

## SMART CONSUMER – A FIRST QUALITATIVE STEP FOR A SCALE DEVELOPMENT

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**Annotation.** When looking into the exiting literature on the topic of smart consumer, we observed that there is a lack in having a clear definition of it, given the fact that the meaning of the term changed over years together with the emerge of technological advancement. In order to come with a broad understanding, we designed the first steps into the creation of a scale. The research combines and proposes multiple quantitative and qualitative methods like the Delphi method, mnemonic scores, pilot surveys, chromatic tables, and Cronbach alpha computations. The research takes you through all the stages in the creation of a scale. The items in the scale were generated by having semi-structured in-depth interviews with 21 experts in IT,C and Marketing fields. The items were generated from the in-depth interviews and are structured into dimensions. For each item in every dimension, we calculated Cronbach alpha and received a .95, which indicates an excellent reliability for the scale.

**Keywords:** smart consumer, scale development, Delphi method, e-communities, influencers, social media experts, generation Y, generation Z.

**JEL classification:** C18, D11, D64, D91, L81, M14, M19, O30, P2.

### Introduction

This article was created as a response to a need, since there is no scale which indicates what is the profile of a smart consumer. The scale will help develop further methods for describing to what degree a person is a smart consumer, depending on how they rate on the scale.

The actual state of knowledge and definition of a smart consumer comes down to people which are conscientious about the products they buy, making purchasing decision based on information that they gather online and are aware of the environmental impact of their buying decision.

Nowadays, the word “smart” appears in a lot of devices that we are using daily, like for example smartphones, smartwatches, smart cars etc. Since, in the existing literature, there is a void of such a scale that could measure the self-perception of a smart consumer we decided to propose a way in doing it.

Since both generation Y and Z are digital natives, we decided to test our scale regarding smart consumers on them, since technology advancement is what transformed the term during time. Generation Z is the first generation that was subjected to significant technological advancements such as internet, smartphones, and social media (Al Aqad, 2020). Therefore, they are highly skilled in using technology and keep their devices in close proximity. At the same time, they are more likely to have friends from different racial, ethnic, and cultural backgrounds, and are more accepting of different lifestyles and identities.

They are interested and passionate about entrepreneurial pathways than previous generations. They are driven by a desire to create their own paths in life and are not afraid to take risks to achieve their goals (Berkup, 2014). They are focused on achieving tangible results, they value autonomy and self-sufficiency, and are less likely to rely on others for support. Gen Z are more “connected” to the world around them and are more likely to have friends and contacts from all over the globe (Koulopoulus, Keldsen, 2016).

On the other side, generation Y (the Millennials) are the predecessors of generation Z. Widely accepted as individuals born between 1981 and 1996, they been described as the first global generation and the first generation that grew up in the Internet age. The generation is generally marked by elevated usage of and familiarity with the Internet, mobile devices, and social media, which is why they are sometimes termed digital natives (Coombes, 2009).

In order to develop the scale, we searched the exiting speciality literature and extracted 10 dimensions that are describing smart consumers. Based on these dimensions, we created an interview guide which was applied to 21 experts. From the gathered information, we used mnemonic scores and chromatic tables and highlighted the keywords mostly used by both specialists. From these keywords, statements or items were formed for each dimension. After creating the first draft of the scale, we applied it on a small sample size, as a pilot survey. Statistical computation was applied to the answers received, mainly used was Cronbach alpha. To validate the scale, we used another method called Q-sorting, where experts were asked again whether the items/statements are belonging to the right dimension or should be moved somewhere else. The scale development process stops here for this research, but we take into consideration continuing it with a quantitative research which has as a scope, the validation of the final resulted instrument.

## 1. Literature Review

In our vision, a smart consumer is a person who makes an informed purchase decision, based particularly on data obtained from the online environment. He is an expert in their search, he knows how to choose the most relevant ones, the information found online helps him make the best decision. He is a digital savant, spends a lot of time online, has active Social Media accounts, follows influencers, owns and uses multiple smartly connected devices that help him in his purchasing decision. Because that's how we view smart consumers, we searched through the existing speciality literature. We found out 10

dimensions which smart consumers can be identified through. These dimensions were extracted thoroughly after examining and analysing the existing speciality literature. The 10 dimensions are E-communities, Social Media experts, Influencers, Smart Technology Adopters, E-WOM, E-influencers, E-brand-equity, E-servicescapes, E-identity, Experience co-creators. They were selected because they explain in every aspect what is a smart consumer. In the following paragraphs the dimensions will be explained.

### **1.1 E-Communities**

First dimension extracted from existing literature which defines a smart consumer is E-community, which stands for a virtual community (Mari, Tomaiuolo, 2008). These communities are based on communication platforms from the World Wide Web (Scott, Johnson, 2005).

E-communities (online communities) are groups of individuals that share common interests and interact with one another through the internet (Preece, Maloney-Krichmar, 2003). They can take many forms, including forums, social media groups, chat rooms and are focused on a wide range of topics, such as hobbies, interests, or specific issues (Preece *et al.*, 2003).

One of the key features of e-communities is that they allow individuals with similar interest to connect and engage with each other, regardless of geographic location (Kolbitsch, Maurer, 2006). This provides a benefit for those who have difficulties forming connections in person, or for people that need to follow the latest updates from their domain of interest.

E-communities provide a platform for individuals to share information and knowledge, exchange ideas and provide support to one another. The members can share tips, tutorials, and messages related to their common interests (Kannan *et al.*, 2000). Most e-communities have dedicated moderators or leaders who help to facilitate discussions and ensure that interactions are respectful and productive (Berge, 2013). For example, many Facebook group admins oversee who is accepted in the group and at the same time, it manages posts, or who can post. They can prove to be a good place to find like-minded people to collaborate on projects or to seek out professional advice (Eastman *et al.*, 2002).

Additionally, some e-communities can have a specific theme or purpose, some can have a more commercial aspect, where members can buy and sell items, promote their business or services, or even offer employment opportunities (Iskoujina *et al.*, 2017).

There is also a social aspect to e-communities. Many individuals are positively impacted by the sense of belonging, social support, and community information sharing which can be found in them (Abdullah, Zakaria, 2010).

However, it's important to highlight some negative effects that e-communities can have, such as cyberbullying, fake information, and other forms of online harassment. It's essential for users to be cautious and be aware of potential risks and to report any suspicious or harmful behaviour (Bretschneider, 2016). These effects are usually seen long after they occur and can be harmful, especially for a more sensitive category of the population, which are children and the elderly.

E-communities come as a solution to the inconveniences of regular physical communities. One solved problem was that of reaching – now you can reach your community in a matter of seconds. The highest shifting rate from physical communities to online communities happened during the COVID pandemic (Wang *et al.*, 2021).

### **1.2 Social Media Expert**

The second dimension which defines a smart consumer is social media expert. Social media experts are individuals or professionals who have a deep understanding of social media platforms and how to effectively use them for a variety of purposes (Zhang *et al.*, 2012). They are experts in developing and implementing social media strategies, create and curate content, and engage with audiences on various platforms such as Facebook, Instagram, Twitter, LinkedIn, TikTok, and others (Zhang *et al.*, 2012). Through this dimension there were created new types of jobs. This is a rather new kind of employment which encourages remote jobs and flexible working hours which has become very attractive and popular career path for young adults. A social media expert is also someone who knows how to promote brands in the online for their customers using social media (Lee *et al.*, 2015).

Social media experts can use data and analytics to measure the effectiveness of their strategies, they are using the collected data to boost their reach to the customer. At the same time, they are able to identify trends and emerging platforms (Fan, Gordon, 2014).

Some of the key responsibilities of social media experts include:

- Developing and implementing social media strategies (Kaplan, Haenlein, 2010)
- Creating and curating engaging and relevant content (Jaakonmäki *et al.*, 2017)
- Managing and growing social media accounts (Neill, Moody, 2015)
- Engaging with audiences and building online communities (Neill, Moody, 2015)
- Analysing and interpreting data and metrics (Peters *et al.*, 2013)
- Staying updated with the latest social media trends and best practices (Briones *et al.*, 2011)
- Managing online reputation and crisis communication (Jin *et al.*, 2014)
- Managing paid social media campaigns and advertising (Dwivedi *et al.*, 2015)

Social media experts can work in a variety of settings, since the characteristics of the job allow it, such as in-house at a company, as part of an agency, or as freelancers (Lee *et al.*, 2015). They may also specialize in a specific industry or sector, such as healthcare, education, entertainment, or wellness.

Social media experts have become an essential part of the business and marketing landscape, as social media platforms have become an integral way for companies to connect with their customers and build their brand (Alalwan *et al.*, 2017). They can help businesses and organizations to increase their visibility, reach new audiences, and build stronger relationships with their customers (Zhang *et al.*, 2012).

