

Polisetty, Aruna; Sowmya, G; Pahari, Subhajit

## Article

# Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM

Cogent Business & Management

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Polisetty, Aruna; Sowmya, G; Pahari, Subhajit (2023) : Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 3, pp. 1-30, <https://doi.org/10.1080/23311975.2023.2283917>

This Version is available at:

<https://hdl.handle.net/10419/294747>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM

Aruna Polisetty, G Sowmya & Subhajit Pahari

To cite this article: Aruna Polisetty, G Sowmya & Subhajit Pahari (2023) Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM, Cogent Business & Management, 10:3, 2283917, DOI: [10.1080/23311975.2023.2283917](https://doi.org/10.1080/23311975.2023.2283917)

To link to this article: <https://doi.org/10.1080/23311975.2023.2283917>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 27 Nov 2023.



Submit your article to this journal [↗](#)



Article views: 1260



View related articles [↗](#)



View Crossmark data [↗](#)



Received: 25 April 2023  
Accepted: 02 November 2023

\*Corresponding author : Subhajt Pahari, Symbiosis Centre for Management Studies, Nagpur Campus, Symbiosis International (Deemed University), Pune, India  
E-mail: [subhajt.pahari@scmsnagpur.edu.in](mailto:subhajt.pahari@scmsnagpur.edu.in)

Reviewing editor:  
Yen-Chun Jim Wu, National Taiwan Normal University, Taiwan, Province of China

Additional information is available at the end of the article

## INFORMATION & TECHNOLOGY MANAGEMENT | RESEARCH ARTICLE

# Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM

Aruna Polisetty<sup>1</sup>, G Sowmya<sup>1</sup> and Subhajt Pahari<sup>1\*</sup>

**Abstract:** The rise of cord-cutting due to technological advancements and internet accessibility has led to an increased interest in understanding the adoption behavior of consumers towards over-the-top services (OTTs). This study aimed to comprehend the barriers to adopting the first wave of OTTs and the innovation characteristics, along with the propagation mechanism, in the second wave, using the Innovation Resistance Theory (IRT) and the Technology Acceptance Model (TAM), respectively. The study was conducted in India, with 302 and 572 respondents for the first and second waves, respectively. Data were analyzed through confirmatory factor analysis and structural equation modeling. The findings revealed that value barriers, technology vulnerability barriers, and individual barriers had the highest impact on consumer resistance, negatively impacting continued usage intention. Consumer habits were found to play a conditional role in antagonizing the effects of consumer resistance on continued usage intention. In the second wave, innovation and consumer characteristics had no significant impact on continued usage behavior. Instead, a robust propagation mechanism was explored to overcome consumer resistance and promote innovation. These findings provide valuable insights for OTT service providers and policymakers to promote continued usage intention and overcome consumer resistance.

**Subjects:** ICT; Consumer Behaviour

**Keywords:** technology; over-the-top services; Innovation Resistance Theory; Technology Acceptance Model; propagation mechanism; consumer adoption

### PUBLIC INTEREST STATEMENT

Our research delves into the fascinating world of streaming services, like Netflix and Amazon Prime, and how people in India have embraced them. With more and more of us cutting the cord and moving to these platforms, understanding what drives or hinders our choices is crucial. We found that concerns about value for money, technology issues, and personal habits can make people hesitant to keep using these services. However, what is truly intriguing is how, in the second wave of streaming, innovation and personal traits do not matter as much. Instead, the way these services spread and convince people to stick around becomes vital. This insight is not just for companies offering streaming, but also for policymakers, as it can help them make decisions that benefit everyone. So, whether you are a fan of binge-watching or just curious about the future of entertainment, our study has something for you.



## 1. Introduction

The advancement of technology has dramatically impacted the media industry and television content consumption. Consumer content consumption patterns have changed due to the rise of the internet, mobile devices, and the availability of various channels and content (Chalaby & Plunkett, 2021). The growth of various streaming services, such as Netflix, Amazon Prime, Hulu, and Disney+, has disrupted the traditional TV industry, leading to changes in production, distribution, and monetization models. The shift towards online content consumption has also led to the decline of traditional TV ratings and the rise of alternative metrics such as online views and social media engagement (Nagaraj et al., 2021). Over-the-top services (OTTs) are monetization services that allow consumers-centred experiences, where users can watch TV shows and movies on demand and customize their viewing experiences according to their preferences directly over the internet on devices such as smartphones, smart TVs, laptops, tablets, etc. (Basu et al., 2022). The robust growth in OTT on-demand video consumption is accompanied by a global decline in offline TV viewing, revealing users' preferences for on-demand multimedia content, with estimated revenue growth of 3.9% worldwide and 5.3% in India by 2024 (Statista, 2020).

Over-the-top (OTT) platforms are online video and audio streaming services that allow users to access and view content through the internet, without the need for a traditional cable or satellite subscription. Subscribers can watch or listen to the content on a variety of devices, including smartphones, tablets, smart TVs, and laptops. Some popular OTT platforms include Netflix, Amazon Prime Video, Hulu, Disney+, and YouTube TV. These services have disrupted traditional means of accessing entertainment and have become increasingly popular due to their accessibility, affordability, convenience, and the wide range of content they offer. Introduced by Reliance Entertainment in 2008, BIGFlix was the first independent OTT platform in India. Over the previous few years, OTTs have gained tremendous prominence; though the amount of investigation in this arena is limited and primarily focused on consumer satisfaction, consumer engagement, behavioural patterns, and ratings. Adoption of OTT services was highlighted by only few studies and mostly, TVC theory (Chakraborty et al., 2023), UTAUT2 model (Bhattacharyya et al., 2022), customer-engagement model (Gupta & Singharia, 2021a), were used by earlier investigators. Surprisingly, there has not been much investigation into OTT resistance. However, the increasing numbers of works in this domain signify its importance. Consequently, it will be worthwhile to research the combination of consumer acceptance and resistance to OTT.

The progression of OTTs headed to changes in people's preferences, technology, and convenience. However, the traditional media is still dominating the media consumption market with a strong base in the rural and regional corners of India (Nagaraj et al., 2021). Despite the benefits provided by OTTs, Indian consumers have traditionally been habituated to watching new releases at cinema theatres only. The OTTs user penetration rate in India is only 4.6% when compared to the global rate of 16.2%, that reflects the need to better understand the target market and reasons for restricting OTTs platforms in India (Statista, 2020). But an unexpected upsurge in the usage of OTTs has been seen because of the outbreak COVID-19. The extended social distancing, work-from-home (WFH), and lockdowns caused by the COVID-19 pandemic made everyone stay home. It resulted in people having more free time, and many chose to spend that time watching TV and using online streaming services, leading to an increase in viewership (Sharma & Elioth Lulandala, 2023). However, when compared to developed countries emerging countries such as India are resisting OTTs consumption, people are sceptical about spending on OTT platforms and prefer the usage of free content available online (Madnani et al., 2020).

Due to ban on public gatherings and restrictions during the COVID-19 pandemic, numerous movie studios released their big-screen films directly on OTT platforms to evade release postponements and financial losses. In 2020 and 2021, OTT platforms subscribed special streaming rights to many new movies (Basu et al., 2022). However, consumers' resistance or willingness towards content consumption with OTTs related to expectations, current standards, and predetermined performance standards (Nagaraj et al., 2021). OTT platforms turned to be more pocket friendly in

2021, the monthly subscription for Netflix was ₹199 for a single device, and many people can watch a movie with that single subscription pack.

However, the theatrical experience of big-screen, high-resolution projectors provide the consumer with wholesome viewing experience (Chakraborty et al., 2023). While films opt for OTT releases, viewers compare these films with theatrical experience and confirm their acceptability or resistance to use. Thus, service providers need to use various methods to reach a large audience and promote innovations, propagation mechanisms (PM) influence the acceptance and diffusion of inventions (Yener & Taşcıoğlu, 2020). However, adoption of innovation is a complex process that can be influenced by various factors. The same factors that drive resistance to an innovation can also drive to its adoption, because the motives for resistance and adoption can co-exist throughout the life of innovation (Basu et al., 2022).

In the realm of over-the-top (OTT) services, a noteworthy research gap emerges. While existing studies delve into either the adoption or resistance dynamics among consumers, a striking absence is the integration of both facets. Furthermore, the pivotal influence of propagation mechanism remains unexplored in the context of OTT, creating an intriguing avenue for future research. Bridging these gaps can provide a holistic understanding of consumer behavior and the driving forces behind OTT services' success or hindrance. Thus, the present study aims to uncover both the reasons for adopting and resisting the OTTs. In particular, the study seeks to address three main questions:

**RQ1:** What barriers drive the consumers to resist OTT platforms?

**RQ2:** What characteristics drive the consumer's willingness to subscribe OTT platforms?

**RQ3:** Does propagation mechanism moderates the continued usage behaviour of consumers?

The current study was conducted in two waves, the data collected during 2020 and 2022. First-wave data is collected during the preliminary stage of OTT adoption in 2020, and second-wave data collected during the acceptance of OTTs period is in 2022 from different groups (the data contained in two waves are from a separate set of respondents). India is used as the context of the study, used conditional role of propagation mechanism during second-wave. The study results necessitated the role of propagation mechanism with the help of innovation characteristics, and consumer characteristics to overwhelmed consumer resistance and promote innovation adoption (Jahanmir & Cavadas, 2018; Zolkepli & Kamarulzaman, 2015). The study underlies on the Innovation Resistance Theory (wave 1) and the Technology Acceptance Model (wave 2). In the first wave, IRT provides a valuable framework to assess and address potential barriers and resistance to OTT adoption, such as perceived risks and uncertainties. This helps researchers identify initial hurdles that may impede adoption. In the second wave, TAM focuses on the users' perceptions of ease of use and perceived usefulness, shedding light on factors influencing their intentions and actual usage, contributing to a holistic understanding of OTT adoption in India. By integrating these two theories, the study delves deeper into the dynamics of OTT acceptance, effectively capturing the initial resistance and later acceptance phases, ultimately offering valuable insights for OTT service providers and policymakers aiming to enhance technology adoption in the Indian market.

