

## How do brand policy updates turn into transgressions and impact consumers' continuance intentions?

### Marka politika deęişikleri nasıl marka ihlaline dönüşür ve tüketici devam niyetini nasıl etkiler?

Fatih Şahin<sup>1</sup> 

#### Abstract

The concept of the digital economy is being implemented more quickly nowadays. Digital services are one of the pillars of the digital economy. The consumers of those services and their information-sharing intentions play a crucial role since the sustainable consumer information flow fuels big data. From a marketing perspective, as a digital service brand, this study examines the roles of privacy concerns and brand transgression interaction effects on consumers' intentions to continue using instant messaging services. Because realistic privacy risks have been difficult to replicate using experimental techniques, this study focused on one of the most well-known digital service brands' most recent violations of a privacy policy update. Based on survey data from 422 related digital service consumers, the results show that brand transgression severity increases consumers' privacy concerns. Privacy concerns are a significant indirect antecedent to the continuation of digital services. Consumers' trust, belief, and perceived risk mediate the relationship between privacy concerns and information disclosure intention. And in digital services, information disclosure intention is an important factor that affects consumers' intentions to continue using this service.

**Keywords:** Policy Update, Brand Transgression, Privacy Concern, Continuance Intention

**Jel Codes:** M30, M31, L82

#### Öz

Günümüzde dijital ekonomi fikri daha hızlı hayata geçirilmektedir. Dijital ekonominin temel bileşenlerinden birisi dijital hizmetlerdir ve büyük veri sürekli tüketici bilgisi akışı tarafından beslendiğinden, bu hizmetlerin tüketicileri ve bilgi paylaşma niyetleri çok önemlidir. Bu çalışma, müşterilerin anlık mesajlaşma hizmetlerini bir dijital hizmet markası olarak pazarlama bakış açısıyla kullanmaya devam etme niyetleri üzerindeki gizlilik endişelerinin ve marka ihlali etkileşiminin etkilerini araştırmaktadır. Gerçekçi gizlilik risklerinin deneysel teknikler kullanılarak tekrarlanması zor olduğundan, bu çalışma, en iyi bilinen dijital hizmet markalarından biri tarafından yapılan bir gizlilik politikası güncellemesi üzerinden konu ele alınmıştır. 422 dijital hizmet tüketicisi ile gerçekleştirilen anket verilerine dayanarak, sonuçlar, marka ihlali ciddiyetinin tüketicilerin mahremiyet endişelerini artırdığını gösteriyor. Gizlilikle ilgili tüketici endişeleri, dijital hizmetlerin devamının önemli bir dolaylı öncülü olarak tanımlanmaktadır. Tüketicilerin güveni, inancı ve algılanan risk, mahremiyet endişesi ile bilgi açıklama niyeti arasındaki ilişkiye aracılık etmektedir. Dijital hizmetlerde bilgi paylaşma niyeti, tüketicilerin bu hizmeti kullanmaya devam etme niyetleri üzerinde önemli bir etkiye sahip olan bir faktördür.

**Anahtar Kelimeler:** Politika Deęişikliği, Marka İhlali, Gizlilik Endişesi, Devam Niyeti

**JEL Kodları:** M30, M31, L82

<sup>1</sup> Assist. Prof. Dr., Bandırma Onyedli Eylül University, Gönen Vocational School, Balıkesir, Turkey, [fsahin@bandirma.edu.tr](mailto:fsahin@bandirma.edu.tr)

ORCID: 0000-0002-4760-4413

Submitted: 17/12/2022

Revised: 15/02/2023

Accepted: 17/03/2023

Online Published: 25/03/2023

**Citation:** Şahin F., How do brand policy updates turn into transgressions and impact consumers' continuance intentions?, bmij (2023) 11 (1): 96-120, doi: <https://doi.org/10.15295/bmij.v11i1.2178>

## Introduction

The digital economy is making a great contribution to the global economy. More than 15% of the world's GDP comes from the digital economy, which has grown 2.5 times faster over the last ten years than the GDP of the physical world (Hayat, 2022). According to the report on the digital economy, digital communication technologies will contribute 60% of the global GDP in 2022 (ITU, 2021). The dissemination of digital communication also contributes to economic growth (Solomon & van Klyton, 2020). Besides that, digital trust is a crucial component, not just for individual sectors but for building a strong digital ecosystem in general. According to a study, a 5% improvement in digital trust causes a \$3,000 average rise in GDP per person (Hayat, 2022). Related to this structural economic development, some researchers measure gross domestic product with IGDP, which stands for "internet gross domestic product." IGDP includes online travel, online media, e-commerce, digital services, and ride-hailing (Manyika et al., 2013). Besides those sectors, some studies include internet-enabled businesses such as digital media (Barefoot, Curtis, Jolliff, Nicholson, & Omohundro, 2018). An estimated 70% of new value created in the economy over the next decade will be based on digitally enabled platform business models (Weforum, 2022). On a micro-level, digitalization allows businesses to improve performance measurement and management (Abd Rahman & Khalid, 2022), shift brand communication from one-to-many to one-to-one (Roncha & Radclyffe-Thomas, 2016), access vast amounts of data and benefit from it, create mutual value for itself and its stakeholders (Benslama & Jallouli, 2022), bring stakeholders closer together (Pletikosa Cvijikj & Michahelles, 2011). With digitalization, marketing activities are enhanced, production costs decrease, and profit margins increase. As a result of digitalization, marketers can access a wide range of customers, helping to develop current market offerings and improving their ability to enter new markets (Elding & Morris, 2018).

Smartphone usage and the data they create are increasing, according to a report (Ericsson, 2022) on network data traffic, which increased by 39% between 2021 and 2022. The momentum of this evolutionary progression is closely associated with society's tendency toward digital services. However, the unprecedented growth of digital services and data users creates a security problem. Criminal organizations are becoming interested in this improvement too. According to estimates, cybercrime will cost society \$6 trillion by 2021, and they expect this figure to increase to over \$10 trillion by 2025 (UNCTAD, 2022). Given that governments and third parties can handle big data and data breaches, any measure that governments put in place to make it easier for social media service brands to access user data could be a breach of user data privacy (UNCTAD, 2021). This puts social media service provider brands under suspicion. Also, any measures governments have put in place to make it easier for social media service brands to access user data could violate user data privacy. However, this is not the only issue facing the dissemination of the digital economy. Another issue is that there can be an indirect effect related to social media brands' decisions that affect the digital ecosystem. This could harm the perception of the digital society and its willingness to continue contributing. Furthermore, some studies indicate that consumer privacy policy practices and regulations could be problematic (Campbell, 1997; Griggio, Nouwens, & Klokmose, 2022; Willis, Jai, & Lauderdale, 2021). The rise in cross-border data flows, the upcoming 5G rollout, the Internet of Things and AI, and an acceleration in digitalization after the COVID-19 epidemic make it possible to collect and monetize massive amounts of data on a global scale. However, without a strong foundation of trust-building global governance, this might discourage consumers' data sharing and amplify existing worries about the lack of transparency in the data value chain, including concerns about personal data privacy, the moral application of AI technologies, and the commercialization of data by digital platforms (UNCTAD, 2021). According to a UNCTAD (2021) report published in 2021, assessing the risks and implementing some measures, particularly against social media platforms, should be undertaken to prevent global harm from digital services such as today's widely used electronic business models. People who consume digital services are also consumers of related digital services and digital brands. That point of view is frequently overlooked in research.

Hilbert (2022, p. 191) suggests that the digital era began in 2002. He explains that the reason behind this assumption is communication technology and storing, processing, and analysing a large amount of data were not possible until that date. But does big data do good or bad for people? Boyd and Crawford (2012, p. 663) express these concerns raised by different groups. Researchers in different fields of science, professionals, natural events, things, people, and their interactions, etc., are constantly producing data. These data feed the big data and, consequently, the digital economy. But the question is, will this technological advancement help people live better lives, or will it be used against them and become the product itself? There is an ongoing debate about who has the right to access, process, and benefit from these mutually created data and who owns it, a major concern among various interest groups (Boyd & Crawford, 2012, p. 672). Instant messaging service consumers' email addresses, phone books, following

and follower lists, interactions with other people and contents, and so on are forging big data. According to a report (Statista, 2022b), social media users reached 4.7 billion people, while the penetration rate was 58.4% worldwide. As of January 2022, the user numbers of the most popular social networks worldwide, respectively, in millions, were as follows: Facebook 2.910, YouTube 2.562, WhatsApp 2.000, and Instagram 1.478 (Statista, 2022a).

Boyd and Crawford (2012) claim that the status of this information obtained from big data must be defined – whether it is public data, requires permission to access, or is ethical. Data from people can be collected by obtaining consent or observing them. The data collected with the users' consent represents volunteered data, and the users knowingly provided the data, such as payment information and location. Observed data is present, using applications to collect user data such as friend lists, online activities, interests, etc. The advancement of digital technologies increases user-created data while also helping to collect data by observing users. Most of the collected user data represent observed data (UNCTAD, 2021). Besides that, only social media companies have access to this valuable data. Social media data is considered the most important and valuable for big data. In addition to these controversial statuses, there are brand-related incidents, such as the desire to access more data. The result is that many digital brands have begun to consider changing their privacy policies. Any information involving people may inevitably give rise to privacy concerns, and it is challenging to assess the real risks of misusing this information (Berry, 2011). By 2012, over 99% of the world's technologically stored information was digital, compared to less than 1% in the late 1980s (Hilbert, 2022). Every 2.5 to 3 years, humanity can store more data than it has since the dawn of civilization. The modern era focuses on algorithms that automatically transform data into useful knowledge. Hilbert (2022) proposed that increased data storage and processing ability causes social change and problems. Researchers consider big data a socio-technical phenomenon because of the vast amount of data that can be collected and processed (Shin & Choi, 2015). Society has some concerns regarding privacy, data quality, access, curation, preservation, and the use of data.

Warren and Brandeis (1989) foresightedly suggest that innovations and new business models would threaten private and domestic life. Society should act accordingly to defend their rights and prevent such harm. Bovard (2022) criticizes the current status quo of digital companies because of the power they are handling, which is not controlled and has a huge impact on every aspect. Since they control the flow of information, they could threaten human rights, which could cause customer rights violations. According to Bremmer (2021)'s work, digital platforms will drive the next industrial revolution. Still, the real question is: will it be done ethically, and will it harm the intentions of users to share their private data? Bovard (2022) asserts that if any precautions do not govern social media, they will rule all of society in the long run.

Big data is providing enormous advantages and posing disadvantages to society. One of the questions is how to eliminate the disadvantages and get the data flow to continue to contribute because, by all accounts, data appears to be fuel for a future society since it's the essence of big data. As a result, data flow security would impact all facets of the digital society. Because the constant flow of small-scale data is vital to accumulating big data, flow is critical for the digital economy and one of its key pillars, which employs data to create information. Data can be about anything, such as people, the natural environment, and organizations. These accumulated data can provide value if aggregated, processed, and used. The information acquired from big data increases the value of decision-making about the environment, organizations, and society locally and globally (Coyle, Diepeveen, Wdowin, Tennison, & Kay, 2020, p. 6).

A recent incident aroused great interest worldwide in line with the mentioned issues. WhatsApp, one of the digital messaging service brands, announced a privacy policy update and received a very negative reaction from consumers. The privacy policy update allowed consumer privacy information shared with WhatsApp to be used among other brands owned by the main parent brand. The approach to obtaining consumer consent for policy changes may adversely affect consumers' privacy. The study asserts that privacy policy updates negatively impact consumer privacy because if customers are unaware of the changes, they may be unable to refuse certain data-gathering techniques (Perez, Zeadally, & Cochran, 2018). Social networking is an intriguing but complex context wherein users, service providers, and other third parties exchange information and may potentially breach users' privacy (Benson, Saridakis, & Tennakoon, 2015). The prior study examined the Apple Privacy Choice Policy in 2020–2021, demonstrating that third-party-enforced privacy policies that increase consumers' privacy concerns detract from the consumers' perception of brand image and weaken the perceived brand value (Sarker, 2022). Eastlick, Lotz, and Warrington (2006) explain that commitment, trust, and privacy concerns impact brand-consumer relationships on digital platforms.

