

The Impact of the COVID-19 Pandemic on Electronic Commerce in Resita

Gabriel Dinu
Loredana Dinu
Jeanina Ciurea

“Babes Bolyai” University, Department of Business Administration Resita, Romania

gabriel.dinu@econ.ubbcluj.ro
loredana.dinu@econ.ubbcluj.ro
jeanina.ciurea@econ.ubbcluj.ro

Abstract

This paper aims to highlight the changes in the intention of the population to buy, moving the center of interest from traditional trade to e-commerce. E-commerce can also be defined as a process of buying or selling through via remote data transmission. This approach is specific to the expansive policy of marketing of commercial companies. Consumption is not at this point a framework recognised to be a need and subjected to the social bond, however it is optional for helping to conduct the changes following the COVID-19 pandemic.

It is very important to understand that online business is not limited to the sale of products via the Internet. Electronic business involves maintaining contacts with suppliers, potential business partners, but also customers, the promotion of products and/or services provided using electronic means.

Key words: marketing, Internet, e-commerce

J.E.L. classification: M31

1. Introduction

Promoting during the COVID time frame is the declaration of the insurgency of robotics, of correspondences, as a crude material of the whole engineering of present-day development. It will be cybermarketing, similarly as there is a cyberlanguage, a cyberart. Extraordinary exhibitions toward the epistemology of new showcasing, in which worldwide thoughts are not yet completely acknowledged as axioms in mathematics, agreement is not prevailing, and translations and assessments are just in part acceptable, requiring illumination and establishment. A stage and a legitimate contraption fit for doing and executing substantial, informative, and prescient developments.

Advertising, as a vision and reasoning, stays unaltered, with the goal that the fundamental ideas, conventional trade or online business stay legitimate. The COVID emergency has changed the real factors to which advertising is applied, with the development of another social system and new frameworks made by the pandemic time frame. The progressions of the climate decide new directions of the market offers, alluding to the progressions that will rebuild the interest, to the innovative changes, to the appearance in the forefront of the electronic trade, all these focusing on the fulfilment of the customer.

Dinu and Dinu (2010) say that in general in the real world firms set prices according to the costs of production, marketing and supply. On the Internet, however, the supply chain is reversed as the customer begins to exercise all power.

2. Theoretical background

Four large groups of services can be called through the Internet network:

- world wide web
- electronic mail
- electronic commerce
- chat/FTP

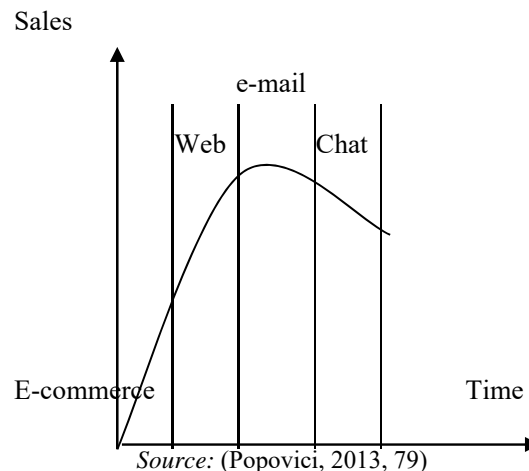
For most, the term "e-commerce" is performance online shopping on the World Wide Web. However, electronic commerce or e-commerce) is more than the process of buying / selling products and services. It can include many other activities, such as: exchanges and negotiations between companies, internal processes of the companies they run performs in support of the activities of purchase, supply, sale, employment, planning. E - commerce also involves the transfer of documents, from contracts or orders, up to images or voice recordings.

The analysis of the e-commerce internet service can be illustrated both on the "S" curve of the life cycle of a product, and in the BCG (Boston Consulting Group) matrix.

The life cycle of Internet services means the period of time from the launch of a service to its exit from the market.

According to the S curve of the life cycles of a product, Internet services are divided into the 4 stages of evolution as follows:

Figure no. 1. The S curve of the life cycle of Internet services



In the launch phase is e-commerce, due to the difficulties encountered in ensuring the security of transactions.