The present study is structured by offering background literature on the emergence of the willingness to adopt OTTs and its influence on personal and innovative characteristics, followed by hypothesis development. The research design was framed to understand what characteristics and propagation mechanism influence the willingness to adopt OTTs for a continued usage behaviour. Subsequently, the study was organised by wave one and wave two quantitative study. Later, data analysis results from analysis and a general discussion based on the results.

Finally, the study presented theoretical and managerial implications, limitations and directions for future research and conclusion.

## 2. Theoretical framework

### 2.1. Innovation Resistance Theory (IRT)

The IRT provides a theoretical framework for consumer resistance. The theory aids in comprehending user behaviour that is resistance-focused (Ram & Sheth, 1989). Here, innovation resistance is understood as behaviour brought about by reasoned consideration and decision-making concerning the adoption and application of innovation due to potential changes brought about by modifications to the current status quo and divergence from the current belief system (Kaur et al., 2020). Customer reluctance can have a significant impact on whether technologies succeed or fail. Users may exhibit resistance-oriented behaviour as a result of the changes innovation has caused in their lives and behaviours (Heidenreich & Kraemer, 2016). Consumer resistance can be categorised as both active as well as passive resistance (Talwar, Talwar et al., 2020). The IRT's emphasis on analysing customer reactions to products from the perspective of functional and psychological barriers gives academics a theoretical foundation for deciphering why certain people are resistant to technological changes (Ram & Sheth, 1989).

### 2.2. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) has played a pivotal role in elucidating users' adoption and acceptance of over-the-top (OTT) services. As the digital landscape continues to evolve, TAM has provided a valuable framework for researchers to explore the factors influencing user decisions when embracing OTT platforms. Previous studies have consistently identified perceived ease of use and perceived usefulness as two fundamental constructs within TAM that significantly impact user intentions and actual usage of OTT services (C. H. Chen et al., 2023; Yousaf et al., 2021). Additionally, TAM has been adapted and extended to include context-specific variables that account for the unique features of OTT services, such as content quality, streaming quality, and social influence (Gupta & Singharia, 2021b; Nagaraj et al., 2021). These studies have demonstrated the model's adaptability and applicability in the context of OTT, shedding light on the dynamic and multifaceted nature of user acceptance, thereby contributing to our understanding of the OTT landscape.

## 3. Research model and hypotheses

The first study model based on IRT undertakes five obstacles for consumers towards OTTs. The framework investigates the connection between different barriers and OTTs' intention to continue OTT.

### 3.1. Functional barriers and consumer resistance to OTT

Usage barrier assesses the obstacle that results from the exertion required to learn and utilising the invention and examines the resistance brought on by modifications that the breakthrough might have (Ram & Sheth, 1989). Individuals with little technical expertise or app usage experience may encounter difficulties due to a technology's complexities which trigger Consumer resistance (Anshu et al., 2022). When invention deviates from the accepted values, resistance develops, and this friction is known as a value barrier (Raj et al., 2020). When it comes to online services, customers want the providers to deliver more value than what they must expend to learn how to use the apps otherwise value barrier occurs and leads to Consumer resistance (Ray et al., 2020). Risk barriers are concerned with the resistance brought on by uncertainties concerning any innovation. Any innovation that has substantial uncertainties will be less accepted. Risk barriers have negative implications in a variety of scenarios, including online purchasing, e-banking, FDAs, etc. according to prior study (Leong et al., 2020). Thus, we propose:

**H1:** Functional barriers (Usage Barriers, Value Barriers, Risk Barriers) influence consumer resistance to OTT

### **3.3. Psychological barrier and consumer resistance to OTT**

One's desire to use is influenced by the traditional barrier since any potential contradiction would be met with a severe backlash. In a variety of scenarios, such as mobile commerce, scholars have discovered a negative link between traditional barriers and the intention to use technology (Talwar et al., 2020). The image barrier, on the other hand, enters the picture since inventions obtain a certain identification from their foundations, such as the product class, nation of origin, and the brand itself (Kushwah et al., 2019). The image barrier, meanwhile, results from thinking in terms of stereotypes and leads to resistance to innovation in various contexts according to earlier researches (Arif et al., 2020). Technological Vulnerability barriers plays crucial role in consumers' resistance to technology. According to previous researchers, Technological Vulnerability barriers include both technological dependence and technology anxiety which are directly related to Consumer resistance (Kamal et al., 2020). Research indicates, everyone gets a little anxious when dealing with new innovation because of fear of addiction, missing out other important tasks or interference in between etc. (Webb & Doman, 2019). Thus, we propose:

**H2:** Psychological barrier (Traditional Barriers, Image Barriers, Technology Vulnerability) influence consumer resistance to OTT

### **3.4. Individual barriers and consumer resistance to OTT**

It is crucial to evaluate the impact of customer individual attributes on consumer resistance to innovation since these qualities have been shown to be decisive factors for any such resistance (Kushwah et al., 2019). Lack of excitement, feeling uncomfortable, satisfaction over traditional technology, sceptical and doubt about success might be the causes of the individual barrier in the context of new technologies. Understanding Individual Barriers is crucial since research has demonstrated that consumer behaviour influences susceptibility to innovation because it varies from consumer to customer (Mani & Chouk, 2018). Thus, we propose:

**H3:** Individual barriers influence consumer resistance to OTT

### **3.5. Moderating role of habit**

Habit is the extent to which individuals naturally carry out behaviours as a result of earlier learning (Tam et al., 2020). In the domain of ICT, the habit construct refers to a learnt behaviour that becomes spontaneous and unconscious and influences information system adoption decision and usage. Information systems research link habit to continuing intention (Wilmer et al., 2017). When habit was investigated as moderating construct in previous studies, it constrained the prediction capability of other factors as habit affects usage pattern (Gomaa & El-Masry, 2016). Based on earlier findings put out by researchers, this study made the assumption that, due to the influence of habit, consumer resistance might have a multitude of repercussions on consumers' continued intention to use OTT. Therefore, we pose:

**H4:** Habit moderates the relationship between consumer resistance to OTT and continuation intention.

### **3.6. Consumer resistance and continuation intention**

Resistance is a reflection of a user's propensity to resist or oppose change. Resistance to change is a basic characteristic which is related to how people feel about technology change (Amarantou et al., 2018). One primary reason innovation fails to achieve commercial success is customer resistance. It is a crucial element that has the potential to hinder or postpone the



**Table 1. Explanation of constructs (1st wave)**

variables	Explanation	Source
Functional Barriers (Usage Barriers, Value Barriers, Risk Barriers)	Usage Barriers relate to challenges in product/service operation, Value Barriers involve perceived benefits versus costs, and Risk Barriers are concerns about potential negative consequences.	(Cham et al., 2022)
Psychological Barrier (Traditional Barriers, Image Barriers, Technology Vulnerability)	Traditional Barriers are resistance to change due to established practices. Image Barriers involve concerns about public perception. Technology Vulnerability pertains to fear of technology failures.	(Krings et al., 2022)
Individual barriers (passive innovative resistance)	This refers to a person's reluctance to adopt new ideas or innovations due to passive opposition, inertia, or a preference for the status quo	(Heidenreich et al., 2022)
Consumer resistance	Consumer resistance refers to the reluctance or unwillingness of individuals to adopt or accept a particular product, service, technology, or innovation.	(Talwar et al., 2020)
Habits	Habits are typically ingrained through repetition and become automatic responses to certain cues or triggers.	(Bollweg et al., 2020)
Continuation intention	Continuation intention, in the context of consumer behavior, refers to an individual's intention or willingness to continue using or engaging with a product, service, technology.	(Al-Adwan et al., 2022)

acceptance of any innovation (Heidenreich & Kraemer, 2016). According to research, people reject new technology because it frequently entails subtle or significant changes, or it is accompanied by uncertainty. Resistance to change is a sign that users would prefer to keep using a system in its existing configuration by rejecting the new one (Özdemir-Güngör & Camgöz-Akdağ, 2018). Previous research discovered that resistance impacted users' intentions to continue using online banking and shopping (Katiyar & Badola, 2018). If impediments are too high, those who acquire technology, following the trend, would reject it and revert to prior technology. Thus, we propose:

**H5:** Consumer resistance influences continuation intention.

### 3.7. Innovation characteristics

One of the constructs in the TAM is perceived usefulness (Davis, 1989). It refers to the extent to which an individual considers that employing a certain system would increase his performance (Singh & Sinha, 2020). It has been discovered that raising the degree of perceived usefulness in utilizing technologies has been a significant motivator for customers to embrace technologies (Cheung et al., 2019). The ability to test a concept, procedure, method, or invention before deciding whether to accept it is referred to as trialability (Al-Rahmi et al., 2019). The extent of ICT experimentation impacts how familiar people get with certain technologies and whether they are eventually adopted. Trialability enhances the trust of potential implementers and reduces their uncertainty risk (Raman et al., 2021); thus is typically adopted faster. Price, a significant factor in marketing research, is a metric which represents the sacrifice customers make in exchange for products or services (Cakici et al., 2019).



