# Open University of Cyprus 

Faculty of Economics and Management

Master in Business Administration

# Postgraduate (Master's) Dissertation 



The impact of Higher Education Digital Marketing Strategies on prospective university students

Androulla Hadjigeorgiou

Supervisor
Dr Daina Nicolaou

May 2021

# Open University of Cyprus 

Faculty of Economics and Management

# Postgraduate (Master's) Programme of Study <br> Master in Business Administration 

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Strategies on prospective university students

## Androulla Hadjigeorgiou

Supervisor<br>Dr Daina Nicolaou

The present Postgraduate (Master's) Dissertation was submitted in partial fulfilment of the requirements for the postgraduate degree in

Business Administration Faculty of Economics and Management

Of the Open University of Cyprus

May 2021

## Summary

The purpose of this dissertation was to examine the impact of Higher Education Digital Marketing Strategies on prospective university students. More specifically, an attempt was made in order to identify the perceptions of prospective university students related to popular digital marketing strategies performed by universities such as Webpage, Social Media and Email Campaigns. Further to that, a closer examination of the information sources preferred by future university students at each stage of the decision-making process was made in order to identify their preferences. The five phase decision-making process, proposed by Lane and Kotler (2016) was used for this study.

Following quantitative approach method, a questionnaire was developed and administrated to current university students, via the Snowball Sampling Method (SSM), yielding 115 participants. Analysis performed using both Microsoft Excel and SPSS.

The findings of the study revealed that the Webpage of a Higher Education Institution is among the three most preferred information sources during the decision-making process. Additionally, statistical analysis revealed that preferences during "Information Search" stage and "Purchase Decision" stage differ according to education level. Despite the fact that Social Media were selected as one of the three most important information sources during "Evaluation of Alternatives stage", results also indicated that when it comes to reviews and testimonials contained in Social Media, future students seem sceptical. Under this scope it should be pointed out that the findings of this study indicated that there exist significant differences between the sources preferred by different age groups during "Evaluation of Alternatives" stage.

Overall, results indicate that university students prefer and trust digital marketing strategies while traditional marketing strategies seem to be of lower importance. Furthermore, there is an indication that the current pandemic Covid-19 pushed prospective students into deeper use and acceptance of the Internet.

## Пعрі́入ך廿ŋ











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## Acknowledgments

Firstly, I would like to express my deepest appreciation to my supervisor Dr. Daina Nicolaou, for her valuable support and invaluable guidance during this process.

Secondly, the completion of my dissertation would not have been possible without the support, motivation and constructive criticism of my friends, coworkers and family members. Thank you all, for being part of this beautiful journey.

Last but not least, I would like to thank my husband George and my kids Alexander, Laria and Orestis for their constant source of inspiration. Your love, support and profound belief in my abilities during this process was invaluable.

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## Chapter 1: Introduction

### 1.1 The Purpose of the Study

Marketing in the educational sector is about being ahead, being innovative and offer pioneer programs of study. To accomplish that, close examination of the society, the economy and technology are mandatory.

Without a doubt we are living the digitalization period. Everything is available on the internet 24 hours a day, 7 days per week. Cyprus Universities seem to embrace new trends and engage Digital Marketing Strategies in order to promote their programmes of study to prospective university students and establish their brand name in the Cyprus Market.

Nowadays, especially after the reform of colleges located in Cyprus to universities, the competition among the institutions offering university level degrees has rapidly increase. Offering pioneer programs of study by Cyprus Universities is clearly remarkable, but unless they are strategically communicated to potential clients, through various channels, no one will be aware of them and it is almost definitely that they will not survive. Moreover, targeting channels that prospective students prefer and regularly visit is of high importance. It is worth pointing out that the last two years, besides the challenges due to increase of competition, Cyprus Universities needed to instantly adapt to new realities related to the pandemic Covid-19.

The purpose of this study was to examine the impact of Higher Education Digital Marketing Strategies on prospective university students. More specifically, an attempt was made in order to identify the perceptions of prospective university
students related to popular digital marketing strategies performed by Universities such as Webpage, Social Media and Email Campaigns. Further to that, a closer examination of the information sources preferred by future university students at every stage of their decision-making process was made in order to identify the sources preferred at each stage. The five phase decision-making process, proposed by Lane and Kotler (2016) was used for this study. According to Lane and Kotler (2016) the five stages that a consumer pass during decision-making process are: Need Recognition, Information Search, Evaluation of Alternatives, Purchase Decision and Post-Purchase Evaluation.

### 1.2 Research Questions

Focusing on prospective university students located in Cyprus, interested in obtaining a university level degree, this study aims to investigate the impact of digital marketing strategies performed by Higher Education Institutions.

Under this scope, the following research questions were formulated and addressed in this dissertation.

Research questions:

1. What are the perceptions of prospective university students regarding the digital marketing techniques performed by Universities?
2. Which marketing channels (traditional and digital) prospective university students prefer and hence trust at each stage of the Consumer Buying Decision Process (Need Recognition, Information Search, Evaluation of Alternatives, Purchase Decision, Post- Purchase Evaluation)?
3. To what extent prospective university students' digital engagement is being affected by the pandemic Covid-19?
4. To what extent preferences of prospective students with relevance to information sources are being affected by gender, age and education?

### 1.3 Outline of the Study

This Master dissertation is presented in six chapters. Following Chapter 1, which refers to the "Introduction" of the study, Chapter 2 "Related Theory \& Literature Review" focuses in presenting the relevant theory as well as findings in relevant literature. Chapter 3 "Research Design" explains in detail the selected research method, states the formulated research questions and provides insights with relevance to sampling methods, data analysis and research ethics. Chapter 4 "Results of the Study" illustrates results and findings of the study while in Chapter 5 "Discussion" an attempt was made to critically discuss them in accordance with findings from past studies. Lastly in Chapter 6 "Conclusions" the most important findings of the study are summarized. Moreover, the limitations of the study are being illustrated along with some recommendations for further studies.

# Chapter 2: Related Theory \& Literature Review 

### 2.1 Definition of Marketing

According to the American Marketing Association, "Marketing is the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large" (Lane and Kotler, 2016).

A shorter, but to the point, definition of Marketing, proposed by Lane and Kotler (2016), is: "meeting needs profitably".

One of the main processes of marketing is research. Companies closely observe and analyze their target/ potential clients and construct products and services corresponding to their human and social needs (Lane and Kotler, 2016). Marketing can be successful when the needs of consumers are satisfied taking into consideration their expectations. To sum up, is all about listening to the vibes of humanity and creating and delivering goods and services in order to fulfill their needs. Products and services are produced in order to satisfy people's needs, in an innovative, convenient and accessible way.

As explained in "Marketing Management" by Lane and Kotler (2016), Marketing is not about selling. Marketing is about making selling unnecessary. When the product is well, carefully designed and strategically promoted, it simply sells itself. Marketing can be distinguished into two main categories: Traditional Marketing and Digital Marketing. The main difference of the two are the media that marketers use in order to disseminate the required message to the public. As per the case of traditional marketing, traditional media are being used such as
newspapers, magazines, billboards etc., while digital marketing uses digital media such as email, webpage and social media.

### 2.1.1 Traditional Marketing

Marketing techniques that are designed and implemented offline form Traditional Marketing. Various forms of advertisements such as TV spots, radio advertisements, billboard advertisements, advertisements on newspapers and magazines, printed brochures and leaflets are some widely known offline marketing practices. As per the case of a Higher Education Institution the prospectus is probably the most reliable traditional information source. More specifically, researchers support that prospectus is the most preferred information source by future students, during the Information Search stage (Moogan and Baron, 2003)

Despite the rapid evolve of Internet and the tremendous technological evolution, many traditional marketing practices are still preferred by marketers. For instance, based on an article written by Todor (Todor, 2016) and on a research conducted by ZenitOptimedia in 2015, people seem to prefer television over other media (Todor, 2016). The above mentioned research ranked television first, with people spending on average three (3) hours per day, while internet was ranked second (Todor, 2016). Also according to the same research, young people seem to prefer spending time online while older people prefer traditional media such as the radio and television (Todor, 2016).

Probably the most powerful tool of marketing is World-Of-Mouth (WOM). We could justify that WOM is the first marketing technique ever practiced, since people tend to share their experiences with others. Moreover, consumers are seeking for an honest opinion prior deciding to purchase a product or a service and WOM certainly satisfies the above requirement. Brown et al. (2008) support the argument that prospective university students are significantly influenced by current university students' opinion, during the Purchase Decision stage.

Moreover, people and particularly clients are seeking for communication and inperson contact with a representative of a company. In addition to the above
statement, with in-person, live contact, customers can scent the atmosphere, get an indication of the quality of the product they are about to buy and more important feel unique and valuable for the company. Moogan and Baron (2003) conducted "an analysis of student characteristics within the student decision making process" and discover that one of the reasons that could make a prospective student change their mind was the "social atmosphere" they felt during an open day. Something that is hardly achieved from distance, for example via live chat through the company's website.

### 2.1.2 Digital Marketing

Digital Marketing is the type of marketing that satisfies the traditional marketing objectives using digital technologies. The promotion of a product or a business through the internet, is also called online or internet marketing (McCoy, 2018).

In addition to the above statement, digital marketing requires a digital device in order to function (Dahiya and Gayatri, 2018). Internet and digital devices are being used in order to pass on a message and reach potential customers. Through digital channels companies promote their products and services, establish their brand in the market and define their customers' profiles.

Internet marketing not only helped companies increase their branding and visibility but also improved communication between the company and their clients (Poddar and Agarwal, 2019). The internet brought products and services closer to customers and improved the interaction between companies and consumers. Likewise, companies can easily target new customers and new markets, based on the data available on the internet.

Digital Marketing can be divided into two main categories, namely Viral and Affiliate Marketing.

### 2.1.2.1 Viral Marketing

According to American Marketing Association Viral Marketing is "a marketing phenomenon that facilitates and encourages people to pass along a marketing
message". The world viral has its origin from the world virus. It describes something that evolves quickly and can be exponentially spread like a virus. Viral marketing consists of announcements, pictures and promotional videos, that become extremely popular in social media platforms in a very little time, through online sharing. We can relate viral marketing, to WOM in traditional marketing.

Companies are using their customers in order to pass on messages to their friends, family and co-workers. Based on an article written by Mira and Beba (2014) the message can either be created by the company or by the customer, whilst the distribution of the message is solely made by the customer. Furthermore, the process of delivering the message to others can be intentional or unintentional (Mira and Beba, 2014). Intentional messages are passed on by the customers willingly. For example, people share through their social media platforms pages of places they have visited and enjoyed, in order to inform their friends and family about their experience. Unintentional messages are passed on unknowingly by the customer. An example of the above statement happens when people reply to emails using their mobile phones. For instance, when people reply to emails using their iPhone, the promotional slogan "send from my iPhone" is added at the bottom of the delivered message.

The purpose of viral marketing is to pass on a message efficiently and effectively with no, or at minimum cost.

The basic characteristics of viral marketing, according to Mira and Beba (2014) are:

- Extremely fast spreading. Internet made information sharing extremely fast and accurate, through emails, social media platforms and communication blogs.
- Increases Communication and Interaction between customers and creates a buzz about a product or a brand.
- Increases Consumers' Confidence. People tend to trust the opinion of other customers/users rather than the campaigns developed by companies in order to promote their products and services.
- Great coverage. The message is delivered at a wide range globally.
- Low budget.

Viral marketing can be beneficial for a company since it can improve the branding of a company with minimum or null cost, shows results extremely fast and has wide coverage.

### 2.1.2.2 Affiliate marketing

Authors Dwivedi, Rana and Ali Alryalat (2017) define affiliate marketing as a modern internet marketing type, that is based on performance. The firm assign to an affiliate the marketing of a service or a product in exchange for commission on an action (Duffy, 2005). The action can be a new sale they achieve, a new visitor on their website, a new subscriber etc. An affiliate is responsible for the marketing of a product or a service, instead of the firm itself. Furthermore, the affiliate design and implement the marketing and promotion of a product or a service and design the commission rates, which are granted only if the agreed outcomes are satisfied (Dwivedi, Rana and Ali Alryalat, 2017). If the marketing process goes well the affiliate will earn money, otherwise the affiliate loses money (Duffy, 2005). Since affiliates are paid according to their performance, affiliate marketing is also called performance marketing (Dwivedi, Rana and Ali Alryalat, 2017).

The performance of the affiliate falls into one or more of the following categories based on the contract agreed with the firm:

- Cost per sale (CPS) or Pay per sale (PPS): the affiliate gets paid according to sales achieved linked to a certain promotional activity, such as an advertisement or a video (Dwivedi, Rana and Ali Alryalat, 2017).
- Cost per lead (CPL) or Pay per lead (PPL): the affiliate gets paid for referrals (Dwivedi, Rana and Ali Alryalat, 2017). In a pay per lead agreement it is not enough for a person to visit the firm's website, some kind of interest must be shown. A lead is usually a sign up. For instance, the visitor willingly provides some demographics to the firm, such as an email address, in order to receive the company's newsletter or promotional vouchers. Referrals must not necessarily proceed to a purchase (Dwivedi, Rana and Ali Alryalat, 2017).
- Cost per click (CPC) or Pay per click (PPC): the affiliate gets paid for the number of clicks on an advertisement that directly leads the potential customer to the firm's website (Dwivedi, Rana and Ali Alryalat, 2017).

The success of affiliate marketing lies in the creation of a win-win relationship between the firm and the affiliate (Duffy, 2005). The firm enjoys sales revenue and has a predictable marketing cost based on sales achieved. Moreover, the affiliate earns money by promoting products on the web, without investing money in expertise and production costs (Duffy, 2005).

### 2.2 Digital Marketing Channels

With relevance to the purpose of this dissertation, the following subsections focuses on presenting the main digital channels preferred by marketers and more specifically Higher Education Institutions, namely Webpage, Email Marketing and Social Media.

### 2.2.1 Webpage

The webpage of a brand, a product or a service is the digital space that consists everything about it. It is probably the most powerful digital channel that marketers use in order to achieve their marketing goals since it is easily accessible by anyone via an electronic device (laptop, tablet, smartphone). Jan and Ammari (2016) conducted a research in order to explore the impact of various online advertising media on students' decision-making process. Their research revealed that websites can positively impact students' choice of a particular university (Jan and Ammari, 2016). Moreover, Simoes and Soares (2010) conducted a research focusing on the information sources and choice factors, that affect an individual's choice. Among their findings was that the university's website belongs in the three most preferred information sources used by prospective university students (Simoes and Soares, 2010).

A good webpage must be well designed, optimized, responsive and of course secured.

The webpage must represent the status of the company in general, and universities in particular, and clearly disseminates the desirable message to the visitor. Among the top priorities of universities should be the creation of a professional website that is regularly updated in order to comply with the latest information (Jan and Ammari, 2016). Therefore, the first component to consider when designing a webpage should be how to organize information through the menu. As mentioned by Dodson (2016), companies need to "design from the consumer's perspective". The web designer must take into consideration that a company's website would be viewed by a wide range of visitors, such as frequent customers, potential customers, even a prospective partner. To sum up the design, the messages, the graphics, the colors, even the pictures that will be included in a webpage, should clearly represent the company's mission and vision. Furthermore, the previously mentioned elements should help the visitor quickly realize what the company does, the products and the services they offer (Reske, 2017).