In the BCG matrix, the value of 10% is conventionally accepted as the limit for the growth rate, and for the market share of 50% the growth direction is different.

If the growth rate is higher than 10% it is said that the service has a high growth. Money is invested in this service, considered a star, but it is also obtained.

The absolute market share for Internet services is calculated by the relation:

$$Ms = (\text{sales service CY} / \text{total Internet sales CY}) \times 100$$

Where:

CY – current year

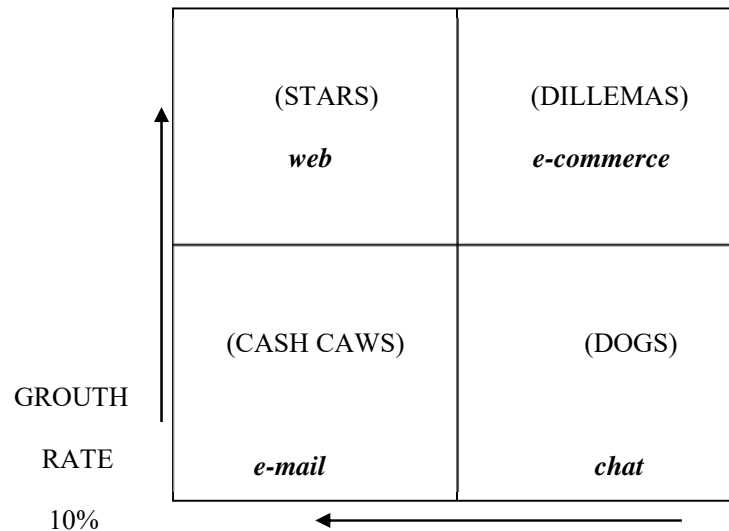
The growth rate for Internet services is calculated by the relation:

$$Gr = (\text{sales service CY} - \text{sales service PY} / \text{sales service PY}) \times 100$$

Where:

CY – current year
PY – previous year

Figure no. 2. BCG (Boston Consulting Group) Matrix



Source: (Dinu&Dinu, 2010, 132)

E-commerce - is a dilemma service because it still requires a lot of money to invest and does not bring the expected money. It is characterized by a relatively small market share, but a high growth rate. This means that it is still necessary to invest in the introduction of this service.

3. Research methodology

This investigation plans to accentuate the impact of the pandemic time frame on consumer behavior from Resita city.

In accordance with the information resulted from the research, it is a quantitative research, and as per the spot of advancement, a field research, accord to Plaias (2008).

To complete a proficient investigation, it is firstly important to plan the exploration, with the foundation of the vital stages and assets to ideally do the examination and get the main data for the decision process.

The study was led on two parts, a qualitative report and the stage that guarantees representativeness in the outcomes and detailing of conclusions, the quantitative investigation. However, as the data acquired from an unrepresentative sample cannot be extrapolated to the whole population, the outcomes being just speculations that will be approved, we considered it ideal to introduce in this section just the quantitative investigation.

The quantitative examination goes through the accompanying stages:

- setting up the sample;
- determining the sample size;
- writing the poll;
- administration of the poll;
- processing and examination of acquired information;
- writing the blend report;

The issue that the examination means to state is identified with the elements of shopping with regards to the COVID-19 pandemic, at the degree of the people from Resita's consumer behaviour.

The approval of the speculations detailed on the event of the subjective investigations is done through quantitative examinations.

Two classes of studies can be utilized for this:

- census - is the cross examination of all people of a given population;
- survey - is an investigation led to know the qualities, the assessments of a given population questioning a set number of its individuals, which means an example.

It comprised of overseeing a poll to a delegate sample taken from the researched population.

To treat the issues examined and predictable help to guarantee an appropriate scientific work, we utilized some logical examination strategies that can be referenced among the techniques for information assortment and association of the meeting, survey, perception, data visits and direct perception, factual investigation the poll, the dissemination of upsides of a variable, mathematical systems (Sipos, Ciurea, 2007) for testing ordinariness, univariate measurable examination of information, the connection strategy, relapse, testing the contrast between two extents.