**Table 2. Explanation of constructs (2nd wave)**

<b>variables</b>	<b>Explanation</b>	<b>Source</b>
<i>Innovation characteristics (Perceived usefulness, Perceived Trialability, Perceived Price, Perceived Relative advantage, Perceived Compatibility, Perceived Reversibility)</i>	Perceived usefulness is the extent to which the innovation is seen as beneficial. Perceived Trialability refers to the ability to experiment with it. Perceived Price relates to its cost. Perceived Relative advantage assesses its superiority over existing solutions. Perceived Compatibility evaluates its alignment with existing practices, and Perceived Reversibility gauges the ease of returning to the prior state if needed.	(Vahdat et al., 2020)
Consumer characteristics (Perceived Self-efficacy, Perceived Initial user experience)	Perceived Self-efficacy is an individual's belief in their ability to use a product or service effectively. Perceived Initial user experience refers to the expectations and satisfaction derived from the first interactions with the product, shaping perceptions and influencing future adoption decisions.	(Li et al., 2022)
Willingness to subscribe OTT	This refers to an individual's or consumer's readiness or inclination to sign up for and pay for content streaming services.	(Saiti et al., 2022)
Propagation mechanism	A propagation mechanism refers to the process or means by which something, such as information, ideas, trends, or innovations, spreads and disseminates within a population or across a network.	(Ebrahimi Fard & Verma, 2022)
Continued usage behavior	This refers to the ongoing or sustained use of a product, service, or technology over an extended period.	(Al-Adwan et al., 2022)

Customers place more weight on perceived value than actual value as “perceived pricing” highlights an individual’s assessment of a product’s monetary worth which impacts their adoption intention (Büyükdag̃ et al., 2020).

Rogers (1962) identified relative advantage as the extent customers observe a new product or service as enhanced than its substitute. Previous studies in the context of ICT innovation have found significant relationship between Perceived Relative advantage and intention to adopt technology (Yuen et al., 2020). Perceived compatibility can be explained, in this context, as the degree to which an OTT system is perceived as being consistent with the existing values, needs, and experiences of consumers. Perceived compatibility has often been used in information systems adoption literature as a determinant of intention and perceived usefulness (Humbani & Wiese, 2019). Again, in the context of adopting technology, the dichotomy between reversibility and irreversibility is crucial. After being exposed to a new technology, a consumer’s capacity to return back to its initial position easily is known as Reversibility in the context of ICT technologies (Chulkov, 2017). If technology has a high degree of reversibility, users can return to older technology if they do not like it, which increases the probability of adopting new technology.

**H6:** Innovation characteristics (Perceived usefulness, Perceived Trialability, Perceived Price, Perceived Relative advantage, Perceived Compatibility, Perceived Reversibility) have substantial impact on willingness to subscribe OTT.

### **3.8. Consumer characteristics**

The traditional definition of perceived self-efficacy is one's perception of their own competence in particular fields. Self-efficacy gauges a person's capacity to carry out a specific task while utilising technology (Chen & Cheng, 2020). Previous researches have supported the impact of self-efficacy on effort expectations for technology adoption (Tanveer et al., 2021). The impact of self-efficacy on acceptance and continuing intentions in the context of mobile shopping applications is further supported by Thakur (2018). Self-efficacy was found by Upadhyay et al. (2022) to have a substantial impact on attitudes and usage patterns for mobile payments. User interaction and experience with a product or service are referred to as the customer experience. It encompasses how useful, simple, and effective something is in consumer's eyes (Portz et al., 2019). Due to the mismatch of features and usefulness, previous research has demonstrated how poor product qualities lead to disgruntled customers (Sauer et al., 2020). Han et al. (2017) supported this view by highlighting the influence of user experience in the context of augmented reality domain. Therefore, it is expected that Perceived Self-efficacy and individuals' Perceived Initial user experience influence willingness to subscribe OTT. Thus, we propose:

**H7:** Consumer characteristics (Perceived Self-efficacy, Perceived Initial user experience) have substantial impact on willingness to subscribe OTT.

### **3.9. Moderating role of propagation mechanism**

It has been earlier studied how propagation mechanisms (PM) influence the acceptance and diffusion of inventions (Yener & Taşçioğlu, 2020). PM can be categorised based on two factors: the level of marketer control and the nature of consumer contact. The marketer-controlled methods, such as advertisement and customer testimonials, play a critical role in lowering consumer resistance when a new technology is first presented in the market. After introduction and adoption by significant number of customers, external Marketer Control mechanisms such including WOM are crucial in lowering consumer resistance and increasing continued usage behaviour (Ram, 1987). The customer will be less inclined to seek out additional information if the communications are unclear, which could lead to more aversion and less continued usage behaviour. Thus, we assume:

**H8:** Propagation mechanism moderates the relationship between willingness to subscribe OTT and continued usage behaviour

### **3.10. Willingness to subscribe OTT and continued usage behaviour**

Behavioural intentions can be explained as a person's consciously formed plans to engage in a particular course of action. The degree to which users perceive their willingness to continue using a product or service is referred to as their continued usage behaviour (McLean et al., 2020). Strong willingness to adopt has been shown to be one of the strongest indicators of continuing usage behaviour across a variety of fields (Alalwan, 2020). Dehghani (2018) explored the aspect of continued usage behaviour in the context of smartwatches. Limayem & Cheung (2010) found significant relation between intention to adoption and continued usage behaviour in the context of e-learning technologies. Thus, we propose:

**H9:** Willingness to subscribe OTT and continued usage behaviour are positively related.

## 4. Materials and methods

### 4.1. Methods

The study adopted two-wave causal approach to analyse the innovation barriers and innovation characteristics in the context of Indian OTT subscribers. Two waves of data were collected to understand the initial barriers leading to consumer resistance in OTT market and innovation characteristics leading to continued usage behaviour in OTT. The causes of consumer resistance due to various functional, psychological, and individual barriers were analysed in the first wave. Also, the moderating role of consumer habits was investigated to understand the impact of consumer resistance on continuation intention. The first wave was conducted during the preliminary stage of OTT adoption in the country. In the second stage, the team examined the impact of various innovation characteristics that increased the willingness to subscribe OTT services and exhibit continued usage behaviour. Also, the conditional role of propagation mechanism was examined in this phase. The second phase denoted the advanced stage of OTT penetration where the consumers were adapted and often addicted to OTT streaming. The collected data were analysed using structural equation modelling in AMOS and Process Macros.

### 4.2. Data Collection

The current study is based on two waves of data collected in India in 2020 and 2022. There were 437 million subscribers to OTT services during 2020 and 424 million subscribers in 2022, respectively (Statista, 2020 & 2022). Data were enumerated using the paid services of Amazon's Mechanical Turk which collected data from Indian OTT subscribers across diverse demographics. Hence, the sampling method used in the study is convenience sampling. The wave 1 data were collected during August–October 2020, when India was under strict COVID-19 safety measures and prolonged lockdown. In the first wave, the research team received 316 complete surveys. After removing inconsistencies from the sample, there were 302 valid responses left to use for further data analysis. Wave 2 was conducted between July–September 2022 when the economy started recovering post pandemic and normal life restored. In wave 2, we received 598 complete surveys from Amazon Mturk out of which 572 consistent responses were retained for data analysis. Refer to Table 3 for socio-demographic profile of respondents.

### 4.3. Psychometric properties of measurement model

The constructs were measured using established scales adapted and modified to suit the present research context. All the variables were measured using five-point Likert scale anchored with strongly agree (5) and strongly disagree (1). The variables such as usage barriers, value barriers, image barriers, and risk barriers were adapted from (Laukkanen, 2016). The items of traditional barriers were modified from the (Laukkanen, 2016) and (Kaur et al., 2020). Technological vulnerability barrier represented as a combination of technology anxiety and technology dependence were adapted from the works of (Charlton, 2002; Meuter et al., 2005), the individual and ideological barriers were adapted from (Heidenreich & Spieth, 2013). Consumer resistance to OTT was measured using the items of (Kleijnen et al., 2009). The moderator of the wave 1 was adapted from the scales of (Gupta & Singharia, 2021a) and the final outcome variable of the initial phase continuation intention was reformed from (Johnson et al., 2018). For explanation of constructs (1st wave) refer Table 1. The wave 2 examined the impact of innovation and consumer characteristics on willingness to subscribe OTT and its combined impact on continued usage behaviour for explanation of constructs (2nd wave) refer Table 2. Six constructs representing innovation characteristics were tailored from previous studies to fit the current study – Perceived price (Mani & Chouk, 2018; Nagaraj et al., 2021); perceived usefulness (Mukherjee & Hoyer, 2001; Venkatesh et al., 2003); perceived trialability (Al-Gahtani, 2010); perceived relative advantage (Agarwal & Prasad, 1998); perceived compatibility (Karahanna et al., 2006) and perceived reversibility (Heidenreich & Handrich, 2015). The consumer characteristics consisted of perceived self-efficacy and initial user experience altered from the studies of (Compeau & Higgins, 1995) and (Choi & Tulu, 2017). Willingness to subscribe consists of three items from Chu and Lu (2007). The moderator, propagation mechanism was modified from the seminal work of (Ram, 1987). Three items measuring

continued usage behaviour were adapted from (Kang et al., 2009). Refer to [Appendices](#) for item list and reliability and validity in wave 1 and wave 2.

The psychometric properties of these established scale in the current context were assessed using confirmatory factor approach the results of which were found satisfactory. The proposed factor structures validated using CFA produced model fit indices above the suggested thresholds (wave 1 - CMIN/DF = 1.24, CFI = 0.95, GFI = 0.94, AGFI = 0.91, RMSEA = 0.04) and (wave 2 - CMIN/DF = 1.37, CFI = 0.98, GFI = 0.95, AGFI = 0.93, RMSEA = 0.06) (Marsh et al., 2009). All the factor loadings of the measurement models were higher than 0.4 indicating the unidimensionality of items. It was observed that Cronbach's alpha values, composite reliabilities, and average variance extracted portrayed high levels of internal consistencies and convergent validity (Bagozzi & Youjjae, 1988). The discriminant validity ascertained using the square root of AVE and intercorrelation between construct also signified high degrees of distinctiveness between constructs (Voorhees et al., 2016). Details of both the measurement models are elaborated in Appendices.