Another important element to consider when designing a webpage is Search Engine Optimization (SEO). The main purpose of using SEO is to achieve higher rankings in Search Engines (Barnard, 2020). In simple words, what SEO does is to optimize the keywords that are indexed in a website (Barnard, 2020). SEO can be achieved by various techniques. The most widely methods used, are meta tags (title, caption, description) to the website images and relevant keywords to posts. Universities can achieve higher rankings in Search Engines by focusing on their unique characteristics such as services or programmes of study, that are able to create an advantage over their competitors. For instance, Open University of Cyprus should focus in distinguishing its competitive advantage from other state universities, i.e. as the one committed to solely distance learning.

As mentioned earlier, security is one of the most essential elements required for a professional webpage. The instalment of Secure Sockets Layer (SSL) on the web server, ensures that all data exchanged between the browser and the server is encrypted (SSL Support Team, 2019). Visitors can detect whether a webpage is secured by the padlock sign on the left of a URL and also the prefix "https" instead of "http" (SSL Support Team, 2019). Moreover, SSL reassures the webpage visitor
that the site is authentic and that their sensitive data, such as personal and financial information, are being protected (SSL.com, 2019). Universities that wishes to promote their programmes of study via internet and more specifically encourage prospective students to submit their application online, should pay particular attention in protecting personal and financial data of their "customers".

Last but not least a professional webpage should be fully responsive. It is all about targeting the electronic devices that consumers prefer (Dodson, 2016). Nowadays people use their smartphones and laptops for educational, entertainment, even business purposes. Therefore, the webpage of a Higher Educational Institution should perfectly function via various electronic media with different screen sizes and operating systems, such as computer, laptop, smartphone or tablet and IOS or Android respectively.

More specifically as mentioned by Dodson (2016), on average people look at their phones 150 times per day. Furthermore, we can assume that any form of digital marketing delivered via smartphones, satisfies the following objectives:

- Immediacy: since people carry their smartphones always with them and look at them several times a day (Dodson, 2016).
- Connectivity: since mobile phones are personal devices, by performing digital marketing campaigns via smartphones, companies invest in deeper bonds with clients (Dodson, 2016).


### 2.2.2 Email Marketing

Email marketing is a powerful way to create loyalty and brand awareness (Budac, 2016). It is the process of designing and delivering promotional messages to a target group, consisting of either potential or existing clients, via e-mail. Usually, it contains information about a product or a service and or an offer for the receiver. When carefully designed, email marketing can elevate the sales of a business and bring visible and measurable results (Budac, 2016).

Companies must design their email campaigns carefully (Reske, 2017). Both Reske (2017) and Budac (2016) agree that the first step in order to design a successful email campaign is to distinguish your audience. Companies should store and use
segmented audience lists, since subscribers differ in occupation, interest and expectations (Budac, 2016). The segmentation of students into smaller target groups according to their preferences and needs, is often mentioned by researchers since it can create a communication path between prospective students and Higher Education Institutions (Obermeit, 2012). The above described technique will have as a result the increase of "clicks to open" and decrease of unsubscribe requests (Budac, 2016).

The email campaign can be designed in reference to one of the following audience categories (Reske, 2017):

- The company's top clients. If a company wishes to design an email campaign with reference to the company's most loyal clients, that should be a personalized email containing offers exclusively for them, as a reward for their support (Reske, 2017). Likewise, Universities invest in the creation of strong bonds between their Alumnus. Personalization is perceived by clients as an appreciation for their loyalty and creates stronger bonds between the customer and the company.
- All existing customers in the company's customer list. Existing customers can receive emails in the form of a newsletter, in order to establish communication and stimulate interest (Reske, 2017). As per the case of a Higher Education Institution, existing customers, are students currently studying at the University.
- Partners. Businesses should be very careful when contacting partners via emails. Partners should be treated as team members and not as clients, despite the fact that can also be viewed as top customers (Reske, 2017). The email delivered to them should be formal and rewarding at the same time. Companies should express their appreciation for the current status of the partnership and offer alluring rewards in order to continue their cooperation.
- Potential customers that have already shown interest in obtaining information about the company. Potential customers that have already shown interest and provide their personal information willingly to the company are the key persons in order to permeate to new markets. They
are mostly interested in offers, news and discounts (Reske, 2017). More specifically, prospective university students that express their interest and provide their personal information during Educational fairs and Open days belong in this category.
- Other potential customers in the targeted market. These email campaigns should be highly promotional and tempting, containing strong offers in reference to new customers only (Reske, 2017).

Furthermore, if a company wishes to achieve maximum results and design successful campaigns, it is crucial to collect feedback from each email campaign they run (Reske, 2017). Key Performance Indicators (KPIs), are useful data showing the overall performance of a campaign (Reske, 2017).

Nowadays, especially after the adoption of the new General Data Protection Regulation (GDPR) in April of 2016 and its full application on May of 2018, companies should be very careful on how they collect, store and handle personal data. Companies must ensure that every email account that exists in their database, was freely given to them by their owners. Further to that, companies ensure that they will not face any legislation problems, by informing provisional subscribers on how their email addresses will be handled and what kind of communication they should expect to receive, such as newsletters, vouchers and/or discounts. Moreover, subscribers must consent to enter the company's mailing list by adding a check mark at the relevant box provided. Another aspect that companies must keep in mind when running email campaigns, is to provide the flexibility to their subscribers to remove their personal data from their mailing list at any time they wish and terminate any form of communication with them. That is achieved either by sending an automatic stop message to them or by clicking at a relevant box provided usually at the end of the content of a promotional message. Moreover, as mentioned earlier, data bases should be segmented according to their audience preferences, in order to avoid complains by annoyed subscribers.

Email campaigns are easy to implement and run and they have minimum cost for a company. Probably the costliest aspect of running email campaigns is the investment in strong firewall systems in order to ensure that the company's data
bases, containing their subscribers' personal data, are well protected. Another aspect that firms must keep in mind is the creation of an action plan, in order to minimize damage of an unfortunate event that might occur, such as a hacker attack.

### 2.2.3 Social Media

Social Media are digital channels that companies use in order to promote their products and enhance their branding. Via social media, companies can advertise their products and establish their brand in the market with minimum cost. Nowadays many universities own accounts on various social media platforms in order to increase interaction and communication with prospective students and consequently affect their choices (Constantinides and Stagno, 2012). Despite the fact that Higher Educational Institutions embrace social media activities in the recent years, limited research is published with relevance to the impact of social media on future students' choice (Constantinides and Stagno, 2012). The article published by Constantinides and Stango (2012) states that although traditional media are preferred by prospective university students, social media are found to be more attractive as information sources.

In the following subsections some of the most popular and widely used social media will be presented, namely Facebook, Twitter, Instagram and LinkedIn.

### 2.2.3.1 Facebook

Facebook is a social media platform that was launched in 2004 (Webwise, 2021). It is probably the most recognized social media over teenagers and young adults. Through Facebook users can create a profile for free in order to stay connected with friends, relatives and colleagues (Webwise, 2021). Via their profile people can share their thoughts, experiences, pictures and videos (Webwise, 2021). Moreover, a company can own a Facebook profile and share content, pictures, advertisements etc. Further to that, people can create groups or ask to join already existing groups. Groups are closed or open societies consisting of people that
share a common characteristic. That can be anything such as their passion about gardening, parenting, sports, cars etc.

### 2.2.3.2 Instagram

Instagram is a free social media platform for sharing photos and videos. It is worth mentioning that Instagram was bought by Facebook in 2012 (Antonelli, 2020). Instagram is all about following and being followed. One of the features that Instagram offers to its users is the ability to publish a post not only to Instagram but also to other social media such as Facebook and Twitter, at the same time. This can happen when the accounts are linked together (Antonelli, 2020).

### 2.2.3.3 Twitter

According to Twitter.com, "Twitter is a service for friends, family, and coworkers to communicate and stay connected through the exchange of quick, frequent messages." Unlike Instagram, Twitter contains less pictures and more messages called "tweets". Moreover, people can follow others and similarly they can be followed by others. Furthermore, they can "retweet", i.e. forward tweets written by others, to their followers (Twitter, 2021).

### 2.2.3.4 LinkedIn

Unlike other social media platforms presented above, LinkedIn is more professional and focuses in business and career development (Johnson, 2019). Every account profile becomes a resume, containing previous work experiences, education, achievements, location etc. (Johnson, 2019). Through LinkedIn people can be informed about job openings, share their Curriculum Vitae, even enrolled to online classes and seminars (Johnson, 2019).

### 2.3 Consumers' Decision Process

The choice of a University and subsequently a programme of study is not an easy task for a prospective student. Various socioeconomic factors affect future
students' choice of which university to attend (Obermeit, 2012). According to Brown et al. (2008) the choice of Higher Education Institution falls under the category of "extended problem solving", since it requires extensive information search in order to eliminate the potential risk. The associate risk perceived to be high when consumers are about to make an expensive purchase and even higher when they are about to purchase a service instead of a product (Brown et al., 2008). The above statement can be supported by the nature of services, namely intangibility, inseparability, perishability and variability (Brown et al., 2008). Further to that, Simoes and Soares (2010) state that future University students face uncertainty because the results of their present choices will be fully known after their graduation.

Hemsley-Brown and Oplatka (2006) state that educational marketing can benefit by the adoption of popular marketing theories applicable in the business world. In addition, Hemsley-Brown and Oplatka (2006) support the argument that prospective university students can be related to consumers. Therefore, the fivestage consumer decision-process theory explained by Lane and Kotler (2016) can be applied in the case of a university choice by prospective students (Moogan and Baron, 2003). It is worth mentioning that many researchers (Lane and Kotler, 2016; Obremeit, 2012) support the argument that not all consumers' pass through all five stages. Further to that, a three-stage choice theory was presented by Obermeit (2012) at which the prospective university student passes through the Predisposition, the Search and the Choice stage. Although the theory presented by Obermeit (2012) consists of only three stages, it appears to be similar to the theory explained by Lane and Kotler with some stages being combined.

According to Lane and Kotler (2016) the Consumer Buying Decision Process consists of the following five stages:

- Need Recognition: The first stage at which prospective university students become aware of their options and decide whether they would like to attend University. Likewise, current university students or graduates decide whether they would like to apply for a higher degree, i.e. Master or Doctorate degree. Obermeit (2012), states that high school students decide whether they would like to attend University and hence,
the first stage is accomplished, by the end of the first semester of high school's final grade. Both internal and external stimulus can create need awareness (Lane and Kotler, 2016; Stankevich, 2017). Marketers should focus on making consumers realize the gap between their present status and the advertised/ desired one (Stankevich, 2017).
- Information Search: After the realization of a need, consumers start searching for additional information in order to fulfill their need (Stankevich, 2017). According to Stankevich (2017) the information search can be both internal and external. Internal information is related to a person's previous experiences while external information can be collected by traditional or digital media (Stankevich, 2017). Stankevich (2017) states that "recommendations" from friends and relatives seem to be the most preferred source of information during "Information Search", while television advertisements and social media are in the second and third place accordingly.
- Evaluation of Alternatives: When the Information Search stage is completed the consumer proceed to the Evaluation of Alternatives stage. As supported by various researchers (Lane and Kotler, 2016; Stankevich, 2017) consumers finalize their decision based on the product attributes which are the most important to them such as price, quality, location etc. In addition, attributes vary by product/ service (Lane and Kotler, 2016).
- Purchase Decision: At some point, consumers formulate their choice and decide to make a purchase but as pointed by Stankevich (2017), there exists a "delay" between the decision and the actual implementation of a purchase. Marketers should invest in marketing strategies that keep the prospective customers alert and if possible give them a "push" in order to proceed to the actual purchase. As per the case of Higher Education Institutions, a common practice that is usually performed in order to convince a prospective student to proceed with the application process, is by offering assistance and exclusive offers to those who submit their application during an Open Day.
- Post-Purchase Evaluation: Post-Purchase evaluation is related to the customer's satisfaction, actions, use and disposal of the product (Lane and

Kotler, 2016). When a customer is satisfied from their purchase, it is possible to recommend it to friends and family even return back for a new purchase (Lane and Kotler, 2016). As mentioned by Lane and Kotler (2016) marketers should pay attention to their clients' feedback after purchase. As per the case of Higher Education Institutions, they should invest in receiving students' feedback regularly, throughout their academic journey, in order to monitor the quality of their services (i.e. teaching experience) and student satisfaction.

For the purposes of this study, the five-stage Consumer Buying Decision Process theory explained by Lane and Kotler (2016) will be applied. The information sources and more specifically the marketing strategies preferred by prospective university students at each stage of the decision making process presented earlier will be explored.

### 2.4 Previous Studies on Education Marketing

The impact of marketing techniques both traditional and digital on consumers buying decision process, has always been an interesting topic for researchers (Jan and Ammari, 2016; Simoes and Soares, 2010; Moogan and Baron, 2003; Obremeit, 2012; Constantinides and Stagno, 2012; Brown et al., 2008). The following Table (Table 1) illustrates key findings of the relevant literature with reference to the topic of this dissertation.

| Article title | Authors | Methodology | Sample | Most important results with relevance to marketing strategies and information sources preferred by prospective students |
| :---: | :---: | :---: | :---: | :---: |
| Advertising online by educational institutions and students' reaction: a study of Malaysian Universities | Jan M. T. <br> Ammari D. | Quantitative Self-administrated questionnaire | 350 students from various Malaysian universities | i. Social media and Websites positively affect students' choice <br> ii. In general, online advertising can influence students' decision |
| An Analysis of Student Characteristics within the Student Decision Making Process | Moogan Y. J. Baron S. | Quantitative Survey | 674 participants from Further Education Schools | i. Prospectus found to be the preferred source of information during Information Search phase <br> ii. Friends and ex-colleagues are a good source of information |
| Applying to higher education: information sources and choice factors | Simoes C. Soares A. M. | Quantitative Survey | 1641 Students from a public University | i. The website of a University found to be among the three most preferred sources of information |
| University course selection and services marketing | Brown C. <br> Varley P. <br> Pal. J | Qualitative Interview | 22 Students from a University in north west England | i. The decision making process is complex <br> ii. Website \& prospectus preferred in the early stages of decision making <br> iii. The purchase decision stage is influenced by open day experience. Prospective university students can be affected by both staff and students they meet during an open day |
| Students' choice of universities in Germany: structure, factors and information sources used | Obermeit K. | Review of German \& US researches | - | i. Internet proven to be the main source of <br> information search  |
| Higher Education Marketing: A Study on the Impact of Social Media on Study Selection and University Choice | Constantinides E. Stagno M. C. Z. | Qyantitative Empirical data and survey | 403 Students in last two years of High School | i. The three most important information sources found to be: campus visits, websites and brochures <br> ii. Despite the fact social media are not preferred by prospective university students, they found to be more attractive than other media |

# Chapter 3: Research Design 

### 3.1 Introduction

The following subsections focuses on the presentation of the research questions formulated in order to provide answers to the topic of this Master dissertation. In addition, the selected research method is presented. Moreover, particular emphasis is given in the explanation of the development of the questionnaire and the sampling method followed. Lastly, explanation of how the data analysis was carried out, along with research ethics and reliability analysis are presented.