Policy updates result in changes in brand-consumer relationship contracts. Evaluating a partner's talents and efforts in managing the relationship along implicit and explicit contract lines are one significant subclass of character inferences that affect how a relationship evolves. Such inferences in a marketing environment include whether a brand as a partner is likely to act in a way that promises are maintained, handling unfavourable events, and serving the long-term interests of consumers (J. Aaker, Fournier, & Brasel, 2004). Steinman (2012) asserts that when a brand breaches the implicit and explicit contract in the brand-consumer relationship, a negative impact on consumer attitude and behaviour is immediate and imminent. When brands violate implicit and explicit contracts, their relationships with consumers can suffer. Sayin and Gürhan-Canlı (2015) point out that when a brand transgression happens, customers must decide whether to adjust and maintain their relationship with the brand or to cease doing so. The severity of the offence is important in making this choice. Some transgressions are so serious that customers cannot continue their engagement with a brand. But in other cases, customers ignore or overlook the new information and blame external factors for the transgression to maintain their relationship, considering previous transgressions. As a result, brand transgression can lead to reduced sales, damaged brand value, weakened consumer loyalty (Khamitov, Grégoire, & Suri, 2020), decreased customer commitment to the brand, and hindered efforts to rebuild consumer trust. (da Rosa Pulga et al., 2019).

As explained above, brand transgression, privacy concerns, and privacy risks are closely related. And privacy risk is one of the crucial determinants of consumers' information disclosure intentions. Keith, Thompson, Hale, Lowry, and Greer (2013) remark that realistic privacy risks have been problematic to recreate using experimental techniques to control independent factors. Furthermore, little research has captured actual information disclosure over digital devices based on realistic risk perceptions. The impact of privacy concerns on information disclosure intention and commitment on digital platforms is also not adequately established (Jai & King, 2016). Due to a large amount of media coverage, the reaction to the WhatsApp Privacy Policy update offers a unique chance to examine these processes (Griggio et al., 2022).

Privacy policy implications in social media are not just related to a micro-level effect on businesses; they also have a macro-level effect on the digital ecosystem. From this point of view, this study examines the meaning of sudden privacy policy changes to users, namely consumers, of social media brands. How does this type of change affect consumers' decisions about continuation intention? This study uses privacy concerns as an exogenous independent variable to explain the effect. While privacy concerns have a negative effect in general, there are also some positive effects related to which independent variable is affected. The research hypothesis contains that privacy concern harms consumers' trust-belief and information disclosure intention while positively affecting consumer perceived risks. And another construct in the research model is trust-belief and perceived risk role as mediators between privacy concerns and information disclosure intention. Furthermore, this study considers privacy policies that are sudden and imposed on consumers by a brand as a brand transgression. So, how the increase in brand transgression severity affects the privacy concern variable and its interaction with other variables in the research construct is another research question to be answered. The effect of gender was also studied in this research construct.

### **A summary of the WhatsApp privacy policy update**

After the privacy policy change decision, WhatsApp had a difficult time. In January 2021, WhatsApp planned to revise its privacy policy. This step by the brand created controversy among consumers since its way of announcing the change seemed to penalize them if it was not accepted. Before this event, the brand had caused incidents before, and after encountering a wave of intense controversy, it rolled out a revision to its privacy policy. The content of this updated privacy policy and the terms that it imposes on consumers include sharing consumer data with their other company brand, which is Facebook. Metaverse became Facebook's main brand as part of the company's strategic shift. This change underlines the brand's commitment to investing in and focusing more on virtual environments. As a result, the company wants to increase the exchange of consumer information between its brands through the Metaverse. After encountering strong consumer resistance, the brand stepped back. It delayed this process, but the brand again alerted consumers about the upcoming privacy policy change via an in-app notification (Hutchinson, 2021). With this mandatory privacy policy revision that WhatsApp imposed, Facebook will have access to more data generated by WhatsApp consumers. Customers of WhatsApp were informed about the app's updated terms of service and privacy policy via an in-app notice. If they disagree, users will not be allowed to use WhatsApp once the mandatory amendments are enacted on February 8, 2021. The update covers how WhatsApp handles user data and how companies may use Facebook-hosted message management and storage services. The revised

terms and privacy policy seem to expand on the modifications published in July 2020. However, that update allowed users to prevent Facebook from receiving information from their WhatsApp accounts. The most recent update removed this feature. If users accept the updated terms, Facebook will receive their phone number, IP address transaction data, service-related information, interaction information, mobile device information, and registration information for WhatsApp accounts, according to the new terms. According to Facebook's policy on how it will use this information, the shared data is used to "understand how our or their services are used," "improve their services," "offer suggestions for you," "personalize features and content," and "show relevant offers and ads across the Facebook Company Products." Since WhatsApp wants to give consumers a consistent experience across services, its integration into Facebook's family of products will be enhanced by the revised conditions (WhatsApp, 2021)

The brand-new attempt to update the privacy policy sets a deadline of May 15 for accepting the revised terms. Still, it will permit notifications to continue for just a short period after that. Despite this consumer controversy, WhatsApp insisted that the privacy policies would take effect on May 15. However, it also issued contradictory results about what would happen if users refused to abide by them. WhatsApp users who do not accept the privacy policy revision will see limited phone functionality for a while. This will include being unable to access your chat list or receive incoming calls or notifications. Eventually, WhatsApp will cease sending messages and making calls to your phone. Anxiety among WhatsApp users, who are seeing rival messaging services once again acquire popularity, was ignited and renewed by the increasing penalties for non-compliance. As a result of triggering major privacy concerns among consumers, this incident cost WhatsApp a high consumer churn rate, which rocketed to 25% just 72 hours after a privacy policy change announcement via an in-app alert. For instance, in these three days, Telegram gained 25 million new users, and Signal and Viber experienced sharp increases in popularity (Griggio et al., 2022). As a result, WhatsApp users will now be subject to high data exchange, which may cause privacy concerns even while the improvements help Facebook reach its broader aims. As mentioned, WhatsApp introduced the new update via more direct in-app alerts in January. As a result, the concern may spread to large masses, discouraging digital media platform consumers from sharing their data.

## Literature review

One of the most controversial statements is, "If you are not paying for it, you are not the customer. You are the product being sold" (Lewis, 2010). On the contrary, when asked to comment on Facebook's privacy policy, Apple CEO Tim Cook stated, "Privacy to us is a human right" when questioned about Facebook's privacy practices. That is a form of civil liberty. "You are not our product." "You are our customer" (Clifford, 2018). As a result, in this study, WhatsApp was evaluated as a digital brand that provides digital services, with its users serving as brand consumers. It is often overlooked that social media users also consume communication, information, content, and the related application itself. Kietzmann, Silvestre, McCarthy, and Pitt (2012, p. 111) address the fact that people use a variety of personas to claim their identities on social media sites. Therefore, there is no such thing as a single identity for a single social media consumer. People who consume digital services are also consumers of related digital services and digital brands. That point of view is frequently overlooked in research. Collis (2020) suggests that social media consumers usually consume digital services that are often free. This study seeks insight into how privacy policy updates trigger consumers' privacy concerns and brand continuation intentions and comprehend the severity of perceived brand transgression on this interaction in digital brands. In this section, hypothesized assumptions of the study will be reviewed in related literature.

## Privacy concern

The concept of informational privacy deals with the rights of those whose information is shared. Information privacy is the right of people, organizations, or other entities to control how, when, and to what degree information about them is shared with others (Westin, 1967, p. 7). Although the concept of information privacy seems somewhat simple, the actual limits of information privacy in everyday life depend on a range of circumstances, such as industrial sectors (Culnan & Bies, 2003), cultural norms (Donaldson & Dunfee, 1994; Milberg, Burke, Smith, & Kallman, 1995), and legal regulations (Campbell, 1997). Campbell (1997, p. 52) argues that concerns about information privacy differ depending on customers' subjective notions of fairness. In the digital economy era, consumer privacy concerns are a topic of interest in various disciplines as unfair information practices, and data security issues continue to increase on many platforms (Okazaki, Li, & Hirose, 2009). Privacy concerns among consumers change because of many external factors. Consumers' perceptions of these external factors will differ depending on their characteristics (Campbell, 1997) and prior experiences (Donaldson & Dunfee, 1994).

Consumer privacy concerns are significantly impacted by lifetime experiences based on prior experiences; the more customers have had negative experiences with data inaccuracies, the more reluctant they may be to disclose subsequent information (Stone & Stone, 1990). Marketers may be adversely affected by this developing situation when marketing practices pervasively shift to digital platforms. Consumers who have experienced negative experiences with information exposure are more concerned about privacy and perceive more risk, which makes them favour stricter regulatory restrictions on privacy data processing. The perceived pervasiveness and sensitivity of the information request only exacerbate the detrimental effect of privacy concerns on trust (Okazaki et al., 2009). Personal negative experiences with the improper use of information by certain brands will likely raise worries about consumer privacy in all areas since these experiences erode customers' trust in how all brands utilize customer information. As a result, consumers frequently differ on what is and is not fair regarding a brand collecting and using their personal information. When customers believe their rights regarding their personal information have been violated, information privacy concerns develop (Okazaki et al., 2009). However, media-reported indirect experiences could not impact customer sentiments as strongly (Phelps, Gonzenbach, & Johnson, 1994). Privacy concerns may also be influenced by consumers' knowledge of actual brand practices and policies (Glazer, 1991), even though its impact has been the subject of two contradictory arguments. Consumers may become more concerned about privacy practices as their understanding of the acquisition and use of personal information increases. However, suppose customers knew that the information gathered might be used to establish a connection with them so they could participate in developing a market product. In that case, their privacy concerns may be mitigated or outweighed by their desire to participate (Glazer, 1991). While the inappropriate disclosure of private data is a cause for privacy concerns, it doesn't matter if the disclosure was permitted; what matters is who received the information and what kind of information was shared (Culnan & Bies, 2003, p. 329).

However, some studies do not support the impact of privacy concerns on perceived risk (Okazaki et al., 2009). Keith et al. (2013) explains that, through the lens of privacy calculus, there is a relationship between intended and actual information sharing. Furthermore, consumer behaviours, including sharing false information, are a significant moderator of this relationship. Also, consumer privacy concerns increase the perceived privacy risk and reduce the willingness of consumers to disclose information. The previous research on internet users' privacy concerns shows that privacy concerns hurt trust beliefs and positively affect risk beliefs; both variables also affect behavioural intention, which mediates the interaction between privacy concern and behavioural intention (Malhotra, Kim, & Agarwal, 2004). Zhang et al. (2018) also support the assumption that customer privacy concerns are adversely associated with information disclosure intentions. The study concludes that increased consumer privacy concerns reduce loyalty to related digital services, while increased credibility increases it (Li, Liu, Lee, & Huang, 2020). Eastlick et al. (2006) suggest that brand reputation is a crucial factor that positively affects customer trust and commitment, influencing the usage intentions of related platforms. However, privacy concerns erode customer trust and their digital platform usage intentions. Wu, Huang, Yen, and Popova (2012) emphasize that the content of privacy policies, privacy concerns, and trust were also significant in consumers' information disclosure intentions. Willis et al. (2021) suggest that if the data regulation laws were applied voluntarily by digital platforms, this would increase consumers' trust and decrease privacy concerns and that as an expected outcome of privacy concerns, a decrease in trust results; consequently, trust motivates the commitment of consumers to a related digital platform. Regulations by governmental organizations significantly contribute to consumers' trust and commitment to related digital platforms. Thus, it is reasonable to posit that information privacy concerns may increase the perceived risk of information disclosure and decrease trust-beliefs and information disclosure intentions:

#### *Direct Effect*

*H<sub>1</sub>: Customers' privacy concerns are negatively associated with trust-belief.*

*H<sub>2</sub>: Customers' privacy concerns are negatively associated with information disclosure intention.*

*H<sub>3</sub>: Customers' privacy concerns are positively associated with perceived risks.*

#### **Trust, perceived risk, and information disclosure intention**

One of the most effective measures consumers may take in response to privacy concerns is to limit their usage of linked brands. Any definition of information privacy must acknowledge that people gave up part of their privacy in return for a financial or social advantage. Customers have to trust that the supplier of the product or service will process their personal information in a way that makes them feel secure (Cespedes & Smith, 1993). The relationship's foundation of trust is in peril if the company fails

to maintain it (Culnan & Bies, 2003, p. 327). Morgan and Hunt (1994, p. 23) asserted commitment trust theory and described trust as when one party has confidence in a partner's reliability and integrity, then trust exists. The commitment-trust theory explains that to maintain a long-term relationship, trust is a crucial component of that structure. Thus, consumers could be very sensitive to sharing their information with third parties, so digital platforms should be careful when disseminating consumer information to avoid losing consumer trust (Jai & King, 2016). Campbell (1997) reveals that consumer privacy concerns related to personal information violation and secondary use are expected to affect consumers' responses to their relationships with brands negatively. The study explains that privacy concern on digital platforms is positively correlated with perceived risk; consumers' increased privacy concern and perceived risk decrease their trust towards the platform and information disclosure intention, while trust increases this intention (Dinev & Hart, 2006).