The potential pitfalls of CMB were avoided by adhering to the guidelines of literatures (Podsakoff et al., 2003, 2011). First, our study was designed as a two-wave approach to examine OTT acceptance at two different time periods. Second, we used Harman-Single factor test and found satisfactory results in the exploratory factor analysis results. No general factor was found in any of the factor structure. Third, after including a single unmeasured latent factor all the path coefficients of the structural model remained significant. Finally, through randomization of items, adoption of established scale, reducing item ambiguity, providing respondents anonymity, and prior instruction on filling the online surveys we were able to psychologically separate the items from the underlying constructs. Using this step-by-step approach, we confirmed that our results are substantially free from the nuances of common method variance. Finally, we tested the

**Table 3. Socio-demographic profile of respondents**

Sl No.	Particulars	Study 1	%	Study 2	%
1	Gender:				
	Male	182	60.26	298	52.10
	Female	120	39.74	274	47.90
2	Age group:				
	Less than 20 years	73	24.17	127	22.20
	20-35 years	104	34.44	202	35.31
	35-50 years	73	24.17	99	17.31
	50-65 years	33	10.93	90	15.73
	Above 65 years	19	6.29	54	9.44
3	Location				
	Urban	133	44.04	214	37.41
	Rural	67	22.19	109	19.06
	Semi Urban	102	33.77	249	43.53
4	Monthly income:				
	Less than 20k	27	8.94	102	17.83
	20k-40k	89	29.47	136	23.78
	40k-60k	96	31.79	142	24.83
	60k-80k	82	27.15	95	16.61
	Above 80k	8	2.65	97	16.96

(Continued)

SI No.	Particulars	Study 1	%	Study 2	%
5	Education:				
	School level	76	25.17	98	17.13
	Graduation	102	33.77	186	32.52
	Post-graduation	98	32.45	114	19.93
	Doctoral degree	14	4.64	32	5.59
	Professional	12	3.97	142	24.83
6	Occupation:				
	Student	74	24.50	134	23.43
	Self-employed	58	19.21	102	17.83
	Salaried employee	92	30.46	113	19.76
	House wife	46	15.23	111	19.41
	Retired	32	10.60	112	19.58
7	Proportion of monthly income spent on OTT services				
	Less than 5%	214	70.86	298	52.10
	5–15%	77	25.50	177	30.94
	15–30%	11	3.64	97	16.96
8	How many OTT services do you use?				
	1	104	34.44	56	9.79
	2	155	51.32	127	22.20
	3	29	9.60	152	26.57
	4	12	3.97	135	23.60
	More than 4	2	0.66	102	17.83
9	How many hours do you spent weekly in OTT?				
	Less than 3 hours	45	14.90	37	6.47
	3–10 hours	169	55.96	398	69.58
	More than 10 hours	88	29.14	137	23.95
10	Which kind of subscription plan do you opt?				
	Monthly	112	37.09	62	10.84
	Quarterly	102	33.77	34	5.94
	Half-yearly	58	19.21	189	33.04
	Annually	30	9.93	287	50.17
11	Do you prefer OTT over traditional means of watching forever?				
	Yes	76	25.17	264	46.15
	No	123	40.73	110	19.23
	Neutral	103	34.11	198	34.62

assumptions of multi-normality (Mardia & Foster, 2007) and multi-collinearity (Mansfield & Helms, 2012) and found the results in consonance with the assumptions of multivariate analysis.

#### 4.4. Participants in wave 1 and 2

### 5. Results of hypothesis testing

#### 5.1. Results of wave I (August–September 2020)

This session includes series of hypotheses testing to examine the causes and effect of consumer resistance to OTT during the initial stages of COVID-19 pandemic. Besides the moderating role of consumer habits was also investigated. The impact of multiple barriers on consumer resistance and its final impact on continuation intention of using OTT platforms were given below (CMIN/DF = 1.370, GFI = 0.930, AGFI = 0.913, CFI = 0.982, RMSEA = 0.031)

The results of direct path between various theoretical constructs were presented in Table 4. All the hypotheses were accepted with the obtained beta coefficients ( $p < 0.05$ ). The estimates depicting the direct impacts were considered sufficient as per the standard criteria (Aloe & Jane Becker, 2012). Examining the standard estimate proves that value barriers, technology vulnerability barriers and individual barriers had relatively highest impact on consumer resistance which in turn had negative impact on continuation intention. The conditional role of consumer habits in antagonizing the impact of consumer resistance on continuation intention is illustrated below (Table 5).

The test of moderation was done as detailed by (Dawson, 2014; Hopwood, 2007). It was found that habits significantly moderate the negative path between consumer resistance and continuation intention in such a way that consumer with strong habits has more continuation intention in the OTT platforms. The significance of moderation was reflected through bootstrapping indices which does not include absolute zero (Table 5). It was found that positive value of conditional estimates antagonizes the direct estimate since the negative effects are reversed. The parsimonious measure of moderation obtained unparallel graphs reinforcing the significance of moderation in the theoretical model. Refer to Figure 2 for parsimonious measure of conditional effect.

#### 5.2. Results of wave II (July- September 2022)

This session examines the advanced stage of OTT acceptance among the Indian subscribers. Here, the researchers attempted the conditional indirect effect of willingness to subscribe OTT and propagation mechanism of such services on the continues usage behaviour of the subscribers

Table 4. Summary of path coefficients – direct effects						
Path	Estimates	SE.	CR.	P	Hypothesis	Sig.
<b>Functional barriers:</b>						
USB- CRE	0.38	0.07	5.43	0.01	H <sub>1</sub>	Yes
VAB-CRE	0.41	0.11	3.73	0.02		Yes
RSB- CRE	0.27	0.02	13.50	0.01		Yes
<b>Psychological Barriers:</b>						
TRB- CRE	0.42	0.09	4.67	0.01	H <sub>2</sub>	Yes
IMB- CRE	0.24	0.03	8.00	0.02		Yes
TVB-CRE	0.54	0.14	3.86	0.04		Yes
IDB- CRE	0.31	0.03	10.33	0.01		Yes
<b>Individual Barriers:</b>						
INB- CRE	0.39	0.02	19.50	0.01	H <sub>3</sub>	Yes
CRE- COI	-0.42	0.12	-3.50	0.04	H <sub>5</sub>	Yes

**Table 5. Results of moderation**

Path	$\beta$	SE	t	P	LLCI	ULCI	Moderation	Hypothesis
<b>Conditional effect of Habits</b>								
CRE- COI	0.45	0.10	4.50	0.01	0.1023	0.2176	Yes	H <sub>4</sub>
<b>Summary of moderation</b>								
Path	Direct estimate	Conditional estimate	Nature of moderation		Significance			
CRE- COI	-0.42	0.45	Antagonistic		Yes			

**Table 6. Summary of mediation analysis**

Path	Direct effect	Indirect effect	SE.	CR.	P
PEU-WTS	0.26	NA	0.10	2.60	0.03**
PET-WTS	0.19	NA	0.02	9.50	0.01**
PEP-WTS	0.36	NA	0.04	9.00	0.01**
PRA-WTS	0.44	NA	0.10	4.40	0.02**
PEC-WTS	0.31	NA	0.07	4.43	0.02**
PER-WTS	0.20	NA	0.02	10.00	0.01**
PSE-WTS	0.44	NA	0.12	3.67	0.01**
IUE-WTS	0.39	NA	0.09	4.33	0.01**
WTS- CUB	0.46	NA	0.11	4.18	0.01**
PEU-CUB	0.14	NA	0.22	0.64	0.09
PET-CUB	0.19	NA	0.19	1.00	0.08
PEP-CUB	0.20	NA	0.15	1.33	0.07
PRA-CUB	0.24	NA	0.22	1.09	0.06
PEC-CUB	0.17	NA	0.20	0.85	0.11
PER-CUB	0.11	NA	0.21	0.52	0.10
PSE-CUB	0.27	NA	0.29	0.93	0.09
IUE-CUB	0.13	NA	0.17	0.76	0.08
PEU-WTS-CUB	NA	0.28	0.01	28.00	0.02**
PET-WTS-CUB	NA	0.26	0.04	6.50	0.01**
PEP-WTS-CUB	NA	0.31	0.07	4.43	0.01**
PRA-WTS-CUB	NA	0.32	0.06	5.33	0.02**
PEC-WTS-CUB	NA	0.27	0.02	13.50	0.01**
PER-WTS-CUB	NA	0.28	0.02	14.00	0.02**
PSE-WTS-CUB	NA	0.35	0.10	3.50	0.02**
IUE-WTS-CUB	NA	0.32	0.08	4.00	0.02**

**Hypothesis testing mediation**

Path	Hypothesis	Decision	Sig.	Nature of mediation
PEU-WTS-CUB	H <sub>9</sub>	Supported	Yes	Full
PET-WTS-CUB		Supported	Yes	Full
PEP-WTS-CUB		Supported	Yes	Full
PRA-WTS-CUB		Supported	Yes	Full
PEC-WTS-CUB		Supported	Yes	Full
PER-WTS-CUB		Supported	Yes	Full
PSE-WTS-CUB		Supported	Yes	Full
IUE-WTS-CUB		Supported	Yes	Full



using Process Macros (Karazsia et al., 2014). The acceptance of OTT services can be mainly attributed to innovation characteristics and consumer characteristics. The relative importance of each of these characteristics and the combined impact of moderation and mediation on the outcome variable is presented below (CMIN/DF=2.119, GFI=0.873, AGFI=0.843, CFI=0.959 RMSEA=0.056).