### 3.2 Research Questions

Within the context of my dissertation topic the following research questions were set and addressed:

1. What are the perceptions of prospective university students regarding the digital marketing techniques performed by Universities?
2. Which marketing channels (traditional or digital) prospective university students prefer and hence trust at each stage of the Consumer Buying Decision Process (Need Recognition, Information Search, Evaluation of Alternatives, Purchase Decision, Post- Purchase Evaluation)?
3. To what extent prospective university students' digital engagement is being affected by the pandemic Covid-19?
4. To what extent preferences of prospective students with relevance to information sources are being affected by gender, age and education?

### 3.3 Data Collection

A survey is usually preferred by researchers in order to measure perceptions, beliefs and attitudes shared by a specific group of people, since it provides quantitative data driven from a sample of the population (Creswell and Creswell, 2018). Advantages of a survey design were outbid by Creswell and Creswell (2018). Firstly, it is preferred because it is an inexpensive method of gaining data (Creswell, 2018). Secondly, it is easily administrated via email and provides a wide coverage overcoming geographical restrictions (Creswell and Creswell, 2018). Thirdly, numerical data are obtained immediately (Creswell and Creswell, 2018). Therefore, for the purposes of this study a self-administered, crosssectional, questionnaire was developed in order to obtain the required data. For the development of the questionnaire, theories and methods found in relevant literature were taken into consideration.

Since this research was going to take place in Cyprus, a decision was made to design the questionnaire in Greek, the native language of participants. By doing so, the undesirable event of a misleading answer due to misunderstanding of a question was eliminated. Moreover, the questionnaire was created using Google Forms ${ }^{1}$ and administrated to prospective university students via email. Email administration of the questionnaire was decided for two reasons. On the one hand, to minimize the time required in order to collect the desired data and on the other hand, to reassure a contactless procedure in compliance with mandates related to the pandemic Covid-19.

The questionnaire consisted of four parts. All four parts of the questionnaire contained closed-ended type questions besides the last question in part B at which the option "Other" was provided, so that participants could add their suggestions (For the questionnaire in word format please see Appendix A).

[^0]Part A contained questions aiming to explore the perceptions of prospective university students related to digital marketing strategies performed by Higher Education Institutions. More specifically, it consisted of ten in total, Likert scale questions, related to digital channels presented earlier, namely webpage, email and social media.

Part B contained questions related to prospective university students' preferences of Marketing Strategies performed by Higher Education Institutions, at each stage of the decision-making process. An attempt was made to include at least one question related to each stage, in order to investigate whether a specific stage is more affected by digital marketing strategies than other stages. More precisely, seven questions in total were included in Part B. With reference to the first stage of decision-making process, "Need Recognition", one multiple Likert scale question was included in the questionnaire. In order to explore the preferences of future students during "Information Search" and "Evaluation of Alternatives", three questions were formulated containing lists of the most popular marketing strategies performed by universities, both traditional and digital, and asked participants to rank the three most important sources of information according to their opinion. A similar practice performed by Simoes and Soares (2010) in order to identify the information sources preferred by prospective students. The next two questions asked participants to choose one of the possible options provided (both digital and traditional options included) with reference to the "Purchase Decision" and "Post Purchase Evaluation" stages. It is worth mentioning that, there is limited research investigating the preferences of prospective university students during the last two stages of the decision-making process. Literature presented earlier mainly focuses on pre-purchase stages of the decision-making process. Therefore, it is interesting to explore whether prospective students prefer traditional channels rather than digital channels during these two stages. The last question contained a list of additional marketing actions and asked participants to select which of them, according to their opinion, could enhance the overall image of a Higher Education Institution. At this point, participants were also given the option to select "Other" in this particular question and specify their suggestion.

Part C contained three Likert scale questions related to the pandemic Covid-19. Despite the fact that when this dissertation's topic was decided, Covid-19 did not exist, its appearance definitely caused many changes in peoples' lives. Fear of the unknown forced people change their everyday routines and isolate themselves. More specifically, the pandemic affected the way people perform marketing research and proceed to a purchase. By including Part C in the questionnaire an attempt was made to explore whether the current global pandemic situation has pushed consumers into deeper acceptance and engagement with the digital world.

Part D contained questions focusing on demographics and overall digital engagement of participants. More specifically with reference to demographics Part D asked questions related to the gender, the age and the education level of participants. Moreover, four Likert-scale questions were included in part D aiming to explore the overall digital engagement of participants (See Appendix B for a detailed explanation of the questions included in the questionnaire).

### 3.4 Pilot Test

In order to test the time required to complete the questionnaire as well as the clarification of the formulated questions, a pilot test of the study was executed. More specifically, a small group of people - consisting of close friends and relatives - with different educational background and varying ages, were asked to answer the questionnaire prior it was released to the public. It is worth mentioning that the questionnaire remained open for two days during the pilot test period. Finally, some alterations and corrections were made, based on the received feedback. For instance, adjustments were made to the cover letter along with some improvements in the questions format and instructions.

### 3.5 Sampling Method and Participants

The Snowball Sampling Method (SSM) was preferred in this study as the best option to recruit participants. According to Cohen and Arieli (2011) SSM is a
convenient, chain-referral sampling method, usually preferred by researchers interested in recruiting participants from specific populations, in cases where difficulties arise in gaining access to a representative sample of the targeted population. Dusek et al. (2015) explained how SSM is carried out: The researcher passes on the questionnaire to a number of participants that satisfy the required characteristics of the targeted population, and encourage them to pass it on to other individuals with the same characteristics. It is also worth pointing out that this sampling method highly depends on the researcher's social network and goodwill of participants.

Participants for this study decided to be current Cypriot University students of any level, studying in Higher Education Institutions located in Cyprus. Due to the fact that gaining access to email lists of current University students is strictly prohibited by GDPR regulations, the questionnaire was initially send to a group of around thirty (30) people, consisting of fellow students as well as close friends and relatives that are currently studying in Cyprus Universities. Furthermore, they were kindly asked to forward the questionnaire to their classmates, via closed groups in various social media platforms.

Due to time restrictions in completing this study, the questionnaire remained open for two weeks only. A total of a 115 respondents were collected. As presented in Figure 1 below, 23\% of participants were Male, 76\% were female and $1 \%$ Prefer not say.


Figure 1: Gender Pie Chart

Figure 2 illustrates participants age. The majority of participants (42\%) belong in the 31-40 age group, followed by $30 \%$ in the 21-30 age group. $16 \%$ belong in the $41-50$ age group, $6 \%$ in the $51-60$ age group, $5 \%$ in the $\leq 20$ and only $1 \%$ in the age group $\geq 61$.


Figure 1 Age Pie Chart
Figure 3 presents participants Education Level. The majority of participants, 48 out of 115 (42\%), hold a Master's degree followed by the participants that hold a Bachelor's degree being 34 out of 115 (29\%). In addition, $15 \%$ of the respondents hold a Diploma, 8\% had finished High School and 6\% hold a PhD.


Figure 3 Education Level Pie Chart

### 3.6 Data Analysis

Collected data were initially exported from Google Forms to Microsoft Excel. Moreover, data were manipulated in order to be able to be transferred in SPSS. In more detail, research questions were renamed as variables and possible answers were coded into numbers. For example, the research question that asked participants to state their gender was renamed as "Gender" and the answers were coded as follows: Male=1, Female=2 and Prefer Not Say=3. Analysis performed using both Microsoft Excel and SPSS.

### 3.7 Research Ethics

"In all research involving the collection of data from human beings, there is a fundamental moral requirement to treat those people in accord with standards and values which affirm their essential humanity" (Oliver, 2003).

As supported by Oliver (2003), among the core principles of social science research ethics is that participants should be fully aware of the purpose of the research before they decide whether they would like to take part in it. In addition, researchers should keep in mind that the information given to possible participants must be written in simple language and they should avoid using academic terminologies without explaining them, in order to avoid confusing them (Oliver, 2003). For this study and with respect to all possible participants, a cover letter was included at the beginning of the questionnaire explaining in an understandable manner the purpose of the study. Furthermore, the researcher's email address was added at the last paragraph of the cover letter, so that anyone could contact the researcher for additional information related to the topic of the dissertation.

Another fundamental element of social science research ethics mentioned by Oliver is anonymity (Oliver, 2003). In order to keep the identity of respondents hidden, the questionnaire remained anonymous and questions that could probably reveal the identity of a participant were avoided. Furthermore, the
above statement was clearly stated on the cover letter in order to encourage people to take part in the research.

Moreover, according to Oliver (2003), possible participants should be informed on how the data will be handled, for how long they would be stored and whether they will be available for future studies (Oliver, 2003). As per the case of this study and with respect to confidentiality, it was clearly stated in the cover letter that the data collected via the questionnaire will be used for the purposes of the present study only.

Last but not least, in order to make sure that participants have read and consent to the terms and conditions included in the cover letter, a check box was added at the bottom of the cover letter. By clicking on the check box provided, participants agreed to the terms and conditions stated above and only then, they could access the questionnaire. Furthermore, and with respect to each and every one that decided to participate in this research, the opportunity to withdraw from the study was given at any time during the completion of the questionnaire and before submitting it.

### 3.8 Reliability of the Study

As stated by Creswell and Creswell (2018), "the most important form of reliability for multi-item instruments is the instrument's internal consistency". By "internalconsistency" we refer to the degree at which the questions included in the questionnaire are related (Creswell and Creswell, 2018).

Cronbach's alpha $(\alpha)$ is a coefficient that measures reliability of the instruments in a questionnaire. The coefficient of reliability ( $\alpha$ ) can take values between 0 and 1. When $\alpha=0$ or values close to 0 , the items checked are independent and hence are not correlated. Similarly, when $\alpha$ approaches 1, we can assume strong correlation between the items checked and hence there exist a high probability that our questionnaire was reliable. Creswell and Creswell (2018) state that values between the interval 0.7-0.9 are acceptable and indicate strong internalconsistency.

For this study and in order to check reliability of the questionnaire, a reliability analysis was carried out in SPSS. All Likert scale questions (23 in total) were included in the analysis. The results are presented in the following Table (Table 2). Cronbach's alpha found to be equal to .851 which indicates an acceptable reliability of the instrument.

| Table 2: Reliability Statistics |  |  |
| :---: | :---: | :---: |
| Reliability Statistics |  |  |
| Cronbach's <br> Alpha | Cronbach's <br> Alpha Based <br> on <br> Standardized <br> Items | $N$ of Items |
| .851 | .850 | 23 |

After a closer examination of the statistics obtained via SPSS, we can detect that if we delete the following question: "The content of an email designed to promote a Higher Education Institution should be brief", the Cronbach alpha coefficient would increase some more and reach the value 0.856 . As seen in Table 3.

Table 3: Item Total Statistics - Cronbach's Alpha if Item Deleted

| Item-Total Statistics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item- <br> Total Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item Deleted |
| Info | 87.9043 | 105.000 | . 314 | .465 | . 849 |
| Access | 87.8348 | 104.929 | . 354 | . 500 | . 848 |
| Navigation | 88.2000 | 101.372 | . 399 | . 585 | . 846 |
| Impression | 87.5913 | 105.174 | . 370 | . 391 | . 847 |
| Aware | 87.7478 | 103.559 | . 452 | . 618 | . 845 |
| Reviews \& Testimonials | 89.0696 | 101.048 | 417 | 498 | . 845 |
| Live videos | 88.2522 | 103.138 | . 345 | . 522 | . 848 |
| Email - Interesting info | 88.5478 | 101.145 | . 454 | . 489 | . 844 |
| Personalized - Trigger | 88.2783 | 102.694 | . 363 | .425 | . 847 |
| Email content brief | 87.8087 | 108.384 | . 076 | . 155 | . 856 |
| Webpage | 88.7391 | 94.966 | . 624 | . 743 | . 836 |

A decision was made not to delete the question since coefficient of reliability was already high enough and indicated a strong internal-consistency. The full statistical analysis performed in SPSS can be viewed in Appendix C.

## Chapter 4:

## Findings and Results

### 4.1 Introduction

In the following subsections, results of the study will be presented in an attempt to answer the research questions stated earlier. In particular results from Part A, $B, C$ and the last four questions of Part $D$ will be presented. It is noted that the first three questions of Part D related to demographics such as Gender, Age and Education Level were presented earlier (please see Chapter 3, subsection 3.5 Sampling method and Participants).

### 4.2 Perceptions Towards Digital Marketing Strategies Performed by Universities

Part A contained ten (10) in total Likert scale questions aiming to shed light on the perceptions of prospective university students associated to digital marketing techniques performed by Higher Education Institutions. The results were broken down to three parts in order to distinguish perceptions related to Webpages, Social Media and Email campaigns.

With reference to the first set of questions, aiming to define perceptions related to the webpage of a Higher Education Institution it is reported that respondents indicate a positive mindset towards them. The above statement can be supported by the means of these questions which are $4.3,4.4,4.0$ and 4.7 respectively (please see the descriptive statistics table in Appendix D1). More specifically, with respect to the first question that asked participants whether they believe that the information contained on the webpage of a Higher Education Institution is reliable, $49 \%$ ( $\mathrm{n}=56$ ) of the respondents strongly agreed to the statement.

Moreover, $51 \%(\mathrm{n}=59)$ of the participants strongly agreed that accessing a university's webpage is easy. With respect to the third question related to the navigation in a university's webpage the majority of respondents ( $73.9 \%, \mathrm{n}=85$ ) "agree" or "strongly agree" with the statement. Furthermore, a significant portion of the sample ( $72.2 \%, \mathrm{n}=83$ ) strongly agreed with the statement that a professional webpage gives the impression of a "good" university. The results of these questions are presented in Figure 4.

The second set of questions focuses in defining perceptions related to digital marketing strategies performed by universities via Social Media platforms. It is worth mentioning that participants seem to be skeptical when it comes to reviews \& testimonials shared in social media. The previously mentioned statement can be supported by the mean and mode of the above question that were found to be 3.2 and 3 respectively (please see the descriptive statistics table in Appendix D2). Furthermore, the majority of respondents ( $59.1 \%, \mathrm{n}=68$ ) strongly agreed that the presence of a Higher Education Institution in Social Media can positively affect its awareness by future university students. With relevance to the last question related to social media platforms, respondents seem to share the belief that live streaming videos displayed in social media can stimulate interest of prospective students. More specifically, more than $70 \%(n=83)$ answered either "agree" or "strongly agree" in the above question. The results of these questions are presented in Figure 5.

