

**VILNIUS UNIVERSITY**

**FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION**

**Giancarlo Alberto FARFAN VALENCIA**

Master study programme  
*Marketing and Integrated Communication*

**MASTER'S THESIS**  
**INFLUENCE OF PRIVACY CONCERNS AND RISK BELIEFS ON WILLINGNESS TO  
DISCLOSE PERSONAL DATA IN ONLINE PURCHASING IN LITHUANIA AND  
PERU.**

Supervisor: **prof. Sigitas, Urbonavičius**  
The date of the delivery:  
Registration No.

**Vilnius, 2020**

## **AUTHOR'S DECLARATION**

I, the undersigned, hereby declare that this submission is entirely my own work, in my own words, and that all sources used in researching it are fully acknowledged and all quotations properly identified. I understand the ethical implications of my research, and this work meets the requirements of the Faculty of Economics and Business Administration from Vilnius University.

**Student Name:** Giancarlo Alberto Farfan Valencia

**Student Number:** 1930160

Signed

A rectangular box containing a handwritten signature in black ink. The signature is stylized and appears to be the initials 'GAF' followed by a horizontal line.

# TABLE OF CONTENT

## INTRODUCTION

<b>1. THEORETICAL ANALYSIS.....</b>	<b>7</b>
1.1 THEORETICAL BASIS FOR PERSONAL DATA DISCLOSURE .....	7
1.1.1 WILLINGNESS TO PROVIDE PERSONAL INFORMATION .....	7
1.1.2 REGULATORY FOCUS THEORY .....	9
1.1.3 SOCIAL JUSTICE THEORY AND THE DIMENSIONS OF PERCEIVED FAIRNESS / JUSTICE .....	12
1.2 TRUST-RELATED FACTORS .....	14
1.2.1 TRUST-RELATED CONTEXT .....	14
1.2.2 INTERNET EXPERTISE .....	15
1.3 PRIVACY CONCERN RELATED FACTORS.....	16
1.3.1 PRIVACY CONCERN CONTEXT.....	16
1.3.2 PERCEIVED RISKS .....	19
1.4 CROSS-CULTURAL RELATED CONTEXT .....	21
1.4.1 LITHUANIA RELATED CONTEXT .....	21
1.4.2 PERU RELATED CONTEXT .....	23
1.4.3 CULTURAL DIFFERENCES – HOFSTEDE 6-DIMENSION MODEL.....	25
<b>2. METHODOLOGY OF THE RESEARCH .....</b>	<b>29</b>
2.1 RESEARCH MODEL AND HYPOTHESES .....	29
2.2 RESEARCH INSTRUMENT.....	34
2.3 SAMPLING AND DATA COLLECTION .....	38
<b>3. ANALYSIS OF THE EMPIRICAL DATA .....</b>	<b>42</b>
3.1 DESCRIPTIVE STATISTICS.....	42
3.2 RELIABILITY OF SCALES.....	46
3.3 MEASUREMENT OF VARIABLE’S MEAN BETWEEN GROUPS .....	49
3.3.1 EFFECTS ON IUIPC .....	49
3.3.2 EFFECTS ON RISK BELIEFS .....	52
3.3.3 EFFECTS ON WILLINGNESS TO DISCLOSE .....	54
3.4 TEST OF HYPOTHESES .....	56
3.5 SUMMARY OF THE RESULTS AND MANAGERIAL APPLICATIONS.....	66
<b>CONCLUSIONS.....</b>	<b>73</b>

## LIST OF REFERENCES

## SUMMARY

## ANNEXES

## **INTRODUCTION**

### **INFLUENCE OF PRIVACY CONCERNS AND RISK BELIEFS ON WILLINGNESS TO DISCLOSE PERSONAL DATA IN ONLINE PURCHASING IN LITHUANIA AND PERU**

In the 1990s, the rise of worldwide communication, trade, travel, and marketing activities, specifically the global use of credit cards and the Internet evoked the collection and use of personal data by multinational companies (Westin, 2003); making privacy concern a global issue, because nowadays “personal data has become a valuable commodity” (M. Vestager, personal speech, September 9, 2016).

Consumers, are willing to make an exchange of personal data for shopping benefits, according to the value of benefits that implies the purchase of the product and/or the use of the service, usually offered by the marketers, in the so-called, “trade-off” (Malhotra et al., 2004; Phelps et al., 2000). One theory with great support to encourage customers to disclose information, is through building trust and reducing privacy concerns (Wirtz & Lwin, 2009); study that includes the successful application of the Regulatory Focus Theory (RFT) through the relation of two central mediating variables like trust and privacy concern.

An online buying transaction by itself brings privacy/security concerns that have a negative impact on purchase intention (Fortes & Rita, 2016). Privacy, according to some previous consumer market-place definition, is the ability to affect an individual’s dissemination and use of personal data that is collected during or as a result of a marketing transaction, as well it represents individuals’ control over the reception of marketing offers like phone calls, emails, or physical advertising (Phelps, Nowak, & Ferrell, 2000).

In the digital media, privacy concerns, is correlated with the definition of the Internet User’s Information Privacy Concerns (IUIPC), where online users are concerned about online marketers’ *collection* of personal data, the user’s *control* over the collected information, and the user’s *awareness* of how the collected information is used (Malhotra, Sung, & Agarwal, 2004). As well, it has been proven that privacy concerns on the internet, has negative impact over various beliefs about the use of ecommerce and online purchase intention, such as trust, perceived usefulness (PU), perceived ease of use (PEU) and perceived behavioral control (PBC), and positive impact on perceived risk (Nuno & Paulo, 2016). Therefore, privacy concern rises perceived risk on shoppers in an online purchase scenario (Featherman & Pavlou, 2003), as such,

acts as an inhibitor to purchase (Peter & Ryan, 1976)”, accordingly negatively related to online shopping intention. Consequently, risk beliefs will have a negative effect on intention to reveal personal information (Malhotra, Sung, & Agarwal, 2004).

“Online shoppers will not get involved in a transaction on the internet unless the perceived level of trust exceed the minimum level acceptable to the shopper” as stated in (Martínez-López, Luna, & José Martínez, 2005), therefore, perceived trust should be bigger than any privacy concern in order to complete the transaction. Internet shopping involves trust between the consumer and the computer system used to fulfill the action (Lee & Turban, 2001). In addition, trust in Internet shopping exert strong positive influence on online shopping, that can be explained through attitudes towards the use, specially through *Internet Expertise* (Martínez-López et al., 2005), ), while in the risk side of Internet shopping, *Ecommerce Experience*, is an important predictor of perceived risk of disclosure and willingness to disclose (Robinson, 2017).

It has been proved that the consumers’ ability and desire to *control* subsequent dissemination of personal information (Phelps et al., 2000), and the *awareness* of what type of information is *collected* (Malhotra et al., 2004), is very important for consumers. Therefore, many regulations and governmental institutions has been created over the past years to address this privacy concerns. As in the context of Lithuania with, the European General Data Protection Regulation (GDPR), widely considered for its contribution to a fair digital society built on mutual trust (European Commission, 2019), that emphasizes the importance of enhancing *Individual Control* in the data economy (Ooijen & Vrabec, 2019), and strengthen individuals’ rights according to its principles.

Peru, possess one of the lowest investment in cybersecurity across Latin America and under the global average (Statista, 2019), with the next insecurity statistics: 25.5% Peruvians were victim of a criminal act between 2017 and 2018, having “fraud” as the second most common crime between the nation (INEI - Instituto Nacional de Estadística e Informática - Perú, 2018), and having “Personal detail security” as the highest barrier to online purchasing above Latin American and the global average (GfK, 2018), making Peru a highly propense territory to insecurity and privacy concerns about sharing personal information among its population.

In addition, Lithuanian and Peruvian societies differ one from the other, as two elements from the Hofstede 6 Dimension Model show marked differences: the *Long term orientation*

dimension shows that Lithuania is a marked pragmatic society while Peru is a marked normative society, and in the *Individualist* dimension shows that Lithuania is considered as an individualist society while Peru is a marked collectivist society. Therefore; Lithuania, a nation from the Europe Union under the GDPR, with high internet penetration rate and with an active population shopping online -1.41 million e-shoppers- that represents almost the half of their population (European Commission, 2018), and as a pragmatic and individualist society; might differ with the Republic of Peru, nation without a regulation addressing privacy concerns about personal detail security, with high rates of distrust to shop online (GfK, 2018), with a smaller portion of e-shoppers -6 million e-shoppers- less than 20% of their total population (Follegatti, 2019), and as a normative society and marked collectivist society. Therefore, a comparison of Lithuania and Peru provides strong contrasts for this study of disclosure of data in an ecommerce transaction; Lithuania, as one country with high connectivity, high internet usage, representative e-shopper community according to their population, and bigger quantity of number of debit/credit cards (7 million of cards issued only in Q3 from 2020 according to Lietuvos Bankas); and Peru, with no representative e-shoppers numbers in comparison with Lithuania, a population that the element of “personal detail security” deter them from shopping online, the fear of fraud spread among them, and smaller quantity of debit/credit cards in relation to total population (8 million of credit cards and 23 million of total active cards in 2016 according to Superintendencia de Banca y Seguros). The problem to analyze is: How the IUIPC and the perceived risk beliefs exert direct influence on willingness to provide different types of personal data for online shopping purposes according to a cross-cultural comparison?.

The aim of this study is to analyze the influence of privacy concerns and risk beliefs on willingness to disclose personal data and purchasing online in Peru and Lithuania. The objectives for this study are below:

1. To elaborate hypothesis according to the theoretical analysis from the main variables involved (*IUIPC*, *risk beliefs*, *willingness to disclose*), and validate or reject its acceptance.
2. To understand privacy concerns, defined as *IUIPC* for this study, principally validate its direct effect over willingness to disclose personal data, using the *IUIPC 10-item scale* and the *6-item of personally identifying information (PII)*, respectively.

3. To validate according to a cross-cultural analysis between Peru and Lithuania, the full model, the positive effect of *IUIPC* over *perceived risk beliefs*, the negative effect of *perceived risk beliefs* over *willingness to disclose*, and the direct effect of *IUIPC* over *willingness to disclose*.
4. To validate the *cross-cultural comparison* itself and the selection of the two countries, by differentiation of means and effects in the main variables.
5. To evaluate the differences between the willingness to disclose *different types of information*, using Robinson's classification (2017).
6. To compare the similarities and differences from the results of acceptance or rejection from hypotheses with other *related studies* focused on *willingness to disclose*.
7. Finally, to evaluate the side effects from the control variables, *Nationality* and *Ecommerce Experience*, and in addition, from the demographic factors of *age* and *education* over the principal variables for further implications.

For effects of the methodology, two individual online surveys using Google forms were run during the last months of 2020, with a total questionnaire of 25 items. In the case of Lithuania, 251 answers were collected, and the survey was completely presented in the English language; while in the case of Peru, 202 answers were collected, and the survey was completely presented in the Spanish language. The two surveys were merged into one file for further analysis with SPSS Statistics.

# **1. THEORETICAL ANALYSIS**

## **1.1 THEORETICAL BASIS FOR PERSONAL DATA DISCLOSURE**

### **1.1.1 WILLINGNESS TO PROVIDE PERSONAL INFORMATION**

Willingness to disclose, according to the study related context is defined, as an individual's openness to provide personal information in an e-commerce transaction. Customers are willing to make the so-called "trade-off" to participate in a commercial society having as actual background the increased adoption of ecommerce and the digital economy, while also the increased common interest to protect consumer's data (Robinson, 2017). It's been known that the type of information play an important role in consumers' disclosure of private data, many studies proved that customers are least willing to provide financial and personal identifier information (social security numbers, among others) considered as sensitive information; in the opposite way, are more willing to provide demographic or lifestyle information consider as less sensitive information (Phelps et al., 2000). One of the approach that properly measure in a cross-cultural environment the type of information that a person is willing to disclose in a purchase scenario, is the one offered in the "Online disclosure consciousness model" (Robinson, 2017).

Several studies are trying to frame the need to disclose private data with the presence of the perceived risks: like the privacy paradox, calculus framework or the communication privacy management theory. But, according to Taddicken study (as cited in Robinson, 2017) and for the context of this study, all previous theories fail to directly relate users' privacy concerns to their disclosure behaviors, also the previous models deal with the problem as an abstraction, and by last, the fluctuation between willingness to disclose, perceived risk and information categorization is missing or it's not clear.

In a purchasing scenario that requires customer disclosure of personal information, it's been proved that purchase intentions will be greater in the next scenarios: shopping benefits are included in the trade-off for personal data, time saving benefit is offered rather than the promise to a wider selection consumers, and the promise that they will receive less advertising in the future (Phelps et al., 2000).



The next covariates are being proved to be relevant according to the context of customer's disclosure in a cross-cultural comparison: *education*, *nationality*, and *previous ecommerce experience*.

Some studies assert that *education* is negatively related with trusting beliefs (Malhotra et al., 2004), while some others suggests that less educated customers are more willing to disclose information online (Robinson, 2017). Therefore, in accordance to the cross-cultural context of this study, and the next data: in the year 2018, 82% from the total Peruvian population with ages 25 and over attained or completed its primary education; while in the year 2017, 99% of Lithuanian population with ages 25 and over attained or completed its primary education (UNESCO Institute for Statistics, 2020), the Peruvian percentage is lower in comparative proportion with the Lithuanian percentage; I could suggest that: *Peruvians with less education are more willing to disclose information online, in comparison with Lithuanians with more education*.

About the *previous ecommerce experience* factor, it has been proved that more self-reported online shopping expertise is positively related to the willingness to disclosure and negatively related to the perceived risk of disclosure (Robinson, 2017). If we correlated willingness to shop online, online shopping expertise and disclosure of private data, there is one study in Lithuania that states that consumers' expertise in online shopping is directly related with the convenience dimensions, where *convenience* is the main motivator to shop online among Lithuanians (Bagdonienė & Zemblytė, 2009); but what is more relevant about this previous study is that according to the demotivation dimensions to shop online and the perceived risks to disclosure: Lithuanians are less worry about the misuse of their personal information by Internet retailers, and they have less concerns about providing financial information like credit cards to complete a payment (only 15.7% and 17.2% among respondents agree that these are demotivating factors to shop online respectively). In the other side for Peru, the main motivators to buy online is savings, because Peruvians consider the online channel to have *better prices*, in addition to frequent discounts or promotions; as opposite, the actual barriers that hinder online shopping in Peru, foremost the lack of electronic means of payment among Peruvian population, and the spread of suspicious feeling of entering their personal data on a web page, which by definition they consider unsafe, regardless of the provider (Euromonitor International, 2019). This last

information can be largely proved in the Future Buy study presented by GfK (2018), that points that one of the biggest barriers to online purchases for Peruvians is the treatment and security of their personal details, the results show 55% relevance among Peruvians respondents above the 39% for the global average. And about the size of the Peruvian ecommerce environment, over 6 million of Peruvians (18% of its population) buy online according to the Lima Chamber of Commerce (as cited in Follegatti, 2019), however 14.4% of the online shopping transactions in Peru are paid with cash through a bank agency, that percentage represents Peruvians mainly in the next scenarios, people who are not willing to provide financial data because of the fear of misused or prevention from any potential fraud, feel more secure about completing a transaction in this way, or population that doesn't have any electronic payment method. According to all the previous information, I will suggest two statements: First, *Lithuanians are more willing to provide specifically sensible information, like financial data, in an online purchasing scenario in comparison with Peruvians.* And second, *Lithuanians are less worry about the perceived risks of shopping online in comparison with Peruvians.*

In addition, one important extent of willingness to disclose data, is precisely, the type of data to disclose. Most of the studies and authors take the type of data as an item-by-item base concept, that can be study as a homogeneous construct or unique dimension. Nevertheless, there is one recent study that explore the possibility of three dimensions or groups of personal data that can be constructed for the willingness to disclose, which did not take into account the credit card information and banking type information; and for the specific analysis of this study where, Peru, is a country that banking/financial information cannot be omitted because is a natural barrier for shopping online in this territory (42.19% of the population in Peru have a bank account, according to the World Bank ranking in 2017), and where, Lithuania, a country with high banking levels among their population (82.88% of the population in Lithuania have a bank account according to the World Bank ranking in 2017), might offer different collective perceptions about disclosing financial data across these two territories.

### **1.1.2 REGULATORY FOCUS THEORY**

The Regulatory Focus Theory (RFT), is focused on individual's self-regulation toward desired end-states according to specific approach-avoidance behaviors/principles. To

reach this desired end-states, people's motivation is due to *promotion focus*, involving sensitivity to positive outcomes and the desire to match with a positive/winning outcome; and contrarily, *prevention focus*, which means the presence of sensitivity to negativity and avoidance of negative/losing outcome (Higgins, 1997). Hazlett, Molden and Sackett study (as cited in Bjarne, Markus, Roy, Ileana, Sören, Michalis, & Andreas, 2017) found that promotion-oriented individuals tend to be optimistic and prevention-oriented individuals are more pessimistic.

In the privacy context, and in comparison with the other approach-avoidance orientation principles, like the Regulatory Reference or the Regulatory Anticipation, the Regulatory Focus is more active according to its *strategic motivation* to approach or avoid end-states; as in the following scenario: to avoid the breach of private data in an e-commerce transaction (undesired end-state), a person with a prevention focus orientation before the action will evaluate and behave strategically according to its own motivational consequences of shopping online. In line with the RFT, the application of the Regulatory Focus Questionnaire in the field of dealing with motivational benefits from online buying (desired end-state) and the goal attainment to keep your private data safe against any violation (undesired end-state), is highly recommended (Bjarne et al., 2017), and it will be used in this study

Wirtz and Lwin (2009), as mentioned in the introduction, with their study support the use of RFT in a privacy context. Their findings demonstrate that *trust* predicted the next promotion-focused behaviors: the relational behavior, the relationship investment and the repatronage intentions. As well, their findings demonstrate that *privacy concern* predicted prevention-focused behaviors: the defensive, the deflective and the disruptive behavior. Therefore, in the upcoming lines, I'm explaining in more detail promotion focus behaviors and prevention focus behaviors, as well a punctual understanding and correlated them with willingness to disclose data.

***Promotion oriented behaviors*** are directly related with positive outcomes or desired end-states. Therefore, according to Wirtz and Lwin (2009), increasing the consumer's level of compromise in an ongoing relationship perspective. Next, I've detailed each one of the key promotion-focused behaviors and correlates them with similar elements from other studies according to the context.

- *Relational behavior*: It's understood as an individual's willingness to take actions or make the extra effort to keep in a customer-firm relationship. Relatively, easy and low-effort actions to provide or update consumer's private data (Phelps et al., 2000).
- *Relationship investment*: It's understood as an individual's willingness to provide time and be collaborative to keep a customer-firm relationship.
- *Repatronage intentions*: It's understood an individual's willingness to repatronize a service organization. In a trust relationship, individual's commitment in the customer-firm relationship, it's a predictor of future purchase intention (Morgan & Hunt, 1994).