### **1.3 Smart Technology Adopter**

The third dimension which defines a smart consumer is smart technology adopter. A smart technology adopter is quick to adopt new and emerging technologies and is able to effectively integrate them into their daily life and work (Godoe, Johansen, 2012). They are usually tech enthusiasts that spend a lot of their time trying to get information about the newest product concepts or unreleased technology. They quickly understand the potential benefits and limitations of new technology and are able to make informed decisions about whether and how to use it.

Smart technology adopters are often early adopters, meaning they are willing to sit in lines for a long period of time or set tents in front of stores just to be the first ones to try out new technologies. Their strong interest in technology is undeniable and are always on the lookout for new and innovative products and services. They adapt very fast regardless of the degree of technological change and are not afraid to take risks to gain the benefits of new technology (Wright, 2019).

Another characteristic of a smart technology adopter is the reason behind why they adopt a new technology and that is to reduce their carbon print on the environment. Smart technology adopters are aware of the environmental challenges that the planet Earth is facing right now and are willing to go the extra mile and act.

Because of their constant presence online and desire for better products for everyone, they are willing to take time to write in-depth reviews about their recent acquisitions and read the reviews that others' left before them. When writing reviews, they include their thoughts and feelings and are glad to let others know if a product is worth buying or not.

Smart technology adopters can revolve around a single technology ecosystem (such as Apple, Samsung, Huawei etc.) or can adopt devices from multiple technology ecosystem. These ecosystems can be described as multiple devices that serve multiple purposes developed by the same brand and designed to connect easily with each other. Whether they stay true to one ecosystem or not, they integrate new technology effortlessly into their daily lives and work (Morris, Venkatesh, 2000).

Even if integrating technology into their life may sometimes prove troublesome, they are always on the lookout for potential solutions or alternatives and able to troubleshoot and solve problems that were not expected (Issa *et al.*, 2017). As a consequence of this, problem solving skills that were not here a decade ago, have been developed and acquired by people that adopted technology into their daily lives nowadays.

Smart technology adopters can be found in all industries, and they are able to bring significant benefits to their organizations by increasing efficiency, productivity, and competitiveness (Hwang *et al.*, 2022). Additionally, they can serve as a source of information and support for other employees in their organization who may be less comfortable or not familiar with technology (Huda, 2019).

However, it's important to note that being a smart technology adopter doesn't mean always being the first to buy new technologies, but rather weighing all the factors implied by the purchase, such as the costs, ease of use, design, reliability, and the overall impact of the technology on oneself and the society (Golant, 2017).

#### **1.4 Influencers**

The fourth dimension which defines a smart consumer is influencers, they are individuals who have a strong online presence and a great number of followers on social media platforms such as Instagram, YouTube, TikTok, and others (Młodkowska, 2019). They are known for creating and sharing content related to specific topics or interests (such as beauty, fashion, lifestyle, travel etc.) (Casaló *et al.*, 2020), building audiences which, later on, can be monetized. Being an influencer has become modern-day job, their market valued being at 16.4 billion \$ in 2022. This amount has doubled since 2019. They are getting their audiences through two types of content creation educational and entertaining. Although influencers

tend to diversify and extend their interest areas, usually they stick to their main area and don't dwell on distant or unrelated topics.

Reaching and maintaining a stable audience is the main priority for a growing influencer, this process is rather slow and time consuming in early stages but has an exponential growth in time.

Some of the key characteristics of influencers include:

- Having a large and engaged community of followers on social media platforms (De Veirman *et al.*, 2017)
- Creating and sharing high-quality and relevant content (Andričić, 2020)
- Being considered an expert or authority in their niche or field (Moore *et al.*, 2018)
- Building trust and credibility with their audience (Xiao *et al.*, 2018)
- Having the ability to influence their followers' purchasing decisions, opinions, and behaviors (Fakhreddin, Foroudi, 2022)
- Having a strong personal brand (Lou, Yuan, 2019)

Working with influencers to promote products and services has become an important part of the marketing landscape, as many companies and brands have begun to adopt this strategy because it has very high success rate and it is rather new in comparison with the conventional marketing promo strategies (Lou, Yuan, 2019). Influencers help to increase brand awareness, reach new audiences, build stronger relationships with customers, and add credibility and authenticity to a brand's message (Uzunoglu, Kip, 2014).

However, it's important to note that not all influencers are created equal and it's important to evaluate their authenticity, engagement rate, and relevance to the brand's target audience before partnering with them (von Mettenheim, Wiedmann, 2021). Additionally, it's important to disclose any sponsored content as per the regulations of the respective platform and country, to maintain transparency and credibility (Beckert, Koch, 2022).

Influencers are often considered experts in their niche or field, and their followers look to them for advice and inspiration (Nandagiri, Philip, 2018).

## 2. E-WOM

The fifth dimension which defines a smart consumer is E-WOM, which is an acronym for electronic word-of-mouth, refers to the sharing of information, opinions, and recommendations about products or services through electronic channels such as social media, online forums, and review sites (Yayli, Bayram, 2012). It is a form of online communication that allows individuals to share their experiences and insights with others, and to seek out information and advice from others (Kumari, Verma, 2018). There are two E-WOM factors that can have a major influence on sale level. The first one is volume which can be described as the quantity of products sold. For many customers, the sales figures are a very important criteria when considering making a purchase. This can have a snowfall effect since a high number of product sales could also increase the sales furthermore. The second factor is valence which is a term meant to describe a quantifiable method to rate the product. The most common way is the five-star rating system which is widely used by many e-vendors. This rating system provides customers'

access to other customer's purchasing experience and a lot of people are considering these online opinions when making a purchase decision.

The impact of E-WOM can be significant for consumers' purchasing decisions, as it allows them to access a wide range of information and perspectives that may not be available through traditional advertising or marketing channels (Erkan, Evans, 2016). It also helps with the process of trust building and credibility for a brand or product, as it allows potential customers to hear first-hand accounts of others' experiences (El-Baz *et al.*, 2018). However, it can also have a negative impact if the information shared is negative or false (Cheung, Thadani, 2012).

Companies and brands awareness of E-WOM has led them to actively monitor and engage in online conversations about their products or services, responding to customer inquiries and feedback, and encourages satisfied customers to share their positive experiences online (Sun *et al.*, 2019). This can prove a very effective strategy regarding reputation management and crisis communication strategies, when the impact of E-WOM is negative and the respective companies are suffering financial losses (Luo, Chien, 2021).

E-WOM can take many forms, including:

- Social media posts and reviews (Lee, Youn, 2009)
- Online forums and discussion boards (Adila *et al.*, 2020)
- Blogs and vlogs (Bhaiswar *et al.*, 2021)
- Customer reviews on e-commerce websites (Yan *et al.*, 2016)
- Online ratings and testimonials (Yaylı, Bayram, 2012)

This dimension refers to the fact that a person follows the ideas that spread online, knows certain tips and tricks from online (e.g. which is a good restaurant, etc.), passes on and expresses his ideas online.

In summary, E-WOM is the sharing of information, opinions and recommendations about products or services through electronic channels, it has a significant impact on consumers' purchasing decisions and can have a positive or negative impact on a brand or business (Izogo *et al.*, 2023). Companies and brands can manage E-WOM by monitoring, engaging, and encouraging positive E-WOM and by having reputation management and crisis communication strategies in place (Tran, Strutton, 2020).

## **2.1 E-information**

The sixth dimension which defines a smart consumer is E-information and consists of any type of information, message or data which is transmitted via online channels. At the same time, E-information refers to information that is stored, accessed from anywhere in the world (Marchionini, 1995), and exchanged electronically (Quadri, 2012). It encompasses a wide range of digital content, including text, images, videos, audio, and other forms of multimedia. The main advantages of E-information are the ease of access, the fact that they can be stored and shared in different formats, it is time saving compared to offline information and doesn't require a physical form (Jain, 2013).

Most common types of e-information are:

- Websites and online articles (Li, Crane, 1996)

- PDF documents (Liew, Foo, Chennupati, 2001)
- E-books and digital publications (Staiger, 2012)
- Email and instant messaging (Jannsen, 2009)
- Social media posts and comments (Badieh Habib Morgan, van Keulen, 2014)
- Online databases and archives (Hodge, 2005)
- Virtual and augmented reality content (Kim, Lee, 2016)
- Streaming media such as music, movies, and TV shows (Hou, Li, 2005)

E-information has completely revolutionized the way that people act when searching for information. Since ancient times, people would resort to their physical sources of information, such as free speech, books, or intellectuals when in need of an answer or a solution. Nowadays, this process is simplified or even removed altogether since many answers are just a search away. All that is required is a device that can be linked to an internet connection and the connection itself. Therefore, E-information has become an integral part of our daily lives, as it provides easy access to a wide range of information and resources (Tsakonas, Papatheodorou, 2006) and many people relying only on this process. This phenomenon could be easily spotted on younger generations that never had a chance to experience only the offline process.

There is a certain degree of influence in the way that businesses and organizations are operated that is caused by E-information, since it can provide a more efficient channel for communication (Goethals *et al.*, 2005). The fast spread of information about a certain entity allows it to reach a very high number of people in a relatively short period of time. This may be an advantage for both the customer and seller because they can become aware of each other and make more informed purchase decisions.