There are some instances where social media users can keep interacting with people even while they believe their privacy is at stake. The privacy paradox refers to this unexplainable occurrence; it claims that people have high privacy concerns and high perceived privacy risk, yet people act in ways that go against these claims. Smith, Dinev, and Xu (2011) report that a privacy paradox was observed when the generic idea of privacy as a right was applied to consumer behaviour. Despite having serious privacy concerns, consumers continued to provide their personal information in various circumstances. This phenomenon is attempted to be explained by the privacy calculus theory. According to the privacy calculus theory, sharing information has risks and benefits (Dinev & Hart, 2006). When determining the advantages of disclosing their personal information to third parties, customers weigh the costs and advantages of doing so (Culnan & Bies, 2003, p. 327). According to this line of reasoning, some researchers assess information as a commodity and suggest that a person's decision to reveal private information is influenced by a cost-benefit disclosure analysis (Keith et al., 2013). However, prior studies show that consumers perceive the risks and benefits of information disclosure in a well-balanced way and will continue to do so. This phenomenon is called fair exchange (Culnan & Bies, 2003, p. 328).

Ozdemir, Jeff Smith, and Benamati (2017) determined that the perceived risk negatively affected consumers' trust in their information disclosure intentions, while privacy concerns among consumers decreased their willingness to disclose information. The research also indicates, through the lens of privacy calculus, that benefit plays a key role in information disclosure intention. The study finds that consumers' perceived risks and benefits of information disclosure significantly correlate with their desire for instant gratification. Privacy awareness, prior online privacy breaches, payment security in a mobile environment, and negative media exposure significantly impact perceived risks and benefits (Cheng, Hou, & Mou, 2021). Okazaki et al. (2009) support that prior negative consumer experiences with information exposure have led to greater privacy concerns and a more risk-averse attitude, which makes them want stricter regulatory controls on digital platforms. The apparent pervasiveness and sensitivity of the information request only exacerbate the detrimental effect of privacy concerns on trust. Malhotra et al. (2004) claim that whether consumers disclose personal information upon the request of a digital service brand may be determined by their intention to do so. Consumer beliefs about perceived risks are likely to impact their intentions majorly. As a result, trust and risk beliefs significantly influence consumers' behavioural intentions. Furthermore, Malhotra et al. (2004) emphasize that customers' increased privacy concerns about digital services decrease their trust perceptions and increase their risk beliefs. This study shows that consumers' trust and risk beliefs affect behavioural intention, while the sensitivity level of information required to use the service also affects each. The study's assumptions are as follows, by the examined literature:

#### *Direct Effect*

**H<sub>4</sub>:** *Customers' trust-belief is positively associated with information disclosure intention.*

**H<sub>5</sub>:** *Customers' perceived risk is negatively associated with information disclosure intention.*

**H<sub>6</sub>:** *Customers' information disclosure intention positively correlates with continuance intention towards related instant messaging services.*

According to specific studies, trust and perceived risk mediate the relationship between privacy concerns and information disclosure intention (Bélanger & Crossler, 2011; Smith et al., 2011; Ozdemir et al., 2017; Li et al., 2020; Cheng et al., 2021). Thus, it is reasonable to posit that information privacy concerns increase perceived risk and decrease trust-beliefs in consumer information disclosure intentions, both of which have direct and indirect effects as antecedents of digital service continuation intentions.

*Mediation Effect*

**H<sub>10a</sub>:** *Trust-belief mediates the relationship between privacy concerns and information disclosure intention.*

**H<sub>10b</sub>:** *Information disclosure intention mediates the relationship between privacy concerns and continuance intention.*

**H<sub>10c</sub>:** *Perceived risk mediates the relationship between privacy concerns and information disclosure intention.*

**H<sub>11a</sub>:** *Trust-belief mediates the relationship between privacy concerns interaction with brand transgression severity and information disclosure intention.*

**H<sub>11b</sub>:** *Information disclosure intention mediates the relationship between privacy concerns interaction with brand transgression severity and continuance intention.*

**H<sub>11c</sub>:** *Perceived risk mediates the relationship between privacy concerns interaction with brand transgression severity and information disclosure intention.*

Since demographic characteristics were seen as important determinants of decisions relating to privacy in earlier research, gender was used as a control variable in this study. But some studies supported this assumption (Smith et al., 2011; Jai & King, 2016), while others did not (Cheng et al., 2021; Willis et al., 2021). Furthermore, the sample is inadequate for testing other demographic characteristics (e.g., income, age, education, etc.) but gender. Therefore, the study hypothesizes:

*Group Difference*

**H<sub>12</sub>:** *There is a difference between genders in the relationship between trust-belief and information disclosure intention.*

**H<sub>13</sub>:** *There is a difference between genders in the relationship between perceived risk and information disclosure intention.*

**H<sub>14</sub>:** *There is a difference between genders in the relationship between information disclosure and continuance intentions.*

**Brand transgression**

Strong brand-consumer relationships result in strong brand loyalty and resistance to switching brands, increased intention to purchase, a willingness to pay more, and positive word-of-mouth (Hemsley-Brown, 2022). However, brand-consumer relationships can go wrong at times. In situations where good brands do bad things, this is called brand transgression (Aaker et al., 2004). Marketing causes various negative events or encounters, and brand transgression is one of them. Khamitov et al. (2020, p. 521) listed these events as service failure, product harm crisis, and brand transgression. They included investigations into a consumer's disagreement or friction with a company, brand, or product.

When characterizing brands, consumers and owners think of a brand as having distinct characteristics (Aaker, 1997). The brand's origin and personality traits are significant characteristics of the branded offer. More than the brand's owner, brand consumers talk about the brand as a person. The brand's personality and character make it come alive and give it a soul. But just like with people, a brand is more than just its personality. Where individual personality defines people from the inside, individuals' actions show who they are to the rest of the world. In this aspect, brand managers gained the ability to analyse the brand-consumer relationship through the lens of interpersonal relationships. The study (Metts, 1994, p. 221) investigated some transgressions regarding interpersonal relationships. According to the study, a transgression occurs when: (1) violating confidence; (2) violating privacy in a network relationship; (3) forgetting plans and special occasions; (4) emotional attachment to a former partner; (5) intimate intercourse with a former partner; (6) a lack of trust; (7) breaking promises; (8) changing important plans; (7) physical abuse; (8) behaving unfairly in fighting; and (7) comparisons in an unfair manner. In conjunction with this viewpoint, Aaker et al. (2004) identified two factors that impair the relationship between consumers and brands and lead to brand transgression. One is based on the definition of "brand personality," according to which it can be said that consumers have different experiences with brands that have positive and negative effects on them. The accumulation of these experiences defines the strength of brand-consumer relations, which is crucial for brands to create a competitive advantage. This relationship strength is shaped based on experiences and brand personality. Both direct and indirect effects of personality on a relationship can be seen since partner personality consistently shapes the actions taken in a relationship and reshapes the conclusions about a person's character inference from long-term observation of these actions (Aaker et al., 2004). Evaluating a partner's talents and efforts in managing the relationship along implicit and explicit contract lines are one significant subclass of character inferences that affect how a relationship evolves. Such inferences



in a marketing environment include whether a brand as a partner is likely to act in a way that promises are maintained, handling unfavourable events, and serving the long-term interests of consumers (Aaker et al., 2004). Besides that, two out of five personality traits provide some advantages related to brand relationship strength, which are sincere and exciting brand personalities (Aaker et al., 2004). The committing of a transgression, which refers to a violation of the implicit or explicit standards guiding relationship performance and evaluation, is a second factor frequently pointed out for its decisive impacts on relationship strength (Aaker et al., 2004).

Literature on customer relationship management suggests that brands' violation behaviour can lead to revenue loss, damaged brand equity, lower consumers' brand commitment (Khamitov et al., 2020), potentially violate consumer trust, and affect the recovery of that trust (da Rosa Pulga et al., 2019). Steinman (2012) asserts that when a brand breaches the implicit and explicit contract in the brand-consumer relationship, a negative impact on consumer attitude and behaviour is immediate and imminent. When brands violate implicit and explicit contracts, their relationships with consumers can suffer. Brand transgressions result in consumer behaviours such as negative word of mouth (Grégoire & Fisher, 2006), which is faster with today's technological development. While forming overall assessments of an attitude object, consumers give more weight to positive than negative information (Herr, Kardes, & Kim, 1991), brand switching (Bechwati & Morrin, 2003), and brand boycotting (Klein, Smith, & John, 2004).

Studies in interpersonal relationship research suggest that privacy violations decrease relational quality and satisfaction (Petronio, Olson, & Dollar, 1989; Metts, 1994, p. 221). Similarly, a strong brand reputation lowers the risks related to privacy concerns and fosters consumer impressions of trust (Eastlick et al., 2006). This study found that commitment, trust, and privacy concerns impact brand-consumer relationships on digital platforms. Furthermore, dissatisfaction with the service experience will result from unethical cues, whereas ethical cues and an honest service provider may be the expected norm (Thomas, Vitell, Gilbert, & Rose, 2002). And unethical activities damage a brand's image (Sierra et al., 2010). Based on the consistency between brand image and self-image, consumers develop and show themselves to others through their brand selections. This process connects the collection of brand associations to the consumer's inner self-image (Escalas & Bettman, 2003). Therefore, balancing brand image and consumer identity is crucial in brand management (Jan Alsem & Kosteljik, 2008). According to Sayin & Gürhan-Canlı (2015), when a brand transgression occurs, customers may decide whether to adjust and keep their relationship with or abandon the brand. The severity of the offence is important in making this choice. Some transgressions are so severe that customers cannot continue their engagement with a brand (Sayin & Gürhan-Canlı, 2015).

#### *Moderation Effect*

**H<sub>7</sub>:** *The severity of brand transgressions customers perceive strengthens privacy concerns and trust-beliefs relationships.*

**H<sub>8</sub>:** *The severity of brand transgressions customers perceive strengthens privacy concerns and the information disclosure intention relationship.*

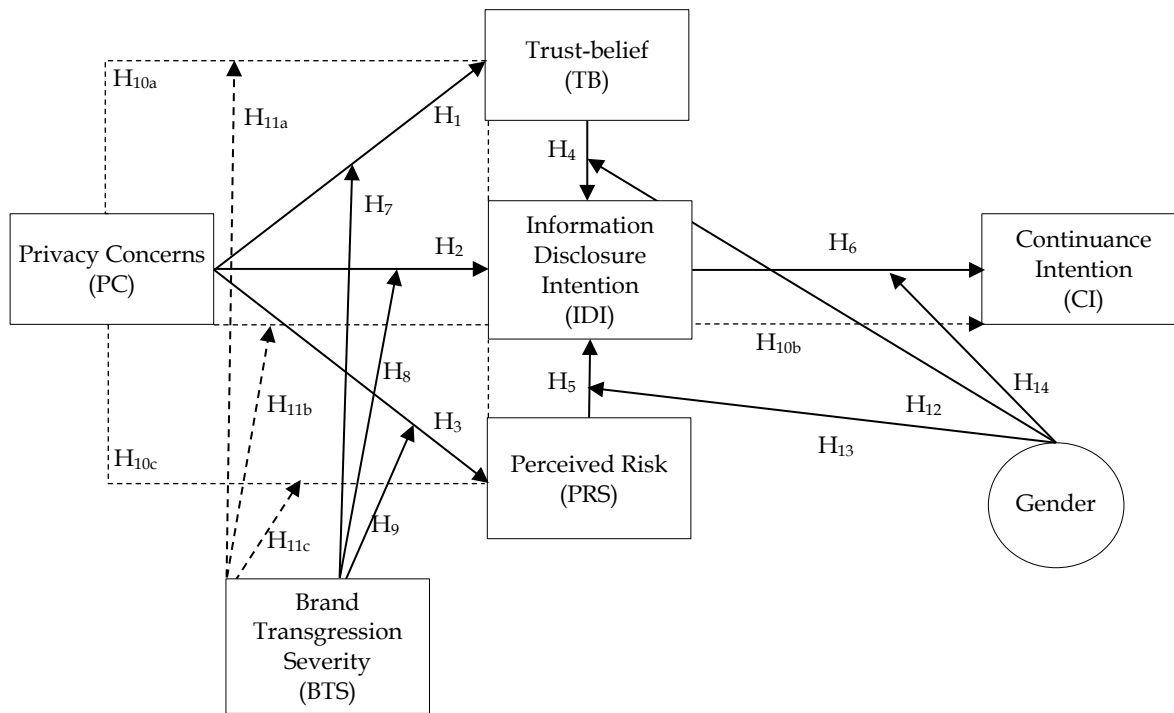
**H<sub>9</sub>:** *The severity of brand transgressions customers perceive strengthens the privacy concerns and perceived risk relationship.*

## **Methodology**

### **Research model**

The research model that plots the interactions between the constructs is represented in Figure 1. The research model is derived from prior studies (Malhotra et al., 2004; Eastlick et al., 2006; Okazaki et al., 2009; Zhang et al., 2018; Cheng et al., 2021) in related literature and adopted for this study.

