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THE INFLUENCE OF THE DIGITAL CHANNELS DESIGN ON CUSTOMER EXPERIENCE

Abstract: The online shopping is a process that enables customers to buy products and services offered by digital channels. Nowadays, the technologic revolution has changed the customers' behavior and habits on media consumption, which has a direct effect on the ways they receive the information about brands and shopping locations. These changes require higher level of sophistication of design of the customer journeys, sometimes including behavioristic and neuromarketing researches when planning and optimizing the online sales in digital environment.

For successful competitiveness in the digital environment, it is mandatory to define the key characteristics of online shops that influence the attractiveness towards customers and stimulate sales. One of the most important aspects and key factors is the design, the visual and functional journey that the customer needs to fill in order to create positive experience for digital business. The customer experience understand the psychological condition of the digital channel visitor stimulated by the online channel characteristic and exposed products i.e. the online shop design.

This paper presents research findings for online shops of two companies from same industry in the Republic North Macedonia, with use of neuromarketing tools of customer behaviour. The findings show that design has a significant influence to the positive customer experience, and consequently to the sales increase and the profitability to online business.

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Introduction

The Pandemic with Covid 19 was a period that has changed the life of each individual and business with a speed that has not been noted in the human history before. Practically, there is no company that during this period did not create or intended to create an online interface and digital interaction with its own customers, suppliers and partners. Such development leads to highly intensified competition in the digital world.

Nowadays, majority of the companies are forced to use digital solutions as sales channels, which means significant change in their way of working and the applied business models. The increased number of platforms for online sales increases the competitiveness and creates a need for strategic planning and new competitive advantage for each business using digital channels.

In order to create successful differentiation in the intensive competitive environment (practically the full eco system is becoming a single market), it is necessary to define the key characteristics of the digital channels that attract the customers and prospects.

The optimization of the online sales shall be well thought, planned and implemented process in order to achieve maximal efficiency and effectiveness. Every attribute related to the online shop like the awareness of the existence, the simple customer journeys¹, variety of products with affordable prices, the relation with the customers, anticipation of the customer needs, the design of the online shop etc. have influence towards the final goal, i.e. realization of higher and more profitable sales and revenues.

This paper elaborates and analyses the impact of the design of the digital channel, online shop, to the increase of its efficiency, i.e. sales. The basic assumption is that the design of the online shop has a significant impact in creation of positive customer experience, and correspondingly for increased sales and effectiveness. Since customer experience is a process that mostly happens unconsciously, the appropriate methodology for its research are neuromarketing techniques, as tools for detecting eye movements, navigating through clicks and recognizing emotions through micro-expressions. The obtained results from the research shows that the design of the online shop directly influences the successful online transactions, as well as buying other additional

¹ A **customer journey** is an entire experience a customer has while communicating with a brand.

products. In order the results to be limited only to the influence of the design, the products and prices are equal during the research.

1. THE TRENDS AND CHALLENGES FOR ONLINE SALES

The development of online sales was intensified during the Covid 19 period. According to OECD, the online sales increase of 25.7% in 2020 is directly correlated with the delivery of the goods to the physical locations, and the development trend is similar in all developed countries. The assumptions for online sales worldwide shows that it is expected to grow with stable annual rate (Figure 1), but not with the rate that was reached in 2020 (Holiday, 2021).