However, it is important to note that not all e-information is accurate, reliable, or trustworthy, and it is critical to evaluate the source and credibility of the e-information before using it for decision making or sharing with others (Tuzahra, 2021). Additionally, the abundance of e-information also leads to information overload, where it becomes difficult to go through the vast amounts of information and find the relevant pieces (Melinat *et al.*, 2014). The online part containing information might be an unsafe environment since it's hard to distinguish between what's fake and real. But this topic has been brought up more and more to the attention of people, so, navigating through it and knowing what's good or bad it's a skill a smart consumer should have.

## 2.2 E-Brand-Equity

The seventh dimension which defines a smart consumer is E-brand-equity which refers to the value that a brand holds in the digital or online space (Rios, Riquelme, 2010). It is the perception of value that consumers associate with a brand because of their interactions and experiences with it through digital channels, such as websites, social media, and e-commerce platforms (Christodoulides *et al.*, 2006). A form of interaction can be through an online platform where people are able to compare prices and specifications in the online environment. There are certain tools which help us with comparing prices, characteristics etc.

E-brand equity is built through a variety of factors, including:



- Brand awareness: the degree to which consumers are familiar with a brand (Sasmita, Suki, 2015)
- Brand loyalty: the degree to which consumers have a strong attachment to a brand (Sasmita, Suki, 2015)
- Brand associations: the perceptions and associations that consumers have with a brand (Buil et al., 2013)
- Brand performance: the degree to which a brand meets or exceeds consumer expectations (Oliveira-Castro et al., 2008)
- Brand personality: the personality and characteristics that consumers associate with a brand (Loureiro et al., 2014)

E-brand equity can have a significant impact on a brand's success in the digital space, as it can influence consumer buying decisions, increase brand loyalty, and improve brand awareness and reputation (Zhang *et al.*, 2015).

Companies can build and manage their e-brand equity by investing in digital marketing and e-commerce strategies, creating engaging and relevant content, and actively managing their online reputation (Kim *et al.*, 2002). They can also invest in customer relationship management, and by measuring and analysing their e-brand equity through metrics like website traffic, social media engagement, and customer satisfaction (Christodoulides *et al.*, 2006).

E-brand equity is important because it can affect the brand's visibility, recognition, and perceived value among consumers, which can lead to increased sales and revenue (Gwee *et al.*, 2002). Additionally, it can also affect the brand's ability to charge a premium price and to expand into new markets.

In summary, E-brand equity is the value that a brand holds in the digital or online space, it is built through a variety of factors and can have a significant impact on a brand's success in the digital space (Christodoulides *et al.*, 2006). Companies can build and manage their e-brand equity by investing in digital marketing and e-commerce strategies, creating engaging and relevant content, and actively managing their online reputation (Ibeh *et al.*, 2005).

### **2.3 E-Identity**

The eighth dimension which defines a smart consumer is E-identity, also known as digital identity, it refers to the online representation of an individual or organization (Sullivan, 2018). It encompasses the information, attributes, and characteristics that are associated with a person or organization, and that are used to identify them online (Marwick, 2013). Nowadays, for most website people are asked to create an identity or complete a form with personal information. Purchases cannot be completed online if an identity is not provided. This applies to social media, email services, e-commerce platforms, gaming platforms, shipping services etc.

E-identity can include things like:

- Name and contact information
- Profile picture and other images

- Social media profiles
- Personal or professional website
- Online reviews and ratings
- Digital footprint (all the data that an individual or organization leaves behind when they interact with digital platforms)

E-identity plays an important role in how we interact and conduct business online. It is used to authenticate and authorize access to online services and resources, and to establish trust and credibility in online interactions (Ma, Agarwal, 2007).

Individuals and organizations can be represented in the online by creating and maintaining an e-identity using social media profiles, personal or professional websites, and by actively managing their online image (Kirwan, Mc Guckin, 2013). Protecting e-identity becomes a main priority because it can be highly susceptible to cybersecurity attacks. As a protection method, it is recommended the usage of strong passwords and taking security measures (Agrawal, 2021). Also, people should be cautious about their personal information shared online because it can have an impact on their privacy, security, and safety, as well as their personal and professional life (Murrell, Einspruch, 2008).

A well-established e-identity of an organization or individual helps with the way they are perceived, the way they interact with online and how they establish trust and credibility in online interactions (Walczak, Gregg, 2009).

In summary, E-identity, also known as digital identity, refers to the online representation of an individual or organization, it encompasses the information, attributes, and characteristics that are associated with a person or organization, and that are used to identify them online (Cover, 2015). Individuals and organizations can create and manage their e-identity by creating and maintaining social media profiles, personal or professional websites, and by actively managing their online reputation (Yang, 2015). They can also take steps to protect their e-identity by using strong passwords and security measures, and by being cautious about the information they share (Camenisch *et al.*, 2012).

## **2.4 E-Servicescapes**

The ninth dimension which defines a smart consumer is E-servicescapes which refer to the virtual or digital environment in which an online service or experience takes place (Lee, Jeong, 2012). This includes the physical and virtual elements that are associated with the service, such as website design, virtual customer service, and online payment systems (Colm, Prestini, 2022). In order to have an accurate assessment on the experience provided by an e-servicescapes, an individual must have certain knowledge about website responsiveness, how easy is it to navigate through it and whether it misses anything. In most cases, the first interaction of a customer with a brand or company relies heavily on e-servicescapes because people are used to search for everything online. It is very likely that among their search results to find the website or social media page. The first encounter with a brand's presence online is very important because that's the moment when the customer decides whether to trust the website or not.

E-servicescapes encompass the various touchpoints that customers have with a brand or business online, including:

- Website design and user experience
- Virtual customer service (chatbots and live chat)
- Online payment systems and security features
- Online reviews and ratings
- Social media presence
- Email and SMS marketing
- Mobile app design and functionality

Because E-servicescapes play a critical role in shaping customers' perceptions of a brand or business, can have a significant impact on their satisfaction and loyalty (Tankovic, Benazic, 2018), companies invest in a well-designed e-servicescape which can improve the customer experience, increase trust and credibility, and ultimately drive sales (Wu *et al.*, 2017). The management and improvement of and e-servicescape can be made by designing and testing their website (Kageyama, 2018), virtual customer service and online payment systems, monitoring and responding to online reviews and ratings, and actively managing their social media presence and marketing campaigns (Mu *et al.*, 2011). Investing in customer analytics and user research to gather feedback and insights on how to improve the e-servicescape represents another effective strategy adopted by companies (Loukis *et al.*, 2012).

In summary, E-servicescapes refer to the virtual or digital environment in which an online service or experience is provided. It encompasses many touchpoints that customers have with a brand or business online (Lee, Jeong, 2012). They play a critical role in shaping customers' perceptions of a brand or business and can have a significant impact on their satisfaction and loyalty (Tankovic, Benazic, 2018).

### **2.5 Experience co-Creators**

The tenth dimension which defines a smart consumer is Experience co-creators, which are individuals or groups of individuals who actively participate in the design process and delivery of a product, service, or experience (Campos *et al.*, 2018). They collaborate with the provider of the service or experience by offering their feedback in how a product should be, in order to co-create a customized and personalized service that meets their needs and preferences (Loef *et al.*, 2017). These are the people who like to have control over their experience online. Experience co-creators are often referred to as customers, but they can also be employees, partners, or other stakeholders (Minkiewicz *et al.*, 2014).

Some of the key characteristics of experience co-creators include:

- Active engagement in the design and delivery of the service or experience
- Input and feedback in the decision-making process
- Collaboration with the service or experience provider
- Customization and personalization of the service or experience
- Sense of ownership and responsibility for the outcome

Experience co-creation can bring significant benefits for both the provider and the co-creator, the last can have a more personalized and satisfying experience, while the provider can increase customer loyalty, satisfaction, and repeat business (Vega-Vazquez *et al.*, 2013). Additionally, experience co-creation can also lead to new and innovative ideas, solutions and increase revenue.

Experience co-creation can be applied in various industries and sectors, such as tourism, retail, healthcare, and many more. Companies and organizations can encourage and facilitate experience co-creation by actively engaging with customers and stakeholders, providing feedback mechanisms, and investing in customer analytics and research (Rowley *et al.*, 2007).