The results of direct and indirect estimates checking for the mediating role of WTS between the endogenous and exogenous variables are presented in Table 6. It was found that none of the direct path leading to continued usage behaviour was significant ( $p < 0.05$ ). It was observed that all the facets of innovation characteristics and consumer characteristics had significant impact on willingness to subscribe for OTT. We also observed positive impact of WST on CUB. Analysis of the indirect paths revealed that the direct paths in the conceptual model were significantly altered by the presence of mediator. While the direct path coefficients were insignificant, all the indirect path estimates were significant since  $p < 0.05$  (Table 4). The results indicate the presence of full mediation since all the insignificant direct path were significantly mediated through WTS. The model fit indices also attained the standard threshold values which increases the credibility of the results obtained (CMIN/DF=1.43, GFI=0.97, AGFI=0.94, TLI=0.96, CFI=0.95, RMSEA=0.04) (Schreiber, 2017, 2008).

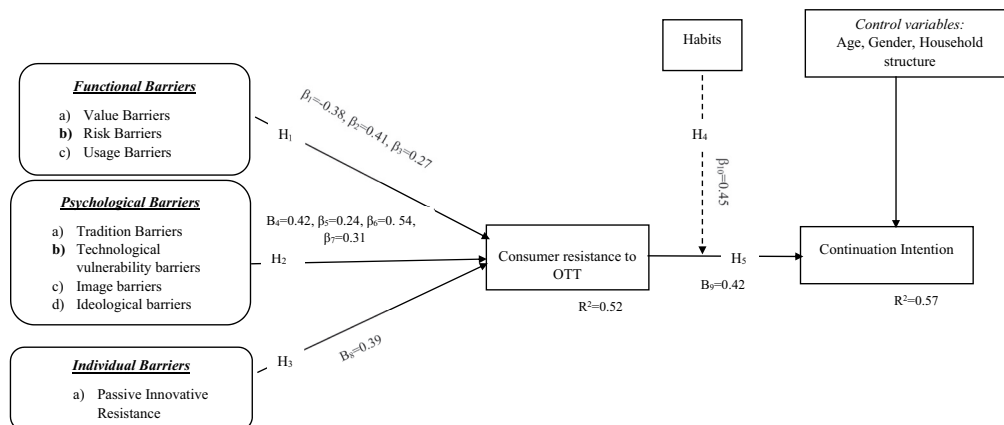
Table 5 evaluated the indirect role of willingness to subscribe OTT platforms and the conditional role of propagation mechanism simultaneously. The results of conditional indirect effect show enhancing role of propagation mechanism in the path fully mediated by WTS. Hence, we accepted the  $H_8$  since all the bootstrapping confident are significant and does not include absolute zero. It was earlier in Table 6 depicted that the direct path between innovation characteristics and CUB as well as consumer characteristics and CUB were insignificant. However, the conditional interaction of willingness to subscribe fuelled by proper propagation mechanism had significant impact on outcome variable. All the path coefficients were significant since  $p < 0.05$ . Refer Table 7 for the results of conditional indirect effects and Figure 4 for Parsimonious measure of moderation-propagation mechanism.

## 6. Discussions

The purpose of the study was to trace out the acceptance of OTT services in the Indian market, which initially faced dyads of consumer resistance. Designed as a two-wave approach, the study provided insights about the reasons for initial consumer resistance during pandemic (August–October 2020) and acceptance of OTT services post pandemic (July–September 2022). Due to technology enthusiasm and savviness, youngsters remained the major subscribers of OTT during both the initial and advanced phase. Availability of high internet bandwidth and uninterrupted network were the major reasons for increased usage of OTT services in urban counterparts. The prolonged lockdowns and social isolation attracted most of the salaried employees and students to OTT platforms initially; however, when the economic life returned normal and with the resuming of physical office spaces and reopening of educational institutions the leisure time available for OTT usage were shrunk. Due to the options of shared viewing, the average amount incurred on OTT remained less in both the waves. Due to initial suspiciousness and lack of trust on OTT services users mainly used less than two streaming platforms. Positive user experience and increased propagation mechanism of these players were cited as the major reasons for subscribing in more platforms the advanced stage. While the average time spent on OTT remained constant during both the time periods, there was a radical shift in the subscription pattern. When the share of monthly subscriptions was more in the initial phase, continued usage behaviour was reflected through the surging annual subscriptions during second wave. The reason for choosing OTT services over traditional means can be ascribed to the robustness of various innovation and consumer characteristics. These findings voice the insights of previous studies on OTT acceptance and user experiences (Madnani et al., 2020).

While exploring the potential reasons for consumer resistance to OTT in the wave 1, the study found eight major barriers categorised as functional, psychological, and individual obstructions.

**Figure 1. Results of wave-I (initial stage).**



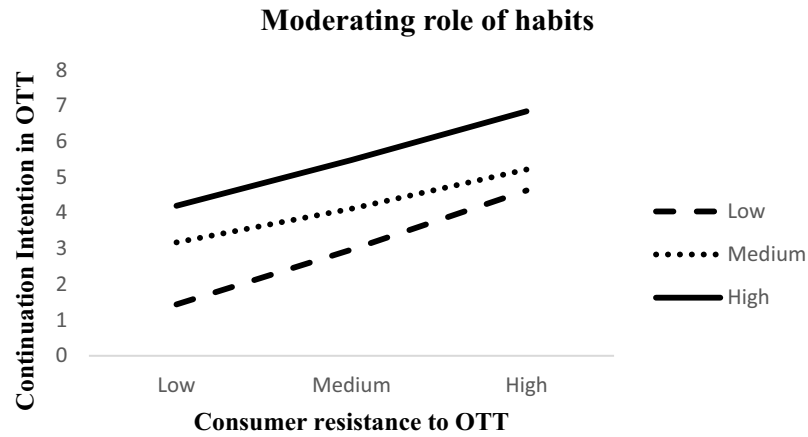
Indian consumers who are largely value driven and more value-conscious considered OTT subscription as costly due to additional perceived cost on internet connectivity. Among the functional barriers, value barrier represented a major threat to usage of OTT services ( $H_1$ ,  $\beta_2 = 0.41$ ) (Figure 1). Considered as highly time-constrained, users were suspicious of addiction to such services which may hinder their social life. Rooted on traditions and culture, Indian consumers are more anxious about any form of technology. Technological vulnerability barrier by means of anxiety and increased dependence thus had higher impact on consumer resistance ( $H_2$ ,  $\beta_6 = 0.54$ ). OTT platforms fail to provide socializing experience which the movie houses offer ( $\beta_4 = 0.42$ ). Many Indian subscribers with high traditional values consider watching movies in theatres as special event. They resisted OTT due to lack of big screen experience, high-quality sound and recurring distractions of household chores. Indians have passive resistance to any form of innovations. The passive resistance can be attributed to lack of knowledge about OTT services, lack of need for such innovation before the pandemic and lack of sufficient resources to use OTT ( $H_3$ ,  $\beta_8 = 0.39$ ). These findings are at par with the prior researches on consumer resistance to innovations (Claudy et al., 2015; Kleijnen et al., 2009). It was found that consumers with frequent habits of using OTT exhibited high levels of continuation intention ( $H_4$ ,  $\beta_{10} = 0.45$ ). The prolonged lockdown and increased boredom of unable to venture outside home increased the dependency to use OTT services which reversed the negative impact of consumer resistance on continuation intention ( $H_5$ ,  $\beta_9 = -0.42$ ).

The study also extracted six innovation characteristics and two consumer characteristics which facilitated the acceptance of OTT services post pandemic ( $H_6$  &  $H_7$ ) (Figure 3). Perceived relative advantage of OTT services over conventional means had highest impact on the willingness to subscribe ( $\beta_{14} = 0.44$ ), whereas perceived trialability had the lowest ( $\beta_{12} = 0.19$ ). Enhanced user control, the feature to watch self-paced, convenience, and safety increases the preference for OTT over traditional means. The lack of free trial periods in many OTT platforms reduces its impact on WTS. Perceived usefulness ( $\beta_{11} = 0.26$ ), perceived price ( $\beta_{13} = 0.36$ ), perceived compatibility ( $\beta_{15} = 0.31$ ), and perceived reversibility ( $\beta_{16} = 0.20$ ) were the other prominent innovation characteristics facilitating WST. Among the consumer characteristics perceived self-efficacy had higher impact on WST ( $\beta_{17} = 0.44$ ) than initial user experience ( $\beta_{18} = 0.39$ ). With the prevalence of OTT streaming and in course of time users became self-equipped to use such platforms. The simplified and user-friendly platforms with customized options smoothed positive WST. However, it was found that all the innovation characteristics and consumer characteristics had no significant impact on continued usage behaviour which further necessitated the test of mediation through WST. Willingness to subscribe fully mediated the direct path between the predictors and outcome variable ( $H_9$ ). The WST was further supplemented with marketer-based propagation mechanism for increasing the continued usage behaviour in OTT context ( $H_8$ ). The essential characteristics of propagation mechanism such as clarity, credibility, informativeness, and attractiveness conditioned the