Figure 1: The forecasted trend of online sales

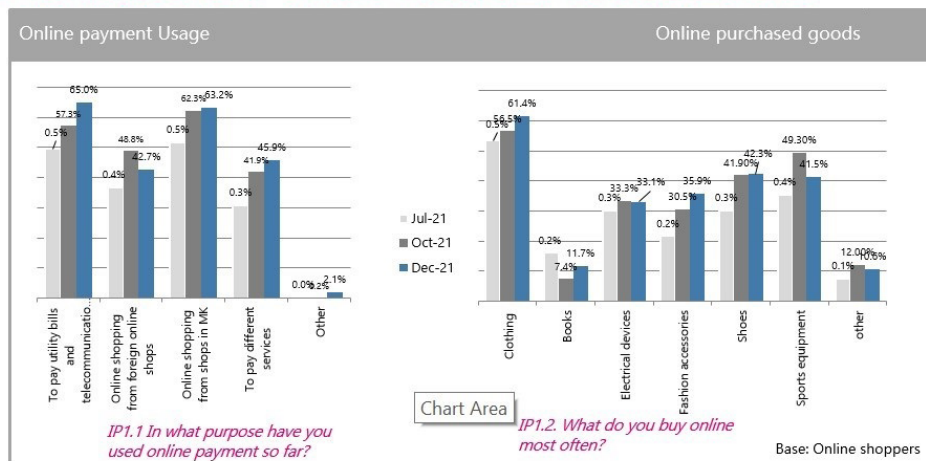


Source: Adjusted according to: Retail e-commerce worldwide 2014-2026, <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/>

In 2021 year, the growth of online sales in Republic of North Macedonia is also notable, especially for the basic goods like clothes and food. The Figure 2 shows the data provided by the Omnibus research for online sales growth in July, October and December 2021, where the increase of the mobile payments and online sales in the second half of the year are visible.

Figure 2: The growth of online sales in Macedonia in the second half of 2021

ONLINE SHOPPING USAGE AND HABBITS



Source: Omnibus research, STRATUM R&D, 2020-2021

In order to increase the online sales, the businesses are facing different market and customer challenges. Market challenges are related to the increased number of offerings for online sales and marketing activities via digital channels, which makes the competition harder, and the customer choices more difficult. Besides the enormously increased offers in online sales channels and intensive digital communication, a lot of noise is being created, i.e. the quantity of the data disseminated towards the customers is enormously huge, which is resulting into an overload and insensitivity towards the information.

From customer perspective, the challenges are multidimensional and very complex. According to Schultz (2018), the online solutions shall be simplified, with minimal quantity of visual and textual information, in order to decrease the customer overload and the destruction and to enable the conscious control and attention. For more successful online sales transactions, the trust is critically important and it is based on the direct experience or on the reputation of the company (Basso at al. 2001). In the situations when besides the habits also the values are being changed, according to some researches, a tendency for conservatism is being increased, and changes of the values in the direction of intensifying the need for traditional behavior, conformism and security, on account on values related to self-development and openness to changes (or

more concretely decrease the needs for achievements, power, leisure, stimulation and self-governance).

According to Mitson (2016) for online sales not only an active web site is needed, but also provision of positive customer experience, which increase the trust, loyalty and intention to purchase. This is creating a demand for smart online solutions that will make the customer experience easier and richer, and via pleasant, simple and unique customer experience, competitive advantage will be created for the retention of the existing customer base and acquisition of new prospects.

2. THE DESIGN OF THE ONLINE CHANNEL

There are more aspects that influence the selection of the online shop, like the specific needs of the customers, familiarity and closeness to the brand, attractive price offerings, attractive design, perceived quality, overall likability and more specific individual factors. For better effectiveness of online sales, one of the most important aspects is the design of the online channel. When the word design is mentioned, it is often associated with graphic design, that is, the visual solution of the online channel. The design of the online shop shall produce the optimal information for the users in order to strengthen their trust, create positive customer experience via esthetics and enjoyment and efficiency that will provide, in short time with small number of clicks customer to be able to finalize the realization of the desired transaction.

According to many authors in the area of consumer psychology, ICT and sales like Mosteller at al. (2014), Bilgihan (2016) and Basso at al. (2001), the design of the digital channels shall take into account three psychological consumer conditions: the attitude of the customer towards online sales (based on trust), attractiveness and attention (hedonistic needs of the consumer) and functionality (or the highly efficient customer experience).

The attitude towards the online sales has to be based on trust and security, meaning the buyer believes in the sales process and the concrete online shop will provide protection of the personal data and will offer proper value for money for the presented product portfolio. This trust can be created successfully via positive customer experience that happened in the past, and the brand reputation. Consequently, the clear branding of the online shop does have a severe impact on the finalization of the transaction.

The visual aspects of the design shall be based on attractive solution (Mosteller at al. 2014) on esthetical principles like good form, symmetry and

contrast of the base and objects. These esthetical principles shall not create unnecessary cognitive effort to the consumer, but will satisfy the hedonistic needs via perceived fluency in order to realize the selection of the product and finishing the sales transaction.