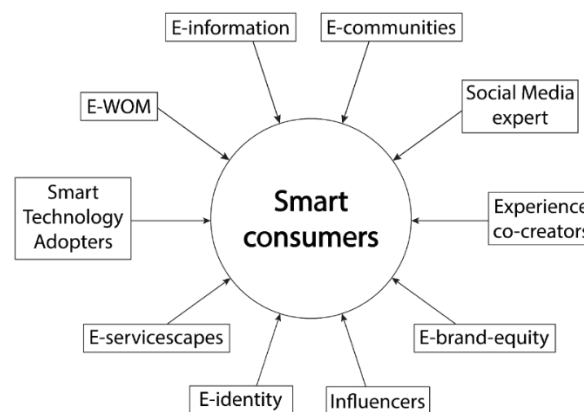
In summary, Experience co-creators are individuals or groups of individuals who actively participate in the design process and delivery of a product, service or experience, they collaborate with the provider of the service or experience to co-create a customized and personalized service that meets their needs and preferences (Campos *et al.*, 2018). Experience co-creation can bring significant benefits for both the provider and the co-creator and can be applied in various industries and sectors (Jaakkola *et al.*, 2015). Companies and organizations can encourage and facilitate experience co-creation by actively engaging with customers and stakeholders, providing feedback mechanisms, and investing in customer analytics and research (Alexander, Jaakkola, 2015).

### 3. Methodology

The scope of this research is instrumental, so this research aims to build a scale that will be used further in quantitative research.

The objective of this research are the generation of the most relevant items which characterize the 10 dimensions (*Figure 2*).

- O1. Generating the most relevant items that characterize **E-communities** dimension.
- O2. Generating the most relevant items that characterize **Social Media expert** dimension.
- O3. Generating the most relevant items that characterize **Smart Technology Adopters** dimension.
- O4. Generating the most relevant items that characterize **Influencers** dimension.
- O5. Generating the most relevant items that characterize **E-WOM** dimension.
- O6. Generating the most relevant items that characterize **E-information** dimension.
- O7. Generating the most relevant items that characterize **E-brand-equity** dimension.
- O8. Generating the most relevant items that characterize **E-identity** dimension.
- O9. Generating the most relevant items that characterize **E-servicescapes** dimension.
- O10. Generating the most relevant items that characterize **Experience co-creators** dimension.



Source: own processing in Photoshop.

Figure 2. Research Diagram

### 3.1 Method and Instrument

The methods used are semi-structured in-depth interviews using the Delphi method, together with a pilot survey which helped determine the reliability of the scale using Cronbach alpha.

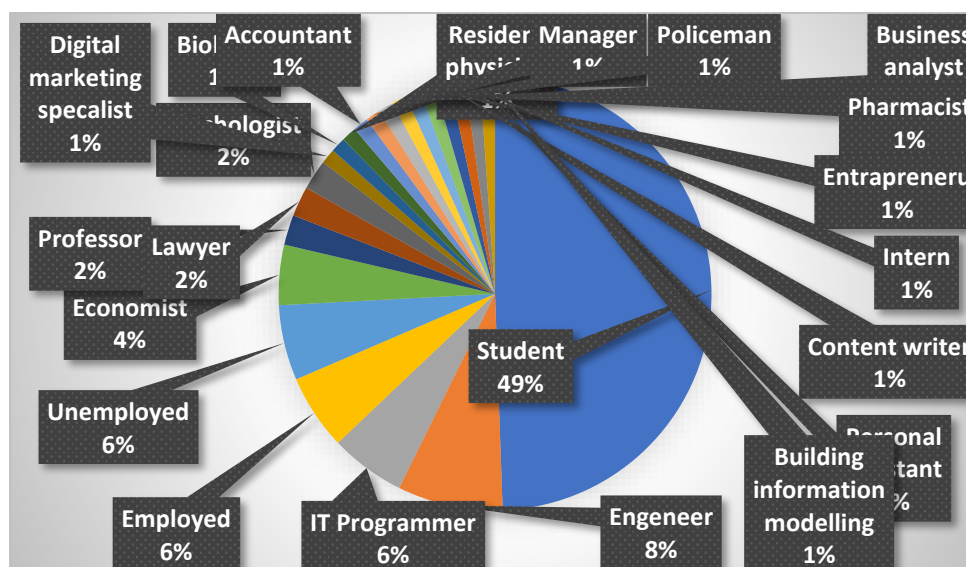
The instruments used were the interview guide for the in-depth interviews and a survey, applied as a pilot test which was build based on the information collected from the in-depth interviews.

Table 1. Table showing the quality of the sample

Specialist	Occupation
S1IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S2IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S3IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S4IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S5IT	IT consultant at Microsoft
S6IT	IT Associate professor at the University "Alexandru Ioan Cuza" of Iasi
S7IT	Senior tester at an IT company
S8IT	Senior tester at an IT company
S9IT	Senior tester at an IT company
S10IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S11IT	IT Professor at the University "Alexandru Ioan Cuza" of Iasi
S12IT	Senior tester at an IT company
S1M	Marketing Professor at the University "Alexandru Ioan Cuza" of Iasi
S2M	Marketing Professor at the University "Alexandru Ioan Cuza" of Iasi
S3M	Marketing Associate professor at the University "Alexandru Ioan Cuza" of Iasi
S4M	Marketing Professor at the University "Alexandru Ioan Cuza" of Iasi
S5M	Marketing Professor at the University "Alexandru Ioan Cuza" of Iasi
S6M	Marketing Professor at the University "Alexandru Ioan Cuza" of Iasi
S7M	Marketing Associate professor at the University "Alexandru Ioan Cuza" of Iasi
S8M	Marketing Associate professor at the University "Alexandru Ioan Cuza" of Iasi
S9M	Digital Marketing specialist at Sevio

Source: created by the authors.

To show the quality of the sample size for the qualitative method used, *Table 1* was created where every specialist's occupation is mentioned. The occupation shows that the people chosen to take part in the interview are specialists.



Source: own processing in Excel.

Figure 1. Pie Chart Showing the Distribution of Occupation between Respondents

To show the quality of the sample size for the quantitative method used, a pie chart was created to see what the majority occupation of the respondents is. The *Figure 1* shows that the sample size is homogenous in terms of occupation, mostly being students, followed by engineer and IT programmers.

### 3.2 Research Design

The research design contains 4 stages.

#### Stage 1: Qualitative research – Delphi method

The starting point to build a new scale for determining a smart consumers' profile, was conducting exploratory qualitative research to find new information. This is the step where raw information is collected. Based on the 10 dimensions extracted from existing speciality literature, an interview guide was designed (this interview guide can be found in *Appendix 1*). The interview contains an open question per each dimension which invites specialists to share their knowledge. The next step consisted in creating a database of specialists that could answer this interview. There were 21 interviews in total, as follows 12 interviews from specialists in IT,C domain and 9 interviews from specialists in the Marketing domain. The interviews were transcribed from speech to text, but they have been transcribed in Romanian. All of them were conducted online since the pandemic context, and the most used platform for communication was Microsoft Teams. Each interview lasted up to maximum 30 minutes and the research period for the interviews was from 1<sup>st</sup> of June until 10<sup>th</sup> of July 2022.

From the collected raw information, tables were created highlighting repeating ideas from the specialists. From these tables, keywords were extracted from each respondent per each dimension.

**Stage 2: Qualitative research – Mnemonic scores**

In the second stage, chromatic tables were created using mnemonic scores. Mnemonic scores are a scoring that takes into account the frequency of occurrence and the order of spoken words for each respondent. In the anglophonic space, this term is known as mnemonic score, while in the francophone space is known as score mnésique.

**Table 2. Chromatic table with keywords for the first dimension – E-communities**

Keywords Subject	Follows activity	Administrator role	Communicate	Authentication	Profile	Influencer	Comments	Posts	Interaction	Information	Messages	Share	Connected	Opens the phone	Spends time online
S1IT	5	1						3							
S2IT										5					
S3IT			5							3					
S4IT				5	1					1	3				
S5IT										5					
S6IT						3				5					
S7IT								5							
S8IT							5								
S9IT								5							
S10IT							3	5							
S11IT												5			
S12IT	5								3			1			
S1M								3			5	1			
S2M								3		1		5			
S3M								5	3						1
S4M										5			3		
S5M													5		
S6M								5		3					
S7M								3						5	
S8M										3					5
S9M									5						
TOTAL	10	1	5	5	1	3	8	37	11	31	8	12	8	5	6

Source: own calculations.

The keywords extracted from the previous stage, were inserted into a table where a score was given for every keyword used per person. The score given was following the next rules: first word mentioned in the speech was given 5 points, the second keyword mentioned in the speech was given 3 and all the following ones got 1. The first mentioned word is the one which got the highest score. The tables consisted of all the keywords mentioned by both specialists from IT,C domain, as well as specialists from the Marketing domain. The area in the middle, with the colour red signifies that those are keywords mentioned by both specialists, the colour blue signifies that those are keywords mentioned by IT,C specialists and the colour green signifies that those are keywords mentioned by Marketing specialists. Below, an example of a table like that can be found, the same structure and logic was behind the tables built for the other 9 dimensions. Each respondent had its name coded as follows: S meaning specialists, followed by a number, which is the number given to the person as the order of interview and then followed by either IT or M which means if the respondent is a specialist from the IT,C domain or Marketing domain.