The third set consisted of three questions related to Email Campaigns run by universities. Evidence indicates that participants in this research keep a positive attitude towards email marketing campaigns with mean values of these questions being 3.7, 4 and 4.4 (please see the descriptive statistics table in Appendix D3). In particular, $60 \%(n=69)$ of respondents agreed or strongly agreed to the statement that promotional emails distributed by universities to prospective students contain interesting information. In addition, $30 \%(n=37)$ of the respondents neither agreed nor disagreed to the above statement. Moreover, $73.9 \%$ ( $\mathrm{n}=85$ ) of the respondents "agree" or "strongly agree" that personalized emails can trigger the interest of a prospective student. With relevance to the third question in this set we can observe that a considerable percentage ( $86.1 \%, \mathrm{n}=99$ ) of the sample
"agree" or "strongly agree" with the statement that promotional emails should be brief. The results of these questions are presented in Figure 6.


Figure 2: Perceptions Related to Webpage


Figure 3: Perceptions Related to Social Media

## PERCEPTIONS RELATED TO EMAIL MARKETING



Figure 4: Perceptions Related to Email Marketing

### 4.3 Preferred Marketing Channels During DecisionMaking Process

Part B contained seven in total questions. Six of them aiming to explore whether a specific stage of the decision-making process is more affected by digital marketing rather than traditional marketing strategies. The last question asked participants to select which of the given options according to their opinion, could enhance the overall image of a Higher Education Institution in order to explore their preferences and suggestions.

Responses to the first question "According to your opinion, to what extent the following media can lead an individual to the recognition of the need for further undergraduate, postgraduate or doctoral studies?" are shown in Figure 8. Furthermore, the mean and mode values for each marketing strategy are presented in Figure 7.


Figure 5: Need Recognition Stage - Mean and Mode Values


Figure 6: Need Recognition Stage

Overall, we can detect a wide diversity in the responses. Furthermore, it appears that "Friends/ Relatives/ Current Students and Graduates" of a University seem to affect an individual the most at the very first stage of the decision-making process with mode value 5 and the highest mean value (3.8). In addition, $40 \%$ ( $\mathrm{n}=46$ ) of the respondents seem to be "extremely" affected by "Friends/ Relatives/ Current Students and Graduates" during the Need Recognition stage. It is also worth pointing out that Email Campaigns seem to be the least influential factor at this stage, with the lower mode (2) and mean (2.8) values. Additionally, 33\% (n=38) of the respondents indicate that Email Campaigns can "slightly" lead them to the recognition of the need for further studies.

In the second question of Part B participants were asked to indicate the three most important information sources during the second stage of decision-making process. In order ensure the validity of the responses, cases at which either all three or two of the sources selected were the same, were deleted from the sample. In total 6 responses were deleted. Table 4 below summarizes the results.

Table4: Information sources during Information Search stage

|  | RANKING |  |  |  |  |  |  |  |
| ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 st |  | 2nd |  | 3 rd |  | Total |  |
| Webpage | 65 | $60 \%$ | 24 | $22 \%$ | 11 | $10 \%$ | 100 | $92 \%$ |
| Social Media | 9 | $8 \%$ | 26 | $24 \%$ | 22 | $20 \%$ | 57 | $52 \%$ |
| Email Campaign | 1 | $1 \%$ | 5 | $5 \%$ | 14 | $13 \%$ | 20 | $18 \%$ |
| Educational Fairs/ <br> Open Days | 16 | $15 \%$ | 26 | $24 \%$ | 27 | $25 \%$ | 69 | $63 \%$ |
| Friends/Relatives/ <br> Current Students/ <br> Graduates | 17 | $16 \%$ | 18 | $17 \%$ | 25 | $23 \%$ | 60 | $55 \%$ |
| Printed Material | 1 | $1 \%$ | 10 | $9 \%$ | 10 | $9 \%$ | 21 | $19 \%$ |
| Sum | 109 |  | 109 |  | 109 |  |  |  |

Among the options provided, the "Webpage" was indicated as the most important information source ( $60 \%, \mathrm{n}=60$ ). Additionally, $92 \%$ ( $\mathrm{n}=100$ ) of the respondents selected the "Webpage" as one of the three most important information sources. By observing the results, we can detect that the second and third most important information sources are "Educational Fairs/ Open Days" and "Friends/ Relatives/ Current Students/ Graduates" with $15 \%(\mathrm{n}=16)$ and $16 \%(\mathrm{n}=17)$ respectively. It is also worth pointing out that both "Educational Fairs/ Open Days" and "Friends/ Relatives/ Current Students/ Graduates" were highlighted as one of the three most important sources with percentages $63 \%$ ( $\mathrm{n}=69$ ) and $55 \%$ ( $\mathrm{n}=60$ ) respectively.

The third and fourth questions of Part B asked participants to indicate the three most important information sources during the third stage of decision-making process. Table 5 summarizes the results of the third question that asked participants to rank the three most important media they will refer to, in order to compare Higher Education Institutions with respect to the services they offer. Again, in order ensure the validity of the responses, cases at which either all three or two of the sources selected were the same, were deleted from the sample. In total seven (7) responses were deleted.

As in the previous question the "Webpage" was indicated as the most important information source ( $61 \%, \mathrm{n}=66$ ). Additionally, $92 \%$ ( $\mathrm{n}=100$ ) of the respondents selected the "Webpage" as one of the three most important information sources during evaluation of services. By observing the results, we can detect that the second and third most important information sources are "Social Media" and "Friends/ Relatives/ Current Students/ Graduates" with 11\% (n=12) and 17\% ( $\mathrm{n}=19$ ) respectively. It is also worth pointing out that both "Social Media" and "Friends/ Relatives/ Current Students/ Graduates" were highlighted as one of the three most important sources with percentages 65\% ( $\mathrm{n}=71$ ) and 55\% (n=60) respectively.

Table 5: Information sources during Evaluation of Alternatives stage

|  | RANKING |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st |  | 2nd |  | 3rd |  | Total |  |
|  | n | \% | n | \% | n | \% | n | \% |
| Webpage | 66 | 61\% | 14 | 13\% | 20 | 18\% | 100 | 92\% |
| Social Media | 12 | 11\% | 36 | 33\% | 23 | 21\% | 71 | 65\% |
| Email Campaign | 1 | 1\% | 5 | 5\% | 15 | 14\% | 21 | 19\% |
| Educational Fairs/ Open Days | 8 | 7\% | 22 | 20\% | 21 | 19\% | 51 | 47\% |
| Friends/ Relatives/ Current Students/ Graduates | 19 | 17\% | 23 | 21\% | 18 | 17\% | 60 | 55\% |
| Printed Material | 2 | 2\% | 8 | 7\% | 11 | 10\% | 21 | 19\% |
| Sum | 108 |  | 108 |  | 108 |  |  |  |

The fourth question asked participants to rank the three most important media from the list provided, at which they will refer to, in order to obtain reviews and testimonials regarding the universities they are interested in. As in the previous two questions, cases at which either all three or two of the sources selected were the same, were deleted from the sample. In total five (5) responses were deleted. The results are presented in Table 6.

Table 6: Information sources during Evaluation of Alternatives stage

|  | RANKING |  |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 st |  | 2nd |  | 3 rd |  | Total |  |
| Webpage | n | $\%$ | n | $\%$ | n | $\%$ | n | $\%$ |
| Social Media | 27 | $25 \%$ | 44 | $40 \%$ | 20 | $18 \%$ | 91 | $83 \%$ |
| Email Campaign | 0 | $0 \%$ | 6 | $6 \%$ | 16 | $15 \%$ | 22 | $20 \%$ |
| Educational Fairs/ Open <br> Days | 11 | $10 \%$ | 13 | $12 \%$ | 30 | $28 \%$ | 54 | $50 \%$ |
| Friends/ Relatives/ <br> Current Students/ <br> Graduates | 39 | $36 \%$ | 27 | $25 \%$ | 8 | $7 \%$ | 74 | $68 \%$ |
| Printed Material | 0 | $0 \%$ | 4 | $4 \%$ | 5 | $5 \%$ | 9 | $8 \%$ |
| Sum | 110 |  | 110 |  | 110 |  |  |  |

Among the possible options provided, "Webpage" (30\%, n=33), "Social Media" ( $25 \%$, $\mathrm{n}=27$ ) and "Friends/ Relatives/ Current Students/ Graduates" ( $36 \%, \mathrm{n}=39$ ) were highlighted as the most important information sources (ranked $1^{\text {st }}$ ). In addition, these three information sources were indicated as the three most important information sources in order to obtain reviews and testimonials during Evaluation of Alternatives stage. More specifically, in the overall ranking, 83\% ( $\mathrm{n}=91$ ) indicated "Webpage", 73\% ( $\mathrm{n}=80$ ) indicated Social Media and 68\% ( $\mathrm{n}=74$ ) indicated "Friends/ Relatives/ Current Students/ Graduates" as the most important sources.

Under a closer observation of the responses presented with reference to the questions aiming to explore the information sources preferred at the third stage of the decision-making process, we detect consistency in the results. Both questions highlighted the same information sources, as the most important during the "Evaluation of Alternatives" stage.

The fifth question asked participants to choose the type of assistance they would prefer at the stage of completing their application at the university of their choice.

The purpose of this question was to evaluate whether participants prefer digital or traditional type of assistance during the "Purchase Decision" stage. Results of the above question are presented in Figure 9.


Figure 7: Preferences during Purchase Decision stage

As demonstrated in Figure 9, 32.2\% (n=37) of the respondents prefer "Online Assistance via live chat" followed by "Assistance via Telephone" with percentage 25.2\% ( $\mathrm{n}=29$ ). Overall preference between digital and traditional assistance seems to be insignificant. More specifically, $52.2 \%$ ( $\mathrm{n}=60$ ) of participants prefer digital assistance while $47.8 \%(\mathrm{n}=55)$ of them prefer traditional assistance.

The next question asked participants to indicate the method at which they would prefer to proceed with the evaluation of the services provided by the Higher Education Institution of their choice by completing a questionnaire. Two methods were listed (one digital and one traditional). Results are presented in Figure 10.


Figure 8: Preferences during Post Purchase Evaluation stage

In this case the vast majority $87.8 \%(\mathrm{n}=101)$ prefer to provide feedback to the Higher Education Institution of their choice digitally rather than completing a printed copy of the questionnaire ( $12.2 \%, \mathrm{n}=14$ ).

The last question of Part B asked participants to indicate which of the following actions, according to their opinion, could enhance the overall image of a Higher Education Institution. The option "Other" was also given so that participants could provide their suggestions. Results are presented in Figure 11.
$85.2 \%$ ( $\mathrm{n}=98$ ) of the respondents suggest that "Webpage Improvement" could enhance the overall image of a Higher Education Institution. It is worth mentioning that organization of events ( $54.8 \%, \mathrm{n}=63$ ), participation in exhibitions ( $55.7 \%, \mathrm{n}=64$ ), social media presence ( $59.1 \%, \mathrm{n}=68$ ) and webinars ( $59.1 \%, \mathrm{n}=68$ ) seem to be of approximately same importance. The actions that respondents ranked as the least important are school visits (44.3\%, n=51) and advertisements in public places (33.9\%, n=39).


Figure 9: Actions to Enhance Image

Furthermore, a few participants selected the option "Other" and pointed out their suggestions. The actions suggested were:
"Television and radio advertisements"
"Via current students and alumnus"
"Competitive prices, discounts, by strengthening the role in society"
"By announcing the accomplishments of their graduates"
"involvement in social and productive bodies (e.g. educational committees, presence in relevant TV shows), via the University's research activity, awards and certifications, by strengthening relations with their alumnus (University ambassadors)"

### 4.4 Digital Engagement Affected by the Pandemic Covid-19

Part C contained three question related to the pandemic Covid-19, aiming to explore the impact of the pandemic in participants' digital engagement. Results are shown in the Figure 12.

Overall respondents indicate that the pandemic Covid-19 positively affected their digital engagement. It is also worth pointing out that the means of these questions are 4.2, 4.2 and 4.1 while the mode in each question found to be 5 (please see the descriptive statistics table in Appendix E).

More specifically, around $50 \%$ of the responses revealed that pandemic Covid-19 "extremely" affected their online presence, research and purchases. In particular, with respect to the first question, $47.8 \%(\mathrm{n}=55)$ of the respondents indicate that the time they spend online was "extremely" increased during the pandemic Covid19. Moreover, $52.2 \%$ ( $\mathrm{n}=60$ ) of the participants indicate that Covid-19 "extremely" changed their habits towards online research. With respect to the third question related to the online purchases, $51.3 \%(\mathrm{n}=59)$ of the participants pointed out that they were "extremely" affected.


Figure 10: Digital Engagement Affected by Covid-19

### 4.5 Technology Use

Part D, besides demographics, contained four question related to technology use aiming to define overall digital engagement of the participants. Results are presented in the Figure 13.

Overall respondents seem to be familiar with technology use. It is also worth pointing out that the means of the questions related to the use of internet, navigation in websites in order to obtain information and use of email were 4.9, 4.7 and 4.5 respectively. Responses in the question "How often do you use social media" are more diverse and henceforth mean value equals 4.2. Additionally, mode in each question found to be 5 (please see the descriptive statistics table in Appendix F).

More specifically, $89.6 \%(n=103)$ of the respondents indicated that they use internet "extremely" often while $73.9 \%(n=85)$ of the respondents stated that they "extremely" often visit webpages in order to obtain information. In addition, $68.7 \%$ claimed that they "extremely" often use email.

With reference to the question related to social media, $47 \%(\mathrm{n}=54)$ indicated that they "extremely" often visit social media platforms followed by $33 \%(\mathrm{n}=38)$ which stated that they visit social media "very" often. It is worth pointing out that 4 participants (3.5\%) indicated that they "not at all" use social media.

A closer examination of the responses revealed that $50 \%(n=2)$ of the participants that "not at all" use social media are male and the other 50\% ( $\mathrm{n}=20$ ) are female. Furthermore $50 \%(\mathrm{n}=2)$ of them hold a Bachelor degree while the other $50 \%$ ( $\mathrm{n}=2$ ) hold a Master degree. In addition, $50 \%(\mathrm{n}=2)$ belong in the age group 41-50 years old, $25 \%(n=1)$ in the age group 31-40 and the rest $25 \%(n=1)$ in the age group 21-30. Having stated the above and due to small portion of the sample that do not visit social media, no direct link could be detected between age, gender or education level and the use of social media platforms.

## TECHNOLOGY USE



Figure 11: Technology Use

### 4.6 Individual Factors Affecting Preferences of Prospective Students

A decision was made to test whether individual factors such as gender, age and education level affect people's preferences related to information sources preferred. In order to gain insight into this matter, chi-square tests were performed between individual factors (age, gender, education) and the information sources ranked $1^{\text {st }}$ during the "Information Search" and "Evaluation of Alternatives" stages. It should be clarified that, as per the case of the statistical tests no observations were deleted since we were interested in participants $1^{\text {st }}$ choice only. Additionally, relationships between preferences during the "Purchase Decision" stage and more specifically preferences related to assistance provided during the completion of the application and individual factors were tested. Furthermore, preferences during the last stage "Post-Purchase Evaluation" were analysed but no significant differences were detected.