Since the customer's behavior is showed available (Dinu and Dinu, 2012), it turns into a significant investigation of advertising. I have examined how promoting impacts consumer's behavior. The state of how

the investigation was made was working by the overview led on a delegate test for the number of inhabitants in Resita.

The study that was needed for improving this paper was led during the period September 2020 – October 2020. The review is non-exhaustive, the base sample size was determined using the formula:

$$R = \frac{n}{N} * 100 = \frac{t^2 * p * q}{e^2}$$

Where:

R - sampling rate

N - researched population size

n - sample size

t - the coefficient of confidence

p - frequency of the phenomena

e – tolerated margin error

The survey was made as a type of research: organised individual, based on a survey made out of a specific number of inquiries, all closed. The survey incorporates content inquiries and inquiries to distinguish the respondent.

4. Results

Most marketing studies consider the indication of consumer behavior because of specific components. We concentrated what the Coronavirus emergency meant for purchasing propensities as far as purchasing and consuming behavior. The state of how the examination was done was work by the survey directed on an representative sample for the number of inhabitants in Resita (Dinu and Dinu, 2014).

Coronavirus lastingly affects buyers needs, inclinations and behaviors. The pandemic created in a brief time frame a change of the manner in which individuals purchase and consume, regardless of whether are items, administrations, media channels or social encounters.

This part might be isolated by subheadings. It ought to give a succinct and exact portrayal of the exploratory outcomes, their understanding and the experimental conclusions that can be drawn.

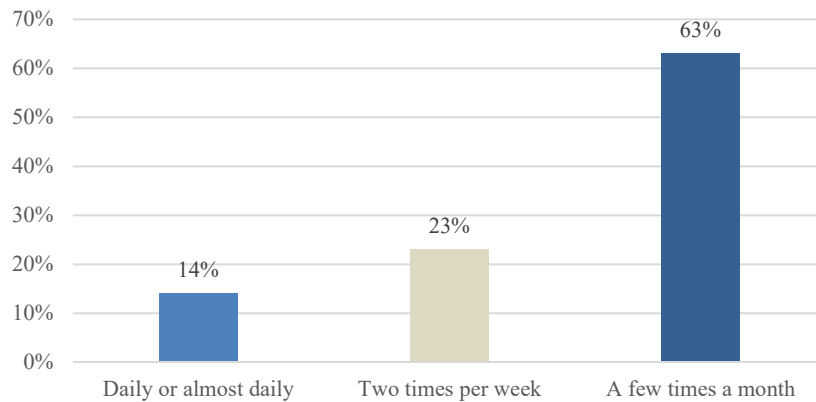
Moving on, the appropriate responses given by 366 survey subjects questions 1-7 of the survey will be introduced, analysed and deciphered. Questions 8-10 allude to the standards for investigating the outcomes (age, gender, not needing singular examination of the study).

A sociological examination was directed at Resita's population level, an examination dependent on a survey.

Further, I realized interpretation of research results:

I. Regarding frequency of visiting online stores in Pandemic.

Figure no. 3. Frequency of visiting online stores in COVID-19 pandemic

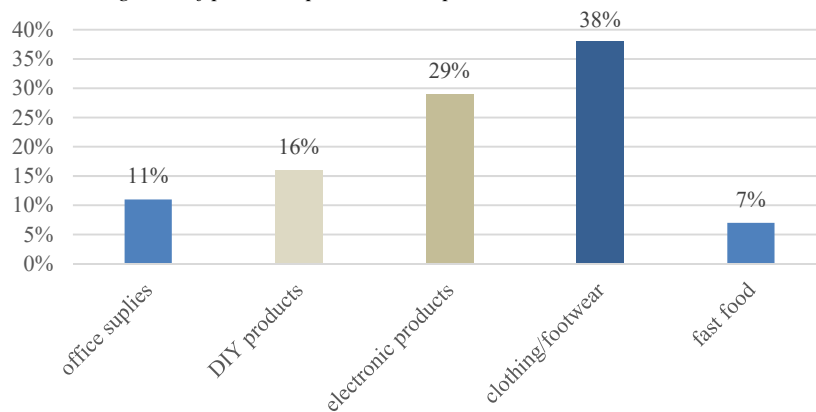


Source: Authors' contribution

A percentage of 63% of residents visit online stores even if they do not buy. Followed by those who enter the Internet weekly to visit virtual stores, with a percentage of 23%. Respondents who visit online stores daily are in a lower percentage, 14%. Among those who enter the Internet daily to visit online stores are young people aged between 18 and 25, with a percentage of 58%.