After building all the 10 tables corresponding to each dimension, the keywords in the red area, followed by 2 more keywords from each domain (2 from IT,C + 2 from Marketing) were extracted and started to

build the items of the scale. For example, for the table above, the keywords posts, interactions, information, messages, share, connected, spends time online, follows activity and comments were used as starting points to create the items in the scale. The final version of the survey can be found in *Appendix 3*.

#### Stage 3: Quantitative research – Q-sorting method

To validate our scale, we used the Q-sorting method, asking the same experts again to check each statement of the scale and indicate whether they fit in the dimension or should be moved in another one. However, this time, only 12 specialists replied, 6 from IT,C domain and 6 from Marketing domain. For Q-sorting method, there was another handout designed and build (the handout can be found in *Appendix 2*). Specialists mainly had to tick a box if they think the item falls into the dimension specified and if not, they should specify where the item should be moved from the remained dimensions. Some of the specialists didn't tick the box and didn't mention where the item would better fit, so those answers were taken under a new column. Each item should get an 8 to be validated and there were some items which didn't fall into this number. However, we decided to keep all the items of the scale, to further test them with a pilot survey. The values of Q-sorting method can be found in Findings.

#### Stage 4: Quantitative research – Pilot survey

Based on the previous steps, a scale describing a smart consumer was created and was tested on a small sample size. The target group of the sample size for the questionnaire consists of people from Generation Y and Z, since they are the ones that are known as “digital natives” and changed the way people purchase goods. In total there were 97 respondents, from which 1 didn't want to respond to the survey and another 6 weren't part of generation Y or Z. That means only 90 responses were valid from which 22 males and 68 females.

Recruitment for the questionnaire took place in the online environment through a questionnaire (that can be found in *Appendix 3*) which was posted on the following Facebook pages and groups of Faculties and University centers: Iași, Cluj-Napoca, Bucharest and Timișoara.

The research period for the questionnaire took place from 2nd of August until 25th of August 2022 and the location was online, via Google Forms, taking each respondent maximum 15 minutes.

The data gathered from of the applied questionnaire was interpreted using Cronbach's Alpha in SPSS. This stage was made to check the reliability of the scale built and whether the survey is comprehensible, it's not taking too long and if the Likert scale was

#### Stage 5: Quantitative research - internal consistency (measuring Cronbach alpha)

After gathering the data from the pilot test, we made statistical computations, mainly we used Cronbach alpha and checked how reliable the scale is. The results per each dimension were higher than .90, which indicates that the scale is good. However, there are several authors which state that if Cronbach alpha is higher than .95, then this shows redundancy. Even so, we kept all the items in the scale because there are some explanations to why this has happened. First of all, the sample size was quite homogenous, which means that respondents come from similar environments and the answers can't vary too much. Another explanation is the number of the sample size, it's quite a small sample size for the scale.



#### 4. Findings

Our findings show a greater than .90 Cronbach alpha for most of the dimensions tested, which indicates the fact that our computations worked and the scale has an excellent reliability.

**Table 3. Cronbach's alpha for each dimension model**

Dimension	Cronbach alpha
E-communities	.945
Social Media Expert	.927
Smart Technology Adopter	.947
Influencers	.961
E-WOM	.933
E-information	.960
E-brand-equity	.967
E-identity	.969
E-servicescapes	.969
Experience co-creators	.962

Source: own calculations.

In the *Table 4*, items 2 and 7 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension.

**Table 4. Cronbach's alpha for 1<sup>st</sup> dimension (E-communities) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Posts daily in groups.	.948	10
2	Saves information in which they are interested.	.946	7
3	Shares posts or messages in which they are interested.	.937	10
4	Interacts with people in the community (through like/share/comments).	.938	12
5	Replies to messages.	.935	11
6	Feels connected while being online.	.936	12
7	Spends a great amount of time online.	.935	4
8	Follows the activity in their online communities.	.938	12
9	Comments on the posts from the online communities they are part of.	.938	11

Source: own calculations.

**Table 5. Cronbach's alpha for 2<sup>nd</sup> dimension (Social Media expert) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Posts personal details on Social Media.	.925	9
2	Spends more than 3 h on Social Media.	.922	11
3	Creates and administer Social Media pages.	.915	12
4	Has marketing competences.	.921	9
5	Promotes businesses and brands in Social Media.	.917	10
6	Is up to date with the latest trends in their areas of interests.	.926	7
7	Has communication skills.	.922	10
8	Creates online content.	.916	10
9	Knows how to make facts, concepts and ideas go viral.	.916	10
10	Follows online people they are interested in.	.919	8

Source: own calculations.

In *Table 5*, item 6 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like E-information.

In *Table 6*, item 4 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like E-WOM.

**Table 6. Cronbach's alpha for 3<sup>rd</sup> dimension (Smart Technology Adopter) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Trusts smart technologies.	.942	12
2	Uses daily smart technologies.	.942	12
3	Recommends smart technologies.	.941	12
4	Uses smart technologies in order to reduce their impact on the environment.	.946	7
5	Is willing to spend hours in line in order to be the first ones using new technology.	.946	8
6	Changes old technology (under a year old) with new technology very often.	.944	10
7	Is a fan of electric cars.	.944	10
8	Is a fan of Smart Homes.	.942	12
9	Has and tests new gadgets and their applications.	.942	12
10	Starts searching for information on YouTube.	.948	8
11	Is a smart technology adopter in terms of technology.	.940	12
12	Tends to become themselves influencers.	.942	10
13	Is up to date with the trends of smart technology.	.944	12
14	Is aware about cyber security.	.946	10

Source: own calculations.

In *Table 7*, item 5 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like E-information.

**Table 7. Cronbach's alpha for 4<sup>th</sup> dimension (Influencers) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Follows influencers daily.	.956	11
2	Interacts with influencers by reacting to their posts.	.955	11
3	Their decisions are determined by the influencers.	.958	8
4	Their purchasing decisions are determined by influencers.	.957	10
5	Is a curious person.	.965	7
6	Has time and financial resources to keep up with trends.	.959	10
7	Is part of the online community of the influencer.	.955	11
8	Is subscribed to the influencer's channel.	.956	12
9	Copies the behaviours of influencers.	.957	9
10	Trusts the influencers they follow.	.956	12
11	They wish to have the life of the people they follow.	.958	10

Source: own calculations.

**Table 8. Cronbach's alpha for 5<sup>th</sup> dimension (E-WOM) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Reads daily news online.	.930	8
2	They propagate news through comments and posts.	.924	12
3	Trusts the opinions expressed online.	.923	11
4	Express their opinions online.	.922	11
5	They wish to find out other people's opinions while online.	.929	12
6	Is up to date with everything that happens.	.929	11
7	Reads and forwards memes.	.931	12
8	Follows all types of news (fake but also real news).	.936	7
9	They fuel their curiosity online.	.927	10
10	Spends a long time online, especially on Social Media.	.920	8
11	Follows trends (Google Trends, YouTube Trends).	.926	9

Source: own calculations.

In *Table 8*, item 8 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like E-information.

In the *Table 9*, all items managed to get a score of 8 or higher.

**Table 9. Cronbach's alpha for 6<sup>th</sup> dimension (E-information) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Selects their information of interest.	.956	12
2	Searches online information through multiple sources.	.957	12
3	Asks information from institutions/companies through Social Media or email.	.957	10
4	Searches keywords and chooses the relevant, high frequency information.	.957	10
5	Takes decisions based on the information found online.	.959	9
6	Searches all kinds of information on search engines.	.956	12
7	When they want to find something new, first of all, they search online.	.957	12
8	Uses different kinds of search engines based on the type of the information they look for.	.958	10
9	Uses Social Media to inform themselves.	.958	9
10	Reads reviews.	.956	10
11	Uses Social Media to write reviews.	.959	8
12	They can tell the difference between fake news and real news.	.958	8
13	Searches for "how to" tutorials.	.956	11
14	Follows news websites.	.957	12
15	They are faithful to a limited number of sites considered to be trustworthy.	.958	11
16	Have their notification on for their Social Media apps.	.963	9

Source: own calculations.

**Table 10. Cronbach's alpha for 6<sup>th</sup> dimension (E-information) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Has preferences for certain brands.	.964	12
2	Recommends also online their favourite brands.	.966	11
3	Defends also online their preferred brands.	.968	11
4	Searches for reviews for products/brands.	.963	11
5	Uses price comparison websites.	.964	11
6	Understands the values which the brands also promote in the online environment.	.964	12
7	They inform themselves from different sources, in the online.	.963	8
8	Adopts Smart Technology, they are Smart Technology adopters.	.964	6
9	Searches their favourite brands by means of keywords.	.964	11
10	Establishes comparison criteria for the products/brands they want.	.962	12
11	Studies the information promoted by brands.	.963	11
12	Is well informed about brands of interest.	.962	12
13	Uses the internet to inform themselves about brands, so that they can make a buying decision.	.963	11

Source: own calculations.

In Table 10, item 8 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like Smart Technology Adopter.

For the 8<sup>th</sup> dimension, all items got a passing score (Table 11).

