of private information predominate while choosing an on-line shop. The survey showed, surprisingly, that these factors do not play the most significant role in selecting an on-line shop. Shopping on-line is becoming more and more popular even among often very conservative Czech customers. At the beginning of the survey (RQ1), we assumed that there are still more than 15 % of people who do not purchase on the Internet. Although the survey showed that e-shops are not used by approx. 11% of people, this research question can be thus disproved. We thought that regular on-line customers purchase on-line (RQ2) mostly more than once a month (i.e., 2-5 times a month). This confirms the thesis that regular on-line customers shop on-line mostly once per month (42.5 %). The second most common frequency of purchases is 2-5 times a month (almost 30 % of respondents). Based on the survey results, this research question can also be refuted. We therefore disprove this research question. The more often customers shop the bigger influence it has on the amount of money spent at on-line shops. Thus the fourth research question (RQ4) was established. We can confirm this research question. It was confirmed that the frequency of purchasing on-line influences the amount of money spent, but in a negative way. A weak negative correlation (-0.411) was found between these two variables. It can be interpreted in a way that customers who use e-shops frequently spend less but more regularly. This confirms the general marketing thesis that an effort of merchants is to bring regular customers to shopping for smaller amounts than to making one purchase for large amount only. The survey results confirmed the general awareness and previous research results about on-line shopping in the Czech Republic. Presented and other survey results will serve as a basis for on-line buying model creation because to know on-line customers is becoming more and more important for companies and e-shops as well.

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References

- Clarke, I. & Flaherty, T. (2005). Advances in electronic marketing. Hershey, PA: Idea Group Pub. http://dx.doi.org/10.4018/978-1-59140-321-0
- Corbitt, B. J., Thanasankit, T. & Yi, H. (2003). Trust and e-commerce: a study of consumer perceptions. *Electronic Commerce Research and Applications*. 2(3), 203-315. http://dx.doi. org/10.1016/S1567-4223(03)00024-3
- Hernández, B., Jiménez, J. & Martín, M. J. (2010). Customer behavior in electronic commerce: The moderating effect of e-purchasing experience. *Journal of Business Research*, 63 (9-10), 964–971. http://dx.doi.org/10.1016/j.jbusres.2009.01.019
- 4. Chaffey, D., Johnston, K., Ellis-Chadwick, F. & Mayer, R. (2006). *Internet Marketing. Strategy, Implementatiton and Practice*. New York: Pearson Education.
- InternetWorldStats. (2012) World Internet Users and Population Stats. Retrieved September 20, 2012 from http://www.Internetworldstats.com/stats.htm

- 6. Porter, M. E. (2001) Strategy and the Internet. Harvard Business Review, 79(3), 62-78.
- Ramanathan, R., Ramanathan, U. & Hsiao, H.-L. (2012). The impact of e-commerce on Taiwanese SMEs: Marketing and operations effects. *International Journal of Production Economics.* 140(2), 934–943. http://dx.doi.org/10.1016/j.ijpe.2012.07.017
- 8. Ranchhod, A. (2004). *Marketing Strategies: A Twenty-first Century Approach*. Harlow: Prentice Hall.
- 9. Roberts, M. L. (2008). Internet marketing: integrating online and offline strategies. Mason: Thomson.
- Sung, T. K. (2006). E-Commerce critical success factors: East vs. West. *Technological Forecasting and Social Change*, 73(9), 1161-1177. http://dx.doi.org/10.1016/j.techfore.2004.09.002
- Tao, Z., Li, Z. & Dingjun, Ch. (2011). The Predicting Model of E-commerce Site Based on the Ideas of Curve Fitting. 2011 International Conference on Physics Science and Technology (ICPST 2011), 22, 641-645. http://dx.doi.org/10.1016/j.phpro.2011.11.099
- The Nielsen Company. (2008) Over 875 Million Consumers have Shopped Online the Number of Internet Shoppers up 40% in Two Years. Retrieved September 15, 2012 from http://nz.nielsen. com/news/OnlineShopping.shtml
- Zott, Ch., Amit, R. & Donley, J. (2000). Strategies for Value Creation in E-Commerce: Best Practice in Europe. *European Management Journal*, 18(5), 463-475. http://dx.doi.org/10.1016/ S0263-2373(00)00036-0

Contact information

Ing. Michal Pilík, Ph.D. Tomas Bata University in Zlín, Faculty of Management and Economics Mostní 5139, 76001 Zlín, Czech Republic E-mail: pilik@fame.utb.cz

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