The functionality of the design means high efficiency for realization of the aim of the consumer, i.e. optimal time and energy to make a decision for choice and to realize the transaction. Bilgihan (2014) links the customer satisfaction related to the successful flow of the transaction as high level predictor for next shopping (high loyalty). In order to offer highly functional online sales solution, it is very important to take into account the complexity, the optimal number of clicks, optimized navigation that results into short time used for realization and remaining time for additional pleasure that will create a possibility for selection of products that will generate additional unplanned sales.

3. EMPIRIC RESEARCH ON THE DESIGN OF THE ONLINE CHANNEL AND CUSTOMER EXPERIENCE

The customer experience is mostly based on unconscious motives. According to Bridger (2017), when the business generates more graphic media and content, including web pages, presentations, videos and social media posts, majority of big companies like Procter&Gamble, Coca-Cola, Tesco and Google, use neuromarketing tools and theories in order to optimize their digital content, and consequently increase the sales and profitability.

The selection of neuromarketing tools for this type of researches is based on the analyses presented by Gunter (2020), according to which the neuromarketing tools can generate new forms of consumer profile that combines measures for human personality, verbalized cognitive and emotional reaction and neuro-physiological measures for the activity of the brain that can locate which parts of the brain are being engaged by specific marketing stimulus. The neuromarketing analyses are based on psychophysical metrics taken from the neurology, but with application of advanced software solutions that replace the expensive hardware-based solutions in medicine.

According to the above, for the purposes of this paper, below are presented the findings on the rational and unconscious drivers of online shopping, i.e. customer experience, based on which it can be determined how online store design affects positive customer experience and increases sales. For this research, the platform Impala is used via the detection of the movements of the

eye pupils, recognition of emotions and detection of behavior while surfing via behavior of 200 respondents of the research (www.impala-research.com).

The data obtained from the reactions of the respondents on websites of two large companies in Macedonia were used in the analysis (Company 1 and Company 2). The research was conducted on two groups of respondents according several demographic characteristics. The first group is experimental and the second is a control group (Figure 3). Each group has 100 respondents, 50 of whom are male and 50 females. Their age is between 18 and 60 years, with an average of 35 years. According the user profile, the defined sub-samples are composed of more than 30 respondents in the following way:

- Subsample 1 – customers of Company 1
- Subsample 2 – customers of Company 2
- Subsample 3 – customers of other companies

The experimental group is getting a virtual voucher with a value of 25.000 denars, with a task to buy a product (a device) from web site of the company that the customer is attached to. The control group gets instruction to buy same product, but on a web site selected by own choice. With this plan, the emotional bond that the customers have with the company they are loyal/attached to is being neutralized.

Figure 3: The structure of the sample



Source: research data

The collection of data is done by sending an online link to the respondents with included supervision on their quality. The collected data are presented by the software. In addition, an interview questions are being formulated at the end of the research. The answers are transferred to the SPSS database, with a mechanism that controls the logic.

The data are analysed by using the following techniques: heat maps, descriptive statistics for detection of the movement of the eye pupils, descriptive statistics for emotions detection via micro-expressions, descriptive statistics of clicks, significance of the difference between the experimental and control group and the subsamples.

From the analyses of the obtained data the statistical significant difference between the experimental and control group in regards to all key indicators is being determined on a level $p < 0.01$. These differences show that the percentage of successfully finished transaction is visibly higher at the control group versus the experimental, i.e. when the respondents make their own choice where to buy the device (besides the fact that the prices of the devices and sales conditions are the same). Due to the elimination of the impact of emotional bond with the company (in this case the brand), it can be concluded that the design of the online shop is having an influence over the customer experience, i.e. the online sales.