According to the customer's willingness to be collaborative (relational behavior), proactive (relationship investment) and even supporter (repatronage intentions) to maintain an ongoing relationship with firms, it has been proved that these trust responses are promotive (Wirtz & Lwin, 2009). In addition, all three promotion-focus behaviors are related to customer's willingness to provide private data and purchase intention, supporting the implementation of these key behaviors as part of the model of study.

***Prevention oriented behaviors*** are directly related with safety, negative outcomes and undesired end-states; according to RFT, relates to individual's trying to protect themselves from any potential loss. The key prevention-focused behaviors are presented next, further implications with related theories is being examined.

- *Deflective behavior*: It's understood as an individual's avoidance of marketer's communication through defensive actions; or the negative response from a non-active customer to the collection of its personal information. In this case, many studies suggest that customers are constantly using tools to avoid firm's communications (Lwin & Williams, 2003; Lwin et al., 2007).
- *Defense behavior*: It's understood as an individual's proactiveness to request the discontinuation of its data, stop the firm's communication and the removal of their names from mailing lists (Sheehan & Hoy, 1999).
- *Disruptive behavior*: It's understood as an individual's expressive dissatisfaction and proactive negative behavior in accordance with the firm's privacy practices, including the spread of negative word-of-mouth and the promotion of negative campaign in various type of media (Sheehan & Hoy, 1999; Culnan & Pamela, 1999).

According to the customer's avoidance (deflective behavior), proactiveness to secure own private data (defense behavior) and expressive dissatisfaction (disruptive behavior) during the relationship between customers and organizations, it has been proved that this privacy concern responses are largely negative (Wirtz & Lwin, 2009). In addition, prevention-focus behaviors are being connected with studies about willingness to disclose according to a cross-cultural comparison (Gupta, 2010).

### **1.1.3 SOCIAL JUSTICE THEORY AND THE DIMENSIONS OF PERCEIVED FAIRNESS / JUSTICE**

The Social Justice Theory, states that the perceived fairness of experiences and interactions — *socioemotional outcome* — creates a closer bidirectional customer-firm relation — *social exchange relationship* — (Cropanzano, Rupp, Mohler, & Schminke, 2001). In this case, the role of *perceived fairness* as a key mediator is highly important for a successful exchange of information and has direct implications to increase trust and to reduce privacy concern. In the pretended context, the *fair* treatment of consumer private data can build trust, and marketer's *fair* information practices can reduce privacy concern; therefore, in an ongoing relationship with each new interaction with organizations, consumers will create expectations for future transactions according to its own perception of fairness.

Next, I've detailed each one of these three dimensions of justice implemented in the analysis of Wirtz and Lwin (2009), distributive, procedural and interactional justice; and correlates them with similar elements from other studies according to the context of the privacy concerns and trust.

- *Distributive justice*: It is understood as an individual's perceived equity between its own input (private data), commensurate with the outcomes received (firm's benefits) in a proportional investment according to the customer-firm's trade-off. In other words, distributive justice in its essential form, is the perceived equity of resources received versus resources provided, according to Greenberg's study (as cited in Wirtz & Lwin, 2009). The distributive justice can be tied up with the next dimension of online concerns, *collection* — “whether the exchange of personal information is equitable” (Malhotra et al., 2004).

- *Procedural justice*: It is understood as an individual's fairness perception of organization's information handling practices, having as key element control over information disclosure. Procedural justice, in its essential form, is the perceived fairness of how procedures are enacted in a transaction or relationship, according to Greenberg's study (as cited in Wirtz & Lwin, 2009). The procedural justice can be tied up with the next dimension of online concerns, *control* — “whether I have control over the data” (Malhotra et al., 2004).
- *Interactional justice*: It's understood as an individual's fairness perception of the organization's compliance with companies' policies and the honoring of companies' statements according to the customer-firm's trade-off. The interactional justice can be tied up with the next dimension of online concern, *awareness* — “whether I am adequately informed about the use of the data” (Malhotra et al., 2004).

According to the customer's perceived equity (distributive justice), perceived fairness of information handling practices (procedural justice) and the perceived fairness in the interpersonal treatment (interactional justice) during the exchange of customers' private data to firms; and in accordance with the customer's willingness to exchange personal data for shopping benefits (Phelps et al., 2000), these dimensions to measure perceived fairness and justice, can easily be adapted to an scenario where a customer is required to disclose private data during an online buying transaction; supporting the implementation of these key behaviors as part of the model of study.

Nonetheless, according to the study of Wirtz and Lwin (2009), found that only two (distributive and interactional justice) of the three fairness dimensions are important drivers of trust and privacy concern, because both can be easily overweight by customers during the pursuit of online shopping in an ongoing relationship with firms. As opposite, the relevance of the application of the procedural justice dimension were less clear; and some explanations from the authors were that this dimension is more important in an initial contact, and the respondents were unable to vividly identify past procedural justice interaction; meaning that people are not well informed about companies' information handling practices or it's hard to recall for them, and therefore, the power of information control is dismissed or unaware.

For purpose of this study, and having the knowledge that a regulation like the GDPR effectively enhance individual control in individual's behavior, and according to the proposed definition of individual control from the previous author's, I will suggest that: *Lithuanians are more aware of its control over information than Peruvians*, due that Lithuania is a territory under the GDPR.

## 1.2 TRUST-RELATED FACTORS

### 1.2.1 TRUST-RELATED CONTEXT

According to Wirtz and Lwin (2009), we can define trust in the context of disclosure of personal data, as the customer's faith in the organizations' reliability-integrity, and the secureness about sharing customer's private data with them. If we correlated trust-related factors with online shopping we can find the next positive effects: trustworthiness of the Internet is associated with positive attitudes toward internet purchasing (George, 2002), or vendors' trust that affects positively the usage from the e-commerce (Park, Lee and Ahn, 2004). And related to the release of personal information, trust in a marketer can significantly reduce perceived risk and unwillingness to disclose personal data (Malhotra, Sung, & Agarwal, 2004).

“The lack of consumer trust is assumed as a strong barrier to the growth of Electronic Commerce” (Fortes & Rita, 2016). Therefore, to address this some previous studies give us some background to understand individual's trust in an online buying context. One of the first studies pointing to clarify consumer's trust in internet shopping (CTIS) from Lee and Turban (2001), build a model with four components that can determinate consumer's trust involving an online transaction; for a further understanding two of them are explained below:

- *The trustworthiness of the Internet merchant* mainly focuses on an individual's perceived trustworthiness in the online seller, where it is conceptualized and related to company reputation in terms of *ability*, *integrity*, and *benevolence*. Precisely, the *integrity factor* was proved to be positively associated with CTIS (Lee & Turban, 2001); giving us the knowledge that the integrity of the Internet merchant, understood as honesty and strict adherence to a set of principles accepted by consumers, can and influence consumer's trust. In accordance to cross-cultural studies, effects of Internet

usage and perceived risks on Internet buying behavior are different between countries (Park & Jun, 2003); likewise, consumers from different cultures, like the ones from Peru and Lithuania, might have different expectations of what makes a web merchant trustworthy (Jarvenpaa et al., 1999).

- *Contextual Factors* mainly focus on an individual's perceived trustworthiness of elements acquired and offered by the Internet merchant like SSL and SET protocol or third-party certifications. Therefore, the main components of this dimension are *effectiveness of third-party certification*, and *effectiveness of security infrastructure*; specially these factors are related with issues about security and privacy that affects consumer's trustworthiness (Lee & Turban, 2001).

If we address some of the companies' internal factors that can explain trustworthiness of the Internet merchant, the mere existence of a privacy policy implies a signal to trustworthiness, which in turn can decrease privacy concerns and increase disclosure behavior (Lee & Turban, 2001). There are also other factors that can affect consumer's trustworthiness in an online purchasing scenario; namely, some demographic variables of the buyers, such as *sex*; *age*, it has been proved that age is negatively related with intention (Malhotra et al., 2004) and trusting beliefs in online purchase scenario; another factor like *education*, is negatively related with trusting beliefs (Malhotra et al., 2004) and also represent a relevant variable for willingness to disclose private data in a cross-cultural study as stated in subchapter 1.3; lastly, *media exposure* can reduce trusting beliefs.

### **1.2.2 INTERNET EXPERTISE**

Internet shopping involves trust not simply between the internet merchant and the customer, but also between the consumer and the Internet. In the study from Martinez-Lopez et al. (2005) proved that some attitudes toward the internet, namely, *web design aspect*, *social benefits*, *interaction speed/time of response* and *invasion of privacy*, has direct connection with trust in internet shopping. Of course, not all the attitudes were relevant for respondents; web design aspect, and social benefits proved to have a positive effect on attitudes toward the Internet; while, invasion of privacy proved to have a negative effect on the same attitudes. Some authors are related trustworthiness of Internet with online



purchasing (George, 2002), and willingness to disclosure (Lee and Turban, 2001), as it is shown next.

- *The trustworthiness of Internet Shopping Medium* mainly focuses on an individual's perceived trustworthiness on Internet or the computer systems used for online purchasing; because it has been demonstrated that trust in Internet merchant is necessary but not enough. *Technical competence, reliability, and consumer's understanding* are the main components of this dimension. Other factors directly related with trustworthiness on the Internet, it is perceived security, because it affects positively on trust, and similar effects offer the impact of consumer's innovativeness (Cui, Lin, & Qu, 2018).

Meaning that the mastery of this technological science, the Internet, can and influence trustworthiness, and therefore online shopping intention. Now, internet expertise can be related or connected with innovativeness, as in the representation from the study from Cui et al. (2018), where people with higher innovativeness may have plenty of experience with online products, and, according to that innovativeness reflects consumers' general beliefs with regard to IT products. Some other studies have found similarities between "Internet experience" and "Ecommerce experience", being the last one explained as: "the more a person shops online, the individual becomes more familiar with and accustomed to providing information to complete a transaction", as stated by Robinson (2017).

### 1.3 PRIVACY CONCERN RELATED FACTORS

#### 1.3.1 PRIVACY CONCERN CONTEXT

The internet as a marketing channel provides elements that increase uncertainty, like the inability to directly touch the intended product to buy from a foreign country or even from the local market, and in consequence, the perceived riskiness rises in online shopping (Jarvenpaa, Tractinsky, and Saarinen, 1999). One of the first studies about privacy and security risk from this century points that the security of personal and financial information are main privacy concerns for internet users that can predict online purchase rates (Miyazaki & Fernandez, 2001). In accordance with the previous mentioned study, Miyazaki and Fernandez, classified the online shopping concerns in five different categories, and

according to their consensus is presented below in a more detailed way for a better understanding of its individual impact among consumers.

In the study from Miyazaki and Fernandez (2001), point that a higher Internet experience is related to lower levels of perceived risk toward online shopping, that can be translated into higher online purchase rate. According to Table 1, the first three mentioned categories are directly related with privacy and security concerns; and the category defined as “*Privacy – Infringements by Online Retailers*” shows greater concern for consumer with higher Internet experience, meaning that the more informed internet users are the higher concerns regarding privacy issues they will have, specifically in *awareness* about the dissemination of personal data or *control* over future marketers communications, including two from the three major dimensions from the Malhotra and colleagues study.

**Table 1**

***Classification Scheme for Online Shopping Concerns***

Number of Responses	Percentage of Total	Classification Categories (in bold) and Subcategories
<b>43</b>	<b>16.0</b>	<b>Privacy – Infringements by Online Retailers</b>
15	5.6	Sharing (selling, renting) personal information to other companies.
6	2.2	Tracking of shopping habits, purchases, etc.
4	1.5	Placement of cookies on a consumer’s computer.
4	1.5	Being contacted by the company without providing consent.
14	5.2	General privacy concerns.
<b>98</b>	<b>36.4</b>	<b>System Security – Third-Party Fraudulent Behavior</b>
19	7.1	Unauthorized third-party access to personal information.
54	20.1	Unauthorized third-party access to credit card information.
25	9.3	General security concerns.
<b>36</b>	<b>13.4</b>	<b>Security – Fraudulent Behavior of Online Retailers</b>
14	5.2	Potential for nondelivery of ordered goods.
22	8.2	General misrepresentation or fraud.

<b>63</b>	<b>23.4</b>	<b>Inconveniences of Online Shopping</b>
22	8.2	Unable to touch, feel, or see actual goods to assess quality.
8	3.0	Potential inaccuracies regarding the item being purchased.
8	3.0	Potential hassles or costs of returning undesired goods.
5	1.9	Difficulty in contacting customer service personnel.
8	3.0	Shipping-related inconveniences.
12	4.5	General difficulties or hassles of online shopping.
<b>5</b>	<b>1.9</b>	<b>No concerns</b>
<b>24</b>	<b>8.9</b>	<b>Miscellaneous (nonsense and uncategorized responses)</b>
269		Total

---

**Note.** Source: Consumer Perceptions of Privacy and Security Risks for Online Shopping (Miyazaki & Fernandez, 2001)

There is another study that support that privacy concerns related with the property perspective help inform attitudes toward online shopping, which in turn can affect intention to purchase online (George, 2002); the same study proved that consumers' control over their own data affect negatively to their attitudes toward internet purchasing. More importantly, the study shows the high relevance for customers to have control over its own information; and the suitable application of the Theory of Planned Behavior with attitudes reflecting directly on intention, and suggesting the inclusion of Subjective Norms and the Perceived Behavioral Control (PBC) in future implementation.

In addition to the already mentioned classification from Miyazaki and Fernandez about online shopping concerns, there have been other scales pointing information privacy concerns like the multidimensional scale, Concern for Information Privacy (CFIP), with four dimensions of information privacy concerns: collection, unauthorized secondary use, improper access and errors; but been applied mainly in the offline direct marketing as mentioned in Malhotra et al. (2004). In a more recent study, the conceptualization of privacy concerns about personal information show five dimensions: collection, unauthorized secondary internal use, unauthorized secondary external use, improper access, errors (Fortes & Rita, 2016); with the slightly difference in the partition of the unauthorized secondary use in internal and external, in comparison with the CFIP.

The Malhotra et al. study (2004) based in the Social Contract Theory, trust-risk framework and the Theory of Reasoned Action, the three factors that better capture the essence of privacy concerns in an online environment in relation with the disclosure of private data: *collection*, been understood as a factor that mediates the equitable exchange of information after evaluation of the cost and benefits; *control*, been understood as a factor that mediates freedom to opt-in or opt-out from a consumer-marketer relationship; and *awareness*, been understood as a passive factor that involves transparency and the knowledge of future dissemination of consumer's data. The correct implementation of trust beliefs and risk beliefs as main variables in the scenario of consumer's release of private data in an online transaction; and been proved that IUIPC had a negative effect on trusting beliefs and a positive effect on risk beliefs, as well, trusting beliefs had a negative impact on risk beliefs, show the interrelatedness between themselves and picture them as predictors of behavioral intentions; and the validation of the 10-item IUIPC scale in correlation with the CFIP, entail the application of the scale of Malhotra et al. research in this study.

Finally, some other implications suggested the use together from the 10-item scale IUIPC and the 15-item scale CFIP, but to put it on context of reality this research and the extension of the survey, I will only consider the 10-item scale; as well, as suggested the optimal application of the 10-item scale in a cross cultural scenario and considering the *type of information to disclose* as crucial key to determinate the grade of disclosure a consumer is willing to offer.

### **1.3.2 PERCEIVED RISKS**

Perceived risk is defined as “the potential loss in the pursuit of a desired outcome in online shopping” as cited in Featherman and Pavlou, (2003); the same authors divided the perceived risk according to the performance-based risk facets: performance, financial, time, psychological, social, privacy and overall risks that influence consumer product evaluation, consumer service evaluation and consumer purchases. Even though the facets of the perceived risk are well explained and detailed carefully in the previous mentioned study, the implementation of the facets into this study will not take part because for their application requires a specific product or service, and as main purpose of this study is not to point one specific product or even product category, but is to focus on privacy concerns and how this affect differently to willingness to disclose personal information in an online purchasing

scenario in Peru and Lithuania, taking the type of information to disclose and Internet experience as key mediators. Nevertheless, the study from Lim (2003) highlight the sources of the perceived risks, and according to the results, there are three major dimensions that explain each one and are relevant to consumers when they are in an online purchasing scenario:

- *The perceived technology risk*: It is understood as an individual's belief about the potential losses caused by the Internet and its technology infrastructure, such as transaction delays or security weaknesses in an online purchasing scenario.
- *The perceived vendor risk*: It is understood as an individual's belief about the potential losses caused by Internet vendors like the non-delivery of products and the unauthorized use of consumer's personal information in an online purchasing scenario.
- *The perceived product risk*: It is understood as an individual's belief about the potential losses caused by the acquisition, such as defective products or unsuitable for their needs in an online purchasing scenario.

The model offered by Glover and Benbasat (2011) for general perceived risk and with base on the previous causes and in the seminal marketing theory in the context of e-commerce, offered a suitable application validating all the relevant perceived risk in the construction of this online buying transaction perceived risk view. According to them, there are three main dimensions of the perceived risk in this context: first, *information misuse risk*, when the consumer suffers a loss of personal information privacy during an online purchase, therefore, dimension related with the perceived vendor risk; second, *failure to gain product benefit risk*, when the consumers doesn't obtain from the online retailer the expected benefits of the product, therefore, dimension related with the perceived product risk; and third, *functionally inefficiency risk*, related with consumer wasting of time, money and effort in making an online purchase, therefore, related with the perceived consumer risk.

Now, the *perception risk of disclosing PII items*, can be defined as consumers' beliefs about potential negative outcome from divulging specific type of information, PII items, during ecommerce transactions (Robinson, 2017). Some interesting results about previous study, is that *nationality* significantly predicted perceived risk of disclosing, meaning that country of origin can affect perceptions of risk differently. In the case of *risk beliefs*, developed by Malhotra et., al (2004), it has been proved that IUIPC has a positive

effect on risk beliefs, while risk beliefs influence negatively to behavioral intention to reveal personal information; also the type of information plays an important role according to the authors, more sensitive information increased risk beliefs and decreased intention to disclose; in addition, the control variable, *Internet experience*, overall reduced risk beliefs. Therefore, *risk beliefs*, has important connections to *IUIPC*, *behavioral intention to reveal personal information*, and it is influenced by the side effects of individuals' *Internet experience*.

## 1.4 CROSS-CULTURAL RELATED CONTEXT

### 1.4.1 LITHUANIA RELATED CONTEXT

*Lithuania* is home to almost 2.8 million people (United Nations, 2019) and has an internet penetration rate of 75% (European Commission, 2018). Lithuanians are very active online users with the implementation in their daily life of mobile services like mobile e-signature, car parking, bank services, among others. As well, there is one data about the digital economy of Lithuania to take into account, and it's the steady increase in the proportion of the Lithuanian population purchasing goods online, from 5% in 2009 to 35% in 2017, where foreign online stores already have a 36% of market penetration in the Baltic country (European Commission, 2018). Lithuania has one the highest levels of 4G coverage, and it's above the EU average: 98% Lithuanians households' coverage of the 4G network, according to the average of its local operators. As well, the ultrafast broadband coverage is higher in Lithuania than in the EU; some other key points for this nation is the increasing improvement of pricing competitiveness. Still, there are some missing points and clarity about the implementation for the 5G network, as mentioned in the Digital Economy and Society Index (DESI) 2018 for the country report of Lithuania. According to the payment methods, 33% of its population complete the transactions with a bank card (Statista, 2020), while a recent survey has pointed out that the most preferred method among Lithuanians is complete the purchase through a bank transfer (55%) or using an online money transfer system (37%), rather than with a debit or credit card (29%) (Gemius, 2020).