The research model proposes that increased privacy concerns positively affect perceived risk. In contrast, a negative effect on trust-belief and information disclosure intention and consequently those affect consumers' instant messaging service continuation intention. Figure 1 demonstrates that trust-belief, perceived risk, and information disclosure intention mediate the relationship between privacy concerns and brand transgression severity with continuance intention. Also, brand transgression severity moderates the effect of privacy concerns: trust-belief, perceived risk, and information disclosure intention. So, the increase in the severity of transgressions increases the negative effect of privacy concerns on trust, belief, and information disclosure and the positive effect on perceived risk. Also, to see if differences exist in the relationship proposed in the research model across different groups, customer demographic characteristics of gender are evaluated as the control group.



**Figure 1:** Research Model

#### Data collection

The research questions are conceptualized in the context of instant messaging services. Since most instant messaging service customers are young, the research sample population was chosen from Bandırma Onyedi Eylül University students and staff. Before starting the survey, this study got approval from the Social and Humanities Sciences Ethics Committee at Bandırma Onyedi Eylül University on July 1, 2021, and a 2021-6 document number. Research data were collected between the dates 7/14/2021 and 10/25/2021. The research samples were collected using a simple random sampling method and an online questionnaire. Several control questions were included in the research questionnaire, and 456 responses were collected via electronic form. As a result, 23 individuals' data were found invalid, and 11 were removed from the research sample since their data could not fully answer the control questions. Within the scope of the research, 422 valid samples were obtained. It is understood that the number of samples obtained according to the 95% confidence interval and 10% precision coefficient is also sufficient in cases where the population number is between 15,000 and 20,000 (Singh & Masuku, 2014, p. 11). This study uses structural equation modelling to test hypotheses. Research (Schumacker & Lomax, 2015) on this method for determining sample size suggests that it will provide adequate, reliable sample power at a statistical significance level of 0.05 (Singh & Masuku, 2014, p. 11). Some researchers working in structural equation modelling suggest that a certain ratio should be maintained between the number of participants and the number of items used in the research. Accordingly, Nunnally (1978, p. 421) suggests that this ratio should be 10 to 1, while Hatcher and Stepanski (1994, p. 73) argue that this ratio should be 5 to 1. The participant-to-item ratio for this study is determined to be 15:1, given that 27 scale items were employed, and 422 valid data were collected. Therefore, it is concluded that, according to the preceding works in structural equation modelling, the number of samples obtained in this study meets the criterion of being sufficient to perform the structural equation modelling.

#### Measures

Six constructs were measured in this research model: privacy concerns (PC), brand transgression severity (BTS), trust-belief (TB), information disclosure intention (IDI), perceived risk (PR), and continuance intention (CI). All dimensions of the research construct were measured using five-point Likert scales. Nunnally (1978) suggested that per construct in the research model, at least three items. The scales are anchored between "strongly disagree" and "strongly agree". In the context of the research model, six dimensions and 27 items were used. PC was measured using six items adapted from Pavlou, Liang, and Xue's (2007) information privacy concerns scale. The following five items measured respondents' trust beliefs, adapted from Jarvenpaa, Tractinsky, and Saarinen (1999)'s study. The last

three items measured information disclosure intention using Wang and Liu's (2014) scale. PR dimension was measured using five items adapted from Malhotra et al. (2004) risk belief scale. CI was measured using three items adapted from Mathieson (1991)'s intention scale of technology acceptance literature study. Finally, BTS used as a moderation variable in this study, was measured with six items adapted from (Hyman, 1996).

### Demographics

The demographic characteristics of the data included in this research were investigated. Results reveal that 42% of respondents are male, and 58% are female. The respondents' age group falls into the youth population, which was expected in the research design because of the nature of technology services. 85.5% of respondents were between the ages of 18 and 25, 5.9% were between the ages of 26 and 33, and 8.5% were between the ages of 34 and 41. Regarding income, 322 respondents were between 0 and 2300 TL, 76.3%. 14.2% of respondents with an income between 2301 and 4600 TL, 5.7% between 4601 and 6900 TL, and 3.8% with an income of 6901 TL or more. The respondents' educational backgrounds are as follows: 4.7% are in high school, 17.3% have an associate degree, 74.2% are undergraduates, and 3.8% are postgraduates.

Respondents were asked, "Will you continue to use related instant messaging services?" Of the 52.1% who responded that they would continue to use the service, 31.1% continue to use but also seek an alternative to a related app, and 16.8% have begun using an alternative instant messaging app. To investigate which instant messaging services are being used in this context, a question directed to respondents yielded the following answers: 83.2% WhatsApp, 64% Telegram, 23% Messenger, 18% Turkcell BIP, 15.4% iMessage, 12.3% Skype, 2.4% Signal, 1.9% WeChat, and 1.9% GroupME.

## Data analysis and results

### Analysis

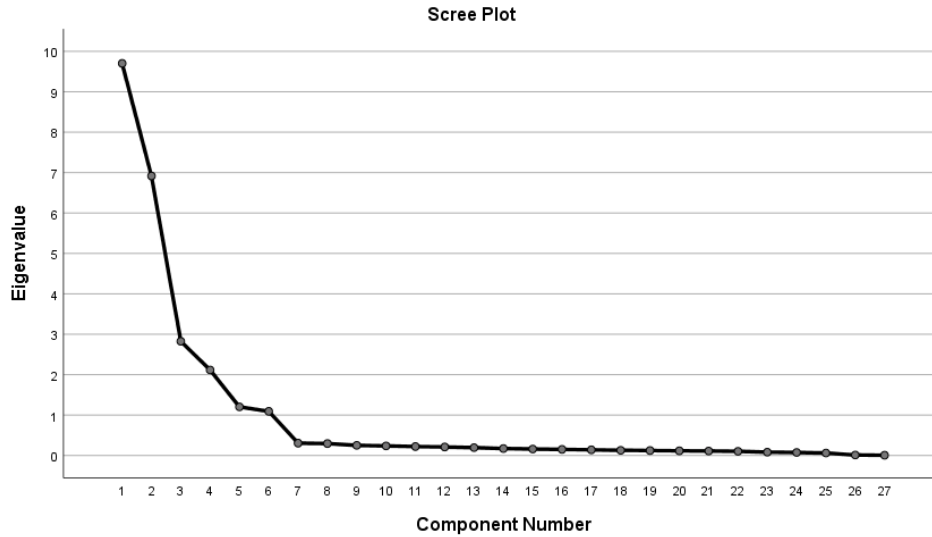
Factor analysis has a crucial role in multivariate analyses, mainly because it allows for revealing the implicit structure between the variables in the analysis (Hair, Black, Babin, & Anderson, 2014, p. 92). To prevent deviating from the objectives of the scales used in the research, exploratory factor (EFA) and confirmatory factor (CFA) analysis were used first to reveal the relationship between the variables and then understand whether there is a relationship between the variables if any. (Byrne, 2016, p. 5). As Schumacker and Lomax (2015, p. 93) mentioned, it is also an important issue regarding the reliability and validity of the scales used in research. Thompson (2004, p. 6) emphasizes that performing EFA before CFA is important to prevent an error that may be encountered later and to avoid duplication of procedures. For this reason, EFA was performed on the data before employing CFA. To assess whether the research data meets the assumption of factor analysis, Bartlett's Test of Sphericity (BTS) (Bartlett, 1950, 1951) and Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) tests (Kaiser, 1970, 1974) were employed before performing factor analysis to see relationships between constructs in the study. KMO sample adequacy was measured, and BTS was performed to examine whether it showed a normal distribution (Frank & Todeschini, 1994, p. 160). The KMO and BTS results are shown in Table 1. As a result, BTS was statistically significant ( $p < 0.05$ ),  $KMO > 0.6$  was obtained, and the results were considered a good value for factor analysis (Pallant, 2020, p. 181). In addition, the data obtained generally explains 88,574% of the total variance. Therefore, the data is adequate to perform CFA according to the results obtained.

**Table 1:** KMO and Bartlett's Test

KMO	0.916
Approx. Chi-Square	14850.372
BTS	300
df	300
Sig.	0.000
Total Variance Explained	88.574

EFA was employed using the SPSS 23 program, and six-factor patterns were obtained. The related results are shown in the scatter plot in Graph 1. According to EFA findings, PC6, BTS4, and TB1 items were excluded from the study due to low and cross-loading issues (Tabachnick & Fidell, 2013), and EFA was repeated. Table 2 displays mean values, standard deviations, and loadings for six components obtained in the second EFA. The results of the second EFA show that the values of the items in the following scales range from PC 0.845-0.880 ( $\alpha = 0.970$ ), BTS 0.873-0.901 ( $\alpha = 0.955$ ), TB 0.854-0.890 ( $\alpha = 0.940$ ), PRS 0.807-0.854 ( $\alpha = 0.955$ ), IDI 0.850-0.854 ( $\alpha = 0.909$ ), CI 0.942-0.958 ( $\alpha = 0.962$ ). The analysis indicates that each component of the research's model satisfied the requirements (Osborne & Costello, 2009, p. 138). Furthermore, each measurement dimension's value of Cronbach's alpha is greater than

0.9, meeting the required threshold value, indicating excellent internal consistency and reliability (Darren & Mallery, 2003, p. 231).



Graph 1: Scree Plot

Table 2: Measurement Model

Dimensions/Items	$\bar{X}$	$\sigma$	EFA( $\lambda$ )*	CFA ( $\lambda$ )	t value
<b>Privacy Concerns (PC)</b>	<b><math>\alpha= 0.970, CR=0.966, AVE=0.849, MSV=0.298, MaxR(H)=0.967</math></b>				
PC1	3.325	1.066	0.848	0.902	-
PC2	3.454	1.090	0.851	0.904	30.620
PC3	3.382	1.055	0.852	0.934	33.030
PC4	3.389	1.035	0.845	R	R
PC5	3.401	1.084	0.861	0.931	32.449
<b>Brand Transgression Severity (BTS)</b>	<b><math>\alpha= 0.955, CR=0.955, AVE=0.811, MSV=0.159, MaxR(H)=0.958</math></b>				
BTS1	2.493	1.051	0.882	0.874	-
BTS2	2.678	1.076	0.873	0.884	25.922
BTS3	2.623	1.080	0.876	0.898	26.760
BTS5	2.731	1.093	0.874	0.911	27.581
BTS6	2.649	1.120	0.901	0.934	29.136
<b>Trust Blief (TB)</b>	<b><math>\alpha= 0.940, CR=0.941, AVE=0.799, MSV=0.313, MaxR(H)=0.943</math></b>				
TB2	3.863	1.029	0.887	0.921	-
TB3	3.817	0.992	0.862	0.872	27.467
TB4	3.762	0.981	0.854	0.894	28.830
TB5	3.820	0.951	0.890	0.889	28.854
<b>Perceived Risk (PRS)</b>	<b><math>\alpha= 0.955, CR=0.956, AVE=0.845, MSV=0.408, MaxR(H)=0.956</math></b>				
PR1	3.401	1.071	0.854	0.919	-
PR2	3.358	1.086	0.834	0.926	33.083
PR3	3.373	1.015	0.835	0.91	31.370
PR4	3.356	1.054	0.807	0.922	32.576
<b>Information Disclosure Intention (IDI)</b>	<b><math>\alpha= 0.909, CR=0.997, AVE=0.991, MSV=0.433, MaxR(H)=0.990</math></b>				
IDI1	3.405	1.044	0.853	0.995	-
IDI2	3.422	1.042	0.854	0.998	164.633
IDI3	3.392	1.047	0.850	0.993	132.037
<b>Continuance Intention (CI)</b>	<b><math>\alpha= 0.962, CR=0.964, AVE=0.898, MSV=0.067, MaxR(H)=0.968</math></b>				
CI1	3.106	1.169	0.942	0.921	-
CI2	3.406	1.223	0.958	0.963	38.346
CI3	3.363	1.246	0.948	0.958	37.604

\* Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

$\bar{X}$ : mean,  $\sigma$ : Standart Deviation,  $\alpha$ : Cronbach's Alpha Value, CR: Composite Reliability, AVE: Average Variance Extracted, MSV: Maximum Shared Variance, MaxR(H): Maximal Reliability H, R: Removed

CFA is employed for the validity test of all six dimensions included in the research construct via SPSS AMOS 24 software. The maximum likelihood technique and the correlation matrix of each item were

used as inputs in estimating the model. The CFA conducted with the scale items that were obtained from the EFA indicates that the model fit indices ( $\chi^2$ :666.080, df:260,  $\chi^2$ /df: 2.562,  $p < 0.01$ ; CFI:0,973; SRMR: 0.029; RMSEA: 0.061; PClose:0,0001; PCFI:0,844, and AGFI: 0.861) do not meet the expected criteria (Thompson, 2004, p. 34). In this aspect, standardized residual covariance matrices were examined, and PC4 was removed from the analysis because it has 1.96 or more relationships with other items (Byrne, 2016, p. 86) and retested. Table 3 provides the findings of the second round of the CFA model fit measures. The analysis results suggest that the measures met the required criteria (Hu & Bentler, 1999; Miles & Shevlin, 2007; Hooper, Coughlan, & Mullen, 2008; Tabachnick & Fidell, 2013; Schumacker & Lomax, 2015).