**Table 11. Cronbach's alpha for 8<sup>th</sup> dimension (E-identity) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Spends many hours a day online.	.967	12
2	Is an antisocial person.	.969	9
3	Expresses their emotions very hard.	.969	10
4	Hides online aspects of their personality which don't correspond with their personal ideal.	.967	12
5	Creates an online avatar.	.967	11
6	Feels the need to extend their identity virtually.	.966	12
7	Escapes in the online from the physical anxiety.	.966	11
8	Shares messages that they resonate with from their Social Media accounts.	.968	8
9	Prefers socializing online.	.966	12
10	They build an online personality which corresponds with their personal ideal.	.965	12
11	Uses apps which contain "infinite scrolling".	.967	10
12	Knows they have the possibility of being anybody online.	.968	11
13	Takes distance from the physical entourage.	.967	10
14	Posts online content and watches the reactions very carefully.	.967	11
15	Wishes to be socially validated through likes and comments.	.966	12

Source: own calculations.

All items in the 9<sup>th</sup> dimension got a passing score (*Table 12*).

**Table 12. Cronbach's alpha for 9<sup>th</sup> dimension (E-servicescapes) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Has superior knowledge about website functionalities.	.967	12
2	Has basic knowledge about website graphic.	.968	12
3	Has basic knowledge about search engine optimization.	.967	11
4	Has basic knowledge about digital marketing.	.965	10
5	Detects scam websites easily.	.965	12
6	Analyses websites in terms of ease of use.	.965	12
7	Knows how to integrate multiple smart devices while searching the web.	.965	11
8	Is professional in web search, attentive to details relevant to them.	.966	11
9	They easily rate the navigation on a site.	.966	12
10	Is willing to give recommendations to site designers to build an attractive and logical virtual space for the user.	.968	10

Source: own calculations.

**Table 13. Cronbach's alpha for 10<sup>th</sup> dimension (Experience co-creators) affirmations**

No.	Items	Cronbach alpha if item is deleted	Q-sorting score
1	Prefers to customize their required product.	.958	12
2	Makes suggestions to the company they buy from.	.959	12
3	Recommends firms/brands.	.959	8
4	Personalizes their consumer profile in apps.	.959	10
5	Provides personal data to online service providers.	.963	10
6	Doesn't rush to buy a product without having all the information.	.960	10
7	Pays attention to the cookies they accept.	.959	6
8	Choses trustworthy websites.	.959	9
9	Knows that the ease of browsing a site helps in the purchase decision on that site.	.959	8
10	Choses to participate in the development of products and services.	.960	11
11	Knows the sites where they can find information about a product.	.959	9
12	Is concerned about the security of information systems.	.958	8
13	Uses online protection tools against cyber-attacks.	.958	7
14	They access sites in incognito mode.	.958	8
15	Is aware of the phenomenon of cybercrime.	.958	9
16	Has installed extensions that block ads.	.960	9

Source: own calculations.

In *Table 13*, items 7 and 13 didn't manage to get at least an 8 for the Q-sorting method. This means that specialists thought they are better in another category or are not describing the dimension. Some of the specialists thought that this item is a better fit for another dimension, like E-servicescapes.

## Conclusions

### Limitations

One limitation is that in the Qsorting stage, not all the statements received 70% validation from the experts. However, we kept them for further quantitative research to verify again Cronbach alpha on a more heterogenous sample.

## Discussions

One discussion starts from the previous limitation. For each dimension there were a few statements that have a higher than .95 Cronbach alpha and didn't get the 70% validation from the experts. We decided to keep those statements for further tests. This will be verified on a spectre of 100x5 respondents. If the specific statements don't pass this test, then, we will fully decide to take them off the scale.

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## **IŠMANUSIS VARTOTOJAS – PIRMAS KOKYBINIS ŽINGSNIS SIEKANT PLATAUS MASTO PLĖTROS**

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**Santrauka.** Nagrinėjant literatūrą apie išmanųjį vartotoją nustatyta, kad trūksta aiškaus koncepto, kuris apimtų šio termino reikšmės pokytį, įvykusį dėl technologinės pažangos. Siekiant platesnio supratimo ir kuriant skalę atlikti pirmieji žingsniai. Tyrime derinami ir siūlomi keli kiekybiniai ir kokybiniai metodai, pavyzdžiui, Delfų metodas, mnemoniniai balai, bandomosios apklausos, chromatinės lentelės ir Kronbacho alfa skaičiavimai. Tyrime pateikiami visi skalės kūrimo etapai. Skalės elementai buvo sukurti atlikus pusiau struktūruotus giluminius interviu su 21 IT sektoriaus, komunikacijos ir rinkodaros sričių ekspertu. Skalės elementai buvo sugeneruoti iš giluminių interviu ir suskirstyti į dimensijas. Kiekvienam kiekvienos dimensijos elementui apskaičiuota Kronbacho alfa ir gauta 0,95. Tai rodo puikų skalės patikimumą.

**Reikšminiai žodžiai:** išmanusis vartotojas; skalės kūrimas; Delfų metodas; e. bendruomenės; nuomonės formuotojai; socialinės žiniasklaidos ekspertai; Y karta; Z karta.

## Appendixes

### Appendix 1

#### Interview guide

1. What online actions does a person who is part of several e-communities have? (specifically what does it do?)
2. What characterizes a person who is considered to be a social media expert? (specifically what does it do?)
3. What characterizes a person who is a Smart Technology Adopter? (specifically what does it do?)
4. What characterizes a person who follows online influencers? (specifically what does it do?)
5. What characterizes a person who follows ideas that spread online (E-WOM)? (specifically what does it do?)
6. What characterizes a person who searches for information online? (E-information) (specifically what does it do?)
7. What characterizes a person who manages to compare brands online in a relevant way for him/her? (E-brand-equity) (specifically what does he do?)
8. What characterizes a person who escapes from everyday life and finds himself more in a virtual reality? (E-identity) (exactly what does it do?)
9. What characterizes a person who is an expert in evaluating Web sites? (E-servicescapes) (specifically what does it do?)
10. What characterizes a person who wants to be in control of their experience as an online consumer? (Experience co-creators) (exactly what does it do?)

### Appendix 2

#### Q-sorting method

Stage 2 – Q-sorting method handout

In my doctoral thesis I propose to build a scale to describe a smart consumer, so I researched the literature and got to 10 dimensions that define a smart consumer. These are:

1. **E-communities** – this dimension refers to the fact that a person is part of several e-communities (online communities), is in groups with relevant topics, interacts with those groups.
2. **Social Media Expert** – this dimension refers to the fact that a person has basic knowledge of social media, that is, he manages to use social media pages and applications without being taught from somewhere.
3. **Smart Technology Adopter** - this dimension refers to the fact that a person is passionate about technology, owns the latest technology, is interested in the latest trends.
4. **Influencers** - this dimension refers to the fact that a person knows what an influencer is, follows influencers.
5. **E-WOM** - this dimension refers to the fact that a person follows the ideas that spread online, knows certain tips, tricks from online (e.g. which is a good restaurant, etc.), passes on and expresses his ideas online.
6. **E-information** - this dimension refers to the fact that a person is looking for information online, he informs himself online, instead of reading the newspaper, he follows various news pages online.
7. **E-brand-equity** - this dimension refers to the fact that a person knows how to compare brands online, he knows how to find information about each brand/product and uses price or feature comparators.
8. **E-identity** - this dimension refers to the fact that a person creates a virtual identity, finding himself more in a virtual reality.
9. **E-servicescapes** - this dimension refers to the fact that a person has knowledge to evaluate a site, he knows if a site contains all the information it needs, or if it is easy to navigate.
10. **Experience co-creators** - this dimension refers to the fact that a person wants to be in control of the experience from the perspective of the online consumer, he will give his opinion about the products, help to improve the services and products, get involved directly for to create a better experience for all consumers.

Using the Q-sorting method, I want to validate the constructed scale, so I will have the kind request from you to tick the box next to each item if it fits the dimension. If it doesn't fit that dimension, I'd like you to state in which of the remaining 9 dimensions it fits best.