The size of the Lithuanian e-commerce market value is estimated to be worth US\$ 500 million and is growing at an annual rate of 12.2%. There are currently 1.41 million e-shoppers in Lithuania, that represents more than the half from their total of internet users (European Commission, 2018). According to a survey from "Lietuvos Paštas" (Lithuanian

Postal Service) the most common reason for Lithuanians for not to shop online is the desire to examine the goods personally before buying. Furthermore, Lithuanians pointed out the following obstacles during an online purchase, “receive a product that doesn’t match their expectations” and “the delivery time take too much time”. About motivations, 75% of Lithuanian e-shoppers say “the no need to visit a traditional store” is one of their top reasons to shop online, as well, with about 70% approval from respondents pointed out that other of the main reasons is “the commodity of the delivery to their homes”. (Gemius, 2017).

It has been proved that privacy policies and industry self-regulation can contribute to reducing individual privacy concerns (Xu, Dinev, Smith, & Hart, 2011), therefore important for firms. While in Lithuania, as member of the Europe Union and under the regulation of the European General Data Protection Regulation (GDPR), widely considered for its contribution to a fair digital society built on mutual trust (European Commission, 2019), that emphasizes the importance of enhancing Individual Control in the data economy (Ooijen & Vrabc, 2019), and strengthen individuals’ rights according to its principles. The previous authors divided the data processing timeline in the next three stages in the context of GDPR regulation and privacy concerns dimensions:

1. The first one, *the information receiving stage*, where the new right of explanation embraced by the GDPR can address some problems of data affordances, as well the implementation of icons can mitigate some information complexity problems (Ooijen & Vrabc, 2019). If we correlated this stage with privacy concerns present during the online retailer initial collection of consumer’s private data, it can be directly related with the “Awareness” dimension from Malhotra et al. (2004).
2. The second one, *the approval and primary stage*, where the GDPR with the new principle of privacy by default and the extended requirements for consent, can effectively increase individual control specially because needs the prior approval from the online user in order to have permission for its data to be collected (Ooijen & Vrabc, 2019). If we correlated this stage with privacy concerns present during the customer approval or transmit of personal data, it can be related with the “Collection” dimension from Malhotra et al. (2004).
3. And the third one, *the data reuse stage*, where again the GDPR gives more control and power to individual, with the right to erasure; as well, with the right of portability, and

giving more knowledge to users about the flow of their data in situations where its information is being manipulated (Ooijen & Vrabec, 2019). If we correlated this stage with privacy concerns present after the disclosure of information, it can be related with control over “unauthorized secondary internal or external use” from Fortes and Rita (2016), and either with the “Control” dimension from Malhotra et al. (2004).

#### **1.4.2 PERU RELATED CONTEXT**

*Peru* is home to almost 32.5 million people (United Nations, 2019) and has an internet penetration rate of 67%. Peruvians are intensive users, which indicates that they enter the network more than five times a week; what they value the most from online shopping is *savings*, because they consider that “the online channel offers better prices than offline channels” (79.80% of respondents agree with this statement according to the study of the Lima Chamber of Commerce), as well, they see the process of purchase and payment as easy and above all quick; while for other consumers consider the convenience of the delivery to their homes or work as attractive (Euromonitor International, 2019).

In order to visualize the fear among the Peruvian population to possibly being cheated or being involved in a theft of their financial data during or as a result of an online purchase, I'm presenting the next table from the Future Buy study from GfK (2018), where “the security of providing personal details” is the highest barrier to shop online in Peru, clearly above Latin America and the World average, showing the extended fear among Peruvian population, as shown in the Table 2. While, other study about why Peruvians are not purchasing online and completing the payment with a digital method, corroborate the same: the most representative is that 65.8% from the respondents points that is not buying online because of the fear that the product doesn't look like as in the picture, 63.9% feel more secure about buying in a physical store because of the fear of being *cheated*, namely, make the payment and never receive the product, and lastly, 38.4% from respondents are not buying online because of the *thefts* of financial data, specifically from credit or debit cards.



**Table 2*****Barriers to online purchases – Future Buy 2018 (GfK)***

<b>Reasons:</b>	<b>Peru</b>	<b>Chile</b>	<b>Brazil</b>	<b>L. A. <sup>a</sup></b>	<b>World</b>
Personal details security	55%	41%	34%	48%	39%
Prefer to see the product in person	40%	39%	23%	38%	40%
Reliability of delivery	39%	33%	22%	33%	26%
I enjoy shopping in-store	22%	18%	13%	19%	23%

**Notes.** Source: Future Bay 2018 (GfK), author’s elaboration. / <sup>a</sup> Abbreviation for Latin America

According to the payment methods, 62% of its population complete the transaction with a bank card, 22% complete the purchase online with a payment in cash, and 11% through a bank transfer (Statista, 2020). Therefore, I will suggest that: *Peruvian population have higher rates of privacy concerns about personal detail security and worries about the misuse of their financial data, therefore, less willing to disclose financial data in order to complete a purchase online.*

Some data about the Peruvian digital environment, the percentage of individuals with access to the internet increased from 61% in 2016 to 85% (27 million people) in 2018 (Datum International, 2019); in 2017 has been estimated that 6 million people from Peru population buy online, between local and international online purchasing (Follegatti, 2019). The size of the Peruvian e-commerce market, at the end of 2018, was 3,250 million US dollars, and is been estimated that the growth for 2019 is about 30% more in comparison with the previous year. While in Peru, unfortunately, there is not a big regulation that addresses the privacy concerns or enhance individual control over the misuse of sensitive data during an online purchase. Peru as a member of the Ibero-American States have the guide from “Standards for Personal Data Protection for Ibero-American States” and the guide from the Asia Pacific Privacy Authorities for the national application of private data

regulations, but nothing under national legislation at the same level or influence, like the GDPR.

### 1.4.3 CULTURAL DIFFERENCES – HOFSTEDE 6-DIMENSION MODEL

One dimension that is been used to differentiate between cultures is the Uncertainty Avoidance Index (UAI), part of the Hofstede 6-D Model, representing “the extent to which the members of a culture of a national society feel threatened by ambiguous or unknown situations”; it is considered a valid element for a cross-cultural comparison, offering the appropriate basis to compare Lithuania and Peru.

The higher level of ambiguity creates a non-tolerable level of anxiety, therefore societies relies in some sources to alleviate anxiety, like technology, law or rules, and religion. The uncertainty avoidance on individuals is the reflect of values and cultural heritage that has been transferred or reinforced by the family nucleus, the school, or the State, to deal with ambiguity (Hofstede, Hofstede, & Minkov, 2010). In order to picture some of the differences between a society that avoids uncertainty, and a society that accepts uncertainty, I’ve summed up some of the insights mentioned in the book “Cultures and Organizations: Software of the mind” (2010) in the Table 3.

**Table 3**

Uncertainty avoiding societies	Uncertainty accepting societies
Uncertainty inherent in life is a <i>threat</i> that must be fought.	Uncertainty is <i>normal</i> and life is accepted as it comes.
More stress and anxiety	Less stress and anxiety
Aggressions and emotions should be expressed.	Aggressions and emotions should be controlled.
Different is dangerous.	Different is curious.
Stay longer in job positions.	Change of jobs are much more easily done.

All the 6 Dimensions from Hofstede model has values between 0 to 100. In the UAI, 0 represents a society with the weakest uncertainty avoidance level, and 100 represents a society with the strongest uncertainty avoidance level. Now, Peru has an Index of 87 and it is ranked in the 16<sup>th</sup> position; meanwhile, Lithuania has an Index of 65 and it's ranked in the 43<sup>rd</sup> – 44<sup>th</sup> position. While Peru is among the top 20, Lithuania is in the middle down part of the total rank; meaning that Peru has a stronger uncertainty avoidance level than Lithuania. To make even wider the difference between both countries, I am presenting the complete comparison in the 6-Dimension Model from Hofstede between Peru and Lithuania in the Table 4.

**Table 4**

<b>Hofstede 6-Dimension Model for Lithuania and Peru</b>		
	<b>Lithuania</b>	<b>Peru</b>
Power Distance	42	<b><u>64</u></b>
Individualism	<b><u>60</u></b>	16
Masculinity	19	<b><u>42</u></b>
Uncertainty Avoidance	65	<b><u>87</u></b>
Long Term Orientation	<b><u>82</u></b>	25
Indulgence	16	<b><u>46</u></b>

Some remarks about the data presented above to picture the big differences between these two countries if we compare one with another:

- *Power Distance Dimension* – “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally”. Lithuania with an index of 42 has a smaller power distance translated into the existence of limited dependence of subordinates on bosses. While in Peru with an index of 64 has a larger power distance meaning that subordinates are unlikely to approach and contradict.

- *Individualism Dimension* – “the degree of interdependence a society maintains among its members”. Lithuania is considered an *individualistic society* with an index of 60 where new workers focus on their own performance rather than groups. While in Peru is considered a *collectivistic society* with an index of 16 where workers and managers aspire to conformity and prefer having security over having autonomy in their positions.
- *Masculinity Dimension* – “the society will be driven by competition, achievement and success, with success being defined by the winner / best in field – a value system that starts in school and continues throughout organizational life”. Lithuania has a strong feminist influence with an index of 19 where workers’ motivation is liking what they do, they are modest and low profile, communication is soft and with a diplomatic voice in order not to offend anyone, and conflicts are not seeing good. While in Peru with an index of 42 is still feminist where there is a preference for human contact and family over recognition or wealth.
- *Uncertainty Avoidance Dimension*, Lithuania has an emphasis on uncertainty avoidance with an index of 65, having as a society the next kind of perceptions that a manager is a manager because has the knowledge and is able to lead, there is a reluctance in order to take risks, bureaucracy and a emotional reliability on rules and regulations. While Peru with an index of 87 has a strong uncertainty avoidance level, there is a strong need for rules an elaborate legal systems in order to structure life; nevertheless, corruption is widespread, the black market sizeable, and deep split between the portion of people who pay taxes and the ones who look for ways to avoid them in this society.
- *Long term Orientation Dimension* – “how every society has to maintain some links with its own past while dealing with the challenges of the present and future”. Lithuania with an index of 82 is a culture extremely *pragmatic* in nature, they encourage thrift and efforts in modern education as a way to prepare for the future, people believe that truth depends very much on situation, context and time. While in Peru with an index of 25 is a *normative* culture, people in such societies have a strong concern with establishing the absolute truth, they are also normative in their thinking and exhibit great respect for traditions, have a relatively small propensity to save for the future, and a focus on achieving quick results.

- *Indulgence Dimension* – “the extent to which people try to control their desires and impulses”. Lithuania with an index of 16 is a restrained culture, this kind of societies do not put much emphasis on leisure time and control the gratification of their desires. While Peru with an index of 46 has an intermediate score between an indulgence society and a restraint society, in this case making the comparison with Lithuania can be considered having a weaker control over indulgence.

## 2. METHODOLOGY OF THE RESEARCH

### 2.1 RESEARCH MODEL AND HYPOTHESES

The research model intended to develop in this thesis is in the Graphic 1. “The purpose of the research is to prove the validity of this model and the variables included in it, in the context of a cross-cultural comparison study where two countries or territories are intended to differ among willingness to disclose when a type of personal information is required to be able to accomplish a purchase online”.

To accomplish so, some of the variables are partially adapted, and some has been fully dismissed from the model. The first important variable in the model is *Privacy Concerns*, and the Malhotra et., al (2004) study that has been related to studies within the recent years (Mahmoodi et., al, 2018), some suggesting the implementation of IUIPC with the CFIP together (Bélanger, & Crossler, 2011), and also a recent study suggesting that the Malhotra dimensions are direct related to the goals of the GDPR (Ooijen & Vrabec, 2019). Therefore, IUIPC will represent the privacy concerns side in the overall model of this study and pointing out that the two most important factors are *awareness* and *control* over what type of information is collected. Also as suggested before, Malhotra and the other co-authors mentioned that the implementation from the 10-item IUIPC scale along with the 15-item CFIP scale would indicate a perfect set for online consumers’ privacy concerns, but the implementation of both scales will make more extensive the length and duration of the questionnaire. IUIPC as a second-order factor is an important predictor of consumer reactions to online privacy threats and has a positive effect on risk beliefs:

- H1: *Internet users’ information privacy concerns (IUIPC) will have a positive effect on risk beliefs.*

The study will be centered on the perceived risk side of dealing with privacy concerns while the disclosing of personal data is required during an online shopping scenario; as many other authors have focused before, and consequently I will skip the perceived trust side from the model. Some of the reasons and personal motivation to do so, are next: this study is focused on general online shopping disclosing behavior or willingness to disclose personal data in an online purchasing scenario; therefore, not focused on specific website, or even specific product category. The risk beliefs are always

latent in ecommerce transactions, in comparison of the perceived trust that is mostly affected or influenced by third party scenarios, tools, or individual's perspective.

In the case of the risk related variables, most of them are somehow related with some specific type of information: the *perceived risk of disclosure* using the 17-item classification of the personally identifiable information (PII) as explained in the cross-cultural study of Robinson (2017), and with a reliable Cronbach value  $\alpha = 0.90$ ; the *information misuse risk* described by Glover and Benbasat (2010), which as described before can be divided in the financial and personal information misuse that include a list of elicited unwanted events. Moreover, *risk beliefs*, developed by Malhotra et., al (2004), influence negatively to behavioral intention to reveal personal information, and making the division between the type of information, to more sensitive information and less sensitive information:

- H2: *Risk beliefs affects negatively on willingness to disclose.*

In addition to the previous hypothesis, the dual classification of more sensitive information and less sensitive information from Malhotra et al. (2004), is quite open and I will not consider that two hypothetical scenarios are enough to demonstrate willingness to disclose specific type of information; therefore, I would place the role of type of information to disclose as an important part of the model, but it should be extensive. In that way, the list of 17 items of PII from Robinson (2017), namely: name, home address, home phone number, work address, work phone number, email address, date of birth, credit card number, annual income, credit history, medical history, age, marital status, Twitter handle, Facebook profile, Skype username, and PayPal account; offers the appropriate principal index for the type of information to disclose. More importantly, the *Six-item classification* based on the previous 17 items of personally identifiable information, will be implemented because of its reliable classification of the different types of personal information; as shown in Table 5.

Now in some extent, general privacy concerns have been found to be an even better predictor for willingness to disclose data than for behavioral intention (Gerber, Gerber, & Volkamer, 2018). Therefore, the grade of difficult of this study is to prove the validity of the next hypothesis:

- H3: *Internet users' information privacy concerns (IUIPC) will have a negative effect on willingness to disclose.*

Specifically, in the case of the risk beliefs of sharing personal information, this type of information can be interpreted as: name, home address, email, or home phone number; mostly information that is not essential to complete a purchase online, e.g. purchasing digital products, acquiring digital services, purchasing e-tickets; nevertheless, some of this kind of purchases will need an email to send a receipt or will ask for an extra online step like the registration/log in with a valid email, all other items are not fully required. Now, in a cross-cultural scenario, it is true that willingness to share this non-essential information while purchasing a product or service online might differ between countries. According of the case of this study, the differences between Lithuania and Peru are obvious, as from three dimensions among the total 6-Dimension model from Hofstede et. al (2010) have wider differences: Long Term Orientation, Individualism, and Indulgence, with a difference of equal or more than 30 points of gap in each scale. Showing that for example Lithuania is an individualist and pragmatic society, in comparison with Peru as a collectivist and normative society. In addition the 4th Dimension where the difference is obvious, Lithuania with an Uncertainty Avoidance lower level (Index of 65) than Peru (Index of 87), is the appropriate cross-cultural differential factor to separate the two territories by the way its populations behave. The assumption that Peru is a more conservative country in terms of UAI, the higher distrust levels among its population because of fraud and bigger privacy concerns to disclose information, I will suggest that:

- H4: *Impact of Internet users' information privacy concerns (IUIPC) on Willingness to disclose (WTD) is moderated by nationality.*

Meanwhile, Lithuania, a territory under the protection of the GDPR, with a lower level of UAI in comparison than Peru, and it have been validated that the GDPR address some of the privacy concerns about sharing personal data, or enhance individuals' control, I will suggest that:

- H5: *Peruvian respondents have stronger perceptions of risk beliefs than Lithuanian respondents.*



Most of the literature and previous models are related about Internet Experience overall. The research points out that through increased proficiency on the Internet, individual's risk beliefs are reduced (Malhotra et al. study, 2004), or "less likely to be concerned with associated risks" as being mentioned in Robinson's study (2017). Nevertheless, the implementation of the factor of "*Ecommerce experience*" will take main place in this study, because it have being found as an important predictor of willingness to disclose and perceived risk of disclosure, where, individuals with more self-reported ecommerce experience were found to be more willing to disclose, and perceived less risk in disclosing. Maybe, the most important factor why I choose this factor is the relative age of the people who are going to be surveyed, because I will pick people about my age in both countries, and I will suggest that the difference between ecommerce proficiency will differ and offer a better picture of the interactions of the variables, rather than merely internet proficiency:

- H6: *Those who self-report a bigger expertise in online shopping will perceive less risk beliefs (H6a) and will be more willing to disclose personal data (H6b).*

About the omission of the trust related factor from the model, these are mainly directly related with the trustworthiness of the Internet merchant, third-party certifications, and overall security of the infrastructure of the websites. Peruvian and Lithuanian citizens with different types of online buying behavior, different local website infrastructures, different local promotion approaches from merchants that encourage or influence trust, different layers of perceived secureness according to individual's perspective, and different consumer's perceived secureness from major government regulations like the GDPR in the case of Lithuania; it will be hard to recall for the participants of the survey to answer the questionnaire if they do not have an specific website or a particular good or bad scenario of disclosing information.