**Table 3:** Confirmatory Factor Analysis Model Fit Measures

Measure	Estimate	Threshold	Interpretation
$\chi^2$	461.96	-	-
df	215	-	-
$\chi^2$ /df	2.149	Between 1 and 3	Excellent
CFI	0.982	>0.95	Excellent
AGFI	0.885	0.85≤	Acceptable
SRMR	0.026	<0.08	Excellent
RMSEA	0.052	<0.06	Excellent
PClose	0.261	>0.05	Excellent

According to Fornell and Larcker's (1981) study, the convergence validity analysis of scales examined, and the CFA factor loadings ( $\lambda$ ) shown in Table 2 are all higher than the 0.7-threshold value. To test structural reliability, the indicators represented in Table 2 were used. The following findings were achieved: Cronbach's alpha values are higher than 0.8, t values are statistically significant, AVE values are higher than 0.5, and the CR value calculated for each structure is higher than 0.7 (Hair et al., 2014, pp. 605,619). AVE and CR are between threshold values, with AVE values lower than CR values and higher than MSV values. Hence, the findings meet the required assumptions for the convergence validity of the research model. Table 4 provides factor correlation coefficients, while Table 5 presents the findings of the HTMT analysis. Both were used to test the validity of divergence. The correlation coefficients for dimensions and AVE square root scores are diagonally in Table 4. According to related results, the AVE square root was found greater than the factor correlation coefficients in each dimension (Fornell & Larcker, 1981).

**Table 4:** Factor Correlation Coefficients

	PC	BTS	TB	PRS	IDI	CI
PC	<b>0.922</b>					
BTS	-0.399	<b>0.900</b>				
TB	-0.326	-0.238	<b>0.894</b>			
PRS	0.546	0.194	-0.444	<b>0.919</b>		
IDI	-0.381	-0.273	0.558	-0.658	<b>0.995</b>	
CI	-0.26	0.060	0.045	-0.233	0.148	<b>0.948</b>

\*The square root of AVE (shown as bold at diagonal)

HTMT scores close to 1 indicate a lack of discriminant validity. When employing the HTMT as a criterion, it must be compared to a reference value. Based on the findings, there is no discriminant validity if the HTMT value is higher than this threshold value. Henseler, Ringle, and Sarstedt (2015, 2016) assert that structures should have HTMT analysis scores that are less than 0.85. The HTMT correlation analysis findings in Table 5 show that the prior study's stated criteria for divergence validity were satisfied.

**Table 5:** Heterotrait-Monotrait Ratio of Correlations Analysis (HTMT)

	PC	BTS	TB	PRS	IDI
BTS	0,399				
TB	0,329	0,235			
PRS	0,548	0,189	0,445		
IDI	0,392	0,290	0,563	0,642	
CI	0,264	0,059	0,056	0,237	0,156

## Results

The research model hypotheses were tested using structural equation modelling, which was performed using the SPSS AMOS 24 software. Model fit indices were evaluated before performing the path analysis

process. Based on the required assumptions, the results show that specified model fit indices were satisfied. The findings of the model fit indices for structural equation modelling are shown in Table 6, along with their interpretations.

The chi-square test ( $\chi^2$ ) stands out from other model fit indices in structural equation modelling because it evaluates statistical significance. The chi-square value and model degrees of freedom are used to calculate the p-value of this statistical test. This p-value is used to test for the null hypothesis that the predicted model and observed data are equal. In structural equation modelling, the null hypothesis is expected to be nonsignificant and indicate a good model fit, so it is not expected to be rejected. The sample size affects the chi-square test as well. As a result of these findings, researchers in this field propose including other model fit indices in the model fit measurement. Hence, for the evaluation of model fitness, different indices (SRMR, RMSEA, NFI, RFI, and TLI) were included (Hu & Bentler, 1999; Hair et al., 2014). The values of the indices need to be within the range of the threshold values to yield a good model fit. Therefore, the model fit indices in Table 6 are interpreted as model fit indices of the research within the range of acceptable levels.

**Table 6:** Structural Model Fit Measures

Measure	Estimate	Threshold	Interpretation
$\chi^2$	931.838	-	-
df	302	-	-
$\chi^2/df$	3.086	Between 1 and 3	Acceptable
CFI	0.957	>0.95	Excellent
SRMR	0.063	<0.08	Excellent
RMSEA	0.07	<0.06	Acceptable
NFI	0.938	>0.90	Acceptable
RFI	0.927	>0.90	Acceptable
TLI	0.95	>0.90	Acceptable

Path analysis is conducted with the matched pair method to unveil relationships between variables in the research model and test research hypotheses. Path analysis results, the moderation effect relationship between BTS and PC interaction with other variables and probing the interaction of BTS are shown in Table 7.

**Table 7:** Path Analysis Results of Structural Equation Modelling (Matched-Pair Method)

Hypothesis	Causal Path Relationships			Estimate	S.E.	t value	p
H <sub>1</sub>	PC	→	TB	-0.684	0.049	-13.873	***
H <sub>2</sub>	PC	→	IDI	-0.017	0.064	-0.262	0.793
H <sub>3</sub>	PC	→	PRS	0.846	0.050	16.973	***
H <sub>4</sub>	TB	→	IDI	0.520	0.057	9.187	***
H <sub>5</sub>	PRS	→	IDI	-0.399	0.054	-7.412	***
H <sub>6</sub>	IDI	→	CI	0.132	0.050	2.622	0.009
<b>Moderation Test</b>							
	BTS	→	TB	-0.777	0.055	-14.050	***
H <sub>7</sub>	PCxBTS	→	TB	-0.132	0.034	-3.894	***
	BTS	→	IDI	0.000	0.062	-0.003	0.997
H <sub>8</sub>	PCxBTS	→	IDI	-0.040	0.030	-1.335	0.182
	BTS	→	PRS	0.579	0.050	11.476	***
H <sub>9</sub>	PCxBTS	→	PRS	-0.014	0.033	-0.430	0.667
<b>Probing the interaction of BTS</b>							
<i>Low Level</i>							
PC	→	TB	-0.664	0.054	-12.252	***	
<i>Mean Level</i>							
PC	→	TB	-0.684	0.049	-13.873	***	
<i>High Level</i>							
PC	→	TB	-0.715	0.051	-14.078	***	

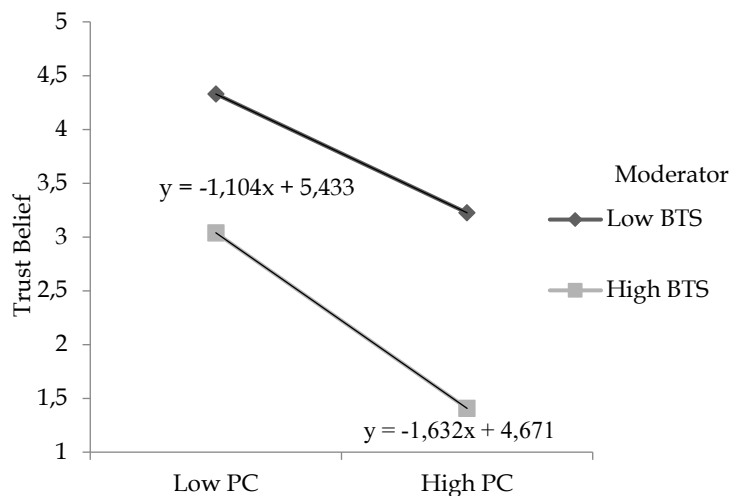
Structural equation modelling path analysis results in Table 7 are examined, and while H1, H3, H4, H5, H6, and H7 hypotheses were statistically significant and supported, H2, H8, and H9 hypotheses were not statistically significant, so they were not supported.

When each hypothesis is examined, a negative effect of PC on TB [H1:  $\beta=-0.684$ ;  $t=-13.873$ ;  $p<0.001$ ] is supported. The increase in PC hurts TB while positively affecting PRS [H3:  $\beta=0.846$ ;  $t=16.973$ ;  $p<0.001$ ], so one unit increase in PC can cause an increase of 0.846 in PRS. However, the effect of PC on IDI [H2:  $\beta=-0.684$ ;  $t=-13.873$ ;  $p<0.001$ ] is not supported. Additionally, TB has a positive [H4:  $\beta=0.520$ ;  $t=9.187$ ;  $p<0.001$ ] effect, while PRS is negatively affecting the IDI [H5:  $\beta=-0.399$ ;  $t=-7.412$ ;  $p<0.001$ ], so the related

hypotheses were supported. Likewise, IDI is affecting the CI [H6:  $\beta=0.132$ ;  $t = 2.622$ ;  $p < 0.01$ ] and was found to be statistically significant.

### Moderation effect

The moderation effect of BTS was assessed in a full structural model with the matched-pairs method. Because the matched-pairs method uses a condensed interaction term, the moderator and independent variables are considered interaction terms, and no moderator items are reused to form interaction terms (Marsh, Wen, & Hau, 2004). In assessing interaction terms, a great collinearity problem could occur (Frazier, Tix, & Barron, 2004). So, to overcome this issue, interaction term data is mean-centred (Dawson, 2014). The moderation effect of BTS on PC is tested with the H<sub>7</sub>, H<sub>8</sub>, and H<sub>9</sub> hypotheses. The test results are depicted in Table 7. Related findings indicate that the H<sub>7</sub> hypothesis is statistically significant and supported, while the H<sub>8</sub> and H<sub>9</sub> hypotheses are not supported. As a result, BTS and PC interaction influence the TB, so BTS [H<sub>7</sub>:  $\beta=-0.132$ ;  $t = -14.050$ ;  $p < 0.001$ ] moderates the relationship between PC and TB. Therefore, when BTS increases, the effect of PC on TB increases. The two-way interaction between PC and BTS and their effect on TB is illustrated in Figure 2. It reveals that BTS has increased the effect of the negative relationship between PC and TB.



**Figure 2:** Two-Way Interaction Graph of Privacy Concern (PC) vs Brand Transgression Severity (BTS)

### Mediation analysis

AMOS software's "user-defined estimand" function was employed to investigate the mediation effect of TB, PRS, and IDI between the PC and BTS interaction relationship with IDI and CI. For mediating role analysis, the bootstrapping technique was utilized. Five thousand bootstrap samples were used, and a 95% confidence level was established for the confidence interval (Hair et al., 2014). Unstandardized coefficients, t-values, indirect and direct effects, and upper and lower bounds are presented in mediation test results and depicted in Table 8.

In both the proposed research model and mediation tests, PC has no direct effect on IDI, while there is an indirect effect. So, in the mediation test relationship with PC and IDI, both PRS and TB have full mediation, H<sub>10a</sub> and H<sub>10c</sub> supported. Also, TB fully mediates PC and BTS interaction term relation with IDI, and H<sub>11a</sub> is supported. H<sub>10b</sub>, H<sub>11b</sub>, and H<sub>11c</sub> were not determined to be statistically significant. These hypotheses' confidence intervals crossing zero indicates that their indirect effects are insignificant. The analysis results indicate that perceived risk mediates the effect of privacy concerns on information disclosure intention.

Privacy concerns do not directly affect the information disclosure intention but indirectly through perceived risk. Similarly, trust-belief also has a mediation effect between privacy concerns and information disclosure intention, and privacy concerns' interaction with brand transgression severity affects information disclosure intention. Both analysis results were found to be statistically significant.

**Table 8:** Bootstrap Analysis with a 95% Confidence Interval is Used to Test for Mediation

Hypothesis	Relationship	Direct Effect	Indirect Effect	Estimate	Confidence Interval		p-value	Conclusion
					Lower	Upper		
H10a	PC→ TB→IDI	-0.017 (-0.258)	-0.693	-0.356	-0.429	-0.292	0.001	Full Mediation
H10b	PC→ IDI→CI	-0.237 (-2.222)	-0.092	-0.002	-0.018	0.012	0.758	No Mediation
H10c	PC→ PRS→IDI	-0.017 (-0.258)	-0.693	-0.337	-0.408	-0.262	0.001	Full Mediation
H11a	PCxBTS→ TB→IDI	-0.04 (-1.341)	-0.063	-0.068	-0.096	-0.039	0.001	Full Mediation
H11b	PCxBTS→ IDI→CI	0.024 (-0.495)	-0.005	-0.005	-0.014	-0.001	0.062	No Mediation
H11c	PCxBTS→ PRS→DI	-0.04 (-1.341)	-0.063	0.006	-0.02	0.036	0.744	No Mediation

**Note:** Unstandardized coefficients reported. Values in parentheses are t-values. Bootstrap sample = 5,000 with replacement.