1. **E-communities** – this dimension refers to the fact that a person is part of several e-communities (online communities), is in groups with relevant topics, interacts with those groups.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Posts daily in groups.	<input type="checkbox"/>	
Saves information in which they are interested.	<input type="checkbox"/>	
Shares posts or messages in which they are interested.	<input type="checkbox"/>	
Interacts with people in the community (through like/share/comments).	<input type="checkbox"/>	
Replies to messages.	<input type="checkbox"/>	
Feels connected while being online.	<input type="checkbox"/>	
Spends a great amount of time online.	<input type="checkbox"/>	
Follows the activity in their online communities.	<input type="checkbox"/>	
Comments on the posts from the online com-	<input type="checkbox"/>	

munities they are part of.		
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2. **Social Media Expert** – this dimension refers to the fact that a person has basic knowledge of social media, that is, he manages to use social media pages and applications without being taught from somewhere.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Posts personal details on Social Media.	<input type="checkbox"/>	
Spends more than 3 h on Social Media.	<input type="checkbox"/>	
Creates and administer Social Media pages.	<input type="checkbox"/>	
Has marketing competences.	<input type="checkbox"/>	
Promotes businesses and brands in Social Media.	<input type="checkbox"/>	
Is up to date with the latest trends in their areas of interests.	<input type="checkbox"/>	
Has communication skills.	<input type="checkbox"/>	
Creates online content.	<input type="checkbox"/>	
Knows how to make facts, concepts and ideas go viral.	<input type="checkbox"/>	
Follows online people they are interested in.	<input type="checkbox"/>	

3. **Smart Technology Adopter** - this dimension refers to the fact that a person is passionate about technology, owns the latest technology, is interested in the latest trends.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Trusts smart technologies.	<input type="checkbox"/>	
Uses daily smart technologies.	<input type="checkbox"/>	
Recommends smart technologies.	<input type="checkbox"/>	
Uses smart technologies in order to reduce their impact on the environment.	<input type="checkbox"/>	
Is willing to spend hours in line in order to be the first ones using new technology.	<input type="checkbox"/>	
Changes old technology (under a year old) with new technology very often.	<input type="checkbox"/>	
Is a fan of electric cars.	<input type="checkbox"/>	
Is a fan of Smart Homes.	<input type="checkbox"/>	
Has and tests new gadgets and their applications.	<input type="checkbox"/>	
Starts searching for information on YouTube.	<input type="checkbox"/>	
Is a smart technology adopter in terms of technology.	<input type="checkbox"/>	
Tends to become themselves influencers.	<input type="checkbox"/>	
Is up to date with the trends of smart technology.	<input type="checkbox"/>	
Is aware about cyber security.	<input type="checkbox"/>	

4. **Influencers** - this dimension refers to the fact that a person knows what an influencer is, follows influencers.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Follows influencers daily.	<input type="checkbox"/>	
Interacts with influencers by reacting to their posts.	<input type="checkbox"/>	
Their decisions are determined by the influencers.	<input type="checkbox"/>	
Their purchasing decisions are determined by influencers.	<input type="checkbox"/>	
Is a curious person.	<input type="checkbox"/>	
Has time and financial resources to keep up with trends.	<input type="checkbox"/>	

Is part of the online community of the influencer.	<input type="checkbox"/>	
Is subscribed to the influencer's channel.	<input type="checkbox"/>	
Copies the behaviours of influencers.	<input type="checkbox"/>	
Trusts the influencers they follow.	<input type="checkbox"/>	
They wish to have the life of the people they follow.	<input type="checkbox"/>	

5. **E-WOM** - this dimension refers to the fact that a person follows the ideas that spread online, knows certain tips, tricks from online (e.g. which is a good restaurant, etc.), passes on and expresses his ideas online.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Reads daily news online.	<input type="checkbox"/>	
They propagate news through comments and posts.	<input type="checkbox"/>	
Trusts the opinions expressed online.	<input type="checkbox"/>	
Express their opinions online.	<input type="checkbox"/>	
They wish to find out other people's opinions while online.	<input type="checkbox"/>	
Is up to date with everything that happens.	<input type="checkbox"/>	
Reads and forwards memes.	<input type="checkbox"/>	
Follows all types of news (fake but also real news).	<input type="checkbox"/>	
They fuel their curiosity online.	<input type="checkbox"/>	
Spends a long time online, especially on Social Media.	<input type="checkbox"/>	
Follows trends (Google Trends, YouTube Trends).	<input type="checkbox"/>	

6. **E-information** - this dimension refers to the fact that a person is looking for information online, he informs himself online, instead of reading the newspaper, he follows various news pages online.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Selects their information of interest.	<input type="checkbox"/>	
Searches online information through multiple sources.	<input type="checkbox"/>	
Asks information from institutions/companies through Social Media or email.	<input type="checkbox"/>	
Searches keywords and chooses the relevant, high frequency information.	<input type="checkbox"/>	
Takes decisions based on the information found online.	<input type="checkbox"/>	
Searches all kinds of information on search engines.	<input type="checkbox"/>	
When they want to find something new, first of all, they search online.	<input type="checkbox"/>	
Uses different kinds of search engines based on the type of the information they look for.	<input type="checkbox"/>	
Uses Social Media to inform themselves.	<input type="checkbox"/>	
Reads reviews.	<input type="checkbox"/>	
Uses Social Media to write reviews.	<input type="checkbox"/>	
They can tell the difference between fake news and real news.	<input type="checkbox"/>	
Searches for "how to" tutorials.	<input type="checkbox"/>	
Follows news websites.	<input type="checkbox"/>	
They are faithful to a limited number of sites considered to be trustworthy.	<input type="checkbox"/>	
Have their notification on for their Social Media apps.	<input type="checkbox"/>	

**7. E-brand-equity** - this dimension refers to the fact that a person knows how to compare brands online, he knows how to find information about each brand/product and uses price or feature comparators.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Has preferences for certain brands.	<input type="checkbox"/>	
Recommends also online their favourite brands.	<input type="checkbox"/>	
Defends also online their preferred brands.	<input type="checkbox"/>	
Searches for reviews for products/brands.	<input type="checkbox"/>	
Uses price comparison websites.	<input type="checkbox"/>	
Understands the values which the brands also promote in the online environment.	<input type="checkbox"/>	
They inform themselves from different sources, in the online.	<input type="checkbox"/>	
Adopts Smart Technology, they are Smart Technology adopters.	<input type="checkbox"/>	
Searches their favourite brands by means of keywords.	<input type="checkbox"/>	
Establishes comparison criteria for the products/brands they want.	<input type="checkbox"/>	
Studies the information promoted by brands.	<input type="checkbox"/>	
Is well informed about brands of interest.	<input type="checkbox"/>	
Uses the internet to inform themselves about brands, so that they can make a buying decision.	<input type="checkbox"/>	

**8. E-identity** - this dimension refers to the fact that a person creates a virtual identity, finding himself more in a virtual reality.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Spends many hours a day online.	<input type="checkbox"/>	
Is an antisocial person.	<input type="checkbox"/>	
Expresses their emotions very hard.	<input type="checkbox"/>	
Hides online aspects of their personality which don't correspond with their personal ideal.	<input type="checkbox"/>	
Creates an online avatar.	<input type="checkbox"/>	
Feels the need to extend their identity virtually.	<input type="checkbox"/>	
Escapes in the online from the physical anxiety.	<input type="checkbox"/>	
Shares messages that they resonate with from their Social Media accounts.	<input type="checkbox"/>	
Prefers socializing online.	<input type="checkbox"/>	
They build an online personality which corresponds with their personal ideal.	<input type="checkbox"/>	
Uses apps which contain "infinite scrolling".	<input type="checkbox"/>	
Knows they have the possibility of being anybody online.	<input type="checkbox"/>	
Takes distance from the physical entourage.	<input type="checkbox"/>	
Posts online content and watches the reactions very carefully.	<input type="checkbox"/>	
Wishes to be socially validated through likes and comments.	<input type="checkbox"/>	

**9. E-servicescapes** - this dimension refers to the fact that a person has knowledge to evaluate a site, he knows if a site contains all the information it needs, or if it is easy to navigate.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Has superior knowledge about website functionalities.	<input type="checkbox"/>	

Has basic knowledge about website graphic.	<input type="checkbox"/>	
Has basic knowledge about search engine optimization.	<input type="checkbox"/>	
Has basic knowledge about digital marketing.	<input type="checkbox"/>	
Detects scam websites easily.	<input type="checkbox"/>	
Analyses websites in terms of ease of use.	<input type="checkbox"/>	
Knows how to integrate multiple smart devices while searching the web.	<input type="checkbox"/>	
Is professional in web search, attentive to details relevant to them.	<input type="checkbox"/>	
They easily rate the navigation on a site.	<input type="checkbox"/>	
Is willing to give recommendations to site designers to build an attractive and logical virtual space for the user.	<input type="checkbox"/>	

10. **Experience co-creators** - this dimension refers to the fact that a person wants to be in control of the experience from the perspective of the online consumer, he will give his opinion about the products, help to improve the services and products, get involved directly for to create a better experience for all consumers.