Figure 4: The result for navigation

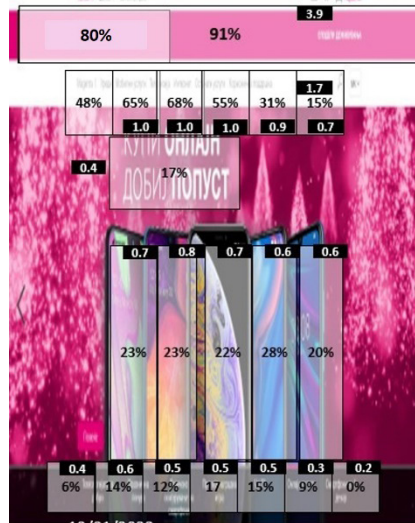
Navigation overview slide

	Company 1 site	Company 2 site	Other	
KPIs	Completion rate: can they find the task page?	98%	95%	90%
	Time to find the task page	62s	72s	65s
	Numbers of clicks they needs to find	2.8	4.8	5.4
Path	Used menu/success rate via menu	90%	89%	91%
	Used search/success rate via search	97%	97%	97%
General	Percentages that added products via search	89%	85%	75%
	Percentages that added product via menu	90%	85%	80%
	Percentage that added products via promotion	70%	50%	50%

Source: research data

The online shop of the Company 1 in major part of the indicators is optimal, and therefore has the highest percentage of successfully finished transaction in the both groups and subgroups. Figure 4 shows that the highest number of consumers bought additional products from Company 1 that implies on higher number of sales transactions.

Figure 5: Result for view of separate zones of interest (% of respondents and average time)



Source: research data

The Figure 5 shows that the promotional banner is the most visible part of the web site, which is being watched by 91% of the respondents and is being listed for almost 4 seconds, meaning that the visitors were reading the text.

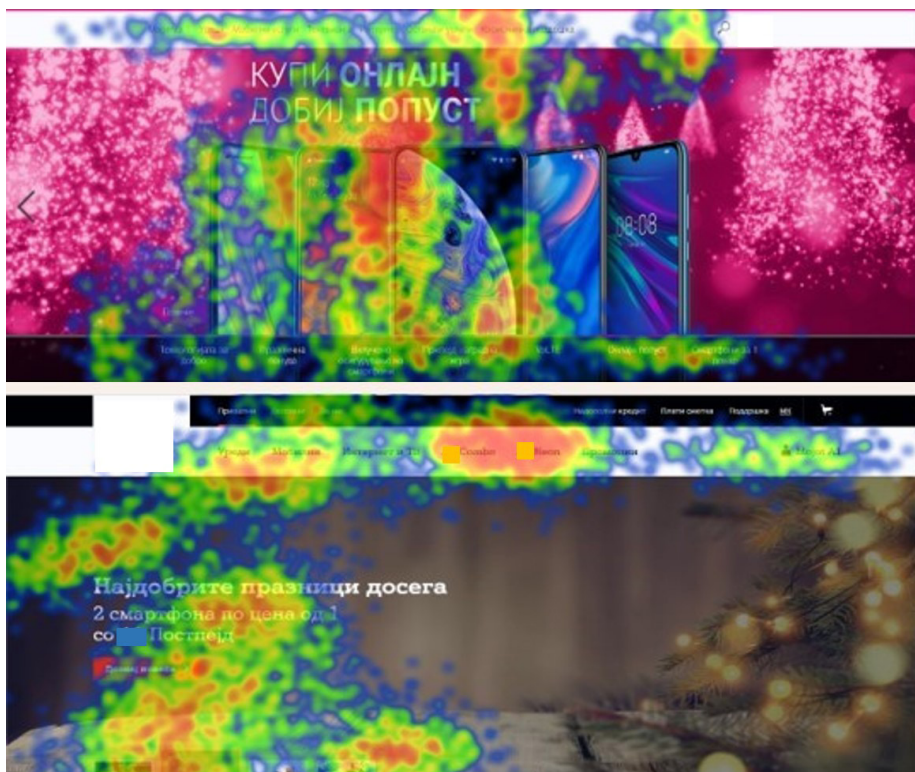
The elements that are above the listing line are still having dissent visibility (the Shipping Pass banner and line for promotional articles).

The visibility drops down with a progression of the page, and only 22% respondents are reaching the bottom of the page).

The average visibility of the category in the menu of the web page (the middle of the page) is 16%, which is very low compared to the expectations. These categories are visible only if the customers scroll down.