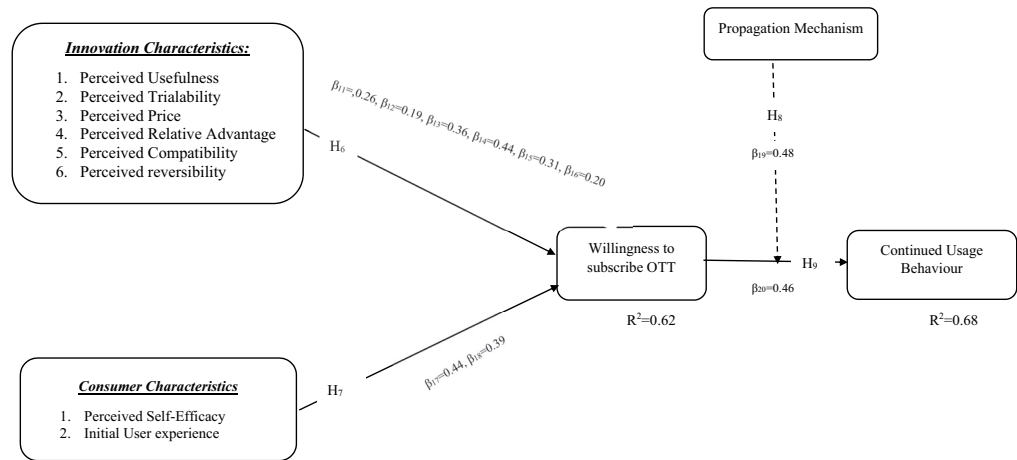
**Table 7. Results of conditional indirect effects**

Path	$\beta$	SE	t	P	LLCI	ULCI	Moderation	Hypothesis
<b>Moderating role of PRM through WST</b>								
PEU-CUB	0.39	0.02	20	0.01	0.1019	0.1823	Yes	H <sub>8</sub>
PET-CUB	0.41	0.11	4	0.01	0.1320	0.1923	Yes	
PEP-CUB	0.29	0.01	29	0.02	0.1178	0.1742	Yes	
PRA-CUB	0.32	0.02	16	0.02	0.0652	0.1923	Yes	
PEC-CUB	0.28	0.01	28	0.02	0.0321	0.1768	Yes	
PER-CUB	0.25	0.01	25	0.03	0.0145	0.1769	Yes	
PSE-CUB	0.38	0.02	19	0.02	0.0216	0.1863	Yes	
IUE-CUB	0.30	0.01	30	0.01	0.0167	0.1943	Yes	
<b>Comparing the direct and conditional indirect effect between the predictors and outcome variable</b>								
Path	Direct estimate		Conditional indirect estimate			Nature of moderation	Sig.	
PEU-CUB	0.14		0.39		Enhancing	Yes		
PET-CUB	0.19		0.41		Enhancing	Yes		
PEP-CUB	0.20		0.29		Enhancing	Yes		
PRA-CUB	0.24		0.32		Enhancing	Yes		
PEC-CUB	0.17		0.28		Enhancing	Yes		
PER-CUB	0.11		0.25		Enhancing	Yes		
PSE-CUB	0.27		0.38		Enhancing	Yes		
IUE-CUB	0.13		0.30		Enhancing	Yes		

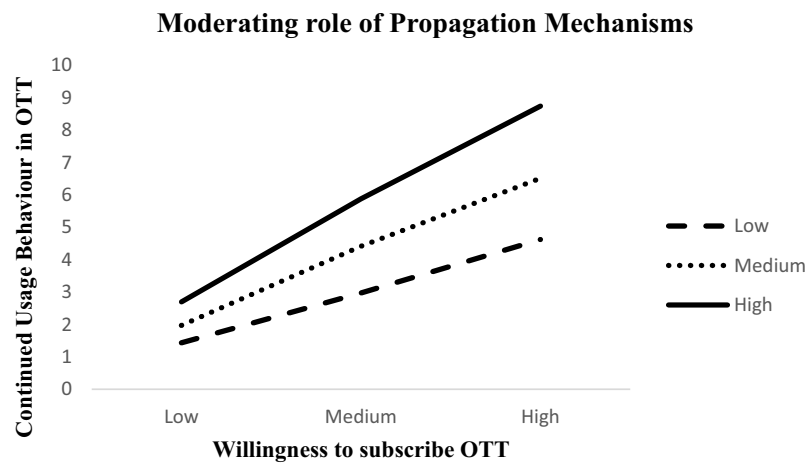
**Figure 2. Parsimonious measure of conditional effect.**



**Figure 3. Results of wave II (advanced stage).**



**Figure 4. Parsimonious measure of moderation- propagation mechanism.**



continued usage behaviour in the OTT market. These results are consistent with the prior literature that necessitated the importance of innovation characteristics, consumer characteristics, and

robust propagation mechanisms to overcome consumer resistance and promote innovation adoption (Jahanmir & Cavadas, 2018; Zolkepli & Kamarulzaman, 2015).

## **7. Theoretical and managerial implications**

### **7.1. Theoretical implications**

The current study's approach provides a wide range of theoretical ramifications. The findings of the study can help researchers identify the specific types of barriers that consumers face when deciding whether to subscribe to an OTT service. For example, consumers may resist subscribing to a service because they do not believe it offers the features they need (functional barrier), because they feel that using the service will conflict with their identity or values (psychological barrier), because they believe their social network will disapprove of using the service (social barrier), or because they find it difficult to navigate the sign-up process (usage barrier). Also, the findings of our study can help researchers understand which barriers are most important in shaping consumers' subscription behaviour. Also, the findings of the study can be used to guide the development of interventions designed to overcome innovation resistance.

Our study found that consumer habits and propagation mechanism play significant moderating role in antagonizing consumer resistance in OTT platforms. The present study provides a useful framework for understanding the complex interplay of factors that influence consumers' decisions to subscribe to new OTT services. By identifying the specific barriers that consumers face and understanding their relative importance, researchers can develop interventions that are more likely to be effective in promoting adoption of new services. In the area of communication and media studies, both of the moderators used in this study have a number of theoretical applications. The wave 1 analysing consumer habits in OTT platforms have made significant theoretical contributions to the field of consumer behaviour and psychology. By providing insights into personalization, habit formation, social influence, and user experience, these studies have helped companies develop more effective strategies to promote and sustain successful OTT platforms. The results of moderation in wave 2 provided meaningful insights into network effects, viral marketing, content selection, and platform competition, these studies have helped companies develop more effective strategies to promote and sustain successful OTT platforms.

### **7.2. Managerial implications**

The study provides valuable insights into the acceptance of OTT services in the Indian market, highlighting the reasons for initial consumer resistance and the factors that facilitated the acceptance of OTT services post-pandemic. The findings have several managerial implications for OTT service providers. To begin with, the study suggests that service providers should prioritize improving the perceived value of their services, particularly in terms of affordability and internet connectivity. They can consider offering bundled packages that include internet connectivity and provide affordable subscription plans to attract more price-conscious consumers. Secondly, the study emphasizes the importance of enhancing user control, convenience, and safety in OTT services to increase consumer willingness to subscribe. Service providers should offer user-friendly and customizable platforms that provide a seamless viewing experience and enable consumers to watch content at their own pace. They should also ensure a safe and secure environment for consumers to enjoy their content. Thirdly, the study highlights the significance of robust propagation mechanisms for increasing continued usage behaviour. OTT service providers should leverage social media and other digital platforms to promote their services and engage with their customers. They should also focus on building credibility, clarity, and attractiveness in their marketing communication to increase their brand awareness and loyalty. Finally, the study emphasizes the need for continued innovation to maintain and grow the OTT market in India. OTT service providers should continue to invest in developing innovative features and functionalities that cater to the evolving needs and preferences of Indian consumers. Overall, the study suggests that OTT service providers should focus on improving the perceived value of their services, enhancing user control and convenience, building robust propagation mechanisms,

and investing in continued innovation to increase adoption and usage of their services in the Indian market.

### 8. Limitations and future research directions

The current findings account for few limitations also. The current study focused primarily on OTT platforms in India and may not account for the differences in adoption and resistance in other types of media and platforms. Research conducted only in India would have a limited sample size, which may not adequately represent the diverse population of India. This could lead to biased findings and lack of representativeness regarding OTT subscription behaviour. IRT assumes that resistance to innovation is based on cultural and social factors. However, research conducted only in India may not provide sufficient insights into the unique cultural factors that affect adoption and resistance to OTT platforms in other countries. While IRT can provide insights into the factors that contribute to innovation resistance, it may not be able to fully explain the complex and dynamic nature of adoption and resistance in OTT platforms. Other theories and frameworks may need to be considered in conjunction with IRT for a more comprehensive understanding of the phenomenon. Future studies regarding OTT can be conducted to analyse the Customer Lifetime Value (CLV) of OTT subscribers in India. Such study can help the OTT players in India to understand the customer's behaviour and preferences in terms of content, pricing, and engagement. The study can also provide insights into customer churn rates and retention strategies. Studies can be conducted to segment the OTT subscribers in India based on their behaviour, preferences, and demographics. These studies can help the OTT players in India to target specific segments with tailored content and pricing strategies. The study can also provide insights into the customer's preferences for various types of content and their willingness to pay for premium content. In addition, studies can be conducted to compare the different OTT platforms in India based on their content, pricing, and user experience. These studies can help the OTT players in India to benchmark themselves against their competitors and identify the areas where they need to improve. Such studies can also provide insights into the customer's preferences for various types of content and their expectations from OTT platforms.

#### Author details

Aruna Polisetty<sup>1</sup>  
ORCID ID: <http://orcid.org/0000-0002-9391-6442>  
G Sowmya<sup>1</sup>  
ORCID ID: <http://orcid.org/0000-0002-8957-0098>  
Subhajit Pahari<sup>1</sup>  
E-mail: [subhajit.pahari@scmsnagpur.edu.in](mailto:subhajit.pahari@scmsnagpur.edu.in)  
ORCID ID: <http://orcid.org/0000-0001-9302-7680>  
<sup>1</sup> Symbiosis Centre for Management Studies, Nagpur Campus, Symbiosis International (Deemed University), Pune, India.

#### Disclosure statement

No potential conflict of interest was reported by the author(s).