The decision to perform a chi-squared test was taken after an extensive and exhausting review of the relevant literature. In general, Chi-squared test are preferred when we wish to test the relationship between two categorical variables. It is declared that chi-square tests were performed in SPSS and significance level was set at $\alpha=0.05$.

### 4.6.1 Age

Statistical tests reveal that people's preferences are affected by age during the "Evaluation of Alternatives" stage, as seen in Table 7. In particular, the p-value obtained (.005) is less than the chosen significance level. Hence we can conclude that there exist significant differences between the information sources preferred by different age groups, with relevance to reviews and testimonials.

| Table 7: Chi-squared test - Reviews and Testimonials versus Age |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Chi-Square Tests |  |  |  |  |
|  |  |  |  | Asymptotic Significance <br> (2-sided) |
| Pearson Chi-Square | $32.987^{2}$ | df | 15 | .005 |
| Likelihood Ratio | 37.638 | 15 | .001 |  |
| Linear-by-Linear Association | 4.622 |  | 1 | .032 |
| N of Valid Cases | 115 |  |  |  |
| a. 15 cells (62.5\%) have expected count less than 5. The minimum expected count is |  |  |  |  |
| .11. |  |  |  |  |

As demonstrated in Table 8, a great percentage (67\%) of participants that belong in the age group $\leq 20$ years, favoured Social Media in comparison with the other groups.

Table 8: Preferred Sources during Evaluation of Alternatives versus Age

|  | AGE GROUPS |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| webpage | 0 | 3 | 3 | 19 | 7 | 6 |
|  | $0 \%$ | $9 \%$ | $40 \%$ | $39 \%$ | $86 \%$ | $0 \%$ |
| Social media | 4 | 11 | 8 | 4 | 0 | 0 |
|  | $\mathbf{6 7 \%}$ | $31 \%$ | $17 \%$ | $22 \%$ | $0 \%$ | $0 \%$ |
| Educational fairs/ Open days | 0 | 7 | 4 | 1 | 1 | 0 |
|  | $0 \%$ | $20 \%$ | $8 \%$ | $6 \%$ | $14 \%$ | $0 \%$ |
| Friends/ Relatives/ Current | 2 | 14 | 17 | 6 | 0 | 1 |
| Students/ Graduates | $33 \%$ | $40 \%$ | $35 \%$ | $33 \%$ | $0 \%$ | $100 \%$ |

No significant dereferences were detected between "Information Search", "Purchase decision" or "Post Purchase Evaluation" and age (please see Appendix G1 for statistical tables).

### 4.6.2 Education

Statistical chi-squared tests revealed that "Information Search" and "Purchase Decision" stages were affected by Education level, as seen in Table 9. More specifically, it was shown that there is association between education level and preferences during Information Search stage since the calculated p-value (.002) found to be less than the designated $\alpha$ value.

|  | hi-Squar |  |  |
| :---: | :---: | :---: | :---: |
|  | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | $43.216^{\text {a }}$ | 20 | . 002 |
| Likelihood Ratio | 28.410 | 20 | . 100 |
| Linear-by-Linear Association | . 113 | 1 | . 737 |
| $N$ of Valid Cases | 115 |  |  |
| a. 22 cells ( $73.3 \%$ ) have expected count less than 5 . The minimum expected count is 06 . |  |  |  |

As demonstrated in Table 10, $86 \%(\mathrm{n}=6)$ of the respondents that hold a PhD indicate the Webpage as preferred source (ranked $1^{\text {st }}$ ). Furthermore $33 \%$ ( $n=3$ ) of the respondents that finished High School indicated Social Media and 22\% ( $\mathrm{n}=2$ ) of them pointed out Educational Fairs/ Open Days, as their preferred source during Information Search stage.

Table 10: Preferred Sources during Information Sources versus Education

|  | EDUCATION LEVEL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High School | Diploma | Bachelor | Master | PhD |
| webpage | 3 | 12 | 19 | 28 | 6 |
|  | 33\% | 71\% | 56\% | 58\% | 86\% |
| Social media | 3 | 1 | 4 | 2 | 0 |
|  | 33\% | 6\% | 12\% | 4\% | 0\% |
| email campaign | 1 | 0 | 0 | 0 | 0 |
|  | 11\% | 0\% | 0\% | 0\% | 0\% |
| Educational fairs/ Open days | 2 | 2 | 5 | 8 | 0 |
|  | 22\% | 12\% | 15\% | 17\% | 0\% |
| Friends/ Relatives/ Current Students/ Graduates | 0 | 2 | 6 | 10 | 0 |
|  | 0\% | 12\% | 18\% | 21\% | 0\% |
| Printed Material | 0 | 0 | 0 | 0 | 1 |
|  | 0\% | 0\% | 0\% | 0\% | 14\% |

Furthermore, chi-squared test reveal that there is an association between education and "Purchase Decision" stage since p-value (.011) found to be less than the chosen significance level, as seen in Table 11.

| Table 11: Chi-squared test - Purchase Decision versus Education |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Chi-Square Tests |  |  |  |  |
|  |  |  |  | Asymptotic Significance (2- <br> sided) |
| Value | df |  | .011 |  |
| Pearson Chi-Square | $26.055^{2}$ | 12 | .008 |  |
| Likelihood Ratio | 26.993 | 12 | .341 |  |
| Linear-by-Linear Association | .908 | 12 |  |  |
| N of Valid Cases | 115 |  |  |  |
| a. 11 cells (55.0\%) have expected count less than 5. The minimum expected count is 1.40. |  |  |  |  |

As shown in Table 12, the majority of participants that hold a $\operatorname{PhD}(57 \%, \mathrm{n}=4)$ and Master degree ( $42 \%, \mathrm{n}=4$ ) prefer digital form of assistance (Online chat) while $67 \%$ ( $n=6$ ) of the participants that finished High School prefer traditional form of assistance (In-person).

Table 12: Preferred type of Assistance during Purchase Decision versus Education

|  | EDUCATION LEVEL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High School | Diploma | Bachelor | Master | PhD |
| Online chat assistance | 1 | 6 | 6 | 20 | 4 |
|  | 11\% | 35\% | 18\% | 42\% | 57\% |
| In-person assistance | 6 | 4 | 10 | 5 | 1 |
|  | 67\% | 24\% | 29\% | 10\% | 14\% |
| Assistance via telephone | 1 | 1 | 11 | 14 | 2 |
|  | 11\% | 6\% | 32\% | 29\% | 29\% |
| Assistance via email | 1 | 6 | 7 | 9 | 0 |
|  | 11\% | 35\% | 21\% | 19\% | 0\% |

No significant dereferences were detected between "Evaluation of Alternatives" and education (please see Appendix G2 for statistical tables).

### 4.6.3 Gender

No association was detected between "Information Search", "Evaluation of Alternatives", "Purchase decision" or "Post-Purchase Evaluation" and gender since $p$-value was greater than the chosen significance level for all three cases (please see Appendix G3 for statistical tables).

## Chapter 5: Discussion of Findings and Results

5.1 Introduction<br>In the following subsections the results and findings of this study (see Chapter 4) will be discussed in an attempt to answer the four research questions stated earlier.

### 5.2 Perceptions Regarding Digital Marketing Strategies

Among the purposes of this dissertation was to get a deeper understanding of the perceptions of future university students with relevance to digital marketing strategies executed by Higher Education Institutions.

Overall, a positive attitude is observed with reference to the webpage of a Higher Education Institution. It is worth mentioning that while approximately $40 \%$ ( $\mathrm{n}=45$ ) of the participants strongly agreed that navigation in a university's webpage is easy and eliminates the required time needed to obtain information, a quarter of them ( $26.1 \%, \mathrm{n}=30$ ) stated "Neither Agree nor Disagree", "Disagree" or "Strongly Disagree" with the statement. This observation might indicate that the structure of the websites, or the information contained in them, are somehow problematic. This finding along with the fact that the vast majority of responses strongly agreed that a professional webpage gives the impression of a "good" university, should not be neglected by the marketing managers of Higher Education Institutions. Particular attention should be given in the development of a well-structured and user friendly website. The above result coincides with the findings of Jan and Ammari (2016), with relevance to the importance of creating
a professional and regularly updated website since it highly impacts prospective students' choice.

With reference to Social Media, future university students seem sceptical, especially when it comes to reviews and testimonials. This finding is in contrast with the fact that Social Media were selected as one of the three most important information sources during Evaluation of Alternatives stage. More precisely 83\% selected Social Media as one of the three preferred sources for reviews and testimonials. While this divergence requires more extensive investigation, one possible explanation of this phenomenon is probably the increasing popularity of Social Media, especially in younger ages, along with the new trend of influencers. Under this scope it should be pointed out that the findings of this study indicated that there exist significant differences between the sources preferred by different age groups during Evaluation of Alternatives stage with relevance to reviews and testimonials.

With respect to Email Campaigns performed by Higher Education Institutions, despite the fact that future students do not seem to dislike them, it is also observed that they do not significantly influence them. In addition to the above statement, Email Campaigns are considered to be the least influential marketing strategy during the first three stages of decision-making process, namely Need Recognition, Information Search and Evaluation of Alternatives.

### 5.3 Marketing Channels Preferred at Each Stage of the Consumer Buying Decision Process

Without surprise findings of this study revealed that the first stage of the decisionmaking process, Need Recognition, is highly impacted by Friends/ Relatives/ Current Students and Graduates of a university.

Webpages, Educational Fairs/ Open Days and Friends/ Relatives/ Current Students and Graduates reported to be the most important information sources during the second stage (Information Search) of the decision-making process. This result is consistent with the findings of Simoes and Soares (2010), who
reported that the Internet and more precisely websites are considered to be the "key" sources of information for prospective students. In addition, the fact that Friends/ Relatives/ Current Students and Graduates were reported as one of the most preferred sources of information enhances the findings of Simoes and Soares (2010), who highlighted the importance of "interpersonal" sources of information. Furthermore, this result echoes the findings of Stankevich (2017), who supported that "recommendations" from friends and relatives seem to be of high importance during "Information Search". This study also revealed that the information sources preferred during the second stage of the decision-making process differ according to education level.

As stated earlier consistency was detected in the results obtained with relevance to the information sources preferred at the third stage of the decision-making process. Webpage, Social Media and Friends/ Relatives/ Current Students/ Graduates were highlighted as the most important sources during the Evaluation of Alternatives stage.

With relevance to the fourth stage of the decision-making process approximate $50 \%$ of the respondents indicate digital assistance as their preference (Online chat and Assistance via Email) while the other 50\% report that they prefer traditional form of assistance (In-person Assistance and Assistance via telephone). Although at a first glance preferences between online and traditional methods seem to be of the same importance, statistical analysis revealed that preferences during the Purchase Decision stage differ according to education level.

Last but not least with reference to the Post-Purchase Evaluation stage of the decision-making process, the majority of responses reported that they prefer to provide feedback digitally.

It is worth pointing out that $85.2 \%$ of the respondents suggest that "Webpage Improvement" could enhance the overall image of a Higher Education Institution. More precisely, "Webpage Improvement" was the most frequent action selected by the respondents. The above observation highlighted the importance of a professional webpage once again.

Overall observations revealed that digital marketing strategies highly affect students' choice. Furthermore, it is noted that Printed Material is of very low importance and was not selected as an important source of information by future students. This observation contrast with the findings of Moogan and Baron (2010), where prospectus found to be the primary source of information. One possible explanation of this inconsistency could be the rapid evolve of technology and Internet during the last years. Moreover, and in accordance with the following results, which revealed that the current pandemic Covid-19 pushed consumers into deeper digital engagement, profound investigations are suggested.

### 5.4 Digital Engagement Affected by the Pandemic Covid-19

Findings of this research revealed that digital engagement is affected by the current pandemic Covid-19 at a great level. More specifically as stated earlier 50\% of the responses revealed that pandemic Covid-19 "extremely" affected their online presence, research and purchases.

## Chapter 6: Conclusions

### 6.1 Originality and Contribution

This Master dissertation contributes to the enrichment of academic literature with relevance to the impact of digital marketing strategies performed by Higher Education Institutions located in Cyprus, on prospective students. More precisely, this study attests the findings of previous researches with reference to the importance of vigorous presence of Higher Education Institutions in the digital world. In addition, this research indicates significant differences between individual factors (age and education level) and preferred information sources.

### 6.2 Limitations of the Study

As in other studies, this study has several limitations.

To start with, the method used in order to collect the required amount of completed questionnaires might be problematic. While this method was the most convenient in order to collect a significant amount of completed questionnaires, there is no proof that the questionnaires were actually completed by members of the targeted population. Ideally, as supported by other researchers, the questionnaire should have been distributed to either last year of high school students or first year University students. Henceforth, the questionnaire would have been answered by students' that are either currently under the decisionmaking process or they have recently completed it. Unfortunately, since the majority of last year high school students are under 18 years old, the consent of their parents needed to be obtained prior contacting them. Due to time restrictions in completing my dissertation the above method could not be applied and was immediately rejected. Furthermore, as per the case of first year

University students, the dissemination of my questionnaire to first year students via university officers was unable to happen, due to GDPR restrictions.

Furthermore, the study was constricted due to the chosen implementation method (quantitative method). While a questionnaire gives immediate access to numerical data it fails to provide explanation of the findings. A qualitative approach gives the opportunity to the interviewer to explore in more detail the underlined perceptions of participants.

### 6.3 Recommendations for Further Research

Despite the fact that the results of this study generated some interesting insights with reference to the impact of digital marketing strategies performed by universities on prospective students, it also highlighted some areas that need further investigation.

For example, while prospective students ranked Social Media among their preferred information sources, at the same time they seem not to trust reviews and testimonials contained in them. An in depth analysis of their perceptions, likes and dislikes with reference to universities social media engagement would have been beneficial for universities marketing managers. Furthermore, despite the fact that the webpage of a Higher Education Institution seems to highly impact students' choice, participants reported that "Neither Agree nor Disagree" that the navigation in a university's webpage is easy and minimizes the time required in order to obtain the needed information. Perhaps an interview with the participants could draw light into the areas which are considered problematic and need improvement with reference to navigation in a website.

Furthermore, this research revealed significant differences between individual factors (age and education level) and preferred information sources. An investigation of additional individual factors that could impact future students (located in Cyprus) preferences, such as field of study, should be considered.