The web page of the product is not deeply seen and majority of the attention is dedicated to the picture of the product. This element is being seen by 97% of the respondents in an average of 3 seconds. Over 50% visibility show the connected pictures, but the last element is not sufficiently examined (no sufficient time for reading).

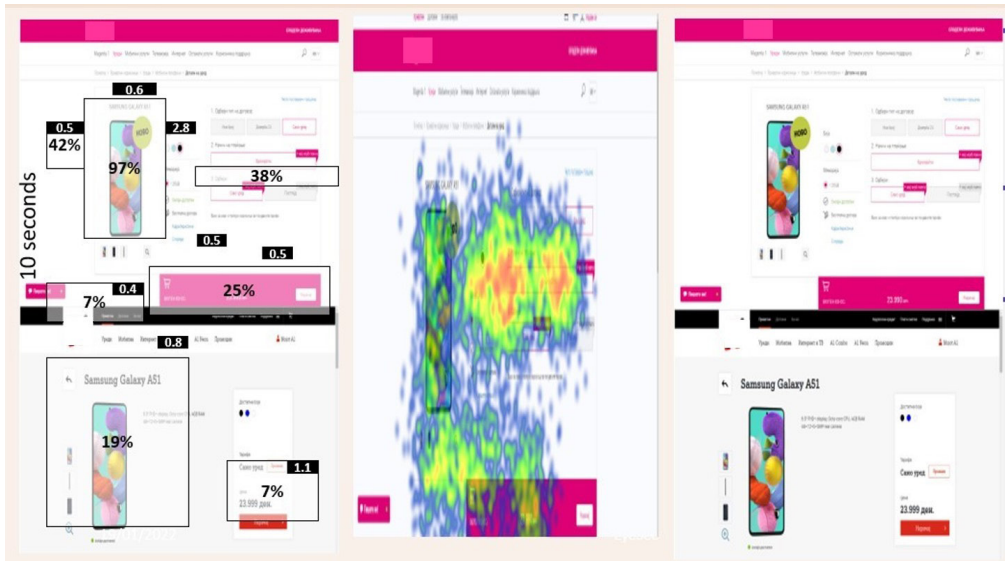
Figure 6: Results illustrated via heat maps for concentration of the view of the respondents at the web sites of Company 1 and Company 2



Source: research data

Figure 6 shows graphical illustration by using heat map of the focus of the customer, and similar behavior of the users of the websites of Company 1 and Company 2 can be noticed (concentration of the view on the devices and the tabs of the main menu).

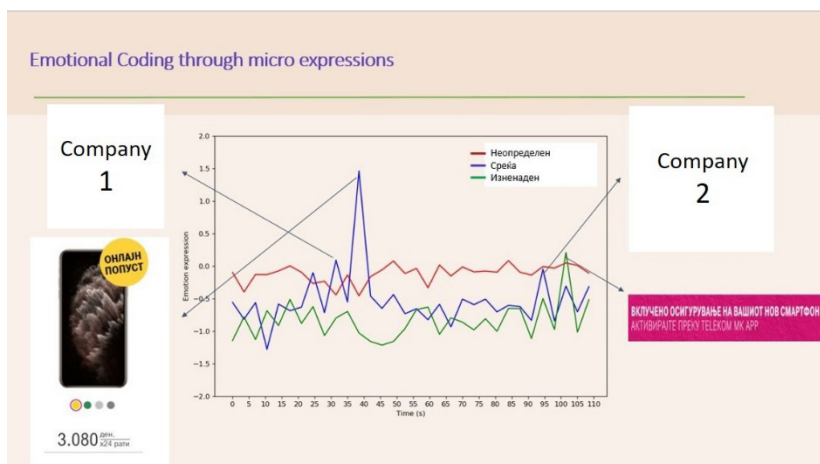
Figure 7: Result of monitoring the movement of the eye on the product page



Source: research data

The most important elements on the product page, after the respondents reach this part of the journey are: click on the map that uncovers the picture of the product, the shopping basket button, followed by the quantity of the product (part of the name), information about the category and availability of the product. This information shall be clearly presented on the web page.