II. Regarding categories of products purchased in pandemic.

Figure no. 4. Categories of products purchased in pandemic



Source: Authors' contribution

The pandemic favored e-commerce for goods that were normally bought only by physical presence in the store. Thus, on the whole sample, 11% of those surveyed ordered office supplies, another 16% of respondents bought DIY products. Also, significant acquisitions took place in the electronics segment, where 29% of the residents bought electronic products from the virtual stores. The category of non-food products with the most sales in the pandemic was clothing / footwear, 38% of the residents buying from the profile sites. There is also a preference for fast food orders during the COVID-19 pandemic, 7% of respondents choosing this type of food.

III. In terms of shopping in virtual stores.

Figure no. 5. Buying from Romanian online stores

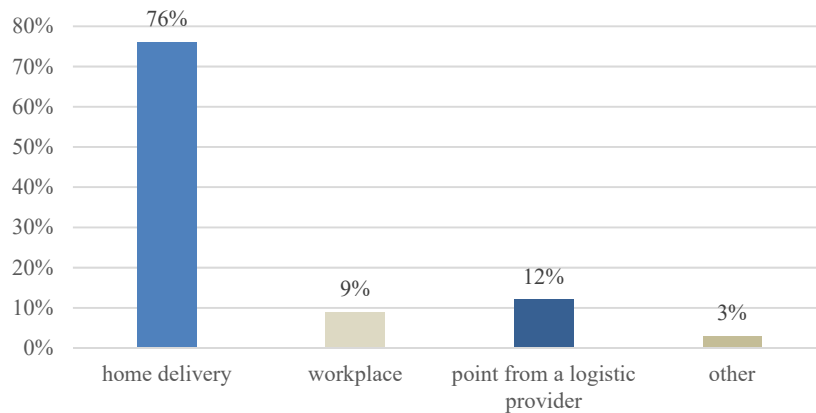


Source: Authors' contribution

A large number of Romanians overcame in 2020 their fear of ordering online and discovered how simple, convenient and safe it is, while others, already familiar with online shopping, have expanded their product categories that he orders them. On the total sample, 57% of respondents did not shop through e-commerce, while 43% of those surveyed bought products from online stores at least once.

IV. Regarding the delivery options that consumers prefer for online purchases.

Figure no.6. Delivery options that consumers prefer for online purchases

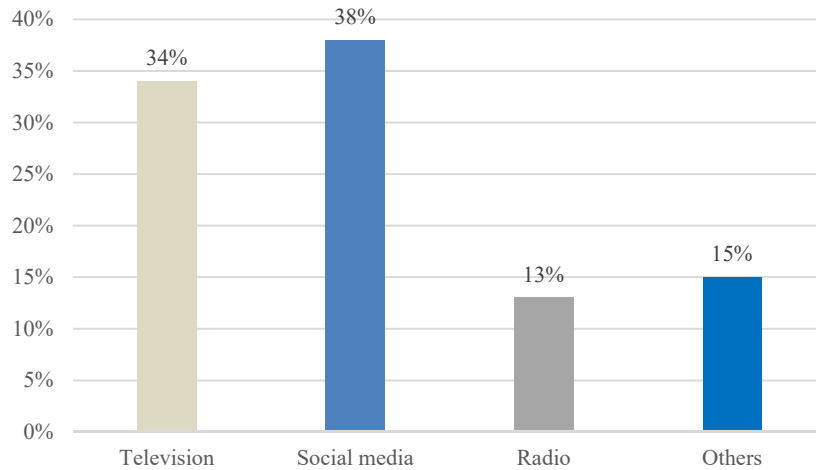


Source: Authors' contribution

Most respondents, in a percentage of 76%, prefer home delivery for online purchases on their online acquisitions. Another respondents, in a percentage of 12%, prefers delivery to the delivery point, while others want the product delivered to their workplace, in a percentage of 9%. Only 3% of respondents chose other delivery options.