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## Chapter 8: <br> Appendices

## Appendix A

##  

## The impact of Higher Education Digital Marketing Strategies on prospective university students

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| H $\delta \rho \alpha ́ \sigma \eta$ हvós $\pi \alpha v \varepsilon \pi \iota \sigma \tau \eta \mu \iota \alpha \kappa о$ и́ $\delta \rho \cup ́ \mu \alpha \tau о \varsigma ~ \sigma \tau \alpha \mu \varepsilon ́ \sigma \alpha$ коเข $\omega$ vเкท́s $\delta เ \kappa \tau \cup ́ \omega \sigma \eta \varsigma ~ \beta о \eta \theta \alpha ́ \quad \sigma \tau \eta \nu$ <br>  |  |  |  |  |  |
|  <br>  |  |  |  |  |  |
| Z $\omega v \tau \alpha v \alpha \dot{\alpha}$ (Live) ßívteo $\pi$ ou $\pi \rho \circ \beta \alpha \dot{\lambda} \lambda \lambda$ ov $\alpha \alpha \iota \sigma \tau \alpha \mu \varepsilon ́ \sigma \alpha$ <br>  <br>  <br>  |  |  |  |  |  |


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|  $\alpha \pi o ́ \quad \tau \alpha \quad \pi \alpha \nu \varepsilon \pi เ \sigma \tau \eta \mu \iota \alpha \kappa \alpha ́ \quad \iota \delta \rho v ́ \mu \alpha \tau \alpha \quad \sigma \varepsilon$ <br>  $\pi \lambda \eta \rho о \varphi о \rho i ́ \varepsilon$＊ |  |  |  |  |  |
|  <br>  <br>  |  |  |  |  |  |
| To $\pi \varepsilon \rho เ \varepsilon \chi$ о́ $\mu \varepsilon v o$ عvós $\eta \lambda \varepsilon \kappa \tau \rho о v เ к о$ и́ $\mu \eta v$ ú $\mu \alpha \tau о \varsigma$ <br>  <br>  бúvтоиo＊ |  |  |  |  |  |

## Mépoc B

## Прผ́то $\tau \tau \alpha ́ \delta \iota o$－Need Recognition（Avaүvópıon avóүкпऽ）

К $\alpha \tau \alpha ́ ~ \tau \eta ~ \gamma \nu \omega ́ \mu \eta ~ \sigma \alpha \varsigma, ~ \sigma \varepsilon ~ т о ь о ~ \beta \alpha \theta \mu o ́ ~ \tau \alpha ~ \pi ь о ~ к \alpha ́ \tau \omega ~ \mu \varepsilon ́ \sigma \alpha ~ \mu \pi о \rho о и ́ v ~ v \alpha ~ о \delta \eta \gamma \eta ́ \sigma o u v ~ \varepsilon ́ v \alpha ~$



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| ＇Еvтито $\delta \iota \alpha \varphi \eta \mu \iota \sigma \tau \iota к o ́ ~ \cup \lambda ı \kappa o ́ ~(\pi . \chi . ~ о \delta \eta \gamma o ́ s ~$ $\sigma \pi o u \delta \omega \dot{v}$ ） |  |  |  |  |  |

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 $\gamma \nu \omega ́ \mu \eta \sigma \alpha \varsigma$. *

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| 3n Emi入orń |  |  |  |  |  |  |

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 $\gamma v \omega ́ \mu \eta \sigma \alpha \varsigma$. *

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| $1{ }^{\eta}$ Emilo ${ }^{\text {n }}$ |  |  |  |  |  |  |
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| 3 n Emi入orq́ |  |  |  |  |  |  |



 $\gamma v \omega ́ \mu \eta \sigma \alpha \varsigma$. *

|  |  |  |  |  |  | $\text { 'Еvтито } \delta \iota \alpha \varphi \eta \mu เ \sigma \tau ı к o ́ ~ \cup \lambda ı к o ́ ~$ |
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| $1{ }^{1}$ Emildorń |  |  |  |  |  |  |
| $2^{n}$ Emilorń |  |  |  |  |  |  |
| $3{ }^{\text {n E }}$ Eti ${ }^{\text {dorń }}$ |  |  |  |  |  |  |

## 



$\square$ Online $\beta$ oŋ́ $\theta \varepsilon ı \alpha \mu \varepsilon ́ \sigma \omega$ live chat $\alpha$ тó $\varepsilon \kappa \pi \rho o ́ \sigma \omega \pi о ~ \tau o u ~ П \alpha v \varepsilon \pi เ \sigma \tau \eta \mu i ́ o u ~ \gamma \iota \alpha$


 ŋ́ Н $\mu \varepsilon ́ \rho \alpha \varsigma ~ Г \nu \omega \rho \iota \mu i ́ \alpha \varsigma) ~$





## 

К $\alpha \tau \alpha ́ \tau \eta ~ \delta \iota \alpha ́ \rho \kappa \varepsilon \iota \alpha ~ \tau \omega v ~ \sigma \pi о \cup \delta \omega ́ v ~ \sigma \alpha \varsigma ~ \theta \alpha \pi \rho о \tau \iota \mu о v ́ \sigma \alpha \tau \varepsilon ~ v \alpha \pi \rho о \chi \omega \rho \eta ́ \sigma \varepsilon \tau \varepsilon ~ \sigma \varepsilon$
 $\varepsilon \rho \omega \tau \eta \mu \alpha \tau$ ддоү́́ou то отоі́о $\theta \alpha \delta \iota \alpha \mu о 七 \rho \alpha$ ̧́т $\alpha v$ : *
$\square \mathrm{H} \lambda \varepsilon \kappa \tau \rho о \nu \iota \kappa \alpha ́ \alpha(\gamma \iota \alpha \pi \alpha \rho \alpha ́ \delta \varepsilon \iota \gamma \mu \alpha \mu \varepsilon ́ \sigma \omega$ Google Forms)
 $\delta \iota \alpha \zeta \omega ́ \sigma \eta \varsigma \mu \alpha \theta \eta ́ \mu \alpha \tau о \varsigma)$

## 

Поıєऽ $\alpha \pi$ о́ тıऽ $\alpha \kappa o ́ \lambda o u \theta \varepsilon \varsigma ~ \delta \rho \alpha ́ \sigma \varepsilon ı \varsigma ~ \mu \pi о \rho о и ́ v, ~ \kappa \alpha \tau \alpha ́ ~ \tau \eta ~ \gamma v \omega ́ \mu \eta ~ \sigma \alpha \varsigma, ~ v \alpha ~ \varepsilon v ı \sigma \chi v ́ \sigma o u v ~$
B $\varepsilon \lambda \tau i ́ \omega \sigma \eta$ I $\sigma \tau \sigma \sigma \varepsilon \lambda i \delta \alpha \Omega$,
Eтıбкย́ $\psi \varepsilon ı \varsigma ~ \sigma \varepsilon ~ \sigma \chi о \lambda \varepsilon i ́ \alpha ~$$\Sigma \cup \mu \mu \varepsilon \tau о \chi \eta ́ ~ \sigma \varepsilon ~ \varepsilon к \theta \varepsilon ́ \sigma \varepsilon ı \varsigma ~$Eví $\chi \cup \sigma \eta$ тทऽ $\pi \alpha \rho 0$ обí $\alpha \varsigma$ тous $\sigma \tau \alpha$ social media


$\square$＇А入入о．П $\alpha \rho \kappa \alpha \lambda \omega$＇$\delta เ \varepsilon \cup \kappa \rho ı v i ́ \sigma \tau \varepsilon:$ $\qquad$

Mépos 「

|  | 3 0 0 0 0 0 0 0 | $\stackrel{\circ}{\text { ¢ }}$ | $\xrightarrow{\text { ¢ }}$ | 吕 | － |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K $\alpha \alpha \dot{\alpha} ~ \tau \eta ~ \delta 九 \alpha ́ \rho к \varepsilon є \alpha ~ \tau \eta \varsigma ~ \pi \alpha v \delta \eta \mu i ́ \alpha \varsigma ~ C o v i d-19 ~ o ~$ <br>  <br>  סเктט́ $\omega \sigma \eta \varsigma)$ と́ $\chi \varepsilon \iota ~ \alpha u \xi \eta \theta \varepsilon i ́ ; ~ * ~$ |  |  |  |  |  |
|  тıऽ $\sigma u v \eta ́ \theta \varepsilon เ \varepsilon \varsigma ~ \sigma \alpha \varsigma ~ \omega \varsigma ~ \kappa \alpha \tau \alpha v \alpha \lambda \omega \tau \eta \prime \varsigma ~ \mu \varepsilon ~ \omega ́ \theta \eta \sigma \eta$ <br>  аүopóv；＊ |  |  |  |  |  |
|  $\tau \iota \varsigma ~ \sigma u v \eta ́ \theta \varepsilon เ \varepsilon \varsigma ~ \sigma \alpha \varsigma ~ \omega \varsigma ~ \kappa \alpha \tau \alpha v \alpha \lambda \omega \tau \eta \prime \varsigma ~ \mu \varepsilon ~ \omega ́ \theta \eta \sigma \eta$ $\pi \rho \circ \varsigma ~ \tau \iota \varsigma ~ \eta \lambda \varepsilon к \tau \rho о v เ к \varepsilon ́ \varsigma / ~ \delta \iota \alpha \delta \iota \kappa \tau \cup \alpha к \varepsilon ́ \varsigma ~ \alpha \gamma о \rho \varepsilon ́ \varsigma ~$ <br>  |  |  |  |  |  |

## Mépos $\boldsymbol{\Delta}$

П $\alpha \propto \kappa \alpha \lambda \omega \dot{\omega}$ عпı $\lambda \varepsilon ́ \xi \varepsilon \tau \varepsilon \tau \eta \nu \kappa \alpha \tau \eta \gamma о \rho i ́ \alpha ~ \sigma \tau \eta \nu$ отоі́ $\alpha \alpha \nu \eta ́ \kappa \varepsilon \tau \varepsilon:$＊${ }^{\prime} \mathrm{A} v \delta \rho \alpha \varsigma$ГuvaíкхПротєц⿳㇒⿵冂⿻丷木大殳 $\alpha \mu \nu \alpha \pi \alpha \nu \tau \eta \dot{\sigma} \omega$$\Sigma \varepsilon \pi о \iota \alpha \eta \lambda_{\iota} \kappa \iota \alpha \kappa \eta ́ к \alpha \tau \eta \gamma о \rho i ́ \alpha \alpha \nu \eta ́ \kappa \varepsilon \tau \varepsilon ;$ *$\leq 20$21-30 عтஸ́v31-40 عт $\omega$41-50 عт $\omega$ v51-60 عт $\omega$$\geq 61$

Поьо عívגı то $\varepsilon \pi i ́ \pi \varepsilon \delta o ~ \tau \eta \varsigma ~ \mu о ́ \rho \varphi \omega \sigma \eta ́ \varsigma ~ \sigma \alpha \varsigma ; ~ * ~$
$\Delta_{i}^{\prime} \pi \lambda \omega \mu \alpha$ПтихíoМعт $\alpha \pi \tau \cup \chi$ ıккó$\Delta$ ıбккторıко́

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## Appendix B

| Part | RQ | Question | Type of Question | Rationale for inclusion |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Part A | RQ1 | The webpage of a Higher Education <br> Institution contains reliable <br> information | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | websites |
|  | RQ2 | Accessing a university's webpage is <br> easy | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | Perceptions with relevance to <br> websites |
|  | RQ3 | Navigation in a university's webpage <br> is easy and reduces the time required <br> in order to obtain the required <br> information | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | A professional webpage gives the <br> impression of a "good" university <br> websites |
| RQ5 | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | Perceptions with relevance to <br> websites |  |  |
| The presence of a Higher Education <br> Institution in social media can make <br> prospective students aware of its <br> existence | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | Perceptions with relevance to <br> social media |  |  |
| RQ6 | Reviews and testimonials that exist in <br> social media are trusted | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor <br> Disagree, Agree, Strongly Agree) | Perceptions with relevance to <br> social media |  |


|  | RQ7 | Live streaming videos displayed in social media platforms can stimulate interest of prospective university students | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor Disagree, Agree, Strongly Agree) | Perceptions with relevance to social media |
| :---: | :---: | :---: | :---: | :---: |
|  | RQ8 | Emails sent by Higher Education Institutions to prospective students contain interesting information | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor Disagree, Agree, Strongly Agree) | Perceptions with relevance to email campaigns |
|  | RQ9 | When the content of an email is personalized, it can trigger the interest of a prospective student | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor Disagree, Agree, Strongly Agree) | Perceptions with relevance to email campaigns |
|  | RQ10 | The content of an email designed to promote a Higher Education Institution should be brief | Likert scale question - Ordinal <br> (Strongly Disagree, Disagree, Neither Agree Nor Disagree, Agree, Strongly Agree) | Perceptions with relevance to email campaigns |
| Part B | RQ11 | According to your opinion, to what extent the following media can lead an individual to the recognition of the need for further undergraduate, postgraduate or doctoral studies? | Multiple, Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived level of impact of various marketing techniques during Need Recognition stage |
|  | RQ12 | Which of the following media will you refer to, in order to obtain information regarding to the | Rank three most important sources - Nominal | Preferences during Information Search stage |


|  |  | continuation of your studies. Please <br> rank the three most important ones <br> according to your opinion. | (Website, Social Media, Email Campaign, <br> Educational Fairs/ Open days, Friends/ <br> Relatives/Graduates/Current Students, Printed <br> Material such as Prospectus) |  |
| :--- | :--- | :--- | :--- | :--- |
| RQ13 | Which of the following media will you <br> refer to, in order to compare Higher <br> Education Institutions with respect to <br> the services they offer (such as <br> accommodation for students, tuition <br> payments, health services, counseling <br> services etc.). Please rank the three <br> most important ones according to <br> your opinion. | Rank three most important sources - Nominal <br> (Website, Social Media, Email Campaign, <br> Educational Fairs/ Open days, Friends/ <br> Relatives/Graduates/Current Students, Printed <br> Material such as Prospectus) | Preferences during Evaluation <br> of Alternatives stage |  |
| RQ14 | Which of the following media will you <br> refer to, in order to obtain reviews <br> and testimonials regarding the <br> Universities you are interested in. <br> Please rank the three most important <br> ones according to your opinion. | Rank three most important sources - Nominal <br> (Website, Social Media, Email Campaign, <br> Educational Fairs/ Open days, Friends/ <br> Relatives/Graduates/Current Students, Printed <br> Material such as Prospectus) | Preferences during Evaluation <br> of Alternatives stage |  |
| RQ15 | Regarding the stage of completing <br> your application at the University of <br> your choice, you will prefer (please <br> select one of the following): | Single choice, multiple answers given - Nominal <br> (Online chat assistance from a University officer, In- <br> person assistance from a University officer, <br> Assistance via telephone, Assistance via email) | Preferences during Purchase <br> stage |  |
| RQ16 | During your studies at the Higher <br> Education Institution of your choice, <br> you would prefer to proceed with the <br> evaluation of the services provided by | Single choice, two possible answers - Nominal <br> (Digitally, Printed copy) | Preferences during Post- <br> Purchase stage |  |


|  |  | completing a questionnaire which would be shared: |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | RQ17 | Which of the following actions, according to your opinion, could enhance the overall image of a Higher Education Institution. | Multiple choice, multiple answers given- Nominal A selection of both traditional and digital strategies: Webpage improvement, Organization of cultural and other events, School visits, Participation in exhibitions, Enhance their presence in social media, Advertisements in public places, Organize public webinars, Other | Propositions in order to enhance the image of a University |
| Part C | RQ18 | During the pandemic Covid-19, has the time you spend online (eg. hours you spend on social media) increased? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived influence related to time spend online by the pandemic |
|  | RQ19 | Do you think the pandemic Covid-19 has changed your consumer habits with a push towards online research? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived influence towards online research by the pandemic covid-19 |
|  | RQ20 | Do you think that the pandemic Covid-19 has changed your consumer habits with a push towards online purchases for goods and services? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived influence towards online purchases by the pandemic covid-19 |
| Part D | RQ21 | Please select the category at which you belong. | Single choice, three possible answers - Nominal (Male, Female, Prefer not say) | Demographics - Gender |
|  | RQ22 | What is your age? | Single choice, multiple answers - Ordinal | Demographics - Age |


|  |  |  | $(\leq 20,21-30$ years old, 31-40 years old, 41-50 years <br> old, 51-60 years old, $\mathbf{5 6 1})$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | RQ23 | What is your education level? | Single choice, multiple answers - Nominal <br> (High School, Diploma, Bachelor, Master, PhD) | Demographics - Education level |
|  | RQ24 | How often do you use internet? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived level of Digital <br> Engagement |
|  | RQ25 | How often do you visit webpages in <br> order to obtain information? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived level of Digital <br> Engagement |
|  | RQ26 | How often do you visit social media <br> platforms? | Likert scale question - Ordinal <br> (Not at all, Slightly, Moderately, Very, Extremely) | Perceived level of Digital <br> Engagement |
| RQ27 | How often do you use email? | Likert scale question - Ordinal |  |  |
| (Not at all, Slightly, Moderately, Very, Extremely) |  |  |  |  |