#### Data availability statement

The data that support the findings of this study are available upon request.

#### Citation information

Cite this article as: Streaming towards innovation: Understanding consumer adoption of OTT services through IRT and TAM, Aruna Polisetty, G Sowmya & Subhajit Pahari, *Cogent Business & Management* (2023), 10: 2283917.

#### References

Agarwal, R., & Prasad, J. (1998). The antecedents and consequents of user perceptions in information technology adoption. *Decision Support Systems*, 22(1), 15–29. [https://doi.org/10.1016/S0167-9236\(97\)00006-7](https://doi.org/10.1016/S0167-9236(97)00006-7)

- Al-Adwan, A. S., Yaseen, H., Alsoud, A., Abousweilem, F., & Mugahed Al-Rahmi, W. (2022). Novel extension of the UTAUT model to understand continued usage intention of learning management systems: The role of learning tradition. *Education and Information Technologies*, 27(3), 3567–3593. <https://doi.org/10.1007/s10639-021-10758-y>
- Alalwan, A. A. (2020). Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. *International Journal of Information Management*, 50 (February), 28–44. <https://doi.org/10.1016/J.IJINFOMGT.2019.04.008>
- Al-Gahtani, S. S. (2010). Computer technology adoption in Saudi Arabia: Correlates of perceived innovation attributes. *Information Technology for Development*, 10(1), 57–69. <https://doi.org/10.1002/ITD.1590100106>
- Aloe, A. M., & Jane Becker, B. (2012). An effect size for regression predictors in meta-analysis. *Journal of Educational and Behavioral Statistics*, 37(2), 278–297. <https://doi.org/10.3102/1076998610396901>
- Al-Rahmi, W. M., Yahaya, N., Aldraiweesh, A. A., Alamri, M. M., Ali Aljarboa, N., Alturki, U., & Aljeraiwi, A. A. (2019). Integrating technology acceptance model with innovation diffusion theory: An empirical investigation on students' intention to use E-Learning systems. *Institute of Electrical and Electronics Engineers Access*, 7, 26797–26809. <https://doi.org/10.1109/ACCESS.2019.2899368>
- Amarantou, V., Kazakopoulou, S., Chatzoudes, D., & Chatzoglou, P. (2018). Resistance to change: An



- empirical investigation of its antecedents. *Journal of Organizational Change Management*, 31(2), 426–450. <https://doi.org/10.1108/JOCM-05-2017-0196>
- Anshu, K., Shankar, A., Behl, A., Pereira, V., & Laker, B. (2022). Impact of barriers of value co-creation on consumers' innovation resistance behavior: Investigating the moderation role of the DART model. *Technological Forecasting and Social Change*, 184(November), 122033. <https://doi.org/10.1016/j.techfore.2022.122033>
- Arif, I., Aslam, W., & Hwang, Y. (2020). Barriers in adoption of internet banking: A structural equation modeling - neural network approach. *Technology in Society*, 61 (May), 101231. <https://doi.org/10.1016/j.techsoc.2020.101231>
- Bagozzi, R. P., & Youjae, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>
- Basu, A., Chandra Mandal, P., Bishnu Murti, A., & Makany, T. (2022). Shaping OTT movie consumption through immersive cinema: A qualitative investigation of consumer perspectives. *Vision: The Journal of Business Perspective*, 097226292211383. <https://doi.org/10.1177/09722629221138375>
- Bhattacharyya, S. S., Goswami, S., Mehta, R., & Nayak, B. (2022). Examining the factors influencing adoption of over the top (OTT) services among Indian consumers. *Journal of Science and Technology Policy Management*, 13(3), 652–682. <https://doi.org/10.1108/JSTPM-09-2020-0135>
- Bollweg, L., Lackes, R., Siepermann, M., & Weber, P. (2020). Drivers and barriers of the digitalization of local Owner operated retail outlets. *Journal of Small Business & Entrepreneurship*, 32(2), 173–201. <https://doi.org/10.1080/08276331.2019.1616256>
- Büyükdag, N., Nur Soysal, A., & Kitapci, O. (2020). The effect of specific discount pattern in terms of price promotions on perceived price attractiveness and purchase intention: An experimental research. *Journal of Retailing and Consumer Services*, 55(July), 102112. <https://doi.org/10.1016/j.jretconser.2020.102112>
- Cakici, A. C., Akgunduz, Y., & Yildirim, O. (2019). The impact of perceived price justice and satisfaction on loyalty: The mediating effect of revisit intention. *Tourism Review*, 74(3), 443–462. <https://doi.org/10.1108/TR-02-2018-0025>
- Chakraborty, D., Siddiqui, M., Siddiqui, A., Paul, J., Dash, G., & Dal Mas, F. (2023). Watching is valuable: Consumer views – content consumption on OTT platforms. *Journal of Retailing & Consumer Services*, 70 (January), 103148. <https://doi.org/10.1016/j.jretconser.2022.103148>
- Chalaby, J. K., & Plunkett, S. (2021). Standing on the Shoulders of Tech Giants: Media delivery, streaming Television and the rise of global suppliers. *New Media & Society*, 23(11), 3206–3228. <https://doi.org/10.1177/1461444820946681>
- Cham, T. H., Hwa Cheah, J., Liat Cheng, B., & Jean Lim, X. (2022). I am too old for this! Barriers contributing to the Non-adoption of mobile payment. *International Journal of Bank Marketing*, 40(5), 1017–1050. <https://doi.org/10.1108/IJBM-06-2021-0283>
- Charlton, J. P. (2002). A factor-Analytic investigation of Computer 'addiction' and engagement. *British Journal of Psychology*, 93(3), 329–344. <https://doi.org/10.1348/000712602760146242>
- Chen, Z. F., & Cheng, Y. (2020). Consumer response to Fake News about brands on social media: The effects of self-efficacy, media trust, and Persuasion Knowledge on brand trust. *Journal of Product & Brand Management*, 29(2), 188–198. <https://doi.org/10.1108/JPBM-12-2018-2145>
- Chen, C. H., Fei Chen, I., Chyn Tsaur, R., & Yun Chui, L. (2023, February). User behaviors analysis on OTT platform with an integration of technology acceptance model. *Quality and Quantity*, 1–19. <https://doi.org/10.1007/S11135-023-01623-W/METRICS>
- Cheung, M. L., Yin Chau, K., Huen Sum Lam, M., Tse, G., Ka Yan, H., Flint, S. W., Broom, D. R., Kar Ho Tso, E., & Yiu Lee, K. (2019). Examining consumers' adoption of Wearable Healthcare technology: The role of health attributes. *International Journal of Environmental Research and Public Health*, 16(13), 2257. <https://doi.org/10.3390/IJERPH16132257>
- Choi, W., & Tulu, B. (2017). Effective use of user interface and user experience in an MHealth application. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2017(January), 3803–3812. <https://doi.org/10.24251/HICSS.2017.460>
- Chulkov, D. V. (2017). On the role of switching costs and decision reversibility in information technology adoption and investment. *JISTEM - Journal of Information Systems and Technology Management*, 14(3), 309–321. <https://doi.org/10.4301/S1807-17752017000300001>
- Chu, C. W., & Lu, H. P. (2007). Factors influencing online music purchase intention in Taiwan: An empirical study based on the value-intention framework. *Internet Research*, 17(2), 139–155. <https://doi.org/10.1108/10662240710737004/FULL/XML>
- Claudy, M. C., Garcia, R., & O'Driscoll, A. (2015). Consumer resistance to innovation—a behavioral reasoning perspective. *Journal of the Academy of Marketing Science*, 43(4), 528–544. <https://doi.org/10.1007/s11747-014-0399-0>
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly: Management Information Systems*, 19(2), 189–210. <https://doi.org/10.2307/249688>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–339. <https://doi.org/10.2307/249008>
- 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>
- Dehghani, M. (2018). Exploring the Motivational factors on Continuous usage intention of Smartwatches among actual users. *Behaviour & Information Technology*, 37(2), 145–158. <https://doi.org/10.1080/0144929X.2018.1424246>
- Ebrahimi Fard, A., & Verma, T. (2022). A Comprehensive review on Countering Rumours in the age of online social media platforms. *Causes and Symptoms of Socio-Cultural Polarization: Role of Information and Communication Technologies*, January, 253–284. [https://doi.org/10.1007/978-981-16-5268-4\\_11/COVER](https://doi.org/10.1007/978-981-16-5268-4_11/COVER)
- Gomaa, A., & El-Masry, A. A. (2016). Understanding the determinants of hotel booking intentions and moderating role of habit. *International Journal of Hospitality Management*, 54(April), 52–67. <https://doi.org/10.1016/j.ijhm.2016.01.007>
- Gupta, G., & Singharia, K. (2021a). Consumption of OTT media streaming in COVID-19 lockdown: Insights from PLS analysis. *Vision: The Journal of Business*