Figure 8: Result on detection of emotions via micro-expressions

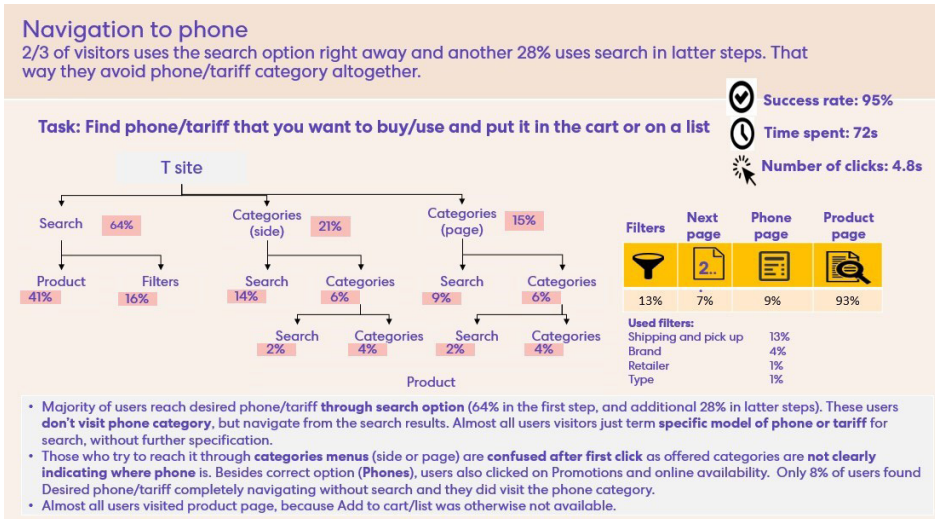


Source: research data

With the tool for recognition the emotions via micro-expressions, the company logo strongly provokes positive emotions (Figure 8). Besides, the elements that provoke positive emotions – happiness and positive surprise is the picture of the products presented as promotion. At the same time, the promotional price also produces happiness, which clearly implies the key elements in the design of the visuals of the online shop: logo, product (if possible with 360-degree view) and clearly expressed price with bigger font.

The impact of the design of the online shop on the sales can be measured via detection of the navigation, i.e. determining how many respondents bought the device, how long time they needed to find the target page with the product they seek for, how many clicks they made, what kind of menu they used, whether they went through the menu tree or they used the Search option, and how many customers bought additional product via other navigation (Figure 9)

Figure 9: The result on navigation scheme for selecting the product



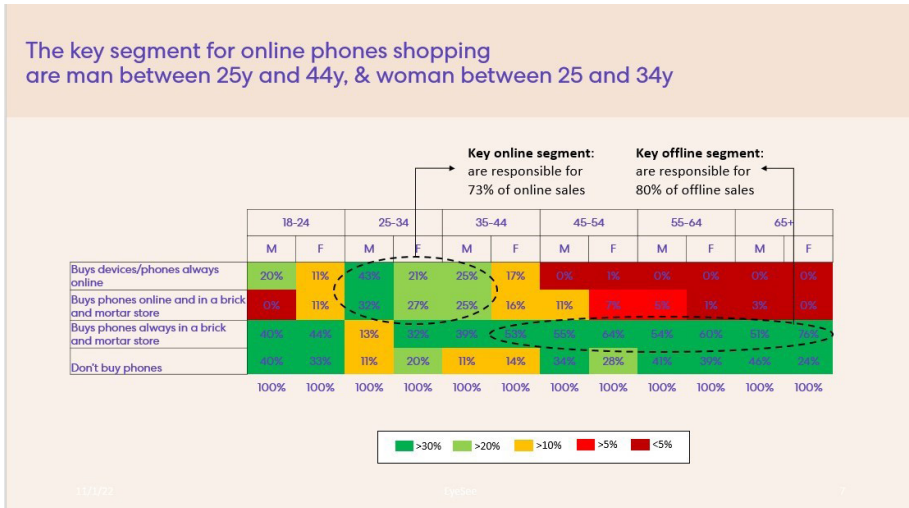
Source: research data

The data shows that the consumers prefer online shops at which they can select the final product in shorter period of time and with a smaller number of clicks. They are also ready to spend more than the planned budget in case they can in shorter period of time and less energy decide for the purchase of the product. This clearly shows the basic directions that shall be taken into account when designing the digital channel customer journey.