## Appendix C

## Reliability Statistics

|  | Cronbach's <br> Alpha Based <br> on |  |
| :--- | :--- | :--- |
| Cronbach's <br> Alpha | Standardized <br> Items | N of Items |
| .851 | .850 | 23 |

## Item Statistics

|  | Mean | Std. <br> Deviation | N |
| :--- | :--- | :--- | :--- | :--- |
| Info | 4.3391 | .73612 | 115 |
| Access | 4.4087 | .67402 | 115 |
| Navigation | 4.0435 | .98579 | 115 |
| Impression | 4.6522 | .62187 | 115 |
| Aware | 4.4957 | .68022 | 115 |
| Reviews \&Testimonials 3.1739 | .98463 | 115 |  |
| Live videos | 3.9913 | .90317 | 115 |
| Email - Interesting info | 3.6957 | .90973 | 115 |
| Personalized - Trigger | 3.9652 | .91700 | 115 |
| Email content brief | 4.4348 | .79616 | 115 |
| Webpage | 3.5043 | 1.14993 | 115 |
| Social Media | 3.4000 | 1.18322 | 115 |
| Email campaign 2.8000 | 1.12546 | 115 |  |
| Educational fair - Open <br> Days | 3.5826 | 1.13927 | 115 |
| Friends, Relatives, <br> Current Students, <br> Graduates | 3.8261 | 1.20132 | 115 |
| Printed Material | 3.2087 | 1.08818 | 115 |


| Covid-19 - Increase of <br> time spend online | 4.2000 | .97513 | 115 |
| :--- | :--- | :--- | :--- |
| Covid-19 - Push <br> towards online <br> research | 4.1652 | 1.10763 | 115 |
| Covid-19 - Push <br> towards online <br> purchases | 4.1043 | 1.15754 | 115 |
| Internet use | 4.8696 | .42964 | 115 |
| Visit Webpages | 4.7043 | .52938 | 115 |
| Visit Social Media | 4.1652 | 1.01679 | 115 |
| Use Email | 4.5130 | .80965 | 115 |

## Item-Total Statistics

|  | Scale Mean if <br> Item Deleted | Scale <br> Variance if <br> Item Deleted | Corrected <br> Item-Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item <br> Deleted |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Info | 87.9043 | 105.000 | .314 | .465 | .849 |
| Access | 87.8348 | 104.929 | .354 | .500 | .848 |
| Navigation | 88.2000 | 101.372 | .399 | .585 | .846 |
| Impression | 87.5913 | 105.174 | .370 | .391 | .847 |
| Aware | 87.7478 | 103.559 | .452 | .618 | .845 |
| Reviews \&Testimonials 89.0696 | 101.048 | .417 | .498 | .845 |  |
| Live videos | 88.2522 | 103.138 | .345 | .522 | .848 |
| Email - Interesting info | 88.5478 | 101.145 | .454 | .489 | .844 |
| Personalized - Trigger | 88.2783 | 102.694 | .363 | .425 | .847 |
| Email content brief | 87.8087 | 108.384 | .076 | .155 | .856 |
| Webpage | 88.7391 | 94.966 | .624 | .743 | .836 |
| Social Media | 88.8435 | 95.203 | .592 | .689 | .838 |
| Email campaign | 89.4435 | 96.056 | .587 | .642 | .838 |


| Educational fair - Open <br> Days | 88.6609 | 95.858 | .588 | .610 | .838 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Friends, Relatives, <br> Current Students, <br> Graduates | 88.4174 | 97.737 | .467 | .520 | .843 |
| Printed Material | 89.0348 | 97.402 | .544 | .624 | .840 |
| Covid-19 - Increase of <br> time spend online | 88.0435 | 102.849 | .327 | .632 | .849 |
| Covid-19 - Push <br> towards online <br> research | 88.0783 | 99.897 | .413 | .734 | .846 |
| Covid-19 - Push <br> towards online <br> purchases | 88.1391 | 99.823 | .394 | .620 | .847 |
| Internet use | 87.3739 | 107.043 | .343 | .498 | .849 |
| Visit Webpages | 87.5391 | 107.128 | .261 | .457 | .850 |
| Visit Social Media | 88.0783 | 103.003 | .302 | .345 | .850 |
| Use Email | 87.7304 | 102.830 | .413 | .368 | .846 |

## Scale Statistics

| Mean | Variance | Std. Deviation N of Items |
| :--- | :--- | :--- |
| 92.2435 | 110.274 | 10.50112 |

## Appendix D

## Appendix D1

|  | Statistics |  |  |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
|  | Info |  |  |  |  |  | Access | Navigation | Impression |
| N Valid | 115 | 115 | 115 | 115 |  |  |  |  |  |
|  | Missing | 0 | 0 | 0 | 0 |  |  |  |  |
| Mean | 4.3391 | 4.4087 | 4.0435 | 4.6522 |  |  |  |  |  |
| Std. Error of Mean | .06864 | .06285 | .09193 | .05799 |  |  |  |  |  |
| Median | 4.0000 | 5.0000 | 4.0000 | 5.0000 |  |  |  |  |  |
| Mode | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  |  |  |
| Std. Deviation | .73612 | .67402 | .98579 | .62187 |  |  |  |  |  |
| Variance | .542 | .454 | .972 | .387 |  |  |  |  |  |
| Skewness | -.768 | -.710 | -.983 | -1.825 |  |  |  |  |  |
| Std. Error of Skewness | .226 | .226 | .226 | .226 |  |  |  |  |  |
| Kurtosis | -.265 | -.586 | .758 | 3.097 |  |  |  |  |  |
| Std. Error of Kurtosis | .447 | .447 | .447 | .447 |  |  |  |  |  |
| Range | 3.00 | 2.00 | 4.00 | 3.00 |  |  |  |  |  |
| Minimum | 2.00 | 3.00 | 1.00 | 2.00 |  |  |  |  |  |
| Maximum | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  |  |  |

Appendix D2

|  | Statistics |  | Live videos |
| :---: | :---: | :---: | :---: |
|  | Aware | Reviews\& Testimonials |  |
| N Valid | 115 | 115 | 115 |
| Missing | 0 | 0 | 0 |
| Mean | 4.4957 | 3.1739 | 3.9913 |
| Std. Error of Mean | . 06343 | . 09182 | . 08422 |
| Median | 5.0000 | 3.0000 | 4.0000 |
| Mode | 5.00 | 3.00 | 4.00 |
| Std. Deviation | . 68022 | . 98463 | . 90317 |
| Variance | . 463 | . 969 | . 816 |
| Skewness | -1.175 | -. 133 | -. 637 |
| Std. Error of Skewness | . 226 | . 226 | . 226 |
| Kurtosis | . 826 | -. 171 | . 020 |
| Std. Error of Kurtosis | . 447 | . 447 | . 447 |
| Range | 3.00 | 4.00 | 4.00 |
| Minimum | 2.00 | 1.00 | 1.00 |
| Maximum | 5.00 | 5.00 | 5.00 |

## Appendix D3

|  | Statistics |  | Email content brief |
| :---: | :---: | :---: | :---: |
|  | Email Interesting info | Personalized - <br> Trigger |  |
| N Valid | 115 | 115 | 115 |
| Missing | 0 | 0 | 0 |
| Mean | 3.6957 | 3.9652 | 4.4348 |
| Std. Error of Mean | . 08483 | . 08551 | . 07424 |
| Median | 4.0000 | 4.0000 | 5.0000 |
| Mode | 4.00 | 4.00 | 5.00 |
| Std. Deviation | . 90973 | . 91700 | . 79616 |
| Variance | . 828 | . 841 | . 634 |
| Skewness | -. 422 | -. 833 | -1.268 |
| Std. Error of Skewness | . 226 | . 226 | . 226 |
| Kurtosis | . 108 | . 702 | . 800 |
| Std. Error of Kurtosis | . 447 | . 447 | . 447 |
| Range | 4.00 | 4.00 | 3.00 |
| Minimum | 1.00 | 1.00 | 2.00 |
| Maximum | 5.00 | 5.00 | 5.00 |

## Appendix E

Statistics

|  | Covid-19- <br> Increase of time <br> spend online | Covid-19 - Push <br> towards online <br> research | Covid-19-Push <br> towards online <br> purchases |
| :--- | ---: | ---: | ---: |
| N | Valid | 115 | 115 |

## Appendix F

|  | Statistics |  |  | Use Email |
| :---: | :---: | :---: | :---: | :---: |
|  | Internet use | Visit Webpages | Visit Social <br> Media |  |
| N Valid | 115 | 115 | 115 | 115 |
| Missing | 0 | 0 | 0 | 0 |
| Mean | 4.8696 | 4.7043 | 4.1652 | 4.5130 |
| Std. Error of Mean | . 04006 | . 04937 | . 09482 | . 07550 |
| Median | 5.0000 | 5.0000 | 4.0000 | 5.0000 |
| Mode | 5.00 | 5.00 | 5.00 | 5.00 |
| Std. Deviation | . 42964 | . 52938 | 1.01679 | . 80965 |
| Variance | . 185 | . 280 | 1.034 | 656 |
| Skewness | -4.110 | -1.606 | -1.358 | -1.506 |
| Std. Error of Skewness | . 226 | . 226 | . 226 | 226 |
| Kurtosis | 20.193 | 1.723 | 1.619 | 1.197 |
| Std. Error of Kurtosis | . 447 | . 447 | . 447 | . 447 |
| Range | 3.00 | 2.00 | 4.00 | 3.00 |
| Minimum | 2.00 | 3.00 | 1.00 | 2.00 |
| Maximum | 5.00 | 5.00 | 5.00 | 5.00 |

## Appendix G

## Appendix G1

Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Reviews \&Testimonials * Age | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Rank 1st - Reviews \&Testimonials * Age Crosstabulation

|  |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | <=20 | 21-30 | 31-40 | 41-50 | 51-60 | >=61 |  |
| Rank 1st - Reviews | Webpage | Count | 0 | 3 | 19 | 7 | 6 | 0 | 35 |
| \&Testimonials |  | Expected Count | 1.8 | 10.7 | 14.6 | 5.5 | 2.1 | . 3 | 35.0 |
|  | Social Media | Count | 4 | 11 | 8 | 4 | 0 | 0 | 27 |
|  |  | Expected Count | 1.4 | 8.2 | 11.3 | 4.2 | 1.6 | . 2 | 27.0 |
|  | Educational Fair - Open Days | Count | 0 | 7 | 4 | 1 | 1 | 0 | 13 |
|  |  | Expected Count | . 7 | 4.0 | 5.4 | 2.0 | . 8 | . 1 | 13.0 |
|  | Friends/Relatives/Current | Count | 2 | 14 | 17 | 6 | 0 | 1 | 40 |
|  | Students/Graduates | Expected Count | 2.1 | 12.2 | 16.7 | 6.3 | 2.4 | . 3 | 40.0 |
| Total |  | Count | 6 | 35 | 48 | 18 | 7 | 1 | 115 |
|  |  | Expected Count | 6.0 | 35.0 | 48.0 | 18.0 | 7.0 | 1.0 | 115.0 |


| Chi-Square Tests |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Value | df | Asymptotic Significance (2- $\qquad$ sided) |
| Pearson Chi-Square | $32.987^{\text {a }}$ | 15 | . 005 |
| Likelihood Ratio | 37.638 | 15 | . 001 |
| Linear-by-Linear Association | 4.622 | 1 | . 032 |
| $N$ of Valid Cases | 115 |  |  |

a. 15 cells (62.5\%) have expected count less than 5 . The minimum expected
count is .11 .

Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .536 | .005 |
|  | Cramer's V | .309 | .005 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Obtain Info * Age | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Rank 1st - Obtain Info * Age Crosstabulation


Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |  |
| :--- | ---: | ---: | ---: | ---: |
| Vearson Chi-Square | $22.105^{\mathrm{a}}$ | df | 25 | .630 |
| Likelihood Ratio | 22.964 | 25 | .580 |  |
| Linear-by-Linear Association | .006 | 1 | .937 |  |
| N of Valid Cases | 115 |  |  |  |

a. 29 cells ( $80.6 \%$ ) have expected count less than 5 . The minimum expected count is 01 .

Symmetric Measures

|  |  | Approximate <br> Significance |  |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .438 | .630 |
|  | Cramer's $V$ | .196 | .630 |
| N of Valid Cases |  | 115 |  |

Rank 1st - Compare services * Age Crosstabulation


| Chi-Square Tests |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Value |  | df | Asymptotic <br> Significance (2- <br> sided) |
| Pearson Chi-Square | $27.118^{\mathrm{a}}$ | 25 | .350 |  |
| Likelihood Ratio | 27.266 | 25 | .343 |  |
| Linear-by-Linear Association | 1.480 | 1 | .224 |  |
| $N$ of Valid Cases | 115 |  |  |  |

a. 30 cells $(83.3 \%)$ have expected count less than 5 . The minimum expected count is 01 .

|  | Symmetric Measures |  | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .486 | .350 |
|  | Cramer's $V$ | .217 | .350 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete application * Age | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

## Complete application * Age Crosstabulation

|  |  | Age |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | < $=20$ | 21-30 | 31-40 | 41-50 | 51-60 | >=61 | Total |
| Complete application | Online chat assistance | Count | 1 | 9 | 19 | 5 | 3 | 0 | 37 |
|  |  | Expected Count | 1.9 | 11.3 | 15.4 | 5.8 | 2.3 | . 3 | 37.0 |
|  | In person assistance | Count | 2 | 11 | 6 | 4 | 2 | 1 | 26 |
|  |  | Expected Count | 1.4 | 7.9 | 10.9 | 4.1 | 1.6 | . 2 | 26.0 |
|  | Assistance via telephone | Count | 1 | 10 | 13 | 4 | 1 | 0 | 29 |
|  |  | Expected Count | 1.5 | 8.8 | 12.1 | 4.5 | 1.8 | . 3 | 29.0 |
|  | Assistance via email | Count | 2 | 5 | 10 | 5 | 1 | 0 | 23 |
|  |  | Expected Count | 1.2 | 7.0 | 9.6 | 3.6 | 1.4 | . 2 | 23.0 |
| Total |  | Count | 6 | 35 | 48 | 18 | 7 | 1 | 115 |
|  |  | Expected Count | 6.0 | 35.0 | 48.0 | 18.0 | 7.0 | 1.0 | 115.0 |

## Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  |  |
| Pearson Chi-Square | $11.863^{\mathrm{a}}$ | 15 | .689 |
| Likelihood Ratio | 11.722 | 15 | .700 |
| Linear-by-Linear Association | .253 | 1 | .615 |
| $N$ of Valid Cases | 115 |  |  |

a. 15 cells (62.5\%) have expected count less than 5 . The minimum expected
count is 20 .