**Table 9:** Multiple Group Difference Test

Hypothesized Relationship	Male	Female	Group Differences
	Standardized Estimates (t-values)	Standardized Estimates (t-values)	$\Delta \chi^2/df$ (p-values)
H12: TB→IDI	<b>0.435 (4.448)</b>	<b>0.535 (8.201)</b>	0.279 (0.597)
H13: PRS→IDI	<b>-0.532 (-6.211)</b>	<b>-0.210 (-2.988)</b>	6.544 (0.011)
H14: IDI→CI	0.085 (0.990)	<b>0.149 (2.71)</b>	0.131 (0.718)

Model Fit Across the Groups:  $\chi^2=2066.185$ ,  $df=608$ ,  $p<0.001$ ,  $CFI=0.907$ ,  $IFI=0.907$ ,  $RMSEA=0.067$

Multigroup analysis was used to examine differences in interactions between TB and IDI, PRS and IDI, and IDI and CI across gender groups. The outcomes of the multigroup difference analysis are shown in Table 9. The analysis's findings indicate at least one difference between the suggested study models when comparing all the relationships between the groups in the model. All possible paths are analysed between the gender groups to identify the link that varies. And as is evident from Table 9, while H12 and H14 are not supported, H13 is statistically significant. Findings indicate that TB and IDI relationships have no difference between males and females. TB is an important component that affects IDI in both genders. Furthermore, IDI affects CI in the female gender but does not affect the male gender. But statistically, these two groups have no difference. This means that, statistically, two groups have been affected by IDI toward CI. Finally, in PRS and IDI interaction, two gender groups differentiate. Findings show that PRS negatively affects IDI in male groups more than in female groups.

## Discussion

In a brand-consumer relationship, explicit and implicit contracts form over time; these contracts determine the relationship's strengths in the long term. The brand and the consumer are responsible for meeting the contract's terms; mutual obligations exist. From a relationship marketing perspective, these contracts also represent brands' offers. Keeping and fulfilling promises is important for creating mutual value since these components are crucial for maintaining long-term customer relationships. Brands that fail to meet or break the contract conditions may experience undesired consumer responses, such as switching brands. As personal data sharing seems to have increased over time on digital platforms, how have privacy policies affected consumers' intentions to continue using related social media apps? How good are privacy policies at helping users understand company practices? These are critical questions to address because some social media platforms impose changes to their privacy policies and terms of service, resulting in brand transgressions and violations of implicit and explicit rules conducted between respective consumers. Since the big data concept provides enormous advantages to society and especially marketing activities, it is important to comprehend the mechanisms that prevent consumers from disclosing information. Another critical point concerns digital services: how important are privacy concerns for consumers to continue consuming brands associated with digitally intensive services, and what role does brand transgression severity play in this relationship? This study aims to explain the role of brand transgression severity in the framework of privacy concerns and its effect on perceived risk, trust, belief, information dissemination intention, and, consequently, the effect on the continuation intention of a related social media brand.



*Summary of findings*

A quantitative study was conducted to answer the research questions. Privacy concerns of digital service brands, increasing consumers' perceived privacy risks and decreasing consumers' trust-beliefs towards the services. Consumer privacy concerns, however, have no impact on information disclosure intentions with digital services. A possible explanation might be related to the fact that some information was required to be disclosed to gain access to related digital services. Another possible explanation might be the network effect caused by the nature of digital services. According to the study results, consumers' intentions to disclose information increase when their trust in related services increases. However, perceived privacy risks decrease consumers' intentions to disclose information. A consumer's intention to disclose information is also related to continuing their relationship with digital services, as these antecedents increase their use. In addition, as a control group, the gender differences in trust and perceived privacy risk effects on information disclosure intention and the information disclosure intention-continuance intention interaction were studied in this study. The genders of consumers have no significant differences in trust-beliefs and information disclosure interaction relationships. While in male consumers, information disclosure intention does not affect digital service continuation intention. However, information disclosure intention is a significant antecedent of digital service continuation intention in female consumers.

Second, the brand transgression severity effect is examined. When consumers' perception of the severity of brand transgression increases, trust-beliefs decrease, and perceived risk increases significantly while not affecting information disclosure intention. Another finding is that the severity of brand transgression influences privacy concerns and the trust-belief relationship. As the severity of brand transgression increases, the effect of privacy concerns is also getting more severe. However, this effect is insignificant regarding privacy concerns, information disclosure intention, or perceived privacy risk.

Third, the study's findings show that trust-belief and perceived privacy risk mediate the privacy concern and information disclosure intention relationships. Still, that information disclosure intention does not mediate the privacy concern and continuation intention relationships. Additionally, perceived privacy risk mediates consumers' privacy concerns and information disclosure intentions. However, the mediation effect of information disclosure intention and perceived privacy risk has no mediation effect on these relationships when privacy concern, brand transgression severity interaction, and continuance intention relationship are combined with information disclosure intention. On the other hand, trust belief mediates the relationship between the interaction of privacy concern and brand transgression severity with information disclosure intention.

*Theoretical implications*

Realistic privacy risks have been problematic to recreate using experimental techniques to control independent factors. Little research has captured actual information disclosure over digital devices based on realistic risk perceptions. The impact of privacy concerns on information disclosure intentions and commitments on digital platforms is also not adequately established. And the same can be said in terms of brand transgression studies. The impact of privacy concerns and brand transgression severity on information disclosure intention and commitment on digital platforms is also not adequately established. The consumers' reaction to the WhatsApp Privacy Policy update offers a unique chance to examine this mechanism in a real-life event, so there is no need to recreate sentiments in this study.

The findings of this study provide several theoretical contributions to the current literature. First, this study brings together privacy concern and brand transgression severity concepts in examining digital service brand continuation intention and digital service brands' different nature from those in the physical environment. Prior literature suggests consumers' intentions about information disclosure are strongly influenced by their privacy concerns and perceptions of risk, trust, and benefit (Eastlick et al., 2006; Wu et al., 2012; Zhang et al., 2018; Willis et al., 2021). The current study emphasizes the brand transgression severity impact. It employs a quantitative approach to investigate the antecedents of information disclosure intentions and their relationship with the continuation intention of the related brand service. This study's results support prior studies: even when the digital service brand's consumers' privacy concerns increase, this doesn't directly affect information disclosure intention. However, increased privacy concerns influence information disclosure intention by mediating trust belief and perceived risk. In some cases, the intangible nature of digital services could be the reason for the privacy concern that doesn't affect the intention to share information. Because of this, consumers couldn't fully evaluate or ignore this concern to use related digital services, which are also based on network effect and digital asymmetry in their decision-making. Some researchers propose that network effects and informational asymmetry are to blame for this market power concentration in digital markets (Griggio et al., 2022). According to "network effects," a consumer's benefit from a good or

service is proportional to the number of others who use it. Informational asymmetry describes firms' competitive advantage when they have more customer data and how they use their services. These are accepted as reasonable when considering this study examining social media brands. The study's findings support that the intention to continue giving digital services is closely related to the intention to disclose information. This result also stands to reason when we consider that using prominent digital platforms requires consumers to disclose their private information. According to a previous study, the sensitivity of this required information also plays an important role in consumers' trust and risk perception. (Malhotra et al., 2004).

This study also contributes to brand transgression literature from a digital media brand perspective. The dynamic structure of digital platforms contains some risk in the activities of brands to meet consumers' needs. When considering consumers' sensitivity to breaching the brand-consumer relationship contract, brand misconducting behaviours may result in brand transgression. This would cause negative consumer behaviour (Bechwati & Morrin, 2003; Sierra et al., 2010; Sayin & Gürhan-Canlı, 2015; Khamitov et al., 2020; Hemsley-Brown, 2022). We support this assumption in this study because the severity of brand transgressions increases consumers' privacy concerns and, as a result, lowers their trust beliefs. Trust is one of the key components of brand relationships. Therefore, it could be said that brand transgression behaviours in digital brands weaken the consumers' relationships, and this could cause a decrease in the brand's consumer retention rate.

Finally, the study scrutinized the gender effect on trust and privacy risk on information disclosing intention and information disclosing intention effect on continuation intention. Trust belief, information disclosure, and intention relationships have no significant difference in gender. Similar results were found for information disclosure intention and continuation intention, even though there's no statistically significant difference. Information disclosure intention does not affect the male group but does the female group. Furthermore, privacy risk influences males' continuation intentions more negatively than females. This might be explained by the fact that female digital service consumers are more likely to communicate than male consumers (Jackson, Ervin, Gardner, & Schmitt, 2001). As a result, males may not be affected from this standpoint because they provide false information to the brand. Keith et al. (2013) explains this situation as a relationship between intended and actual information sharing through the lens of privacy calculus. Furthermore, consumer behaviours, including sharing false information, are a significant moderator of this relationship. Consumers who do not disclose private information may tend to provide false information since accessing digital services requires such information.

#### *Practical implications*

Moreover, this research has implications for practitioners and decision-makers. The brand-consumer relationship has a sensitive balance and contracts that develop over time. Implicit and explicit contracts must be clearly defined to prevent misunderstandings and weaken consumer relationships. In this case, one major issue is policy updates. If newly defined rules cause any perceived discrepancy by consumers, this might cause a violation of previously defined ones. Many researchers give insights into what kind of consumer reaction might be to this type of violation (Khamitov et al., 2020). Before the modern telephone network came around at the turn of the century, the debate over privacy in phone calls seemed far away. However, countless telecommunication channels are beyond the telephone (Carr, 2021). As a result, our society is gradually transitioning into the virtual world, and the debates seem to go beyond telecommunication in the coming decades. Digital services are seen as the most powerful tools to shape people's values, expectations, and demands, so this causes an increase in digital information disclosure (Matt et al., 2015). It has been proven that the Internet provides the fastest way of sharing information as an innovative form of communication, allowing customers to become more knowledgeable than ever before. Multichannel communication prevents companies from denying incidents when market offers do not match customer expectations. Customers can participate more in creating and using digital products and services (Hu & Li, 2022). Thanks to social media and online communication, they can start disputes immediately when their purchase doesn't match expectations (Van Veldhoven & Vanthienen, 2022). With the rise of social media, customer expectations for service response times have decreased. Today's customers expect a fast response from brands to their inquiries and complaints. One recent report indicates that while 40% of customers expect brands to answer within the first hour, 79% expect an answer within the first 24 hours (Chandra Das, Gomes, Lal Patidar, & Thomas, 2022). Given that the related brand is a digital service provider, network effects and information asymmetries could somewhat limit the consumers' reactions. On the other hand, if a generally negative perception of digital branding spreads, these benefits may not be as effective as

before. As a result, managing post-brand transgression behaviour is critical for maintaining relationships with consumers, which affects their intentions of continuing.

#### *Limitations and future research*

As usual, this study has several limitations for previous studies that provide valuable opportunities for future research. Because this study was limited to instant messaging services, the findings may not be generalizable to other digital service brands. Regarding service structure, the requested consumer information and intent to continue may influence the type of information. Besides that, this study examines the cost side of information disclosure intentions and continuation intentions; it would be better understood for future research if it included the benefits of consumers' information disclosure intentions. Because benefit and cost perception must be balanced, and consumers' perceived benefits from that action must exceed its costs, it is preferable to understand the consumer's information disclosure intention. Another limitation of this study emerges when assessing the severity of the privacy concern and brand transgression. This research examined the continuation intentions of consumers, but on the other hand, other consumers' reactions were not included. So, future research could evaluate the post-transgression reaction possibilities of consumers. Also, as a demographic characteristic, this study can only examine the gender differences in continuation intention since the sample focused on a generally homogenous youth population and their demographic characteristics are so similar. Future research could expand our understanding of the demographic effect.

## **Conclusion**

In the era of the digital economy, maintaining data flow is crucial for digital services. Brand-consumer relationship strength is also important for creating mutual benefits. When a brand transgression occurs, consumers' benefits may be significantly impacted. Furthermore, if the brand transgression involves privacy issues, the severity of this action may increase, increasing consumer privacy concerns. Because of these issues, consumers' intentions toward information disclosure and commitment to related digital services are decreasing. This interaction does not have to be direct but can be mediated by perceived risk and trust belief.