Finally, the demographic factors that have more presences in related studies are "*age*", "*education*", and "*internet experience*". Lately, the age factor has no consistent influence throughout the studies; in addition, the difference of age between the persons intended to survey in this study will not have a big gap, therefore, the age factor will not be part of this study as a side variable, but it will be part of the questionnaire. Meanwhile the education factor has a relevant consistent influence among related studies, where, less

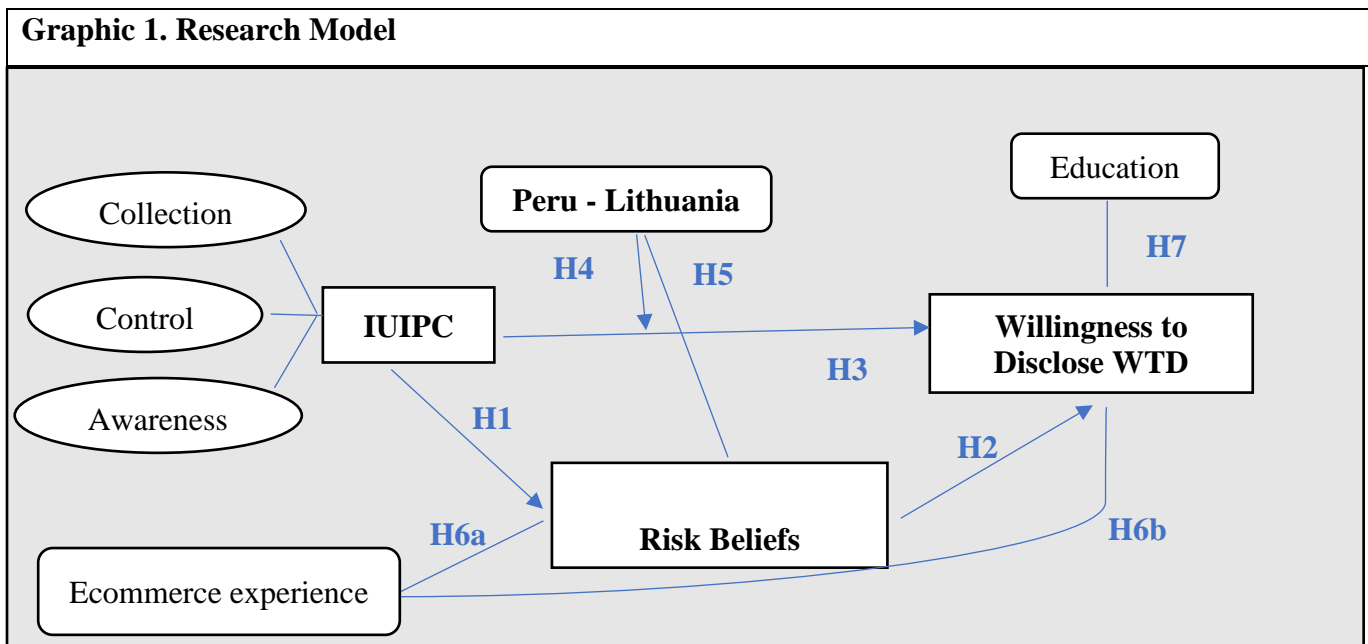
educated is more willing to disclose (Robinson, 2017), and education is negatively related with trusting beliefs (Malhotra et al., 2004). Therefore, *education* as a demographic variable will take part in this study as a control variable. Nevertheless, the education level structures differ between Peru and Lithuania, especially in the studies before the university level; in addition, it might be differences according less or more educated people across nationalities, and the willingness to disclose personal data.

- H7: *Individuals having completed more education will be less willing to disclose personal data (H7).*

In summary, the variables that will take part of the model of this study are below:

1. *Internet Users' Information Privacy Concerns (IUIPC),*
2. *Risk Beliefs,*
3. *Willingness to Disclose (WTD),*
4. *Nationality,* as a moderator variable,
5. *Ecommerce proficiency and education,* as side variables.

The research model intended to develop in this Thesis is in the Graphic 1.



## 2.2 RESEARCH INSTRUMENT

The research scales and instruments to be implemented are next:

**1. The 10-item IUIPC scale:** The 10-item IUIPC scale will be implemented, obtained from the Malhotra et al. study (2004). The list of the 10 items (3 items for “control”, 3 items for “awareness”, and 4 items for “collection”) will take place on the first 10 questions/items from the questionnaire. The scale from Malhotra et., al (2004) has been homologically validated.

- **Control:** Seven-point scales anchored with “strongly disagree” and “strongly agree”.

(1) Consumer online privacy is really a matter of consumers’ right to exercise control and autonomy over decisions about how their information is collected, used, and shared.

(2) Consumer control of personal information lies at the heart of consumer privacy.

(3) I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a marketing transaction.

- **Awareness:** Seven-point scales anchored with “strongly disagree” and “strongly agree”.

(1) Companies seeking information online should disclose the way the data are collected, processed, and used.

(2) A good consumer online privacy policy should have a clear and conspicuous disclosure.

(3) It is very important to me that I am aware and knowledgeable about how my personal information will be used.

- **Collection:** Seven-point scales anchored with “strongly disagree” and “strongly agree”.

(1) It usually bothers me when online companies ask me for personal information.

(2) When online companies ask me for personal information, I sometimes think twice before providing it.

(3) It bothers me to give personal information to so many online companies.

(4) I am concerned that online companies are collecting too much personal information about me.

- 2. Risk beliefs:** Seven-point scales anchored with “strongly disagree” and “strongly agree”. Obtained from the Malhotra et al. study (2004). Adapted instead of “the information” => “personal information”; the personal information including but not limited to “name”, “home address”, “home phone number”, or “email”. As mentioned previously, the interpretation from “personal information” for the participants will take a central part, as they might be able to recognize that the risk beliefs of sharing personal information is related to share non-essential information that customers may perceive less or more risky, especially in a cross-cultural comparison. Moreover, in the perceived risk of disclosing the index of all 17 items was found to be reliable (Cronbach  $\alpha = 0.90$ ).

(1) In general, it would be risky to give personal information to online companies.

(2) There would be high potential for loss associated with giving personal information to online firms.

(3) There would be too much uncertainty associated with giving personal information to online firms.

(4) Providing online firms with personal information would involve many unexpected problems.

(5) I would feel safe giving personal information to online companies.

- 3. Willingness to disclose specific PII items:** Participants will respond to the next statement: “When purchasing goods or services online, people are asked to provide personal information in order to complete the purchase. Please indicate your level of willingness to share each of the following specific types of personal information online when purchasing goods or services where 1 = not willing and 7 = very willing.” and were asked to rate their willingness to disclose each of 6 items of personal information on a 7-point Likert-type scale of 1 = not willing and 7 = very willing. Each of the 6 items of personally identifying information (PII) will be implemented as “the types of personal information”: (1) *contact information*, (2) *payment information*, (3) *life history information*, (4) *work-related information*, (5) *online account information*, and (6) *financial/medical history info*. Obtained from Robinson’s study (2017). The 6-item

classification is taken from the 17-item classification from Robinson’s study as a valid classification of the types of information for a cross-cultural study comparison with a confirmed reliability (Cronbach  $\alpha = 0.87$ ). The 6 items mentioned before will take place from the question/item number 16 to the number 21 in the questionnaire, and the adaptation from the classification is in the Table 5.

**Table 5**

<b>Classification of Types of Personal Information (Robison, 2017)</b>	
<b>Six-Item Classification</b>	<b>17-Item Classification</b>
Contact Information	Name, home address, home phone number
Payment Information	Credit card number, PayPal account
Life History Information	Date of birth, age, marital status
Work-Related Information	Work address, work phone number
Online Account Information	Twitter handle, Facebook profile, Skype username
Financial/Medical History Info	Annual income, credit history, medical history

**4. Ecommerce Experience:** Participants will respond to the next statement: “Ecommerce is the buying and selling of goods and services on the Internet. Choose the number that best reflects your proficiency or experience with purchasing goods or services online”. The scale was measured as one item on 7-point Likert scale with 1 = Beginner and 7 = Expert. Obtained from Robinson’s study (2017). This question will be the number 22 in the questionnaire.

**5. Demographics:** The age factor will be taken into consideration as an open question: “How old are you? (Enter only numbers, e.g.: 20)”

In addition in the Table 6, I have summarized the main dependent variables from willingness to disclose (WTD) that are directly related with the topic of this Thesis: *IUIPC*,

*Perceived Internet Expertise, Uncertainty Avoidance Index, Trust related factors, Privacy Concern related factors, and Risk related factors.* The explanations about why I have picked or not picked some of the variables are in the part 2.1.

**Table 6**

AGGREGATE OF MAIN VARIABLES RELATED TO THE STUDY		
VARIABLES	STUDY	INCLUDED IN THE MODEL
<b>IUIPC</b>	<b>IUIPC</b>	<b>IUIPC</b>
<ul style="list-style-type: none"> <li>• Collection,</li> <li>• Control,</li> <li>• Awareness.</li> </ul>	<ul style="list-style-type: none"> <li>• (Malhotra et al., 2004),</li> <li>• (Phelps et al., 2000),</li> <li>• (Malhotra et al., 2004).</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> </ul>
<b>Perceived Internet Expertise (PIE)</b>	<b>Perceived Internet Expertise</b>	<b>PIE</b>
<ul style="list-style-type: none"> <li>• Trustworthiness of Internet Shopping Medium</li> <li>• Internet Expertise</li> <li>• Ecommerce Expertise</li> </ul>	<ul style="list-style-type: none"> <li>• (Martínez-López et al., 2005)</li> <li>• (Lee &amp; Turban, 2001), (Miyazaki &amp; Fernandez, 2001).</li> <li>• (Robinson, 2017)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• No</li> <li>• Yes</li> </ul>
<b>Uncertainty Avoidance Index</b>	<b>Uncertainty Avoidance</b>	<b>UAI</b>
<ul style="list-style-type: none"> <li>• UAI</li> </ul>	<ul style="list-style-type: none"> <li>• (Hofstede, Hofstede, &amp; Minkov, 2010)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<b>Trust Related Factors</b>	<b>Trust Related Factors</b>	<b>TRUST</b>
<ul style="list-style-type: none"> <li>• The trustworthiness of the Internet merchant</li> <li>• Effectiveness of third-party certification</li> <li>• Effectiveness of security infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• (Jarvenpaa et al., 1999)</li> <li>• (Lee &amp; Turban, 2001)</li> <li>• (Lee &amp; Turban, 2001)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• No</li> <li>• No</li> </ul>
<b>Privacy Concerns Related Factors</b>	<b>Privacy Concerns Related Factors</b>	<b>PRIVACY</b>
<ul style="list-style-type: none"> <li>• Privacy Infringements, System Security Concerns.</li> <li>• Concern for Information Privacy (CFIP)</li> </ul>	<ul style="list-style-type: none"> <li>• (Miyazaki &amp; Fernandez, 2001), (George, 2002).</li> <li>• (Malhotra et al., 2004)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• No</li> </ul>
<b>Risk Related Factors</b>	<b>Risk Related Factors</b>	<b>RISK</b>
<ul style="list-style-type: none"> <li>• Technology risk,</li> <li>• The information misuse risk.</li> </ul>	<ul style="list-style-type: none"> <li>• (Lim, 2003)</li> <li>• (Glover &amp; Benbasat, 2011)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• No</li> </ul>
<b>Type of Information (TOI)</b>	<b>Type of Information</b>	<b>TOI</b>
<ul style="list-style-type: none"> <li>• More – less sensitive information</li> <li>• 17 Items of personal information</li> </ul>	<ul style="list-style-type: none"> <li>• (Malhotra et al., 2004)</li> <li>• (Robinson, 2017)</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• Yes</li> </ul>

Demographic Factors (DEM)	Demographic Factors	DEM
<ul style="list-style-type: none"> <li>• Education</li> <li>• Age</li> </ul>	<ul style="list-style-type: none"> <li>• (Robinson, 2017)</li> <li>• (Malhotra et al., 2004)</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>

### 2.3 SAMPLING AND DATA COLLECTION

The main instrument to be used to collect the data will be through a questionnaire, that will be fully implemented through an *online survey*.

To define and frame the population, I will define the population unit as: “individuals with some internet experience”. I will define the population boundaries as: in the case of Peru “people who are at least 18 years of age; have their principal place of Residence in Peru; and have purchase goods/services online in the past 3 months”, and in the case of Lithuania “people who are at least 18 years of age; have their principal place of Residence in Lithuania; and have purchase goods/services online in the past 3 months”. I will choose “*Snowball*” as the nonprobability sample method to be implemented in both countries, Peru and Lithuania.

- **Lithuania:** To define the sample size, I will sum up some of the important data about Lithuania: total estimated population of 2.8 million people (United Nations, 2019); and the proportion of Lithuanian population purchasing goods online 35% in 2017 (European Commission, 2018), but due situational events during the preparation of this study as the Pandemic of COVID-19 is widespread and online shopper penetration has increase worldwide, therefore, an assumption that at least 40% of Lithuanian population are buying online is being considered. The calculations: confidence level of 95%, confidence interval of 5.01, and an estimated population of 70.6% from the total Lithuanian population is in the range of 18 – 69 years old (Lietuvos statistikos departamentas, 2019), or 1.96 million people, will stablish the sample size of *384 participants*.

**Table 7**

#### Elements to obtain the sample size from Lithuania

Confidence level	95%
------------------	-----

Confidence interval	5.00
Population (18 – 69 years old)	1.96M
Sample size	384 participants

- **Peru:** To define the sample size, I will sum up some of the important data about Peru: the total estimated population is 32.5 million people (United Nations, 2019); and it is estimated that 6 million people from Peru population buy online (Follegatti, 2019) or 18.5% from the total population. In the case of Peru, an assumption that at least 20% of Peruvian population are buying online is being considered. The calculations: confidence level of 95%, confidence interval of 5.01, and an estimated population of 21.1 million people is in the range of 18 – 70 years old (INEI - Instituto Nacional de Estadística e Informática - Perú, 2020), will establish the sample size of *384 participants*.

**Table 8**

<b>Elements to obtain the sample size from Peru</b>	
Confidence level	95%
Confidence interval	5.00
Population (18 – 70 years old)	21.1M
Sample size	384 participants

About the implementation for the case of Lithuania, the survey will be fully written in English and therefore, some of the population extra boundaries are considered, as all the participants from Lithuania must know English language to fulfill the survey. In the case of Peru, the survey will be translated to Spanish from the original English version, the translation of the questionnaire was made for the author of this paper. The questionnaire



must be filled with individual perceptions about privacy concerns, risk beliefs and willingness to disclose data for future online purchasing scenarios. There is a screening question: “*What is the country of your permanent living?*”, were the respondents need to answer “Lithuania” or “Peru” to past to the full survey, if they choose the second option “other”, they will be redirected to the end of the survey, and if they want press “send the answers” or not according to their individual understanding. The online survey will be implement in Google Forms, and will be shared by sharing the link directly to the participants, at the same time I will request that the person who receive can share the survey with a person from their similar age, or studies. The online survey will most probably take place during the last months of the year 2020 until the fulfillment of the required sample size is fulfilled for both countries, a total estimated between 400 – 500 answers are expected to be collected, as the sample size average from related studies is 490, as shown in Table 9. The complete English questionnaire can be found in the Annex 1, and the translated version to Spanish in the Annex 2.

**Table 9**

<b>Sample size average from related studies:</b>				
<b>N°</b>	<b>Author</b>	<b>Type of questionnaire</b>	<b>Sampling</b>	<b>Number of respondents</b>
1.	Phelps, J., Nowak, G., & Ferrell, E. (2000).	Questionnaire	Non-probability	556
2.	Robinson, C. (2017).	Online questionnaire	Non-probability	473
3.	Sipior, J., Ward, B., & Connolly, R. (2013).	Questionnaire	Non-probability	63
4.	Gupta, Babita. (2010).	Online questionnaire	Non-probability	809

5.	Heirman, Wannes. (2013).	Questionnaire	Non-probability	1042
6.	Mindaugas D., Sigitas U., Ignas Z., Skare V., & Dalia L. (2020).	Online questionnaire	Non-probability	439
7.	Heldman, C., & Enste, D. (2018).	Questionnaire	Non-probability	48
			AVERAGE	490

### **3. ANALYSIS OF THE EMPIRICAL DATA**

#### **3.1 DESCRIPTIVE STATISTICS**

First, the survey was divided in two individual surveys, one for Lithuania fully written in English, and one for Peru translated into the Spanish language. The survey for Lithuanians got a total of 264 questionnaires, where only 251 are valid and suitable for the study because the other 13 responses were from people not living or residing in Lithuania, and they were redirected to the end of the survey. The survey for Peruvians got a total 207 questionnaires, where only 202 are valid and suitable for the study because the other 5 responses were from people not living or residing in Peru, and they were redirected to the end of the survey. To conclude, from the two countries a total of 453 valid questionnaires were received; a number of answers close to the average of 490 from the related studies, and also in the planned range, between 400 – 500 answers, to pull out the study.

The two surveys started collecting data on November 25<sup>th</sup> and the last questionnaire was received on December 24<sup>th</sup>. The two surveys were merged using Command prompt from Windows, and using the command: copy \*.csv; all the data from the variables and answers were merged and translated into English language if needed to, and a csv file of a total of 471 answers with 453 valid questionnaires was introduced into IBM SPSS Statistic Data Editor for its analysis. From the total sample, 315 respondents are women and 135 are men, the missing 3 people selected “other” as a gender option; from Lithuania, 193 respondents are women and 56 are men, and from Peru, 122 respondents are women and 79 are men. The mean age of the respondents is 26.42 years of age from 445 respondents, a total of 8 respondents did not provide a proper or legible age; the mean age of female respondents is 25.58 years of age and the mean age of male respondents is 28.55 years of age. The age range for Lithuanian participants was from 18 to 60 years of age, while the Peruvian range was 18 to 68 years of age. To facilitate the analysis, participants were merged into four age-based categories: those with ages between 18 and 21 (29.2%), those with ages between 22 and 25 (26.1%), those with ages between 26 and 29 (25.2%), and finally those age 30 and older (representing 19.6% from the 445 respondents sample). As shown in the Table 10, the three main age categories are divided into more or less a proportional way, close to a quantity of 120 respondents per group, that validate the idea to divide the age categories in the already mentioned way. In addition, the differences between proportions of age categories differ in all

4 categories, and there is a short explanation about that: in the case of Lithuania, most of the respondents were students of first years, due to the researcher have shared the survey into Facebook groups of Lithuanian student communities and also between the Faculty of Economics and Business Administration from Vilnius University with a massive email to colleagues, and probably younger students were prompt to help because of similarities of studies; and in the case of Peru, due to similarities between the age of the researcher and close connections to him the proportion of age is bigger in the range of “26 – 29” and in the range “30 and older”.