Symmetric Measures

|  |  | Value | Signifificance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .321 | .689 |
|  | Cramer's $V$ | .185 | .689 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete questionnaire give feedback * Age | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

## Complete questionnaire give feedback * Age Crosstabulation

|  |  | Age |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 21-30 | 31-40 | 41-50 | 51-60 | >=61 |  |
| Complete questionnaire give feedback | Digitally | Count | 5 | 31 | 42 | 17 | 5 | 1 | 101 |
|  |  | Expected Count | 5.3 | 30.7 | 42.2 | 15.8 | 6.1 | . 9 | 101.0 |
|  | Printed copy | Count | 1 | 4 | 6 | 1 | 2 | 0 | 14 |
|  |  | Expected Count | . 7 | 4.3 | 5.8 | 2.2 | . 9 | . 1 | 14.0 |
| Total |  | Count | 6 | 35 | 48 | 18 | 7 | 1 | 115 |
|  |  | Expected Count | 6.0 | 35.0 | 48.0 | 18.0 | 7.0 | 1.0 | 115.0 |

Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  |  |
| Pearson Chi-Square | $2.773^{a}$ | 5 | .735 |
| Likelihood Ratio | 2.633 | 5 | .756 |


| Linear-by-Linear Association | .017 | 1 | .895 |
| :--- | ---: | :--- | :--- |
| N of Valid Cases | 115 |  |  |

a. 6 cells (50.0\%) have expected count less than 5 . The minimum expected count is 12 .

## Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .155 | .735 |
|  | Cramer's V | .155 | .735 |
| N of Valid Cases |  | 115 |  |

## Appendix G2

|  | Case Processing Summary |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cases |  |  |  |  |  |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Obtain Info * <br> Education Level | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Rank 1st - Obtain Info * Education Level Crosstabulation


| Chi-Square Tests |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Value | df | Asymptotic Significance (2sided) |
| Pearson Chi-Square | $43.216^{\text {a }}$ | 20 | . 002 |
| Likelihood Ratio | 28.410 | 20 | . 100 |
| Linear-by-Linear Association | . 113 | 1 | . 737 |
| N of Valid Cases | 115 |  |  |

a. 22 cells $(73.3 \%)$ have expected count less than 5 . The minimum expected count is . 06 .

## Symmetric Measures

|  |  | Approximate <br> Significance |  |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .613 | .002 |
|  | Cramer's V | .307 | .002 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Compare services * <br> Education Level | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

## Rank 1st - Compare services * Education Level Crosstabulation

|  |  |  | Education Level |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High School | Diploma | Bachelor | Master | PhD |  |
| Rank 1st - Compare services | Webpage | Count | 6 | 13 | 15 | 29 | 5 | 68 |
|  |  | Expected Count | 5.3 | 10.1 | 20.1 | 28.4 | 4.1 | 68.0 |
|  | Socail Media | Count | 2 | 2 | 6 | 4 | 0 | 14 |
|  |  | Expected Count | 1.1 | 2.1 | 4.1 | 5.8 | . 9 | 14.0 |
|  | Email campaign | Count | 0 | 0 | 1 | 0 | 0 | 1 |
|  |  | Expected Count | . 1 | . 1 | . 3 | . 4 | . 1 | 1.0 |
|  | Educational Fair - Open Days | Count | 0 | 0 | 2 | 6 | 1 | 9 |
|  |  | Expected Count | . 7 | 1.3 | 2.7 | 3.8 | . 5 | 9.0 |
|  | Friends/Relatives/Current | Count | 1 | 2 | 9 | 8 | 1 | 21 |
|  | Students/Graduates | Expected Count | 1.6 | 3.1 | 6.2 | 8.8 | 1.3 | 21.0 |
|  | Printed Material | Count | 0 | 0 | 1 | 1 | 0 | 2 |
|  |  | Expected Count | . 2 | . 3 | . 6 | . 8 | . 1 | 2.0 |
| Total |  | Count | 9 | 17 | 34 | 48 | 7 | 115 |
|  |  | Expected Count | 9.0 | 17.0 | 34.0 | 48.0 | 7.0 | 115.0 |


| Chi-Square Tests |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Value | df | Asymptotic Significance (2- $\qquad$ sided) |
| Pearson Chi-Square | $14.669^{\text {a }}$ | 20 | . 795 |
| Likelihood Ratio | 17.678 | 20 | . 609 |
| Linear-by-Linear Association | 1.025 | 1 | . 311 |
| N of Valid Cases | 115 |  |  |

a. 23 cells ( $76.7 \%$ ) have expected count less than 5 . The minimum expected count is .06 .

|  | Symmetric Measures |  | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .357 | .795 |
|  | Cramer's V | .179 | .795 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Reviews | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |
| \&Testimonials * Education |  |  |  |  |  |  |
| Level |  |  |  |  |  |  |

Rank 1st - Reviews \&Testimonials * Education Level Crosstabulation


## Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Vearson Chi-Square | df |  | .478 |
| Likelihood Ratio | $11.601^{\mathrm{a}}$ | 12 | .436 |
| Linear-by-Linear Association | 12.119 | 12 | .499 |
| N of Valid Cases | .458 | 1 |  |

a. 11 cells (55.0\%) have expected count less than 5 . The minimum expected
count is .79 .

Symmetric Measures

|  |  | Approximate <br> Significance |  |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .318 | .478 |
|  | Cramer's V | .183 | .478 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete application * <br> Education Level | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Complete application * Education Level Crosstabulation


Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  |  |
| Pearson Chi-Square | $26.055^{\mathrm{a}}$ | 12 | .011 |
| Likelihood Ratio | 26.993 | 12 | .008 |
| Linear-by-Linear Association | .908 | 1 | .341 |
| N of Valid Cases | 115 |  |  |

a. 11 cells $(55.0 \%)$ have expected count less than 5 . The minimum expected count is 1.40 .

## Symmetric Measures

|  |  | Approximate <br> Significance |  |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .476 | .011 |
|  | Cramer's V | .275 | .011 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete questionnaire give feedback * Education Level | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Complete questionnaire give feedback * Education Level Crosstabulation

|  |  |  | Education Level |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High School | Diploma | Bachelor | Master | PhD |  |
| Complete questionnaire give | Digitally | Count | 7 | 14 | 29 | 44 | 7 | 101 |
| feedback |  | Expected Count | 7.9 | 14.9 | 29.9 | 42.2 | 6.1 | 101.0 |
|  | Printed copy | Count | 2 | 3 | 5 | 4 | 0 | 14 |
|  |  | Expected Count | 1.1 | 2.1 | 4.1 | 5.8 | . 9 | 14.0 |
| Total |  | Count | 9 | 17 | 34 | 48 | 7 | 115 |
|  |  | Expected Count | 9.0 | 17.0 | 34.0 | 48.0 | 7.0 | 115.0 |


| Chi-Square Tests |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
|  | Value |  | df | Asymptotic <br> Significance (2- <br> sided) |
| Pearson Chi-Square | $3.163^{\mathrm{a}}$ |  | 4 | .531 |
| Likelihood Ratio | 3.877 | 4 | .423 |  |
| Linear-by-Linear Association | 2.988 |  | 1 | .084 |
| $N$ of Valid Cases | 115 |  |  |  |

a. 4 cells ( $40.0 \%$ ) have expected count less than 5 . The minimum expected
count is 85 .

|  | Symmetric Measures |  | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .166 | .531 |
|  | Cramer's $V$ | .166 | .531 |
| N of Valid Cases |  | 115 |  |

## Appendix G3

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Obtain Info * Gender | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Rank 1st - Obtain Info * Gender Crosstabulation

|  |  |  | Gender |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female | Male | Prefer not to say |  |
| Rank 1st - Obtain Info | Webpage | Count | 54 | 13 | 1 | 68 |
|  |  | Expected Count | 51.4 | 16.0 | . 6 | 68.0 |
|  | Social Media | Count | 6 | 4 | 0 | 10 |
|  |  | Expected Count | 7.6 | 2.3 | 1 | 10.0 |
|  | Email campaign | Count | 0 | 1 | 0 | 1 |
|  |  | Expected Count | . 8 | . 2 | . 0 | 1.0 |
|  | Educational Fair - Open Days | Count | 11 | 6 | 0 | 17 |
|  |  | Expected Count | 12.9 | 4.0 | 1 | 17.0 |
|  | Friends/Relatives/Current | Count | 15 | 3 | 0 | 18 |
|  | Students/Graduates | Expected Count | 13.6 | 4.2 | 2 | 18.0 |
|  | Printed Material | Count | 1 | 0 | 0 | 1 |
|  |  | Expected Count | . 8 | . 2 | . 0 | 1.0 |
| Total |  | Count | 87 | 27 | 1 | 115 |
|  |  | Expected Count | 87.0 | 27.0 | 1.0 | 115.0 |

Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: |
|  | Value | df |  |
| Pearson Chi-Square | $8.195^{\mathrm{a}}$ | 10 | .610 |
| Likelihood Ratio | 8.182 | 10 | .611 |
| Linear-by-Linear Association | .008 | 1 | .931 |
| N of Valid Cases | 115 |  |  |

a. 13 cells ( $72.2 \%$ ) have expected count less than 5 . The minimum
expected count is .01 .

Symmetric Measures

|  |  |  | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .267 | .610 |
|  | Cramer's V | .189 | .610 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Compare services <br> * Gender | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Rank 1st - Compare services * Gender Crosstabulation


| Chi-Square Tests |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Value | df | Asymptotic Significance (2sided) |
| Pearson Chi-Square | $7.464^{\text {a }}$ | 10 | . 681 |
| Likelihood Ratio | 7.046 | 10 | . 721 |
| Linear-by-Linear Association | . 178 | 1 | . 673 |
| N of Valid Cases | 115 |  |  |

a. 13 cells ( $72.2 \%$ ) have expected count less than 5 . The minimum expected count is .01 .

## Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .255 | .681 |
|  | Cramer's V | .180 | .681 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Rank 1st - Reviews | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |
| \&Testimonials * Gender |  |  |  |  |  |  |

Rank 1st - Reviews \&Testimonials * Gender Crosstabulation


Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  | .519 |
| Pearson Chi-Square | $5.194^{\mathrm{a}}$ | 6 | .586 |
| Likelihood Ratio | 4.676 | 6 | .904 |
| Linear-by-Linear Association | .014 | 1 |  |
| N of Valid Cases | 115 |  |  |

a. 5 cells ( $41.7 \%$ ) have expected count less than 5 . The minimum expected count is 11 .

Symmetric Measures

|  |  | Approximate <br> Significance |  |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .213 | .519 |
|  | Cramer's V | .150 | .519 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete application * Gender | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

## Complete application * Gender Crosstabulation

|  |  | Gender |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Male | Prefer not to say |  |
| Complete application | Online chat assistance | Count | 30 | 6 | 1 | 37 |
|  |  | Expected Count | 28.0 | 8.7 | . 3 | 37.0 |
|  | In person assistance | Count | 18 | 8 | 0 | 26 |
|  |  | Expected Count | 19.7 | 6.1 | . 2 | 26.0 |
|  | Assistance via telephone | Count | 20 | 9 | 0 | 29 |
|  |  | Expected Count | 21.9 | 6.8 | . 3 | 29.0 |
|  | Assistance via email | Count | 19 | 4 | 0 | 23 |
|  |  | Expected Count | 17.4 | 5.4 | . 2 | 23.0 |
| Total |  | Count | 87 | 27 | 1 | 115 |
|  |  | Expected Count | 87.0 | 27.0 | 1.0 | 115.0 |

## Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |  |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  | .518 |  |
| Pearson Chi-Square | $5.200^{\mathrm{a}}$ | 6 | .496 |  |
| Likelihood Ratio | 5.382 | 6 | .916 |  |
| Linear-by-Linear Association | .011 | 1 |  |  |
| N of Valid Cases | 115 |  |  |  |

a. 4 cells (33.3\%) have expected count less than 5 . The minimum expected
count is .20 .

|  | Symmetric Measures |  |  |
| :--- | :--- | ---: | ---: |
|  |  | Value | Approximate <br> Significance |
| Nominal by Nominal | Phi | .213 | .518 |
|  | Cramer's V | .150 | .518 |
| N of Valid Cases |  | 115 |  |

## Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Complete questionnaire give feedback * Gender | 115 | 100.0\% | 0 | 0.0\% | 115 | 100.0\% |

Complete questionnaire give feedback * Gender Crosstabulation

|  |  |  | Gender |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female | Male | Prefer not to say |  |
| Complete questionnaire give feedback | Digitally | Count | 79 | 21 | 1 | 101 |
|  |  | Expected Count | 76.4 | 23.7 | . 9 | 101.0 |
|  | Printed copy | Count | 8 | 6 | 0 | 14 |
|  |  | Expected Count | 10.6 | 3.3 | 1 | 14.0 |
| Total |  | Count | 87 | 27 | 1 | 115 |
|  |  | Expected Count | 87.0 | 27.0 | 1.0 | 115.0 |

## Chi-Square Tests

|  |  |  | Asymptotic <br> Significance (2- <br> sided) |
| :--- | ---: | ---: | ---: | ---: |
| Value | df |  | .182 |
| Likelihood Ratio | $3.410^{\mathrm{a}}$ | 2 | .206 |
| Linear-by-Linear Association | 3.158 | 2 | .122 |
| N of Valid Cases | 2.387 | 1 |  |

a. 3 cells $(50.0 \%)$ have expected count less than 5 . The minimum
expected count is .12 .

Symmetric Measures

|  |  | Value | Approximate <br> Significance |
| :--- | :--- | ---: | ---: |
| Nominal by Nominal | Phi | .172 | .182 |
|  | Cramer's V | .172 | .182 |
| N of Valid Cases |  | 115 |  |


[^0]:    ${ }^{1}$ The online version of questionnaire as viewed by participants can be found here: https://forms.gle/qNTPueHr7SERphhYA