The result of the study reveals that several important factors affect customers' intentions to continue using digital service products and services, including their trust in the brand, their perception of privacy risks, and their opinions regarding the advantages of exposing information. In addition, the severity of brand transgressions can significantly influence customer trust and perceptions of the brand's risks. Yet, this study indicated that privacy concerns alone do not directly influence consumers' intentions to disclose information; trust and perceived risk serve as mediators.

These findings give important insights into how brands may create and sustain long-term consumer connections in the digital age. For example, brands prioritising establishing trust and minimizing perceived risks associated with data sharing are more likely to retain their customers. In contrast, brands that engage in transgressions or fail to communicate their data privacy policies effectively may experience negative consequences, such as decreased customer trust and increased privacy concerns. By recognizing these factors and proactively addressing them, businesses may improve their customer connections and overall market success.

#### **Peer-review:**

Externally peer-reviewed

#### **Conflict of interests:**

The author has no conflict of interest to declare.

#### **Grant Support:**

The author declared that this study had received no financial support.

#### **Ethics Committee Approval:**

Ethics committee approval was received for this study from Bandırma Onyedi Eylül University, Social and Humanities Sciences Ethics Committee on 01/07/2021 and 2021-6 document number.

## References

- Aaker, D. A. (1997). *Building Strong Brands*. New York, N.Y.: The Free Press A Division of Simon & Schuster Inc.
- Aaker, J., Fournier, S., & Brasel, S. A. (2004), When Good Brands Do Bad. *Journal of Consumer Research*, 31(1), 1-16. <https://doi.org/10.1086/383419>
- Abd Rahman, L., & Khalid, S. N. A. (2022), Performance Measurement Management (Pmm) in the Digital Economy: The Insights from Literature", *Journal of Information System and Technology Management*, 7(27), 122-136.
- Barefoot, K., Curtis, D., Jolliff, W., Nicholson, J. R., & Omohundro, R. (2018). "Defining and Measuring the Digital Economy", Us Department of Commerce Bureau of Economic Analysis. Retrieved 03.12.2022 from <https://www.bea.gov/sites/default/files/papers/defining-and-measuring-the-digital-economy.pdf>, (AccessDate: 03.12.2022).
- Bartlett, M. S. (1950), Tests of Significance in Factor Analysis. *British Journal of Mathematical and Statistical Psychology*, 3(2), 77-85.
- Bartlett, M. S. (1951), A Further Note on Tests of Significance in Factor Analysis. *British Journal of Mathematical and Statistical Psychology*, 4(1), 1-2.
- Bechwati, N. N., & Morrin, M. (2003), Outraged Consumers: Getting Even at the Expense of Getting a Good Deal. *Journal of Consumer Psychology*, 13(4), 440-453. [https://doi.org/https://doi.org/10.1207/S15327663JCP1304\\_11](https://doi.org/https://doi.org/10.1207/S15327663JCP1304_11)
- Bélanger, F., & Crossler, R. E. (2011), Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems. *MIS Quarterly*, 1017-1041.
- Benslama, T., & Jallouli, R. (2022), Social Media Data Analytics for Marketing Strategies: The Path from Data to Value. *Journal of Telecommunications and the Digital Economy*, 10(2), 96-110.
- Benson, V., Saridakis, G., & Tennakoon, H. (2015), Information Disclosure of Social Media Users. *Information Technology & People*, 28(3), 426-441. <https://doi.org/10.1108/ITP-10-2014-0232>
- Berry, D. M. (2011), The Computational Turn: Thinking About the Digital Humanities. *Culture Machine*, 12, 1-22.
- Bovard, R. (2022), Rule Social Media, or Be Ruled by It. *The New Atlantis*, 67, 73-76.
- Boyd, D., & Crawford, K. (2012), Critical Questions for Big Data. *Information, Communication & Society*, 15(5), 662-679. <https://doi.org/10.1080/1369118X.2012.678878>
- Bremmer, I. (2021), The Technopolar Moment: How Digital Powers Will Reshape the Global Order. *Foreign Affairs*, 100, 112.
- Byrne, B. M. (2016). *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming*. New York: Routledge.
- Campbell, A. J. (1997), Relationship Marketing in Consumer Markets: A Comparison of Managerial and Consumer Attitudes About Information Privacy. *Journal of Direct Marketing*, 11(3), 44-57.
- Carr, N. (2021), How to Fix Social Media. *The New Atlantis* (66), 3-20.
- Cespedes, F. V., & Smith, H. J. (1993), Database Marketing: New Rules for Policy and Practice. *MIT Sloan Management Review*, 34(4), 7.
- Chandra Das, A., Gomes, M., Lal Patidar, I., & Thomas, R. (2022). "Social media as a service differentiator: How to win", Retrieved from <https://www.mckinsey.com/capabilities/operations/our-insights/social-media-as-a-service-differentiator-how-to-win>, (Access Date: 19.11.2022)
- Cheng, X., Hou, T., & Mou, J. (2021), Investigating Perceived Risks and Benefits of Information Privacy Disclosure in It-Enabled Ride-Sharing. *Information & Management*, 58(6), 103450. <https://doi.org/https://doi.org/10.1016/j.im.2021.103450>
- Clifford, C. (2018). "Apple Ceo Tim Cook: 'Privacy to Us Is a Human Right...a Civil Liberty'", Retrieved 29.11.2022 from <https://www.cnbc.com/2018/04/10/apple-ceo-tim-cook-on-the-importance-of-consumer-privacy.html>, (AccessDate: 29.11.2022).

- Collis, A. (2020). "Consumer Welfare in the Digital Economy (November 11, 2020)". *T. G. A. Institute*. <https://ssrn.com/abstract=3733700> or <http://dx.doi.org/10.2139/ssrn.3733700>
- Coyle, D., Diepeveen, S., Wdowin, J., Tennison, J., & Kay, L. (2020). "The Value of Data. The Bennett Institute for Public Policy", Cambridge. Retrieved 26.09.2022 from <https://www.bennettinstitute.cam.ac.uk/publications/value-data-policy-implications/>, (AccessDate: 26.09.2022).
- Culnan, M. J., & Bies, R. J. (2003), Consumer Privacy: Balancing Economic and Justice Considerations. *Journal of Social Issues*, 59(2), 323-342.
- da Rosa Pulga, A. A., Basso, K., Viacava, K. R., Pacheco, N. A., Ladeira, W. J., & Dalla Corte, V. F. (2019), The Link between Social Interactions and Trust Recovery in Customer-Business Relationships. *Journal of Consumer Behaviour*, 18(6), 496-504.
- Darren, G., & Mallery, P. (2003). *Spss for Windows Step by Step: A Simple Guide and Reference*. Boston: Allyn & Bacon Inc.
- Dawson, J. F. (2014), Moderation in Management Research: What, Why, When, and How. *Journal of Business and Psychology*, 29(1), 1-19. <https://doi.org/10.1007/s10869-013-9308-7>
- Dinev, T., & Hart, P. (2006), An Extended Privacy Calculus Model for E-Commerce Transactions. *Information Systems Research*, 17(1), 61-80.
- Donaldson, T., & Dunfee, T. W. (1994), Toward a Unified Conception of Business Ethics: Integrative Social Contracts Theory. *Academy of Management Review*, 19(2), 252-284.
- Eastlick, M. A., Lotz, S. L., & Warrington, P. (2006), Understanding Online B-to-C Relationships: An Integrated Model of Privacy Concerns, Trust, and Commitment. *Journal of Business Research*, 59(8), 877-886. <https://doi.org/10.1016/j.jbusres.2006.02.006>
- Elding, C., & Morris, R. (2018). "Digitalisation and Its Impact on the Economy: Insights from a Survey of Large Companies." Retrieved 17.08.2022 from [https://www.ecb.europa.eu/pub/economic-bulletin/focus/2018/html/ecb.ebbox201807\\_04.en.html](https://www.ecb.europa.eu/pub/economic-bulletin/focus/2018/html/ecb.ebbox201807_04.en.html), (AccessDate: 17.08.2022).
- Ericsson. (2022). "Ericsson Mobility Report." Retrieved 03.11.2022 from <https://www.ericsson.com/en/reports-and-papers/mobility-report>, (AccessDate: 03.11.2022).
- Escalas, J. E., & Bettman, J. R. (2003), You Are What They Eat: The Influence of Reference Groups on Consumers' Connections to Brands. *Journal of Consumer Psychology*, 13(3), 339-348.
- Fornell, C., & Larcker, D. F. (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Frank, I. E., & Todeschini, R. (1994). *The Data Analysis Handbook* (Vol. 14). Ebook: Elsevier.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004), Testing Moderator and Mediator Effects in Counseling Psychology Research. *Journal of Counseling Psychology*, 51(1), 115.
- Glazer, R. (1991), Marketing in an Information-Intensive Environment: Strategic Implications of Knowledge as an Asset. *Journal of Marketing*, 55(4), 1-19. <https://doi.org/10.2307/1251953>
- Grégoire, Y., & Fisher, R. J. (2006), The Effects of Relationship Quality on Customer Retaliation. *Marketing Letters*, 17(1), 31-46. <https://doi.org/10.1007/s11002-006-3796-4>
- Griggio, C. F., Nouwens, M., & Klokmose, C. N. (2022). Caught in the Network: The Impact of Whatsapp's 2021 Privacy Policy Update on Users' Messaging App Ecosystems Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22), Association for Computing Machinery, New York, NY, USA.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis: International Edition (7th Edition ed.)*. Edinburgh Gate Harlow Essex: Pearson Education Limited.
- Hatcher, L., & Stepanski, E. J. (1994). *A Step-by-Step Approach to Using the Sas System for Univariate and Multivariate Statistics*. SAS Institute.
- Hayat, Z. (2022). "Digital Trust: How to Unleash the Trillion-Dollar Opportunity for Our Global Economy.", Retrieved 23.11.2022 from <https://www.weforum.org/agenda/2022/08/digital-trust-how-to-unleash-the-trillion-dollar-opportunity-for-our-global-economy/#:~:text=The%20World%20Bank%20estimates%20that,faster%20than%20physical%20world%20GDP.>, (AccessDate: 23.11.2022).

- Hemsley-Brown, J. (2022), "Antecedents and Consequences of Brand Attachment: A Literature Review and Research Agenda. *International Journal of Consumer Studies*, 1-18. <https://doi.org/https://doi.org/10.1111/ijcs.12853>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015), "A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016), Testing Measurement Invariance of Composites Using Partial Least Squares. *International Marketing Review*, 33(3), 405-431. <https://doi.org/10.1108/IMR-09-2014-0304>
- Herr, P. M., Kardes, F. R., & Kim, J. (1991), Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective. *Journal of Consumer Research*, 17(4), 454-462. <https://doi.org/10.1086/208570>
- Hilbert, M. (2022), Digital Technology and Social Change: The Digital Transformation of Society from a Historical Perspective. *Dialogues in Clinical Neuroscience*, 22(2), 189-194.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008), Structural Equation Modelling: Guidelines for Determining Model Fit. *Electronic Journal of Business Research Methods*, 6(1), pp53-60-pp53-60.
- Hu, L. t., & Bentler, P. M. (1999), Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Hu, X., & Li, X. (2022), How Does Customer Psychological Empowerment Affect Value Co-Creation? An Empirical Study of Travel Agencies in Mainland China. *Asia Pacific Business Review*, 28(3), 431-459. <https://doi.org/10.1080/13602381.2021.1872915>
- Hutchinson, A. (2021). "Whatsapp Is Re-Launching Its Controversial Privacy Policy Update, Will Penalize Users That Don't Accept", Retrieved 14.08.2022 from <https://www.socialmediatoday.com/news/whatsapp-is-re-launching-its-controversial-privacy-policy-update-will-pena/599991/>, (AccessDate: 14.08.2022).
- Hyman, M. R. (1996), A Critique and Revision of the Multidimensional Ethics Scale. *Journal of Empirical Generalisations in Marketing Science*, 1(1).
- ITU. (2021). "Bridging the Digital Divide with Innovative Finance and Business Models", Retrieved 14.07.2022 from [itu.int/hub/2021/11/bridging-the-digital-divide-with-innovative-finance-and-business-models/](https://itu.int/hub/2021/11/bridging-the-digital-divide-with-innovative-finance-and-business-models/), (AccessDate: 14.07.2022).
- Jackson, L. A., Ervin, K. S., Gardner, P. D., & Schmitt, N. (2001), Gender and the Internet: Women Communicating and Men Searching. *Sex roles*, 44(5), 363-379.
- Jai, T.-M., & King, N. J. (2016), Privacy Versus Reward: Do Loyalty Programs Increase Consumers' Willingness to Share Personal Information with Third-Party Advertisers and Data Brokers?. *Journal of Retailing and Consumer Services*, 28, 296-303. <https://doi.org/https://doi.org/10.1016/j.jretconser.2015.01.005>
- Jan Alsem, K., & Kosteljik, E. (2008), Identity Based Marketing: A New Balanced Marketing Paradigm. *European Journal of Marketing*, 42(9/10), 907-914. <https://doi.org/10.1108/03090560810891064>
- Jarvenpaa, S. L., Tractinsky, N., & Saarinen, L. (1999), Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer-Mediated Communication*, 5(2). <https://doi.org/10.1111/j.1083-6101.1999.tb00337.x>
- Kaiser, H. F. (1970), A Second Generation Little Jiffy. *Psychometrika*, 35(4), 401-415.
- Kaiser, H. F. (1974), An Index of Factorial Simplicity. *Psychometrika*, 39(1), 31-36.
- Keith, M. J., Thompson, S. C., Hale, J., Lowry, P. B., & Greer, C. (2013), Information Disclosure on Mobile Devices: Re-Examining Privacy Calculus with Actual User Behavior. *International Journal of Human-Computer Studies*, 71(12), 1163-1173.
- Khamitov, M., Grégoire, Y., & Suri, A. (2020), A Systematic Review of Brand Transgression, Service Failure Recovery and Product-Harm Crisis: Integration and Guiding Insights. *Journal of the Academy of Marketing Science*, 48(3), 519-542. <https://doi.org/10.1007/s11747-019-00679-1>