**Table 10**

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age category * Nationality	453	100,0%	0	0,0%	453	100,0%

**Age category \* Nationality Crosstabulation**

		Nationality		
		Lithuania	Peru	Total
Age category 18-21	Count	100 <sub>a</sub>	30 <sub>b</sub>	130
	% within Nationality	39,8%	14,9%	28,7%
22-25	Count	78 <sub>a</sub>	38 <sub>b</sub>	116
	% within Nationality	31,1%	18,8%	25,6%
26-29	Count	41 <sub>a</sub>	71 <sub>b</sub>	112
	% within Nationality	16,3%	35,1%	24,7%
30 and older	Count	31 <sub>a</sub>	56 <sub>b</sub>	87
	% within Nationality	12,4%	27,7%	19,2%
No legible age/did not provide	Count	1 <sub>a</sub>	7 <sub>b</sub>	8
	% within Nationality	0,4%	3,5%	1,8%
Total	Count	251	202	453
	% within Nationality	100,0%	100,0%	100,0%

Source: Author’s elaboration (2020), Data: IBM SPSS

About the factor education, as a mandatory question with alternatives, all the 453 respondents answer to their level of education, only 1 respondent did not complete schooling. According to other related studies, like Robinson (2017) and Babita (2010), usually

Education level is merged into two categories to evaluate willingness to disclose for less educated and more educated people. Therefore, the education level was merged into two categories; the first category – *Bachelor’s degree or less*, composed by those whose level of education is “no schooling completed”, “high school graduate, diploma or the equivalent”, “some college credit, no degree”, “trade/technical/vocational training”, and “bachelor’s degree”; and the second category – *At least Professional degree / graduated*, composed by those whose level of education is “professional degree”, “master’s degree”, and “doctorate degree”. Among the Lithuanian respondents, the majority (78.9%) have a bachelor’s degree or lower level of education accomplished; this is also a reflect of the age of the Lithuanian respondents with 25 years of age or younger represented by the 71.2% of the total Lithuanian sample. While, among the Peruvian respondents, also the majority (56.4%) have a bachelor’s degree or lower level of education accomplished, but the proportion of more educated Peruvians is bigger (43.6%) than their similar of the Lithuanian category (21.1%) , as shown in the Table 11; and it is a reflect of the age of the Peruvian respondents with 26 years of age or older represented by the 65.1% of the total Peruvian sample.

**Table 11**

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Education category * Nationality	453	100,0%	0	0,0%	453	100,0%

**Education category \* Nationality Crosstabulation**

			Nationality		Total
			Lithuania	Peru	
Education category	Bachelor's degree or less	Count	198 <sub>a</sub>	114 <sub>b</sub>	312
		% within Nationality	78,9%	56,4%	68,9%
	At least Professional degree / graduated	Count	53 <sub>a</sub>	88 <sub>b</sub>	141
		% within Nationality	21,1%	43,6%	31,1%
Total	Count	251	202	453	
	% within Nationality	100,0%	100,0%	100,0%	

Source: Author’s elaboration (2020), Data: IBM SPSS

About the individual self-reported ecommerce experience, as a mandatory question with a 7-point liker scale, where 1 is beginner and 7 is expert, all the 453 respondents answer to their perceived online shopping expertise. For a deeper analysis, the individual ecommerce experience level was merged into 3 categories: the first one – *Fewer expertise*, for the respondents whose answer was 1, 2 or 3; the second one – *Average expertise*, for the respondents whose answer was 4; and the third one – *More expertise*, for the respondents whose answer was 5, 6 or 7. Overall, Lithuanians respondents reported the more expertise (77.7%) and the minority proportion of fewer expertise (10%); while a little more of the half of Peruvians respondents reported more expertise (53%), and the other half of respondents divided among reported average expertise (21.3%) and fewer expertise (25.7%). Clearly, Lithuanians respondents being younger and with less education accomplishments have more experience buying online than Peruvian older respondents with more education accomplishments; showing and proving some of the background of this study, as Lithuania a territory where buying online is more common, and therefore, individual’s ecommerce experience is bigger. Finally, the table 12 shows the different ecommerce experience levels by nationality with the according proportion.

**Table 12**

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Ecommerce Experience * Nationality	453	100,0%	0	0,0%	453	100,0%

**Ecommerce Experience \* Nationality Crosstabulation**

				Nationality		Total
				Lithuania	Peru	
Ecommerce Experience Fewer expertise	Count	25 <sub>a</sub>	52 <sub>b</sub>	77		
	% within Nationality	10,0%	25,7%	17,0%		
Average expertise	Count	31 <sub>a</sub>	43 <sub>b</sub>	74		
	% within Nationality	12,4%	21,3%	16,3%		
More expertise	Count	195 <sub>a</sub>	107 <sub>b</sub>	302		
	% within Nationality	77,7%	53,0%	66,7%		
Total	Count	251	202	453		
	% within Nationality	100,0%	100,0%	100,0%		

Source: Author’s elaboration (2020), Data: IBM SPSS

To summarize the main descriptive statistics, the Table 13 provides the main demographics factors and the categorizations mentioned above between Lithuania and Peru, and with the correspondent proportions or percentages.

**Table 13**

<b>Lithuania vs. Peru – Descriptive Statistics of Respondents</b>		
	<b>Lithuania</b>	<b>Peru</b>
Responses	251 (55.40%)	202 (44.60%)
Gender		
• Male	56 (22%)	79 (39%)
• Female	193 (77%)	122 (60%)
• Other	2 (1%)	1 (1%)
Education		
• Bachelor’s degree or less	198 (79%)	114 (56%)
• At least Professional degree / graduated	53 (21%)	88 (44%)
Ecommerce Experience		
• Fewer expertise	25 (10%)	52 (26%)
• Average expertise	31 (12%)	43 (21%)
• More expertise	195 (78%)	107 (53%)
Age		
• 18 – 21	100 (40%)	30 (15%)
• 22 – 25	78 (31%)	38 (19%)
• 26 – 29	41 (16%)	71 (35%)
• 30 and older	31 (12%)	56 (28%)
• No legible age/did not provide	1 (0.4%)	7 (3.5%)

**Note.** The percentages have been rounded.

Source: Author’s elaboration (2020), Data: IBM SPSS

### 3.2 RELIABILITY OF SCALES

The first scale to analyze its reliability is the *10-item IUIPC scale*, with a Cronbach’s Alpha of 0.815, and no better option if item deleted proves that the inclusion of this scale is reliable and valid. In addition, the validity for the same scale was confirmed by isolating the

reliability for each country individually: Lithuania with a Cronbach's Alpha of 0.789, and Peru with a Cronbach's Alpha of 0.841.

**Table 14**

**Reliability Statistics**

Cronbach's Alpha	N of Items
,815	10

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(IUIPC1) Consumer online privacy is really a matter of consumers' right to exercise control and autonomy over decisions about how their information is collected, used, and shared.	54,24	55,137	,406	,808
(IUIPC2) Consumer control of personal information lies at the heart of consumer privacy.	54,49	54,631	,377	,812
(IUIPC3) I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a marketing transaction.	54,48	53,715	,478	,800
(IUIPC4) Companies seeking information online should disclose the way the data are collected, processed, and used.	54,05	53,053	,530	,795
(IUIPC5) A good consumer online privacy policy should have a clear and conspicuous disclosure.	53,87	55,359	,497	,799
(IUIPC6) It is very important to me that I am aware and knowledgeable about how my personal information will be used.	53,98	52,686	,572	,791
(IUIPC7) It usually bothers me when online companies ask me for personal information.	54,49	52,609	,514	,796
(IUIPC8) When online companies ask me for personal information, I sometimes think twice before providing it.	54,17	55,454	,410	,807
(IUIPC9) It bothers me to give personal information to so many online companies.	54,17	51,103	,604	,786
(IUIPC10) I am concerned that online companies are collecting too much personal information about me.	54,36	50,544	,578	,789

Source: Author's elaboration (2020), Data: IBM SPSS



The second scale to analyze its reliability, *5-item Risk belief scale*, with a Cronbach's Alpha of 0.625. Table 15 shows that without item RB5 or the last item of the scale the Cronbach's Alpha will go up to 0.874, and at that point there are no better Alpha; and it was proved its effectiveness by isolating the reliability of the scale for each country excluding the last item, Lithuania with an initial Cronbach's Alpha of 0.63 went up to 0.856, and Peru with an initial Cronbach's Alpha of 0.59 went up to 0.88 including only the first 4 items from the scale. Therefore, the last item *RB5 - I would feel safe giving personal information online*, had been removed and it has not been taken into consideration for the further analysis.

**Table 15**

**Reliability Statistics**

Cronbach's Alpha	N of Items
,874	4

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(RB1) In general, it would be risky to give personal information to online companies.	15,96	13,803	,742	,835
(RB2) There would be a high potential for loss associated with giving personal information to online firms.	16,14	13,358	,770	,823
(RB3) There would be too much uncertainty associated with giving personal information to online firms.	15,86	14,080	,695	,852
(RB4) Providing online firms with personal information would involve many unexpected problems.	16,45	12,890	,719	,845

Source: Author's elaboration (2020), Data: IBM SPSS

The third scale to analyze its reliability, *6-item Willingness to Disclose scale*, with an initial Cronbach's Alpha of 0.788. The column Cronbach's Alpha if item deleted shows that if delete the item WTD1 the Cronbach's Alpha will be exactly the same 0.788; the author have followed the line to deleted this item to explore a better Cronbach's Alpha and obtained that without the inclusion of the WTD1, there is another possible improvement without item

WTD2 with a new Cronbach's Alpha of 0.844, and finally, there is one final exclusion of the item WTD5 that provides the better obtainable Cronbach's Alpha of 0.876. The scale proved its effectiveness by isolating the reliability of the scale for each country excluding WTD1 and WTD2 improving in the case of Lithuania from 0.758 to 0.832, and in the case of Peru from 0.825 to 871, if we exclude in addition the item WTD5 only the Cronbach's Alpha from Lithuania improved to 0.882, while in the case of Peru there was no improvement. Therefore, the next items: *WTD1 – Contact Information*, *WTD2 – Payment Information*, and *WTD5 – Online account Information*, had been removed and it has not taken into consideration for the further analysis; the items that are take into consideration for the Willingness to Disclose scale are in Table 16 with the correspondent Cronbach Alpha.

**Table 16**

**Reliability Statistics**

Cronbach's Alpha	N of Items
,876	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(WTD3) Life history information	3,90	6,975	,786	,803
(WTD4) Work-related information	3,58	6,040	,770	,825
(WTD6) Financial/medical history information	4,03	7,420	,742	,844

Source: Author's elaboration (2020), Data: IBM SPSS

### 3.3 MEASUREMENT OF VARIABLE'S MEAN BETWEEN GROUPS

#### 3.3.1 EFFECTS ON IUIPC

The first one to analyze is the mean of the individual's dimensions of IUIPC (*control, awareness, collection*) difference between NATIONALITIES (*Lithuania, Peru*). The only IUIPC dimension that shows difference among Nationalities, is the Control dimension ( $p=0.007$ ), show that Peruvian respondents ( $M=5.99$ ) are more worried about their personal

control over their personal data gathered and managed online than Lithuanian respondents (M=5.74), as shown in the Table 17.

**Table 17**

**Group Statistics**

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
IUIPC_CONTROL	Lithuania	251	5,7357	,97917	,06180
	Peru	202	5,9950	1,06996	,07528

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
IUIPC_CONTROL	Equal var. assumed	,068	,795	-2,688	451	,007	-,25933	,09647	-,44892	-,06973
	Equal var. not assumed			-2,662	412,571	,008	-,25933	,09740	-,45079	-,06786

Source: Author's elaboration (2020), Data: IBM SPSS

The second one to analyze is the mean of the individual's dimensions of IUIPC (*control, awareness, collection*) difference between EDUCATION CATEGORIES (*Bachelor's degree or less, At least Professional degree/graduated*). Two dimensions from IUIPC proved differences between the two groups of level of education, the Awareness dimension (p=0.003) and the Collection dimension (p=0.007); showing that more educated respondents (M=6.49) are more aware about the gathering and manage of their personal data online than less educated people (M=6.20), while the same effect is reflected in the collection dimension, where more educated (M=6.15) are more worried about the collection of their data online than less educated respondents (M=5.87), as shown in the Table 18 and in the Annex 1 (SPSS Calculations, "a").

**Table 18****Group Statistics**

	Education category	N	Mean	Std. Deviation	Std. Error Mean
IUIPC_AWARENESS	Bachelor's degree or less	312	6,1966	1,00721	,05702
	At least Professional degree / graduated	141	6,4870	,86970	,07324
IUIPC_COLLECTION	Bachelor's degree or less	312	5,8702	1,05228	,05957
	At least Professional degree / graduated	141	6,1578	1,05788	,08909

Source: Author's elaboration (2020), Data: IBM SPSS

The third one to analyze is the mean of the composite dimension of IUIPC difference between AGE CATEGORIES (*18-21, 22-25, 26-29, 30 and older*). According to the ANOVA, there is significant differences ( $p=0.001$ ), and Games-Howell test showed mainly and exclusively that respondents from ages “18-21” ( $M=5.79$ ) have less privacy concerns about the control, collection or awareness of their personal data online than the group of ages from “26-29” ( $M=6.22$ ), and with the group of ages from “30 and older” ( $M=6.12$ ), as shown in the Table 19. Finally, these previous results can suggest the validity of the following premise: *as younger people are, as fewer privacy concerns, they have about sharing personal data*. Moreover, for this analysis, the category “No legible age/did not provide” is not considered because of its little representativeness.

**Table 19****Descriptives**

## IUIPC 10 Item Composite

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-21	130	5,7938	,80220	,07036	5,6546	5,9331	2,60	7,00
22-25	116	6,0362	,72381	,06720	5,9031	6,1693	3,70	7,00
26-29	112	6,2214	,62651	,05920	6,1041	6,3387	3,50	7,00
30 and older	87	6,1276	,95219	,10209	5,9246	6,3305	1,20	7,00
No legible age/did not provide	8	5,7750	1,44593	,51121	4,5662	6,9838	2,30	7,00
Total	453	6,0254	,80394	,03777	5,9512	6,0996	1,20	7,00

## ANOVA

### IUIPC 10 Item Composite

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12,698	4	3,174	5,089	,001
Within Groups	279,440	448	,624		
Total	292,138	452			

Source: Author's elaboration (2020), Data: IBM SPSS

To conclude, about the effects over IUIPC: the situation is that no matter how the authors' grouped the respondents, the mean is always above 5.70, showing that the total sample feel high privacy concerns about providing its personal data online. In addition, the group with the highest privacy concerns was from the most educated people within the IUIPC awareness dimension (M=6.49); plus, there was no difference between IUIPC and levels of expertise in online shopping (p=0.05).

### 3.3.2 EFFECTS ON RISK BELIEFS

The first one to analyze is the mean of the composite variable of Risk Beliefs with 4-items (*RB 4 Item Composite*) difference between Education Categories (*Bachelor's degree or less, At least Professional degree/graduated*). The RB 4 Item Composite showed difference among the two groups of level of education (p=0.001), more educated respondents (M=5.64) have bigger risk beliefs about giving personal information online than less educated people (M=5.24), as shown in the Table 20. The previous results can suggest the validity of the following premise: *as more educated people are, as higher the risk beliefs they have about sharing personal data online.* COMPARISON WITH OTHER STUDY

**Table 20**

#### Group Statistics

	Education category	N	Mean	Std. Deviation	Std. Error Mean
RB 4 Item Composite	Bachelor's degree or less	312	5,2444	1,18783	,06725
	At least Professional degree / graduated	141	5,6401	1,19013	,10023

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confiden. Interval of the Difference	
									Lower	Upper
RB 4 Item Composite	Equal var. assumed	,011	,915	-3,281	451	,001	-,39568	,12061	-,63270	-,15866
	Equal var. not assumed			-3,278	269,809	,001	-,39568	,12070	-,63331	-,15805

Source: Author's elaboration (2020), Data: IBM SPSS

The second one to analyze is the mean of the composite variable of Risk Beliefs with 4-items (*RB 4 Item Composite*) difference between Age Categories (*18-21, 22-25, 26-29, 30 and older*). According to the ANOVA ( $p=0.001$ ), and Bonferroni test showed that respondents from ages “18-21” ( $M=5.09$ ) have fewer risk beliefs about giving personal information online than the group of ages from “26-29” ( $M=5.58$ ) and specially with the group of ages from “30 and older” ( $M=5.70$ ), plus, a similar effect was found between the group of “22-25” ( $M=5.21$ ) and the group of “30 and older” ( $M=5.70$ ), as shown in the Table 21. The previous results can clearly suggest the validity of the following premise: *as younger people are, as fewer risk beliefs they have about sharing personal data online*. Moreover, for this analysis, the category “No legible age/did not provide” is not considered because of its little representativeness.

**Table 21****Descriptives**

## RB 4 Item Composite

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-21	130	5,0904	1,11282	,09760	4,8973	5,2835	2,25	7,00
22-25	116	5,2091	1,19052	,11054	4,9901	5,4280	1,50	7,00
26-29	112	5,5848	1,11932	,10577	5,3752	5,7944	2,00	7,00
30 and older	87	5,7069	1,30585	,14000	5,4286	5,9852	1,50	7,00
No legible age/did not provide	8	5,4375	1,49254	,52769	4,1897	6,6853	2,00	6,75
Total	453	5,3675	1,20131	,05644	5,2566	5,4785	1,50	7,00

**ANOVA**

## RB 4 Item Composite

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28,246	4	7,061	5,069	,001
Within Groups	624,057	448	1,393		
Total	652,303	452			

Source: Author's elaboration (2020), Data: IBM SPSS

Overall, almost all the means of the RB 4 Item composite variable across age category and level of education were less than 5.70, validating as a sample group the following statement: *there are more Privacy Concerns than perceived Risk beliefs about sharing personal data online*. In addition, the relationship between Risk beliefs with Nationality (H5) and Ecommerce Experience (H6a) are in the sub chapter 3.4 *Test of hypotheses*, as both represents two of the main hypotheses of this study.

**3.3.3 EFFECTS ON WILLINGNESS TO DISCLOSE**

The first one to analyze is the mean of the composite variable of Willingness to Disclose with 3-items (*WTD 3 Item Composite*) difference between NATIONALITIES (*Lithuania, Peru*). The WTD 3 item consolidate showed no difference among Nationalities ( $p=0.610$ ), where Lithuanian respondents ( $M=1.95$ ) have the same relative low willingness to disclose personal data online than Peruvian respondents ( $M=1.88$ ), as shown in the Table 22 and in Annex 1 (SPSS Calculations, "b").

**Table 22****Group Statistics**

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
WTD 3 Item Composite	Lithuania	251	1,9456	1,38183	,08722
	Peru	202	1,8845	1,10822	,07797

Source: Author's elaboration (2020), Data: IBM SPSS

The second one to analyze is the mean of the composite variable of Willingness to Disclose with 3-items (*WTD 3 Item Composite*) difference between AGE CATEGORIES (*18-21, 22-25, 26-29, 30 and older*). According to the ANOVA between the four age categories there was no difference ( $p=0.340$ ), but the Independent sample t-test shown formally ( $p=0.045$ ) that the age group of "18-21" ( $M=2.01$ ) have more willingness to disclose data online than the age group of "30 and older" ( $M=1.67$ ), as shown in the Table 23. The previous results could suggest formally that: *younger people are more willing to disclose personal data online than older people*. Overall, the tendency to disclose these specific 3 items were low across all the previous presented groups, means below 2.10.