V. Regarding advertising channels that inspired online purchases.

Figure no. 7. Advertising channels that inspired online purchases

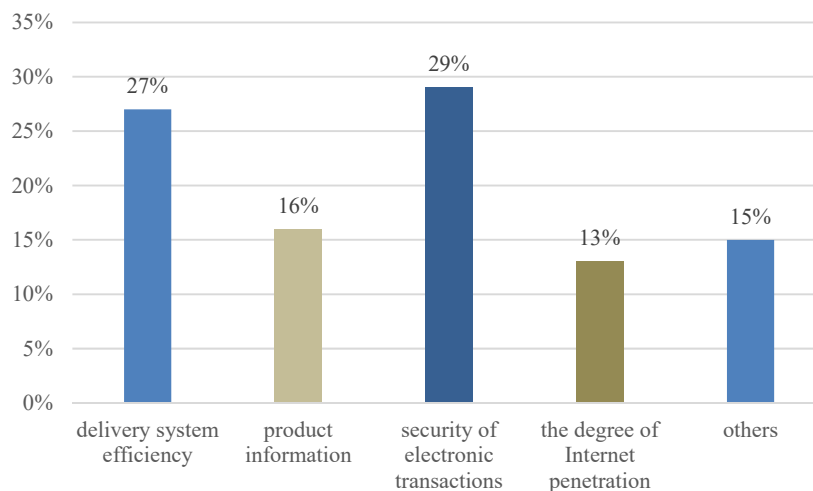


Source: Authors' contribution

Regarding the types of advertising support that influenced the residents of Resita to buy online, the largest proportion have the social networks Facebook and Youtube with a percentage of 38%, followed by television with a percentage of 34%. Next is the radio that influenced 13% of respondents, while 15% of those who answered questions bought online influenced by other forms of advertising support.

VI. Regarding the barriers to online shopping.

Figure no. 8. Barriers to online shopping

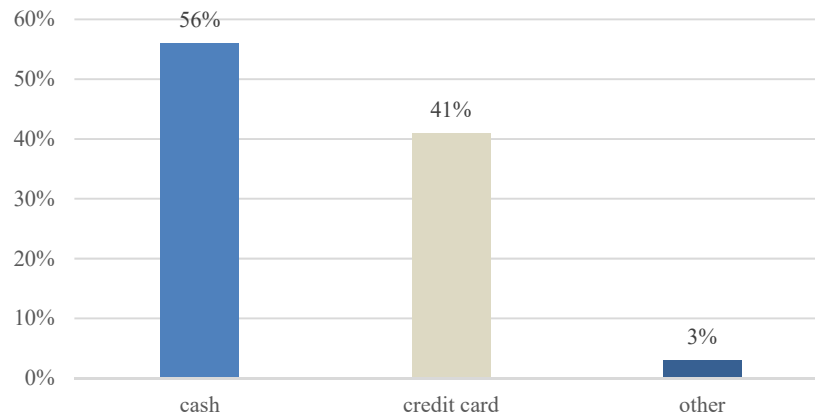


Source: Authors' contribution

On the total sample, 29% of those surveyed believe that the security of electronic transactions can be a problem, 27% of the respondents say they don't trust courier companies, 16% consider that the information about the products sold online is too little. For 13% of respondents, a problem with online shopping is that not all the people have access to the Internet.

VII. Regarding the method used.

Figure no. 9. The payment method used



Source: Authors' contribution

Regarding the payment method, 41% of the respondents pay by card payment, while 56% chose to pay offline purchases with cash.