- Kietzmann, J. H., Silvestre, B. S., McCarthy, I. P., & Pitt, L. F. (2012), Unpacking the Social Media Phenomenon: Towards a Research Agenda. *Journal of Public Affairs*, 12(2), 109-119.
- Klein, J. G., Smith, N. C., & John, A. (2004), Why We Boycott: Consumer Motivations for Boycott Participation. *Journal of Marketing*, 68(3), 92-109. <https://doi.org/10.1509/jmkg.68.3.92.34770>
- Lewis, A. (2010, September 13, 2010). "If You Are Not Paying for It, You're Not the Customer; You're the Product Being Sold. Twitter", <https://twitter.com/andlewis/status/24380177712?lang=de>
- Li, Y., Liu, H., Lee, M., & Huang, Q. (2020), Information Privacy Concern and Deception in Online Retailing. *Internet Research*, 30(2), 511-537. <https://doi.org/10.1108/INTR-02-2018-0066>
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004), Internet Users' Information Privacy Concerns (Iuipc): The Construct, the Scale, and a Causal Model. *Information Systems Research*, 15(4), 336-355.
- Manyika, J., Cabral, A., Moodley, L., Yeboah-Amankwah, S., Moraje, S., Chui, M., . . . Leke, A. (2013). "Lions Go Digital: The Internet's Transformative Potential in Africa", Retrieved 16.09.2022 from [https://www.mckinsey.com/~/media/McKinsey/Industries/Technology%20Media%20and%20Telecommunications/High%20Tech/Our%20Insights/Lions%20go%20digital%20The%20Internets%20transformative%20potential%20in%20Africa/MGI\\_Lions\\_go\\_digital\\_Full\\_report\\_Nov2013.pdf](https://www.mckinsey.com/~/media/McKinsey/Industries/Technology%20Media%20and%20Telecommunications/High%20Tech/Our%20Insights/Lions%20go%20digital%20The%20Internets%20transformative%20potential%20in%20Africa/MGI_Lions_go_digital_Full_report_Nov2013.pdf), (AccessDate: 16.09.2022).
- Marsh, H. W., Wen, Z., & Hau, K.-T. (2004), Structural Equation Models of Latent Interactions: Evaluation of Alternative Estimation Strategies and Indicator Construction. *Psychological Methods*, 9(3), 275.
- Mathieson, K. (1991), Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior. *Information Systems Research*, 2(3), 173-191.
- Matt, C., Hess, T., & Benlian, A. (2015), "Digital Transformation Strategies. *Business & Information Systems Engineering*, 57(5), 339-343. <https://doi.org/10.1007/s12599-015-0401-5>
- Metts, S. (1994). *Relational Transgressions*. In W. R. Cupach & B. Spitzberg (Eds.), *The Dark Side of Interpersonal Communications* (pp. 217-240). Hillsdale, NJ: Lawrence Erlbaum.
- Milberg, S. J., Burke, S. J., Smith, H. J., & Kallman, E. A. (1995). Values, personal information privacy, and regulatory approaches. *Communications of the ACM*, 38(12), 65-74.
- Miles, J., & Shevlin, M. (2007), A Time and a Place for Incremental Fit Indices. *Personality and Individual Differences*, 42(5), 869-874. <https://doi.org/https://doi.org/10.1016/j.paid.2006.09.022>
- Morgan, R. M., & Hunt, S. D. (1994), The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(3), 20-38.
- Nunnally, J. (1978). *Psychometric Theory* (2nd ed.). Hillsdale, NJ: McGraw-Hill.
- Okazaki, S., Li, H., & Hirose, M. (2009), Consumer Privacy Concerns and Preference for Degree of Regulatory Control. *Journal of Advertising*, 38(4), 63-77. <https://doi.org/10.2753/JOA0091-3367380405>
- Osborne, J. W., & Costello, A. B. (2009), Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis. *Pan-Pacific Management Review*, 12(2), 131-146.
- Ozdemir, Z. D., Jeff Smith, H., & Benamati, J. H. (2017), Antecedents and Outcomes of Information Privacy Concerns in a Peer Context: An Exploratory Study. *European Journal of Information Systems*, 26(6), 642-660.
- Pallant, J. (2020). *Spss Survival Manual: A Step by Step Guide to Data Analysis Using Spss for Windows* (15th ed.). London: Routledge.
- Pavlou, P. A., Liang, H., & Xue, Y. (2007), Understanding and Mitigating Uncertainty in Online Exchange Relationships: A Principal-Agent Perspective. *MIS quarterly*, 105-136.
- Perez, A. J., Zeadally, S., & Cochran, J. (2018), A Review and an Empirical Analysis of Privacy Policy and Notices for Consumer Internet of Things. *Security and Privacy*, 1(3), e15. <https://doi.org/DOI:10.1002/spy2.15>
- Petronio, S., Olson, C., & Dollar, N. (1989), Privacy Issues in Relational Embarrassment: Impact on Relational Quality and Communication Satisfaction. *Communication Research Reports*, 6(1), 21-27. <https://doi.org/10.1080/08824098909359828>

- Phelps, J., Gonzenbach, W., & Johnson, E. (1994), "Press Coverage and Public Perception of Direct Marketing and Consumer Privacy. *Journal of Direct Marketing*, 8(2), 9-22.
- Pletikosa Cvijikj, I., & Michahelles, F. (2011, 2011//). *A Case Study of the Effects of Moderator Posts within a Facebook Brand Page*. Paper presented at the Social Informatics, Berlin, Heidelberg.
- Roncha, A., & Radclyffe-Thomas, N. (2016), How Toms' "One Day without Shoes" Campaign Brings Stakeholders Together and Co-Creates Value for the Brand Using Instagram as a Platform. *Journal of Fashion Marketing and Management*, 20(3), 300-321. <https://doi.org/10.1108/JFMM-10-2015-0082>
- Sarker, S. (2022). "Consumer Impact of Apple's Privacy Policy: Evidence from User Reviews and Downloads", Retrieved 25.10.2022 from [https://subhradip.com/files/Apple\\_Privacy\\_Policy.pdf](https://subhradip.com/files/Apple_Privacy_Policy.pdf), (AccessDate: 25.10.2022).
- Sayin, E., & Gürhan-Canlı, Z. (2015). *Feeling Attached to Symbolic Brands within the Context of Brand Transgressions*. In *Brand Meaning Management* (Vol. 12, pp. 233-256). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1548-643520150000012009>
- Schumacker, R. E., & Lomax, R. G. (2015). *A Beginner's Guide to Structural Equation Modeling* (4th, Ed.). Third Avenue, New York, NY: Routledge Academic.
- Shin, D.-H., & Choi, M. J. (2015), Ecological Views of Big Data: Perspectives and Issues. *Telematics and Informatics*, 32(2), 311-320. <https://doi.org/https://doi.org/10.1016/j.tele.2014.09.006>
- Sierra, J. J., Heiser, R. S., Williams, J. D., & Taute, H. A. (2010), Consumer Racial Profiling in Retail Environments: A Longitudinal Analysis of the Impact on Brand Image. *Journal of Brand Management*, 18(1), 79-96. <https://doi.org/10.1057/bm.2010.24>
- Singh, A. S., & Masuku, M. B. (2014), Sampling Techniques & Determination of Sample Size in Applied Statistics Research: An Overview. *International Journal of Economics, Commerce and Management*, 2(11), 1-22.
- Smith, H. J., Dinev, T., & Xu, H. (2011), Information Privacy Research: An Interdisciplinary Review. *MIS quarterly*, 35(4), 989-1015. <https://doi.org/10.2307/41409970>
- Solomon, E. M., & van Klyton, A. (2020), The Impact of Digital Technology Usage on Economic Growth in Africa. *Utilities Policy*, 67, 101104. <https://doi.org/https://doi.org/10.1016/j.jup.2020.101104>
- Statista. (2022a). "Most Popular Social Networks Worldwide as of January 2022, Ranked by Number of Monthly Active Users", Retrieved 13.11.2022 from <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>, (AccessDate: 13.11.2022).
- Statista. (2022b). "Social Media - Statistics & Facts", Retrieved 04.12.2022 from <https://www.statista.com/topics/1164/social-networks/>, (AccessDate: 04.12.2022).
- Stone, E. F., & Stone, D. L. (1990), Privacy in Organizations: Theoretical Issues, Research Findings, and Protection Mechanisms. *Research in Personnel and Human Resources Management*, 8(3), 349-411.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*. Boston: Pearson.
- Thomas, J. L., Vitell, S. J., Gilbert, F. W., & Rose, G. M. (2002), The Impact of Ethical Cues on Customer Satisfaction with Service. *Journal of Retailing*, 78(3), 167-173. [https://doi.org/https://doi.org/10.1016/S0022-4359\(02\)00062-3](https://doi.org/https://doi.org/10.1016/S0022-4359(02)00062-3)
- Thompson, B. (2004). *Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications*. American Psychological Association. <https://doi.org/10.1037/10694-000>
- UNCTAD. (2021). *Cross-Border Data Flows and Development. For Whom the Data Flow* (Digital Economy Report 2021, Issue.
- UNCTAD. (2022). "2022 Outcome Report: Data and Digitalization for Development", Retrieved 25.11.2022 from [https://unctad.org/system/files/information-document/2.eWeek\\_2022\\_Outcome\\_Report.eng\\_.pdf](https://unctad.org/system/files/information-document/2.eWeek_2022_Outcome_Report.eng_.pdf), (AccessDate: 25.11.2022).
- Van Veldhoven, Z., & Vanthienen, J. (2022), Digital Transformation as an Interaction-Driven Perspective between Business, Society, and Technology. *Electronic Markets*, 32(2), 629-644. <https://doi.org/10.1007/s12525-021-00464-5>
- Wang, Z., & Liu, Y. (2014), Identifying Key Factors Affecting Information Disclosure Intention in Online Shopping. *International Journal of Smart Home*, 8(4), 47-58.



- Warren, S., & Brandeis, L. (1989). *The right to privacy*. In T. Goldstein (Ed.), *Killing the Messenger: 100 Years of Media Criticism* (pp. 1-21). New York Chichester, West Sussex: Columbia University Press.
- Weforum. (2022). "Navigating Industry Disruptions, Transitioning to a New Normal", Retrieved 26.11.2022 from <https://www.weforum.org/platforms/shaping-the-future-of-digital-economy-and-new-value-creation>, (AccessDate: 26.11.2022).
- Westin, A. F. (1967). *Privacy and Freedom*. Atheneum, New York: H. Wolff.
- WhatsApp. (2021). "Whatsapp Privacy Policy", Retrieved 29.11.2022 from <https://www.whatsapp.com/legal/privacy-policy/?lang=en>, (AccessDate: 29.11.2022).
- Willis, B., Jai, T., & Lauderdale, M. (2021), Trust and Commitment: Effect of Applying Consumer Data Rights on Us Consumers' Attitudes toward Online Retailers in Big Data Era. *Journal of Consumer Behaviour*, 20(6), 1575-1590.
- Wu, K.-W., Huang, S. Y., Yen, D. C., & Popova, I. (2012), "The Effect of Online Privacy Policy on Consumer Privacy Concern and Trust. *Computers in Human Behavior*, 28(3), 889-897.
- Zhang, X., Liu, S., Chen, X., Wang, L., Gao, B., & Zhu, Q. (2018), Health Information Privacy Concerns, Antecedents, and Information Disclosure Intention in Online Health Communities. *Information & Management*, 55(4), 482-493.