**Table 23****Descriptives**

## WTD 3 Item Composite

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-21	130	2,0103	1,26569	,11101	1,7906	2,2299	1,00	6,33
22-25	116	1,9828	1,37602	,12776	1,7297	2,2358	1,00	7,00
26-29	112	1,9494	1,27202	,12019	1,7112	2,1876	1,00	7,00
30 and older	87	1,6705	1,13494	,12168	1,4286	1,9124	1,00	7,00
Total	453	1,9183	1,26617	,05949	1,8014	2,0352	1,00	7,00



### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
WTD 3 Item Composite	Equal var. assumed	3,466	,064	2,019	215	,045	,33976	,16831	,00801	,67150
	Equal var. not assumed			2,063	197,514	,040	,33976	,16471	,01495	,66457

Source: Author's elaboration (2020), Data: IBM SPSS

### 3.4 TEST OF HYPOTHESES

- H1: Internet users' information privacy concerns (IUIPC) will have a positive effect on risk beliefs (RB).

**Results:** H1 is accepted, there is a *positive moderate correlation* between IUIPC and risk beliefs.  $R=0.564$ ,  $p<0.001$ , as shown in the Table 24. That can prove that: *as bigger internet user's privacy concerns (IUIPC) as bigger risk beliefs they will have about sharing their personal data online.*

**Table 24**

#### Correlations

	IUIPC 10 Item Composite	RB 4 Item Composite
IUIPC 10 Item Composite	Pearson Correlation	1
	Sig. (1-tailed)	,564**
	N	453
RB 4 Item Composite	Pearson Correlation	,564**
	Sig. (1-tailed)	1
	N	453

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Source: Author's elaboration (2020), Data: IBM SPSS

In addition, the author have evaluated the correlation between each individual dimension from IUIPC (IUIPC 3 Item Control, IUIPC 3 Item Awareness, IUIPC 4 Item

Collection) with Risk Beliefs, in two cases was found *weak positive correlation*: between IUIPC 3 Item Control – RB 4 Item Composite (R=0.319, p<0.001), and IUIPC 3 Item Awareness – RB 4 Item Composite (R=0.338, p<0.001); while it was found a *strong positive correlation* between IUIPC 4 Item Collection – RB 4 Item Composite (R=0.603, p<0.001), as shown in Table 25. In order to check, if effectively the correlation of the dimension of IUIPC Collection with Risk beliefs (R=0.603) is stronger than the other two dimensions correlations (R=319, R=338), the author have applied Steiger’s Z test, and proved the actual difference with both (Steiger Z=-5.277, p<0.001, Steiger Z=-4.961, p<0.001), as shown in Table 26. This analysis can suggest that people who have greater concerns about privacy concerns in the awareness dimension will consequently have higher risk beliefs.

**Table 25**

**Correlations**

		IUIPC 3 Item Control	IUIPC 3 Item Awareness	IUIPC 4 Item Collection	RB 4 Item Composite
IUIPC 3 Item Control	Pearson Correlation	1	,466**	,323**	,319**
	Sig. (1-tailed)		,000	,000	,000
	N	453	453	453	453
IUIPC 3 Item Awareness	Pearson Correlation	,466**	1	,471**	,338**
	Sig. (1-tailed)	,000		,000	,000
	N	453	453	453	453
IUIPC 4 Item Collection	Pearson Correlation	,323**	,471**	1	,603**
	Sig. (1-tailed)	,000	,000		,000
	N	453	453	453	453
RB 4 Item Composite	Pearson Correlation	,319**	,338**	,603**	1
	Sig. (1-tailed)	,000	,000	,000	
	N	453	453	453	453

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Source: Author’s elaboration (2020), Data: IBM SPSS

**Table 26**

**Steiger's Z test**

r		n		Output:	
r <sub>jk</sub> :	0.319	453	z-score:	-5.277	
r <sub>jh</sub> :	0.603		1-tail p:	0	
r <sub>kh</sub> :			2-tail p:	0	
Reset	Calculate				
Status:	Status okay				

r		n		Output:	
r <sub>jk</sub> :	0.338	453	z-score:	-4.961	
r <sub>jh</sub> :	0.603		1-tail p:	0	
r <sub>kh</sub> :			2-tail p:	0.000001	
Reset	Calculate				
Status:	Status okay				

Source: Author's elaboration (2020), Data: quantpsy.org

- H2: Risk beliefs (RB) affects negatively on willingness to disclose (WTD).

**Results:** H2 is accepted, there is a *negative correlation* between risk beliefs and willingness to disclose.  $R=-0.107$ ,  $p=0.011$ , as shown in the Table 27. That can prove that: *bigger risk beliefs they have about sharing their personal data online, as fewer the willingness to disclose personal information.*

**Table 27**

**Correlations**

	WTD 3 Item Composite	RB 4 Item Composite
WTD 3 Item Composite	Pearson Correlation 1	-,107*
	Sig. (1-tailed)	,011
	N	453
RB 4 Item Composite	Pearson Correlation -,107*	1
	Sig. (1-tailed)	,011
	N	453

\*. Correlation is significant at the 0.05 level (1-tailed).

Source: Author's elaboration (2020), Data: IBM SPSS

- H3: Internet users' information privacy concerns (IUIPC) will have a negative effect on willingness to disclose (WTD).

**Results:** Using regression, it was validated the construct of the presented model, ANOVA significance shown  $F(3)=8,651$ , and  $p<0.001$ . H3 is accepted, there is a *negative correlation* between one predictor, IUIPC 4 Item Collection, and willingness to disclose, as shown in the Table 29 and 30. That can prove that: *as bigger internet user's privacy concerns (IUIPC) about sharing their personal data online, as fewer the willingness to disclose personal information.*

**Table 28**

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	39,595	3	13,198	8,651	,000 <sup>b</sup>
Residual	685,049	449	1,526		
Total	724,645	452			

a. Dependent Variable: WTD 3 Item Composite

b. Predictors: (Constant), IUIPC 4 Item Collection, IUIPC 3 Item Control, IUIPC 3 Item Awareness

**Table 29**

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	3,453	,332		10,398	,000
IUIPC 4 Item Collection	-,257	,055	-,216	-4,694	,000

a. Dependent Variable: WTD 3 Item Composite

**Table 30**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,216	,047	,044	1,23771

a. Predictors: (Constant), IUIPC 4 Item Collection

Source: Author's elaboration (2020), Data: SPSS

- H4: Impact of Internet users' information privacy concerns (IUIPC) on Willingness to disclose (WTD) is moderated by nationality.

**Moderator effect and results:** First, the abbreviations from the variables were reduced to apply PROCESS Procedure for SPSS Version 3.5.2, and using model 1, the next results for hypothesis H4 is presented: The independent variable, IUIPC\_COM, has impact

on the dependent variable, WTD\_COM, but it is not mediated by the moderator variable, NATIONALITY, with an  $R^2$  small 0.05 and regression shown an F value of 8.2858 and ANOVA significance shown a value of  $p < 0.001$ , as shown in Table 31. There is proved significant impact from X to Y, with a coefficient value of -0.3621; and  $p < 0.001$ , but there is no direct impact from M to Y, with a coefficient value of 0.007 and  $p = 0.95$ . And to conclude this moderation part, “Int\_1” formed by IUPC\_COM multiply by Nationality, shows that there is no moderation effect,  $p = 0.7737$ . So, H4 is rejected, Impact of Internet users’ information privacy concerns (IUPC) on Willingness to disclose (WTD) is not moderated by nationality.

**Table 31**

```

Model : 1
      Y : WTD_COM
      X : IUPC_COM
      W : NATIONAL

Sample
Size: 453

*****
OUTCOME VARIABLE:
WTD_COM

Model Summary
      R          R-sq      MSE          F          df1          df2          p
      ,2290      ,0525     1,5292      8,2858      3,0000     449,0000     ,0000

Model
      coeff          se          t          p          LLCI          ULCI
constant    1,9163      ,0585     32,7489     ,0000     1,8013     2,0313
IUPC_COM    -,3621      ,0730     -4,9582     ,0000     -,5056     -,2186
NATIONAL    ,0078      ,1177      ,0666     ,9469     -,2236     ,2393
Int_1       ,0420      ,1459      ,2877     ,7737     -,2447     ,3287

Product terms key:
Int_1      :      IUPC_COM x      NATIONAL

Test(s) of highest order unconditional interaction(s):
      R2-chng          F          df1          df2          p
X*W      ,0002          ,0828      1,0000     449,0000     ,7737
-----
      Focal predict: IUPC_COM (X)
      Mod var: NATIONAL (W)

```

**Mediation effect:** First, the abbreviations from the variables were reduced to apply PROCESS Procedure for SPSS Version 3.5.2, and using model 4, the next results are presented: The independent variable, IUPC\_COM, has impact on mediator variable, RB\_COM; regression shown F value of 210,43 and ANOVA significance shown a value of

$p < 0.001$ , and also proved with bootstrap from 5000 samples, with a coefficient value of 0.8428 and  $p < 0.001$ , as shown in Table 32.

**Table 32**

```

*****
Model   : 4
  Y     : WTD_COM
  X     : IUPC_COM
  M     : RB_COM

Sample
Size:   453

*****
OUTCOME VARIABLE:
  RB_COM

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      ,5640      ,3181      ,9862    210,4276    1,0000    451,0000      ,0000

Model
      coeff      se      t      p      LLCI      ULCI
constant  ,2892      ,3532      ,8187    ,4134    -,4049      ,9832
IUPC_COM  ,8428      ,0581    14,5061    ,0000      ,7286      ,9570

Standardized coefficients
      coeff
IUPC_COM  ,5640

```

In addition, it was proved that there is not fully mediation effect. The independent variable, IUPC\_COM, has impact on dependent variable, WTD\_COM, while the mediator variable RB\_COM, has no impact on dependent variable, WTD\_COM; regression shown F value of 12.58 and ANOVA significance shown  $p < 0.001$  from the full construct. The impact from X to Y is proved, with bootstrap from 5000 samples gave a coefficient value of -0.3884 and  $p < 0.001$ ; while there was no impact from M to Y, with bootstrap from 5000 samples gave a coefficient value of 0.0336 and  $p = 0.5668$ .

**Table 33**

```

*****
OUTCOME VARIABLE:
  WTD_COM

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      ,2301      ,0530      1,5250    12,5832    2,0000    450,0000      ,0000

Model
      coeff      se      t      p      LLCI      ULCI
constant  4,0783      ,4395      9,2789    ,0000      3,2145      4,9420
IUPC_COM  -,3884      ,0875     -4,4386    ,0000     -,5603     -,2164
RB_COM    ,0336      ,0586      ,5731     ,5668     -,0815     ,1486

```

```

Standardized coefficients
      coeff
IUPC_COM  -,2466
RB_COM    ,0318

```

To conclude in this mediation part, the partial mediation is shown in Table 34, where both the direct effect of X on Y, is valid with a coefficient of -0.3884 and  $p < 0.001$ , and the total effect of X on Y is also significant with a coefficient of -0.3601 and  $p < 0.001$ ; but the indirect effect of X on Y is not significant, with a total effect of 0.0283 and with the value 0 between the lower and upper bootstrapping interval.

**Table 34**

```

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y
  Effect      se      t      p      LLCI      ULCI      c_ps      c_cs
  -,3601      ,0722    -4,9875    ,0000    -,5020    -,2182    -,2844    -,2286

Direct effect of X on Y
  Effect      se      t      p      LLCI      ULCI      c'_ps      c'_cs
  -,3884      ,0875    -4,4386    ,0000    -,5603    -,2164    -,3067    -,2466

Indirect effect(s) of X on Y:
      Effect      BootSE      BootLLCI      BootULCI
RB_COM      ,0283      ,0553      -,0746      ,1453

```

- H5: Peruvian respondents have stronger perceptions of risk beliefs (RB) than Lithuanian respondents.

**Results:** H5 is accepted, Peruvian respondents ( $M=5.68$ ) have stronger perceptions of risk beliefs than Lithuanian respondents ( $M=5.11$ ),  $t(451) = -5.135$ ,  $p < 0.001$ , as shown in the Table 35. The gap between means shows clearly that: *Peruvians have bigger risk beliefs about sharing personal data online than Lithuanians*; plus, Peruvian respondents ( $M=6.13$ ) have bigger internet user's privacy concerns (IUIPC) about sharing their personal data online than Lithuanian respondents ( $M=5.93$ ),  $t(451) = -2.552$ ,  $p=0.011$ , as shown in Table 36 and in the Annex 1 (SPSS Calculations, "c"); demonstrating the spread fear to fraud during online shopping between Peruvian citizens, and validating this cross cultural analysis between these two Nations.

**Table 35****Group Statistics**

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
RB 4 Item Composite	Lithuania	251	5,1145	1,18050	,07451
	Peru	202	5,6819	1,15443	,08123

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
RB 4 Item Composite	Equal var. assumed	,449	,503	-5,135	451	,000	-,56739	,11049	-,78453	-,35024
	Equal var. not assumed			-5,148	434,338	,000	-,56739	,11023	-,78403	-,35075

Source: Author's elaboration (2020), Data: IBM SPSS

**Table 36****Group Statistics**

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
IUIPC 10 Item Composite	Lithuania	251	5,9394	,77511	,04892
	Peru	202	6,1322	,82794	,05825

Source: Author's elaboration (2020), Data: IBM SPSS

- H6: Those who self-report a bigger expertise in online shopping will perceive less risk beliefs (H6a) and will be more willing to disclose personal data (H6b).

- (a) H6a: Those who self-report a bigger expertise in online shopping will perceive less risk beliefs.



**Results:** H6a is rejected, different groups of level of expertise in online shopping among respondents: more expertise (M=5.38), average expertise (M=5.23), and fewer expertise (M=5.45) does not differ between themselves about the perception of risk beliefs, ANOVA (p=0.496), as shown in Table 37.

**Table 37**

**Descriptives**

RB 4 Item Composite

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Fewer expertise	77	5,4545	1,34123	,15285	5,1501	5,7590	1,50	7,00
Average expertise	74	5,2297	1,10707	,12869	4,9732	5,4862	2,00	7,00
More expertise	302	5,3791	1,18698	,06830	5,2447	5,5136	1,50	7,00
Total	453	5,3675	1,20131	,05644	5,2566	5,4785	1,50	7,00

**ANOVA**

RB 4 Item Composite

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,029	2	1,014	,702	,496
Within Groups	650,274	450	1,445		
Total	652,303	452			

Source: Author's elaboration (2020), Data: IBM SPSS

(b) H6b: Those who self-report a bigger expertise in online shopping will be more willing to disclose personal data.

**Results:** H6b is rejected, different groups of level of expertise in online shopping among respondents: more expertise (M=1.90), average expertise (M=1.86), and fewer expertise (M=2.02) does not differ between themselves about the willingness to disclose personal data online, ANOVA (p=0.707), as shown in Table 38.

**Table 38****Descriptives**

WTD 3 Item Composite

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Fewer expertise	77	2,0216	1,12953	,12872	1,7653	2,2780	1,00	6,00
Average expertise	74	1,8604	1,00229	,11651	1,6281	2,0926	1,00	4,67
More expertise	302	1,9062	1,35572	,07801	1,7527	2,0597	1,00	7,00
Total	453	1,9183	1,26617	,05949	1,8014	2,0352	1,00	7,00

**ANOVA**

WTD 3 Item Composite

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,115	2	,558	,347	,707
Within Groups	723,529	450	1,608		
Total	724,645	452			

Source: Author's elaboration (2020), Data: IBM SPSS

- H7: Individuals having completed more education will be less willing to disclose personal data (H7).

**Results:** H7 is rejected, different groups of education among respondents: less educated (M=1.93), more educated (M=1.88), does not differ between themselves about the willingness to disclose personal data online,  $t(451)=0.386$   $p=0.70$ , as shown in Table 39.

**Table 39****Group Statistics**

Education category		N	Mean	Std. Deviation	Std. Error Mean
WTD 3 Item Composite	Bachelor's degree or less	312	1,9338	1,22783	,06951
	At least Professional degree / graduated	141	1,8842	1,35106	,11378

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
WTD 3 Item Composite	Equal var. assumed	,121	,728	,386	451	,700	,04960	,12861	-,20314	,30234
	Equal var. not assumed			,372	248,431	,710	,04960	,13333	-,21301	,31221

Source: Author's elaboration (2020), Data: IBM SPSS

### 3.5 SUMMARY OF THE RESULTS AND MANAGERIAL APPLICATIONS

This subchapter is presented with a comparison table between two cross-cultural studies about willingness to disclose: the first one, the study from Robinson (2017), that represents the closest one to this study, as the main variables and control variables are presented in both studies (perceived risk of disclosing, willingness to disclose, ecommerce experience), therefore, this is the principal referral study; the second one, the study from Gupta (2010), the reason to have chosen this study is because of the similarities between countries, as India is a collectivist culture like Peru, plus both countries have lower internet penetration and populations with fewer banking penetration rate as the quantity of credit card users can be comparable, nevertheless, this study is focus mainly in privacy protection behaviors and actions. In addition, the purpose of the Table 40 is to visualize the main reasons for country selection, and for better visualization of the results; in order to not extend too much the table, only the results from hypotheses are presented below. Other results or implications like from the subchapter 3.3 are presented right after the table.