The results presented on Figure 9 shows the way the navigation on dynamic web sites happens. In order to make a decision for the product, more customers are going via Search option where they write the name of the product without using filter functionalities. Those customers that search via product categories use filters and more specific categories, which influences the prolongation of the time and number of needed clicks, which is the reason why at these categories of users, the realized sales volume is lower.

From the sociodemographic characteristics obtained with the traditional quantitative research at the end of the research, the profile of the customers that majorly buy online is determined, i.e. the primary target group.

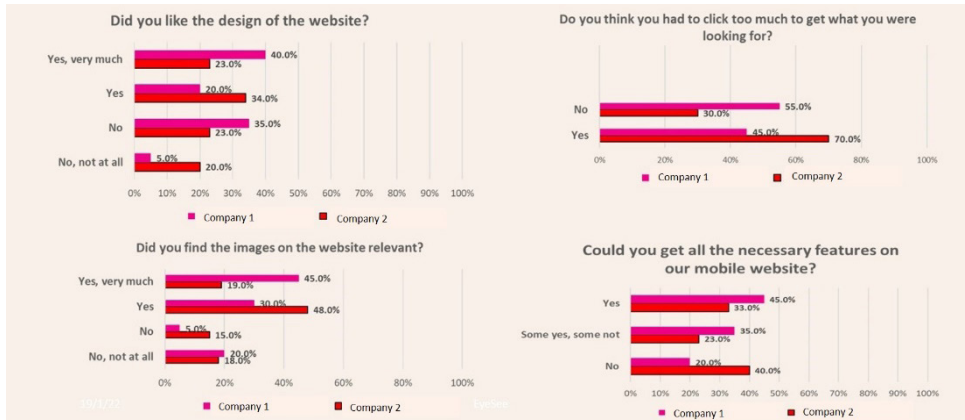
Figure 10: Segment description – target group for online shopping



Source: research data

According to sociodemographic characteristics, the group consist of male users with age 25-44 and female with age 25-34 years (Figure 10).

Figure 11: The results from the Q&A quantitative research



Source: research data

From the interview responses received, it is noticed that the respondents state the reasons for the positive user experience on a rational level, i.e. the design of the customer journey when shopping online has positively impact sales. (Figure 11).

Conclusion

The increased number of platforms for online sales and the extremely high growth of web sites that offers products and options for online orders and payments are strengthening the competition and intensifying the need from strategic planning and creating competitive advantage in the digital environment. With the optimization of the online sales and the digital customer journeys, the maximal effectiveness is being achieved. Practically, each attribute related to the online shop has an impact to the final goal of better commercial performance.

The creation of efficient digital channel is not a simple process, because many factors are influencing the realization of transactions at the digital channels. This paper analyses one of the most important aspects when doing business in competitive digital environment – the importance of the design of the customer journeys in online business.

The design of the digital channels and the corresponding customer experience has a critical importance on the efficiency and sales increase in online business. It is even higher for companies with advanced technology which use digital marketing. According to the findings, companies shall invest significant resources in the design of digital channels. With better customer experience, they are able to charge higher price premium, and secure higher number of acquired and retained customers, especially with the loyalty based on the attitude.

Theoretical and empirical elaboration in this paper indicates that design of the digital channels strongly influences the customer experience. The business that invest in better design will increase the simplicity and conversion rates. The logo of the company, 360-degree of the product and price expressed with large font, as well placing the promotions centrally, positively influence the transaction outcome.

Despite the fact that the online shops are dynamic websites, it must be taken care for the navigation that with less number of clicks and shorter time to reach the desired category and product. The Search option shall be clearly visible, and positioned on the top of the page with larger font.

The positive customer experience that is being stimulated with the above design characteristics of the online channel is helping into easier purchase decision making.

In addition, the quantitative research for customer experience via digital channels commonly conducted with traditional explicit answers are much more difficult to be executed and can dilute the conclusions. The neuromar-

keting tools and big data analyses shows much better and reliable results. In order to define and prioritize the aspects that increase the efficiency of the online business in the digital environment, the researches shall embrace both the unconscious and rational drivers for online shopping and the corresponding customer experience.

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