Items	Does the statement fit the E-communities dimension? (yes/no – a tick in the box means YES, and if the answer is NO – then just write the dimension in the next column)	If you answered no, then which of the following 9 dimensions would it fit?
Prefers to customize their required product.	<input type="checkbox"/>	
Makes suggestions to the company they buy from.	<input type="checkbox"/>	
Recommends firms/brands.	<input type="checkbox"/>	
Personalizes their consumer profile in apps.	<input type="checkbox"/>	
Provides personal data to online service providers.	<input type="checkbox"/>	
Doesn't rush to buy a product without having all the information.	<input type="checkbox"/>	
Pays attention to the cookies they accept.	<input type="checkbox"/>	
Chooses trustworthy websites.	<input type="checkbox"/>	
Knows that the ease of browsing a site helps in the purchase decision on that site.	<input type="checkbox"/>	
Chooses to participate in the development of products and services.	<input type="checkbox"/>	
Knows the sites where they can find information about a product.	<input type="checkbox"/>	
Is concerned about the security of information systems.	<input type="checkbox"/>	
Uses online protection tools against cyberattacks.	<input type="checkbox"/>	
They access sites in incognito mode.	<input type="checkbox"/>	
Is aware of the phenomenon of cybercrime.	<input type="checkbox"/>	
Has installed extensions that block ads.	<input type="checkbox"/>	

## Appendix 3

### Survey

#### Smart Consumer Profile

Hello, my name is Alexandra Jelea and I am a PhD student in the third year, in the field of Marketing at the Doctoral School of Economics and Business Administration in Iasi.

For my thesis, I propose to analyse the concept of Smart Consumer.

The answers provided in this form will be used strictly for statistical purposes, the data being anonymous and without the possibility of identifying the respondent. By completing this form, you consent to the processing and use of the collected information.

1. Do you agree to take part in this survey?

- ☐ Yes  
☐ No

#### Section 1: Generations

1. The desired profile of the respondent corresponds to generations Y and Z. Are you part of them?

- ☐ Generation Y (born between 1981 – 1996)  
☐ Generation Z (born between 1997 – 2004)  
☐ No (the survey stops)



Section 2: Dimension 1 - **E-communities**

1. A Smart Consumer is a person who is part of several e-communities. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I post daily in groups.								
I save information in which I am interested.								
I share posts or messages in which I am interested.								
I interact with people in the community (through like/share/comments).								
I reply to messages.								
I feel connected while being online.								
I spend a great amount of time online.								
I follow the activity in my online communities.								
I comment on the posts from the online communities I am part of.								

Section 3: Dimension 2 - **Social Media Expert**

1. A Smart Consumer is a social media expert. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I post personal details on Social Media.								
I spend more than 3 h on Social Media.								
I create and administer Social Media pages.								
I have marketing competences.								
I'm promoting businesses and brands in Social Media.								
I am up to date with the latest trends in my areas of interests.								
I have communication skills.								
I create online content.								
I know how to make facts, concepts and ideas go viral.								
I follow online people I am interested in.								

Section 4: Dimension 3 - **Smart Technology Adopter**

1. A Smart Consumer is a person who adopts smart technologies (is a Smart Technology Adopter). To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I trusts smart technologies.								
I use daily smart technologies.								
I recommend smart technologies.								
I use smart technologies in order to reduce my impact on the environment.								
I am willing to spend hours in line in order to be the first ones using new technology.								
I change old technology (under a year old) with new technology very often.								
I am a fan of electric cars.								
I am a fan of Smart Homes.								
I have and test new gadgets and their applications.								
I start searching for information on YouTube.								
I am a smart technology adopter in terms of technology.								
I tend to become myself an influencer.								
I am up to date with the trends of smart technology.								
I am aware about cyber security.								

Section 5: Dimension 4 - **Influencers**

1. A Smart Consumer is a person who follows influences. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I follow influencers daily.								
I interact with influencers by reacting to their posts.								
My decisions are determined by the influencers.								
My purchasing decisions are determined by influencers.								
I am a curious person.								
I have time and financial resources to keep up with trends.								
I am part of the online community of the influencer.								
I am subscribed to the influencer's channel.								
I copy the behaviours of influencers.								
I trust the influencers I follow.								
I wish to have the life of the people I follow.								

Section 6: Dimension 5 - **E-WOM**

1. A Smart Consumer is a person who is interested in the ideas that spread online. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I read daily news online.								
I propagate news through comments and posts.								
I trust the opinions expressed online.								

I express my opinions online.								
I wish to find out other people's opinions while online.								
I am up to date with everything that happens.								
I read and forward memes.								
I follow all types of news (fake but also real news).								
I fuel my curiosity online.								
I spend a long time online, especially on Social Media.								
I follow trends (Google Trends, YouTube Trends).								

Section 7: Dimension 6 - **E-information**

1. A Smart Consumer is a person who searches for information online. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I select my information of interest.								
I search online information through multiple sources.								
I ask information from institutions/companies through Social Media or email.								
I search keywords and chooses the relevant, high frequency information.								
I take decisions based on the information found online.								
I search all kinds of information on search engines.								
When I want to find something new, first of all, I search online.								
I use different kinds of search engines based on the type of the information I'm look for.								
I use Social Media to inform myself.								
I read reviews.								
I use Social Media to write reviews.								
I can tell the difference between fake news and real news.								
I search for "how to" tutorials.								
I follow news websites.								
I am faithful to a limited number of sites considered to be trustworthy.								
I have my notifications on for my Social Media apps.								

Section 8: Dimension 7 - **E-brand-equity**

1. A Smart Consumer is a person who manages to compare brands relevant to him online. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I have preferences for certain brands.								
I recommend also online my favourite brands.								
I defend also online my preferred brands.								
I search for reviews for products/brands.								
I use price comparison websites.								
I understand the values which the brands also promote in the online environment.								
I inform myself from different sources, in the online.								
I adopt Smart Technology, therefore I am a Smart Technology adopter.								
I search my favourite brands by means of keywords.								
I establish comparison criteria for the products/brands I want.								
I study the information promoted by brands.								
I am well informed about brands of interest.								
I use the internet to inform myself about brands, so that I can make a buying decision.								

Section 9: Dimension 8 - **E-identity**

1. A Smart Consumer is a person who escapes from everyday life and finds himself more in a virtual reality. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I spend many hours a day online.								
I am an antisocial person.								
I express my emotions very hard.								
I am hiding online aspects of my personality which don't correspond with my personal ideal.								
I create an online avatar.								
I feel the need to extend my identity virtually.								
I escape in the online from the physical anxiety.								
I share messages that I resonate with from my Social Media accounts.								
I prefer socializing online.								
I build an online personality which corresponds with my personal ideal.								
I use apps which contain "infinite scrolling".								
I know I have the possibility of being anybody online.								
I take distance from the physical entourage.								
I post online content and watching the reactions very carefully.								
I wish to be socially validated through likes and comments.								

Section 10: Dimension 9 - **E-servicescapes**

1. A Smart Consumer is a person who is an expert in evaluating Web sites. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I have superior knowledge about website functionalities.								
I have basic knowledge about website graphic.								
I have basic knowledge about search engine optimization.								
I have basic knowledge about digital marketing.								
I detect scam websites easily.								
I analyse websites in terms of ease of use.								
I know how to integrate multiple smart devices while searching the web.								
I am professional in web search, attentive to details relevant to me.								
I easily rate the navigation on a site.								
I am willing to give recommendations to site designers to build an attractive and logical virtual space for the user.								

Section 11: Dimension 10 - **Experience co-creators**

1. A Smart Consumer is someone who wants to be in control of their experience as an online consumer. To what extent do the following statements describe you? (1 meaning I describe myself to a small extent, 8 meaning I describe myself to a large extent)

Statement	1	2	3	4	5	6	7	8
I prefer to customize my required product.								
I make suggestions to the company I'm buying from.								
I recommend firms/brands.								
I personalize my consumer profile in apps.								
I provide personal data to online service providers.								
I don't rush to buy a product without having all the information.								
I pay attention to the cookies I accept.								
I chose trustworthy websites.								
I know that the ease of browsing a site helps in the purchase decision on that site.								
I chose to participate in the development of products and services.								
I know the sites where I can find information about a product.								
I am concerned about the security of information systems.								
I use online protection tools against cyber-attacks.								
I access sites in incognito mode.								
I am aware of the phenomenon of cybercrime.								
I have installed extensions that block ads.								

Section 12: **Smart Consumer Profile**

1. To what extent do you consider yourself to be a Smart Consumer (1 - not at all; 8 - to a very large extent)?  
"A Smart Consumer is a person who makes an informed purchase decision, relying in particular on data obtained from the online environment. He is an expert in their search, knows how to choose the most relevant ones, they help him to make the best decision. He is a digital savant, spends a lot of time online, has active Social Media accounts, follows influencers, owns and uses multiple smart connected devices that help him in his purchase decision"

1 2 3 4 5 6 7 8

Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ To a very large extentSection 13: **Identification items**

1. What is your gender?  
☐ Male  
☐ Female  
☐ Prefer not to say
2. What is the last level of education you completed?  
☐ Highschool  
☐ Baccalaureate  
☐ Bachelor's degree  
☐ Master's degree  
☐ PhD
3. You studied/are currently studying in one of the following University centres:  
☐ Iasi  
☐ Bucharest  
☐ Timisoara  
☐ Cluj-Napoca  
☐ Another city

Section 14: **Further study agreement**

1. Do you agree to be part of a future study for which we will call on your smart consumer experience?  
☐ Yes  
☐ No (stop survey)

Section 15: **Contact collection**

1. If you answered "Yes" to the previous question, please leave a valid email address so I can contact you when I start the next part of the study.