**Table 40**

<b>Author's study.</b>	<b>Robinson, C. (2017).</b>	<b>Gupta, B. (2010).</b>
Comparing: Lithuania and Peru	Comparing: Estonia and the US.	Comparing: India and the US.
<p>Main reasons to compare from the Peru side:</p> <ul style="list-style-type: none"> <li>• Long-term oriented, and collectivist culture; also, differences in power distance and uncertainty avoidance dimension.</li> <li>• High rates of distrust to shop online, and personal details security concerns</li> <li>• Lower percentage of active e-shoppers.</li> <li>• Lower connectivity, lower internet usage.</li> <li>• Lower percentage of credit card users, and quantity of total number of cards.</li> </ul>	<p>Main reasons to compare from the Estonia side:</p> <ul style="list-style-type: none"> <li>• Advanced standing in technological systems</li> <li>• Advanced government legislation and regulations</li> <li>• Long-term oriented and collectivist culture</li> <li>• High level of citizen proficiency with the Internet</li> <li>• Distinct aversion to risk</li> </ul>	<p>Main reasons to compare from the India side:</p> <ul style="list-style-type: none"> <li>• Long-term oriented and collectivist culture; also, differences in power distance dimension.</li> <li>• Lower penetration rate of Internet usage among Indian population</li> <li>• Lower quantity of credit card users</li> </ul>
<p>Results from hypotheses:</p> <ul style="list-style-type: none"> <li>• IUIPC have a positive effect on risk beliefs.</li> <li>• Risk beliefs affects negatively on willingness to disclose.</li> <li>• IUIPC have a negative effect on willingness to disclose.</li> </ul>	<p>Results:</p> <ul style="list-style-type: none"> <li>• Estonians are not more willing to disclose personal data than Americans.</li> <li>• Nationality significantly predicted willingness to disclose.</li> <li>• Estonians are not having lower perception of risks</li> </ul>	<p>Results:</p> <ul style="list-style-type: none"> <li>• Indians are less willing to disclose less sensitive information than Americans.</li> <li>• Indians are more willing to disclose more sensitive information than Americans.</li> </ul>

<ul style="list-style-type: none"> <li>• Nationality does not moderate IUIPC and willingness to disclose.</li> <li>• Peruvians have stronger perceptions of risk beliefs than Lithuanians.</li> <li>• Respondents with more ecommerce experience do not necessary perceive less risk beliefs or are more willing to disclose.</li> <li>• No difference was found in the willingness to disclose between more educated and less educated groups.</li> </ul>	<p>to disclose than Americans.</p> <ul style="list-style-type: none"> <li>• Gender is not relevant to willingness to disclose.</li> <li>• Age is not relevant to willingness to disclose or perceived risk.</li> <li>• Less educated are more willing to disclose information online</li> <li>• Education level is not relevant to the perceived risk of disclose.</li> <li>• People with more ecommerce experience are more willing to disclose and perceive less risk on disclosing.</li> </ul>	<ul style="list-style-type: none"> <li>• Willingness to disclose different types of personal data predicts on intention to engage in privacy protection behavior and in actual protection actions differ between the two countries.</li> <li>• Perceptions of what is consider sensitive information differ between these two cultures.</li> <li>• Collectivist cultures, like the Indian one, tend to exhibit lower privacy concerns.</li> </ul>
--	---	---

Other results / implications extracted from the subchapter 3.3 are presented below, if match or mismatch is presented with other studies further discussion is displayed:

- *Peruvians are more worried about their individual control over personal data managed online than Lithuanians.* While for a country like Peru, without any big regulation addressing their privacy concerns, general population may feel unprotected and with limited control over the processing of their personal data online. In addition, Peru, as a collectivist culture does not necessary exhibit lower privacy concerns, as in the case of India, in the Gupta's results (2010).
- *Education level shows difference in the dimension of awareness and collection from IUIPC, more educated groups are more aware and perceived bigger privacy concerns than less educated groups.* Therefore, suggesting that less educated have

fewer concerns, and in consequence more willing to disclose information online, confirming Robinson's results (2017).

- *Age is relevant for IUIPC, as younger the age group as fewer privacy concerns.* This result differs from Robinson's results (2017), as the age factor was no relevant among the main variables.
- *Education level is relevant to the perceived risk of disclose as more educated people are, as higher the risk beliefs they have about sharing personal data online.* In the initial hypothesis from Robinson's study (2017), he was intended to probe this statement, but without success. This is a clear consequence of the yet latent differences between various professional sections of the population about online privacy literacy<sup>1</sup> (Weinberger, Zhitomirsky-Geffet, & Bouhnik, 2017).
- *Age is relevant to the perceived risk of disclose, as younger people are, as fewer risk beliefs they have about sharing personal data online; and age is relevant for willingness to disclose, younger people are more willing to disclose personal data online than older people.* Another two rejected hypothesis from Robinson's study (2017), while this study presents is validity.
- *Nationality does not reveal willingness to disclose.* Here are similarities with both comparable studies: Robinson (2017), could not probe its initial hypothesis, that Estonians, for having a more technological population are more willing to disclose than Americans; while, Gupta (2010), could no probe the hypothesis, that Indians are less willing to disclose information than Americans, only he could prove the previous statement with less sensitive information. Therefore, the author suggests that the perfect cross-cultural example to prove the contrary is hard to define, even with all the country differences included (technological, cultural, internet usage, governmental legislations, and banking rates). Nevertheless, Gupta (2010) proves that perceptions of what is consider sensitive information differ between cultures, and, furthermore, the final 3-item scale presented here to measure WTD might be too generic for differentiation of sensitive or non-sensitive information.

---

<sup>1</sup> "Term that measure or investigate the attitudes and influential factor of users' knowledge and use of the tools designated for controlling and enhancing online privacy" as cited in Weinberger, M., Zhitomirsky-Geffet, M., & Bouhnik, D. (2017).

To conclude this first part of the analysis of results and implications, it was proved that the demographical factor of *age* is relevant for all the three main variables of this study (IUIPC, Risk beliefs, Willingness to disclose); while the *education* factor is relevant for the perceived risk of disclose, and also for the awareness and collection dimension from IUIPC.

Main results / implications extracted from the hypotheses are presented below, if match or mismatch is presented with other studies further discussion is displayed:

- *IUIPC have a positive effect on risk beliefs.* In the same line of other studies that pointed that privacy concerns on the Internet have a positive impact on perceived risk (Fortes & Rita, 2016; Malhotra et al., 2004).
- *Risk beliefs affects negatively on willingness to disclose.* In the same line of other studies that pointed that risk beliefs have a negative impact on intention to reveal personal information (Malhotra et al., 2004).
- *IUIPC (Collection dimension) have a direct negative effect on willingness to disclose.* This is one of the more relevant implications from the presented study, because before it was proved that IUIPC affects intention to reveal personal information through or mediate by trusting and risk beliefs (Malhotra et al., 2004), while this study is showing that in addition there is also a direct effect.
- *Nationality does not moderate IUIPC and willingness to disclose.* One of the reasons why there is no moderation is maybe the no inclusion of another antecedent like “privacy awareness” that can decrease privacy concerns, and reduce the need for privacy protection behavior (Miltgen & Smith, 2015), or “perceived privacy regulatory protection” defined by the regulatory knowledge, that can influence privacy concerns, as shown in Miltgen & Smith model (2015). While it was probed recently that privacy awareness has a direct positive effect on the willingness to disclose individual facts, in a study in Lithuania (Mindaugas et al., 2020). Therefore, the early conclusion from the author is that Nationality can moderate the relationship between the antecedent of IUIPC and IUIPC itself, as factors like regulatory knowledge or privacy awareness might differ from country to country; of course, further study is needed to prove the validity of the last statement.

- *Peruvians have stronger perceptions of risk beliefs and privacy concerns than Lithuanians.* This brings to the light and reveals one of the main goals of this study: shows that a country without a legislation addressing privacy concerns and with high rates of distrust and fear to online fraud like Peru, clearly manifest bigger privacy concerns and perceived more risk in an online disclosing scenario, than a country under GDPR, with an active e-shopper community and with high banking rates, like Lithuania; showing in other words, that one country can trust or feel more comfortable about disclosing personal data for online shopping purposes, while the other feel unsecure and distrustful about it. In addition, if we compare this results with the rejection of hypothesis from Robinson's result (2017), where he was not able to prove that Estonians have fewer risk beliefs than Americans, it implies that this study can validate its initial idea that a country with advanced legislations and regulations addressing privacy concerns and high level of internet proficiency, have fewer perceptions of risk beliefs than a country without it.
- *Respondents with more ecommerce experience do not necessarily perceive less risk beliefs or are more willing to disclose.* The present study does not present difference among groups with fewer, average, or more ecommerce experience; therefore, in mismatch with Robinson's results (2017). Overall, most of the population from the total sample are more self-reported ecommerce experience that have affected the results, i.e. Lithuanians respondents with more expertise represent 43% from the total sample.
- *No difference was found in the willingness to disclose between more educated and less educated groups.* This finding suggest that differ from Robinson's results (2017); nevertheless, the validity of the education groups might be limited, as the education systems in Peru and Lithuania differ from one to the other.

To conclude the second and final part of the analysis of the results and implications from hypotheses, some bullet point are presented:

- *The second and third objectives from the current study were totally accomplished;* it was proved the direct effect of IUIPC (Collection dimension) over willingness to disclose, the positive effect of IUIPC over risk beliefs, and the negative effect of risk beliefs over willingness to disclose.



- It was also exposed the *need of a predecessor of IUIPC*, like privacy awareness or perceived privacy regulatory protection for better visualization of the effects of the control variable of Nationality over willingness to disclose.
- It was also proved that Lithuania, a country with advanced legislations and regulations addressing privacy concerns (GDPR), active e-shopper community and with high rates of banking, will have fewer perceptions of risk beliefs and less privacy concerns about disclosing data online than a country with the absence of these elements or with diminished elements like Peru.

## CONCLUSIONS

The main theoretical conclusions from the analysis and with relations to the results obtained, are numbered next:

1. This study, explore the negative direct effect from IUIPC to willingness to disclose, even though it was statistically accepted a small negative effect from the Collection dimension to WTD, further tests are needed in order to corroborate the presence of the direct effect or the need of a mediator between the two variables.
2. In line with the previous conclusion, the control variable of Nationality was found that its moderator effect is not relevant between IUIPC and WTD. In addition, to the possibility of inclusion a mediator, like trust, the author also suggests the need of an antecessor to IUIPC like privacy awareness or perceived privacy regulatory protection that can easily be affected or moderated by nationality.
3. The acceptance of the three-variable model from this study (IUIPC, Risk Beliefs, and WTD) is corroborated with t-tests, ANOVA, and regressions. Mainly, the positive direct effect from IUIPC over risk beliefs, and the negative direct effect from risk beliefs over WTD, in line with previous studies; while to have a complete triangle model or have a more complex model, the theoretical conclusions 1 and 2 need to be revisit.

The main conclusions from the analysis and with relations to the results obtained, are numbered next:

1. The age factor is relevant for IUIPC; *as younger the age group as fewer privacy concerns.*
2. The age factor is relevant for perceived risk of disclose; *as younger people are, as fewer risk beliefs they have about sharing personal data online.*
3. The age factor is relevant for willingness to disclose; *younger people are more willing to disclose personal data online than older people.* The first 3 main conclusions suggest that the *age factor* must be consider as a control variable to measure predecessors of willingness to disclose and WTD itself. Furthermore, all the sample group pointed out the powerful insight: that younger people have fewer privacy concerns and less risk beliefs, and therefore more willing to disclose personal data to complete a purchase online.

4. The education level is relevant to the perceived risk of disclose; *as more educated people are, as higher the perceived risk beliefs they have about sharing personal data online*. In this conclusion, the author found validity to the intended hypothesis that Robinson's study (2017) could not probe.
5. The education level shows difference in the dimension of awareness and collection from IUIPC; *as more educated people are, as more aware about the collection of their data, and perceived bigger privacy concerns than less educated groups*. In the opposite form, validate Robinson's results (2017), where less educated people have fewer privacy concerns and in consequence more willing to disclose information online.
6. Peru, as a collectivist society, does not exhibit lower privacy concerns. In fact, *Peruvians are more worried about their individual control over their personal data managed online than Lithuanians*. The absence of regulation addressing privacy concerns, the spread of fear about online fraud, or the security of personal detail disclosure increase privacy concerns in Peru.
7. In relation with the main conclusion 6, *Peruvians have stronger perceptions of risk beliefs and privacy concerns than Lithuanians*. The author can conclude that, while one country can trust or feel more comfortable about disclosing personal data for online shopping purposes, the other feel insecure and distrustful about it. The Baltic country, with advanced legislations and regulations addressing privacy concerns (GDPR), active e-shopper community and with high rates of banking, differ in perceptions of risk beliefs and privacy concerns from a country with the absence of these elements or with diminished elements like the Republic of Peru. Accomplishing one of the main goals of this study, validate the cross-cultural comparison, by the differences of means in the two independent variables across nationalities, and, therefore, bringing further implications for country selection in future related studies about disclosing of personal data.

The author presents some recommendations for interested parties; first, companies pursuing the collection of personal data for marketing or sales purposes should be aware of the frequency that they request for personal data, as people might be tired of giving personal data if it is not absolutely necessary. As well, marketers should be alert over triggers that increase privacy concern, as these influence negatively on risk beliefs and therefore, deter

willingness to disclose data, that can be traduced in no commercial transaction or no selling; this last scenario can be exposed across many industries, as disclosing of information, is present now more than ever, because all types of companies are seeking to keep relationship with clients, and the main channel is keeping a connection with customers through email, phone, social networks or other types of personal data.

And second, the managerial conclusions can be transferred to a governmental level or to institutions seeking to increase online shopping in a country or region for own interest or common benefit; one way to accomplish is increasing banking rates because more portion of the population might have the option to buy online with a digital payment option (debit or credit cards), but it should be complemented with online shopping education about good practices or how to buy securely online, and with the inclusions of laws that protect private data on final customers, as all these elements might bring fewer privacy concerns and risk beliefs, increasing willingness to disclose personal information for online shopping purposes.

To conclude, some limitations are presented: the scale presented to measure WTD was reduced from 6 to 3 items due to the reliability of scale; with a generic classification of type of information, that cannot bring so clear results for willingness to disclose individual items, the validity of the education groups might be limited, as the education systems in Peru and Lithuania differ from one to the other; and finally, most participants can be divided into two groups, younger Lithuanians with less education accomplishments with outstanding ecommerce experience, and older Peruvians with more education accomplishments with high ecommerce experience.

## LIST OF REFERENCES:

1. Bagdonienė, L., & Zemblytė, J. (2009). Online shopping motivation factors and their effect on Lithuanian consumers. *Ekonomika Ir Vadyba, Ekonomika ir vadyba*. 2009, Nr. 14, p. 367-374.
2. Bélanger, F., & Crossler, R. (2011). Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems. *MIS Quarterly*, 35(4), 1017-1041.
3. Bjarne, S., Markus, Z., Roy, S., Ileana, S., Sören, K., Michalis, M., & Andreas, H. (2017). Gain 1 or Avoid -1: Validation of the German Regulatory Focus Questionnaire (RFQ). *BMC Psychology*, 5(1), 1-11.
4. Cui, F., Lin, D., & Qu, H. (2018). The impact of perceived security and consumer innovativeness on e-loyalty in online travel shopping. *Journal of Travel & Tourism Marketing*, 35(6), 819-834.
5. Culnan, M.J. & Pamela K. A. (1999) Information Privacy Concerns, Procedural Fairness, and Impersonal Trust: An Empirical Investigation. (1999). *Organization Science*, 10(1), 104-115.
6. Cropanzano, R., Rupp, D., Mohler, C., & Schminke, M. (2001). Three roads to organizational justice. *Research in Personnel and Human Resources Management*. 20.
7. Euromonitor International. (2019). *Internet Retailing in Peru, Country Report*. Retrieved from <https://www.euromonitor.com/internet-retailing-in-peru/report>
8. European Commission. (2019). Communication from the Commission to the European Parliament and the Council – Data protection rules as a trust-enabler in the EU and beyond – taking stock, COM/2019/374 final.
9. European Commission. (2018) Digital Economy and Society Index 2018, Country Report Lithuania.
10. Featherman, M.S. & Pavlou, P.A. (2003) "Predicting e-services adoption: A perceived risk facets perspective". *International Journal of Human-Computer Studies*, 59, 451–474.
11. Follegatti, C. (2019) "La nueva era del comercio electrónico". *El Peruano*
12. Fortes, N., & Rita, P. (2016). Privacy concerns and online purchasing behaviour: Towards an integrated model. *European Research on Management and Business Economics*, 22(3), 167-176.
13. Gemius (2017). E-Commerce reports 2017 Latvia, Lithuania
14. Gemius (2020). E-Commerce tendencies: Latvia & Lithuania 2020

15. George, J. (2002). Influences on the intent to make Internet purchases. *Internet Research*, 12(2), 165-180.
16. Gerber, N., Gerber, P., & Volkamer, M. (2018). Explaining the privacy paradox: A systematic review of literature investigating privacy attitude and behavior. *Computers & Security*, 77, 226-261.
17. GfK. (2018). Future Buy 2018 study. Retrieved from <https://www.gfk.com/insights/press-release/future-buy-2018-report/>
18. Glover, S., & Benbasat, I. (2010). A Comprehensive Model of Perceived Risk of E-Commerce Transactions. *International Journal of Electronic Commerce*, 15(2), 47-78.
19. Gupta, Babita. (2010). Facilitating global e-commerce: a comparison of consumers' willingness to disclose personal information online in the U.S. and in India. *Journal of Electronic Commerce Research*, 11(1), 41-53.
20. Heirman, Wannes. (2013). Predicting adolescents' willingness to disclose personal information to a commercial website: Testing the applicability of a trust-based model. *Cyberpsychology*, 7(3), 1-16.
21. Heldman, C., & Enste, D. (2018). Trust and privacy: How trust affects individuals' willingness to disclose personal information. IDEAS Working Paper Series from RePEc.
22. Higgins, E. (1997). Beyond Pleasure and Pain. *American Psychologist*, 52(12), 1280-1300.
23. Hofstede, G., Hofstede G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. Revised and Expanded 3rd Edition. New York: McGraw-Hill.
24. INEI - Instituto Nacional de Estadística e Informática. (2018). Estadísticas de Seguridad Ciudadana, noviembre 2017 – abril 2018, Informe Técnico, No 3 – Mayo 2018. Retrieved from [https://www.inei.gov.pe/media/MenuRecursivo/boletines/03-informe-tecnico-n03\\_estadisticas-seguridad-ciudadana\\_nov17\\_ab18.pdf](https://www.inei.gov.pe/media/MenuRecursivo/boletines/03-informe-tecnico-n03_estadisticas-seguridad-ciudadana_nov17_ab18.pdf)
25. INEI - Instituto Nacional de Estadística e Informática. (2020). Estimaciones y Proyecciones de Población Total, por Años Calendario y Edades Simples, 1950-2050 - Boletín Especial N° 17.
26. Jarvenpaa, S., Tractinsky, N., & Saarinen, L. (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer-Mediated Communication*, 5(2), 0.
27. Lee, M., & Turban, E. (2001). A Trust Model for Consumer Internet Shopping. *International Journal of Electronic Commerce*, 6(1), 75-91.
28. Lietuvos bankas. (2021). Payments statistics. Retrieved from <https://www.lb.lt/en/payments-statistics-2>

29. Lietuvos statistikos departamentas. (2019). Population and social statistics, population and its composition, resident population at the beginning of the year.
30. Lim, N. (2003). Consumers' perceived risk: Sources versus consequences. *Electronic Commerce Research and Applications*, 2(3), 216-228.
31. Lwin, M., & Williams, O. (2003). A Model Integrating the Multidimensional Developmental Theory of Privacy and Theory of Planned Behavior to Examine Fabrication of Information Online. *Marketing Letters*, 14(4), 257-272.
32. Lwin, M., Wirtz, J., & Williams, J. (2007). Consumer online privacy concerns and responses: A power–responsibility equilibrium perspective. *Journal of the Academy of Marketing Science*, 35(4), 572-585.
33. Mahmoodi, J., Čurđová, J., Henking, C., Kunz, M., Matic, K., Mohr, P., & Vovko, M. (2018). Internet Users' Valuation of Enhanced Data Protection on Social Media: Which Aspects of Privacy Are Worth the Most?. *Frontiers in psychology*, 9, 1516.
34. Malhotra, N. K., Sung S. Kim, & Agarwal, J. (2004). Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale, and a Causal Model. (2004). *Information Systems Research*, 15(4), 336-355.
35. Martínez-López, F., Luna, P., & José Martínez, F. (2005). Online shopping, the standard learning hierarchy, and consumers' internet expertise. *Internet Research*, 15(3), 312-334.
36. Miltgen, C. L., & Smith, H. J. (2015). Exploring information privacy regulation, risks, trust, and behavior. *Information & Management*, 52(6), 741–759.
37. Mindaugas D., Sigitas U., Ignas Z., Skare V., & Dalia L. (2020). Willingness to disclose personal information: how to measure it? *Inžinerinė Ekonomika*, 31(4), 487–494.
38. Miyazaki, A., & Fernandez, A. (2001). Consumer Perceptions of Privacy and Security Risks for Online Shopping. *Journal of Consumer Affairs*, 35(1), 27-44.
39. Morgan, R., & Hunt, S. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(3), 20-38.
40. Ooijen, I., & Vrabec, H. (2019). Does the GDPR Enhance Consumers' Control over Personal Data? An Analysis from a Behavioural Perspective. *Journal of Consumer Policy*, 42(1), 91-107.
41. Park, C., & Jun, J. (2003). A cross-cultural comparison of Internet buying behavior. *International Marketing Review*, 20(5), 534-553.
42. Park, J., Lee, D., & Ahn, J. (2004). Risk-Focused E-Commerce Adoption Model: A Cross-Country Study. *Journal of Global Information Technology Management*, 7(2), 6-30.