5. Discussion

Romania introduces itself in a rich ground for exchange, yet, lamentably, the internet business consumer remains to a great extent undeveloped all through the country.

More than a quarter of Resita occupants are hesitant to have a look on internet business due to the security of their exchanges. Likewise, a considerable lot of the occupants of Resita do not trust courier companies since they have recently received harmed items and do not have enough information about the items they want to buy.

Also, many people do not order online as they do not have a steady Internet connection.

As a country of the European Union, Romania has less than one bank card per person perhaps the most reduced value in the Union because of the inclination for cash payments.

Consequently, card payment involves trust, which relies upon creating and developing the online market, and the fact that there are stores that do not offer the possibility of online card payment (Dinu and Dinu, 2013).

Regardless of this diminishes, a large number of Resiteni defeated in 2020 the fear of online shopping and found out how easy, advantageous and safe it is, while others, already acquainted with online shopping, have extended the variety of products.

6. Conclusions

Although the shopping habits for Resita occupants have changed, the investigation showed that the greater part of the respondents never purchased online. The study additionally showed that around 66% visited online stores at any least once a month.

Resita inhabitants purchased in the pandemic office supplies, DIY, being champions in the acquisition of hardware, clothes and shoes.

It is additionally worth mentioning that the occupants of Resita were headed to purchase from virtual stores because of the advertising made through TV and online media.

The Covid pandemic has constrained numerous nearby purchasers to cross the psychological barrier of buying online. Once persuaded of the advantages of online business, buyers will keep on picking this option and, in a roundabout way, courier services, with every one of the constraints of delivering items ordered online.

The change to cashless and contactless is a pattern that has increased in the last years in the digitalisation of banking administrations, however it has been sped up during the pandemic. As an extra measure to guarantee wellbeing, banks have suggested that individuals make non-cash payments through current methods of payment given by them, like cards or online payments.

According to the huge effect of this pandemic, customers will avoid potential risk and will bound to act accordingly (Hasanat et al., 2020).

As a result of demographic change and mechanical development, basic changes are occurring in buyer's behavior and in customer's lifestyle, changes whose effect crearea new purchasing behavior (Dinu and Dinu, 2020).

Online business improved by COVID-19. The way that impacted online business will be helping different researchers to explore more profoundly this area, for example, how online business changed because of the virus and future patterns (Bhatti et al., 2020).

7. References

- Bhatti A., Akram H., Basit H. M., Khan A. U., Raza S. M., Bilal N. M., 2020. E-commerce trends during COVID-19 Pandemic, *International Journal of Future Generation Communication and Networking*, vol. 13, No. 2, p. 1451.
- Dinu, G., Dinu, L., 2010. *Marketing systems-theory and applications*. Resita: Eftimie Murgu University Press.
- Dinu G., Dinu L., 2012. The impact of advertising on consumer behavior in the Resita city population. *Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium Intelligent Manufacturing & Automation: Focus on Sustainability*, Vol. 23, Issue 1, p.1047.
- Dinu G., Dinu L., 2014. Using Internet as a Commercial Tools: a Case Study of E-commerce in Resita. *Procedia Engineering*, Vol. 69, p. 473.
- Dinu G., Dinu L., 2013. A study regarding the use of e-commerce by people from Resita. *Management & Marketing Journal*, Vol. 11, p. 296.
- Hasanat M. W., Hoque A., Shikha F., A., Anwar M., Hamid A., B., A., 2020. The impact of Coronavirus (COVID-19) on E-Business in Malaysia. *Asian Journal of Multidisciplinary Studies*, Vol. 3, No. 1, p. 5.
- Dinu G., Dinu L., 2020. Using Internet as a solution for sales in COVID-19 pandemic: e-commerce, *Analns of DAAAM & Procedings*, Vol. 7, p. 109.
- Plaiiaș, I., 2008. *Marketing research*. Cluj Napoca: Risoprint Press.
- Sipos, G. A., Ciurea, J., 2007. Evaluation method of the innovation project global efficiency. *Robotica & Management International Journal*, Vol. 12, No. 2, p. 59.