43. Peter, J., & Ryan, M. (1976). An Investigation of Perceived Risk at the Brand Level. *Journal of Marketing Research*, 13(2), 184-188.
44. Phelps, J., Nowak, G., & Ferrell, E. (2000). Privacy Concerns and Consumer Willingness to Provide Personal Information. *Journal of Public Policy & Marketing*, 19(1), 27-41.
45. Robinson, C. (2017). Disclosure of personal data in ecommerce: A cross-national comparison of Estonia and the United States. *Telematics and Informatics*, 34(2), 569-582.
46. Sheehan, K., & Hoy, M. (1999). Flaming, Complaining, Abstaining: How Online Users Respond to Privacy Concerns. *Journal of Advertising*, 28(3), 37-51.
47. Sipior, J., Ward, B., & Connolly, R. (2013). Empirically assessing the continued applicability of the IUIPC construct. *Journal of Enterprise Information Management*, 26(6), 661-678.
48. Statista, Shanhong Liu, 2019, Global cybersecurity spending 2017-2020. Retrieved from: <https://www.statista.com/statistics/991304/worldwide-cybersecurity-spending/>
49. Statista, Chevalier Stephanie, 2020, Distribution of online transactions in Peru as of January 2020, by payment method. Retrieved from: <https://www.statista.com/statistics/1133862/payment-methods-online-transactions-peru/>
50. Statista, (2020, November), Ecommerce Lithuania – Payment types in percent. Retrieved from: <https://www.statista.com/outlook/243/143/ecommerce/lithuania>
51. UNESCO Institute for Statistics, 2020
52. United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*, Online Edition. Rev. 1.
53. Weinberger, M., Zhitomirsky-Geffet, M., & Bouhnik, D. (2017). Factors affecting users' online privacy literacy among students in Israel. *Online Information Review*, 41(5), 655–671. <https://doi.org/10.1108/OIR-05-2016-0127>
54. Westin, A. (2003). Social and Political Dimensions of Privacy. *Journal of Social Issues*, 59(2), 431-453.
55. Wirtz, J., & Lwin, M. (2009). Regulatory Focus Theory, Trust, and Privacy Concern. *Journal of Service Research*, 12(2), 190-207.
56. Xu, H., Dinev, T., Smith, J., & Hart, P. (2011) "Information Privacy Concerns: Linking Individual Perceptions with Institutional Privacy Assurances," *Journal of the Association for Information Systems*: Vol. 12 : Iss. 12 , Article 1.



## **SUMMARY:**

### **INFLUENCE OF PRIVACY CONCERNS AND RISK BELIEFS ON WILLINGNESS TO DISCLOSE PERSONAL DATA IN ONLINE PURCHASING IN LITHUANIA AND PERU**

94 pages (including annexes), 40 tables, 1 graphic, 56 references

The main purpose of this Master thesis is to assess how privacy concerns, defined as Internet User's Information Privacy Concerns (IUIPC), and perceived risk beliefs may exert different influences in willingness to provide personal data in online purchasing according to a cross-cultural comparison, between Lithuania and Peru.

The work consists of three main parts or chapters: theoretical analysis, methodology of the research, and analysis of the empirical findings in the final chapter; thesis paper ends with recommendations and limitations included in the conclusion chapter, references and annexes.

The theoretical analysis presents four main subchapters:

In the first one, "Theoretical basis for personal data disclosure", it is presented the theoretical basis for personal data disclosure, where the main covariates of willingness to disclose (WTD) in a cross-cultural comparison are discussed: education, nationality, and ecommerce experience. In addition, the regulatory focus theory is included as background theory, and the social justice theory relationship with IUIPC dimensions is presented. Later, the trust-related factors are presented, and extra emphasis is exposed in the degree of Internet expertise effects over trust and WTD. Then, the privacy concern related factors are exposed and take relevant part in this study, the three dimensions from IUIPC (collection control, and awareness) and proper 10-item scale; and the risk beliefs due to its connection with both IUIPC and WTD. In the last part of this chapter, the main cultural differences are exposed across the Hofstede 6-Dimension Model; plus it was justify the cross-cultural comparison between, Lithuania, country with an advanced privacy legislation (GDPR), higher banking penetration indicators in population, bigger e-shopper community, high internet connection coverage, with a country like Peru, a country having "privacy security concerns" as the highest barriers to shop online, fear to fraud, lower banking indicators, and overall lower internet connectivity and smaller e-shopper community in proportion to populations.

In the second part, "Methodology of the research", a base model is developed with the inclusion of three main variables (IUIPC, Risk beliefs, WTD), two control variables, Ecommerce experience, Nationality, and the demographic factors of Education and Age. Main hypotheses include testing the positive or negative effects across main variables, moderation effect of Nationality over IUIPC and WTD, population from Peru will have stronger perceptions of risk

beliefs, ecommerce experience will be relevant for risk beliefs and WTD, and effects of Education level over WTD. The implementation of the 10-item IUIPC Scale, the 5-item Risk belief scale from Malhotra et al. study (2004), and the adapted 6-item WTD Scale from Robinson's study (2017), plus one item to measure Ecommerce experience, are included to test hypotheses. Data is collected via online survey through Google Forms, using snowball as the nonprobability sample method. Research instrument (questionnaire) is developed using the scales that had appropriate reliability in the earlier studies.

In the third part, empirical analysis is performed based on 453 valid questionnaires. The key elements of the sample structure include: the distribution of ages groups 18-21 (28.7%), 22-25 (25.6%), 26-29 (24.7%), 30 and older (19.2%), the majority of respondents are women, the mean age is 26.42 years of age, the majority have only bachelor education or fewer level of education, and majority of the total sample show overall more expertise in ecommerce. Reliability of used scales is appropriate: 10-item IUIPC Scale (Cronbach's Alpha = 0.815), 5-item Risk belief scale reduced to 4-item (Cronbach's Alpha = 0.874), and 6-item WTD scale reduced to 3-item (Cronbach's Alpha = 0.876). First, some effects over the main variables are explored, and insightful implications are obtained: age factor is relevant to determine IUIPC and WTD, and in addition, the age factor and level of education are relevant to determine risk beliefs. Results from the main hypotheses are expressed below: confirmed the positive effect of IUIPC over risk beliefs, the negative effect of risk beliefs over WTD, and the direct effect of IUIPC over WTD, and, therefore, the validation of the constructed model. Furthermore, Peruvians have stronger perceptions of risk beliefs and bigger internet user's privacy concerns (IUIPC) than Lithuanians respondents, accomplishing one of the main goals of this study, validate the cross-cultural comparison, and bringing further implications for country selection in future related studies.

Performed theoretical conclusions allow the author to suggest the inclusion of an antecedent like privacy awareness to IUIPC that can be moderated by terms of nationality. Some managerial implications show that privacy concerns about disclosing of personal data are an issue that affect many industries or even to a governmental level, and should be evaluated carefully, in order that companies pursuing collection of data during a sales funnel, not trigger risk beliefs that can actually deter than promote online shopping. In addition some limitations are presented: the usage of a adapted and reduced WTD scale, may have not bring better results than an individual information type of scale, and the difference between education systems between Peru and Lithuania, may have offered not so clean data for grouping education level.

## ANNEXES:

### 1. SPSS CALCULATIONS

#### a. From table 18:

##### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Differen ce	95% Confidence Interval of the Difference	
									Lower	Upper
IUIPC_A WARENE SS	Equal var. assumed	7,969	,005	-2,961	451	,003	-,29042	,09809	-,48318	-,09765
	Equal var. not assumed			-3,129	309, 898	,002	-,29042	,09282	-,47306	-,10778
IUIPC_CO LLECTIO N	Equal var. assumed	,137	,712	-2,689	451	,007	-,28761	,10696	-,49781	-,07741
	Equal var. not assu.			-2,684	268, 983	,008	-,28761	,10717	-,49861	-,07660

#### b. From table 22

##### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
WTD 3 Item Composite	Equal variances assumed	9,169	,003	,510	451	,610	,06106	,11978	-,17433	,29646
	Equal var. not assumed			,522	450,996	,602	,06106	,11699	-,16886	,29098

c. From table 37

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IUIPC 10 Item Composite	Equal var. assumed	,153	,696	-2,552	451	,011	-,19274	,07553	-,34117	-,04430
	Equal var. not assumed			-2,534	417,538	,012	-,19274	,07607	-,34227	-,04320

## 2. QUESTIONNAIRE (ENGLISH VERSION FOR LITHUANIA)

### **Introduction:**

INFLUENCE OF PRIVACY CONCERNS AND RISK BELIEFS ON  
WILLINGNESS TO DISCLOSE PERSONAL DATA IN ONLINE  
PURCHASING IN LITHUANIA AND PERU.

Dear participant,

My name is Giancarlo Farfan, I am a master's degree student from the Faculty of Economics and Business Administration at Vilnius University. I am conducting research on the willingness to disclose data in an online purchase scenario in Lithuania and Peru.

Please only fill the survey if your principal place of residence is in Lithuania. It will take you up to 10 minutes to complete it. All your answers are completely anonymous. Answers for all the questions are required. If you have any doubts about the survey, you can send me an email at [alberto.valencia@evaf.stud.vu.lt](mailto:alberto.valencia@evaf.stud.vu.lt)

I really appreciate your support in completing this survey. Thank you for your time and sincere answers!

### - **Questionnaire:**

What is the country of your permanent living?

Lithuania

Other

\* (In the case the respondent picks the option "Other", he/she will be redirect to the end of the survey).

1. Please, express your opinion regarding your personal proficiency and experience in purchasing goods or services online. (Where 1 = beginner, and 7 = expert)

Beginner 1  | 2  | 3  | 4  | 5  | 6  | 7  Expert

Below are several statements about online privacy. Please, respond to each of them on a scale from 1 (totally disagree) to 7 (totally agree). There are no right or wrong answers, we are just interested in your opinion.

2. Consumer online privacy is really a matter of consumers' right to exercise control and autonomy over decisions about how their information is collected, used, and shared.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

3. Consumer control of personal information lies at the heart of consumer privacy.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

4. I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a marketing transaction.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

Once again, below are several statements about online privacy. Please, respond to each of them on a scale from 1 (totally disagree) to 7 (totally agree). There are no right or wrong answers, we are just interested in your opinion.

5. Companies seeking information online should disclose the way the data are collected, processed, and used.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

6. A good consumer online privacy policy should have a clear and conspicuous disclosure.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

7. It is very important to me that I am aware and knowledgeable about how my personal information will be used.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

Below are several statements about the online collection of personal data. Please, respond to each of them on a scale from 1 (totally disagree) to 7 (totally agree). There are no right or wrong answers, we are just interested in your opinion.

8. It usually bothers me when online companies ask me for personal information.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

9. When online companies ask me for personal information, I sometimes think twice before providing it.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

10. It bothers me to give personal information to so many online companies.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

11. I am concerned that online companies are collecting too much personal information about me.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

Below are several statements about the disclosure of personal information. Please, respond to each of them on a scale from 1 (totally disagree) to 7 (totally agree). \*Consider “personal information” as name,

home address, personal phone number, home phone number, or personal identification number.

12. In general, it would be risky to give personal information to online companies.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

13. There would be high a potential for loss associated with giving personal information to online firms.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

14. There would be too much uncertainty associated with giving personal information to online firms.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

15. Providing online firms with personal information would involve many unexpected problems.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

16. I would feel safe giving personal information to online companies.

Totally disagree 1  | 2  | 3  | 4  | 5  | 6  | 7  Totally agree

When purchasing goods or services online, people are asked to provide personal information in order to complete the purchase. Please indicate your level of willingness to share each of the following types of personal information online when purchasing goods or services. (Where 1 = not willing, and 7 = very willing)



17. Contact information

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

18. Payment information

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

19. Life history information

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

20. Work-related information

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

21. Online account information

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

22. Financial/medical history info

Not willing 1  | 2  | 3  | 4  | 5  | 6  | 7  Very willing

23. How old are you? (Enter only numbers, e.g.: 20)

-----

24. What is your gender?

Male

Female

25. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.

a) No schooling completed

b) High school graduate, diploma or the equivalent

c) Some college credit, no degree

- d) Trade/technical/vocational training
- e) Bachelor's degree
- f) Professional degree
- g) Master's degree
- h) Doctorate degree

### 3. QUESTIONNAIRE (SPANISH VERSION FOR PERU)

#### **Introduction:**

INFLUENCIA DE LAS PREOCUPACIONES SOBRE LA PRIVACIDAD Y CREENCIAS DE RIESGO EN LA VOLUNTAD DE DIVULGAR DATOS PERSONALES EN COMPRAS EN LÍNEA EN LITUANIA Y PERÚ.

Querido participante,

Mi nombre es Giancarlo Farfan, soy estudiante de maestría de la Facultad de Economía y Administración de Negocios de la Universidad de Vilna. Estoy realizando una investigación sobre la voluntad de divulgar datos en un escenario de compra en línea en Lituania y Perú.

Por favor sólo llena la encuesta si tu lugar principal de residencia es en Perú. Te va a tomar 10 minutos completarlo. Todas las respuestas son completamente anónimas. Todas las preguntas requieren una respuesta. Si tuvieras alguna duda sobre la encuesta, puedes enviarme un correo a: [alberto.valencia@evaf.stud.vu.lt](mailto:alberto.valencia@evaf.stud.vu.lt)

Realmente agradezco tu apoyo completando este cuestionario. ¡Muchas gracias por tu tiempo y tus respuestas sinceras!

#### - **Questionnaire:**

¿Cuál es el país de tu residencia permanente?

- Perú
- Otro

1. Por favor, expresa tu opinión con respecto a tu habilidad y experiencia personal adquiriendo productos o servicios por Internet. (Donde 1 = principiante, y 7 = experto)

Principiante 1  | 2  | 3  | 4  | 5  | 6  | 7  Experto

A continuación, vas a encontrar varios enunciados sobre la privacidad en línea. Por favor, responde a cada uno de ellos en una escala del 1 (totalmente en desacuerdo) hasta el 7 (totalmente de acuerdo). No hay respuestas correctas o incorrectas, solo nos interesa tu opinión.

2. La privacidad en línea del consumidor es realmente una cuestión del derecho de los consumidores a ejercer control y autonomía sobre las decisiones sobre cómo se recopila, utiliza y comparte su información.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

3. El control de la información personal se encuentra en el corazón de la privacidad del consumidor.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

4. Creo que la privacidad en línea se ve invadida cuando se pierde el control o se reduce involuntariamente como resultado de una transacción de marketing.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

Una vez más, vas a encontrar varios enunciados sobre la privacidad en Internet. Por favor, responde a cada uno de ellos en una escala del 1 (totalmente en desacuerdo) hasta el 7 (totalmente de acuerdo). No hay respuestas correctas o incorrectas, solo nos interesa tu opinión.

5. Las empresas que solicitan información en línea deben revelar la forma en que recopilan, procesan y utilizan los datos.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

6. Una buena política de privacidad del consumidor en línea debe tener una divulgación clara y visible.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

7. Es muy importante para mí estar consciente y tener conocimiento sobre cómo se utilizará mi información personal.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

A continuación, vas a encontrar varios enunciados sobre la recopilación en línea de datos personales. Por favor, responde a cada uno de ellos en una escala del 1 (totalmente en desacuerdo) hasta el 7 (totalmente de acuerdo). No hay respuestas correctas o incorrectas, solo nos interesa tu opinión.

8. Usualmente me molesta que las empresas me pidan información personal por Internet.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

9. Cuando las empresas en línea me piden información personal, a veces lo pienso dos veces antes de proporcionarla.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

10. Me molesta dar información personal a tantas empresas en línea.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

11. Me preocupa que las empresas en línea estén recopilando demasiada información personal sobre mí.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

A continuación, vas a encontrar varios enunciados sobre la divulgación de información personal. Por favor, responde a cada uno de ellos en una escala del 1 (totalmente en desacuerdo) hasta el 7 (totalmente de acuerdo). \* Considera como “información personal”: nombre, dirección de casa, número de celular, número de teléfono fijo o número de identificación personal.

12. En general, sería riesgoso brindar información personal a empresas en línea.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

13. Habría un alto potencial de pérdida asociado con la entrega de información personal a empresas en línea.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

14. Habría demasiada incertidumbre asociada con proporcionar información personal a empresas en línea.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

15. Proporcionar información personal a empresas en línea implicaría muchos problemas inesperados.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

16. Me sentiría seguro al dar información personal a empresas en línea.

Totalmente en desacuerdo 1  | 2  | 3  | 4  | 5  | 6  | 7  Totalmente de acuerdo

Al comprar bienes o servicios en línea, se solicita a las personas que proporcionen información personal para completar la compra. Indique su nivel de disposición para compartir cada uno de los siguientes tipos de información personal al comprar bienes o servicios en línea. (Donde 1 = no está dispuesto, y 7 = muy dispuesto)

17. Información de contacto

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

18. Información del pago

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

19. Información de historia de vida

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

20. Información relacionada con el trabajo

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

21. Información de la cuenta de usuario en línea

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

22. Información del historial médico / financiero

No está dispuesto 1  | 2  | 3  | 4  | 5  | 6  | 7  Muy dispuesto

23. ¿Cuál es tu edad? (Ingresa solo números, ejemplo: 20)

-----

24. ¿Cuál es tu género?

Masculino

Femenino

25. ¿Cuál es el título o nivel académico más alto que ha completado? Si está actualmente inscrito, el título más alto recibido.

- a) Sin escolaridad completada
- b) Graduado de escuela secundaria, diploma o el equivalente.
- c) Algunos créditos universitarios, sin título
- d) Formación comercial / técnica / vocacional
- e) Bachillerato
- f) Título de grado / profesional
- g) Título de Maestría
- h) Doctorado