- Perspective*, 25(1), 36–46. <https://doi.org/10.1177/0972262921989118>
- Gupta, G., & Singharia, K. (2021b). Consumption of OTT media streaming in COVID-19 lockdown: Insights from PLS analysis. *Vision: The Journal of Business Perspective*, 25(1), 36–46. <https://doi.org/10.1177/0972262921989118>
- Han, D. I., Tom Dieck, M. C., & Jung, T. (2017). User experience model for augmented reality applications in urban heritage tourism. *Journal of Heritage Tourism*, 13(1), 46–61. <https://doi.org/10.1080/1743873X.2016.1251931>
- Heidenreich, S., Freisinger, E., & Landau, C. (2022). The dark side of business model innovation: An empirical investigation into the evolution of customer resistance and the effectiveness of potential countermeasures. *Journal of Product Innovation Management*, 39(6), 824–846. <https://doi.org/10.1111/JPIM.12627>
- Heidenreich, S., & Handrich, M. (2015). What about passive innovation resistance? Investigating adoption-related behavior from a resistance perspective. *Journal of Product Innovation Management*, 32(6), 878–903. <https://doi.org/10.1111/JPIM.12161>
- Heidenreich, S., & Kraemer, T. (2016). Innovations—Doomed to Fail? Investigating Strategies to Overcome Passive Innovation Resistance. *Journal of Product Innovation Management*, 33(3), 277–297. <https://doi.org/10.1111/JPIM.12273>
- Heidenreich, S., & Spieth, P. (2013). Why innovations fail — the case of passive and active innovation resistance. *International Journal of Innovation Management*, 17(5), 1350021. <https://doi.org/10.1142/S1363919613500217>
- Hopwood, C. J. (2007). Moderation and mediation in structural equation modeling: Applications for early intervention research. *Journal of Early Intervention*, 29(3), 262–272. <https://doi.org/10.1177/105381510702900305>
- Humbani, M., & Wiese, M. (2019). An integrated framework for the adoption and continuance intention to use mobile payment apps. *International Journal of Bank Marketing*, 37(2), 646–664. <https://doi.org/10.1108/IJBM-03-2018-0072>
- Jahanmir, S. F., & Cavadas, J. (2018). Factors affecting late adoption of digital innovations. *Journal of Business Research*, 88(July), 337–343. <https://doi.org/10.1016/J.JBUSRES.2018.01.058>
- Johnson, V. L., Kiser, A., Washington, R., & Torres, R. (2018). Limitations to the rapid adoption of M-Payment services: Understanding the impact of privacy risk on M-Payment services. *Computers in Human Behavior*, 79(February), 111–122. <https://doi.org/10.1016/J.CHB.2017.10.035>
- Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of Telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, 60(February), 101212. <https://doi.org/10.1016/J.TECHSOC.2019.101212>
- Kang, Y. S., Hong, S., & Lee, H. (2009). Exploring continued online service usage behavior: The roles of self-image congruity and regret. *Computers in Human Behavior*, 25(1), 111–122. <https://doi.org/10.1016/J.CHB.2008.07.009>
- Karahanna, E., Agarwal, R., & Angst, C. M. (2006). Reconceptualizing Compatibility Beliefs in Technology Acceptance Research. *MIS Quarterly: Management Information Systems*, 30(4), 781–804. <https://doi.org/10.2307/25148754>
- Karazsia, B. T., Berlin, K. S., Armstrong, B., Janicke, D. M., & Darling, K. E. (2014). Integrating mediation and moderation to advance theory development and testing. *Journal of Pediatric Psychology*, 39(2), 163–173. <https://doi.org/10.1093/JPEPSY/JST080>
- Katiyar, R., & Badola, S. (2018). Modelling the barriers to online banking in the Indian scenario: An ISM approach. *Journal of Modelling in Management*, 13(3), 550–569. <https://doi.org/10.1108/JM2-01-2018-0006>
- Kaur, P., Dhir, A., Singh, N., Sahu, G., & Almotairi, M. (2020). An innovation resistance theory perspective on mobile payment solutions. *Journal of Retailing and Consumer Services*, 55(July), 102059. <https://doi.org/10.1016/J.JRETCONSER.2020.102059>
- Kleijnen, M., Lee, N., & Wetzels, M. (2009). An exploration of consumer resistance to innovation and its antecedents. *Journal of Economic Psychology*, 30(3), 344–357. <https://doi.org/10.1016/J.JOEP.2009.02.004>
- Krings, V. C., Dhont, K., & Hodson, G. (2022). Food technology Neophobia as a psychological barrier to clean meat acceptance. *Food Quality and Preference*, 96 (March), 104409. <https://doi.org/10.1016/J.FOODQUAL.2021.104409>
- Kushwah, S., Dhir, A., & Sagar, M. (2019). Understanding consumer resistance to the consumption of organic food. A study of ethical consumption, purchasing, and choice behaviour. *Food Quality and Preference*, 77(October), 1–14. <https://doi.org/10.1016/J.FOODQUAL.2019.04.003>
- Laukkanen, T. (2016). Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the internet and mobile banking. *Journal of Business Research*, 69(7), 2432–2439. <https://doi.org/10.1016/J.JBUSRES.2016.01.013>
- Leong, L. Y., Soon Hew, T., Boon Ooi, K., & Wei, J. (2020). Predicting mobile wallet resistance: A two-Stage structural equation modeling-Artificial Neural network approach. *International Journal of Information Management*, 51(April), 102047. <https://doi.org/10.1016/J.IJINFOMGT.2019.102047>
- Li, N., Gee Lim, E., Leach, M., Zhang, X., & Song, P. (2022). Role of perceived self-efficacy in automated project allocation: Measuring University students' perceptions of Justice in interdisciplinary project-based learning. *Computers in Human Behavior*, 136 (November), 107381. <https://doi.org/10.1016/J.CHB.2022.107381>
- Limayem, M., & Cheung, C. M. K. (2010). Predicting the continued use of internet-based learning technologies: The role of habit. *Behaviour & Information Technology*, 30(1), 91–99. <https://doi.org/10.1080/0144929X.2010.490956>
- Madnani, D., Fernandes, S., & Madnani, N. (2020). Analysing the impact of COVID-19 on over-the-top media platforms in India. *International Journal of Pervasive Computing and Communications*, 16(5), 457–475. <https://doi.org/10.1108/IJPC-07-2020-0083>
- Mani, Z., & Chouk, I. (2018). Consumer resistance to innovation in services: Challenges and barriers in the internet of Things Era. *Journal of Product Innovation Management*, 35(5), 780–807. <https://doi.org/10.1111/JPIM.12463>
- Mansfield, E. R., & Helms, B. P. (2012). Detecting multicollinearity. *American Statistician*, 36(3a), 158–160. <https://doi.org/10.1080/00031305.1982.10482818>
- Mardia, K. V., & Foster, K. (2007). Omnibus tests of multi-normality based on skewness and kurtosis. *Communications in Statistics - Theory and Methods*,

- 12(2), 207–221. <https://doi.org/10.1080/03610928308828452>
- Marsh, H. W., Tai Hau, K., & Wen, Z. (2009). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing hu and Bentler's (1999) findings. *Structural Equation Modeling: A Multidisciplinary Journal*, 11(3), 320–341. [https://doi.org/10.1207/S15328007SEM1103\\_2](https://doi.org/10.1207/S15328007SEM1103_2)
- McLean, G., Osei-Frimpong, K., Al-Nabhani, K., & Marriott, H. (2020). Examining consumer attitudes towards retailers' m-commerce mobile applications – an initial adoption vs. Continuous use perspective. *Journal of Business Research*, 106(January), 139–157. <https://doi.org/10.1016/J.JBUSRES.2019.08.032>
- Meuter, M. L., Jo Bitner, M., Ostrom, A. L., & Brown, S. W. (2005). Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies. *Journal of Marketing*, 69(2), 61–83. <https://doi.org/10.1509/JMKG.69.2.61.60759>
- Mukherjee, A., & Hoyer, W. D. (2001). The effect of novel attributes on product evaluation. *Journal of Consumer Research*, 28(3), 462–472. <https://doi.org/10.1086/323733>
- Nagaraj, S., Singh, S., & Reddy Yasa, V. (2021). Factors affecting consumers' willingness to subscribe to over-the-top (OTT) video streaming services in India. *Technology in Society*, 65(May), 101534. <https://doi.org/10.1016/J.TECHSOC.2021.101534>
- Özdemir-Güngör, D., & Camgöz-Akdağ, H. (2018). Examining the effects of technology anxiety and resistance to change on the acceptance of breast tumor registry system: Evidence from Turkey. *Technology in Society*, 54(August), 66–73. <https://doi.org/10.1016/J.TECHSOC.2018.03.006>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2011). Sources of method bias in social Science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569. <https://doi.org/10.1146/ANNUREV-PSYCH-120710-100452>
- Podsakoff, P. M., MacKenzie, S. B., Yeon Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Portz, J. D., Bayliss, E. A., Bull, S., Boxer, R. S., Bekelman, D. B., Gleason, K., & Czaja, S. (2019). Using the technology acceptance model to explore user experience, intent to use, and use behavior of a patient portal among older adults with multiple chronic conditions: Descriptive qualitative study. *Journal of Medical Internet Research*, 21(4), E11604. <https://doi.org/10.2196/11604>
- Raj, A., Dwivedi, G., Sharma, A., de Sousa Jabbour, A. B. L., & Rajak, S. (2020). Barriers to the adoption of industry 4.0 technologies in the manufacturing sector: An inter-country comparative perspective. *International Journal of Production Economics*, 224(June), 107546. <https://doi.org/10.1016/J.IJPE.2019.107546>
- Ram, S. 1987. "A Model of Innovation Resistance." ACR North American Advances NA-14. <https://www.acrweb.org/volumes/6688/volumes/v14/NA-14/full>.
- Raman, R., Sairam, B., Veena, G., Vachharajani, H., & Nedungadi, P. (2021). Adoption of online proctored examinations by university students during COVID-19: Innovation diffusion study. *Education and Information Technologies*, 26(6), 7339–7358. <https://doi.org/10.1007/s10639-021-10581-5>
- Ram, S., & Sheth, J. N. (1989). Consumer resistance to innovations: The marketing problem and its solutions. *Journal of Consumer Marketing*, 6(2), 5–14. <https://doi.org/10.1108/EUM000000002542>
- Ray, A., Kumar Bala, P., & Dwivedi, Y. K. (2020). Exploring barriers affecting ELearning usage intentions: An NLP-Based multi-method approach. *Behaviour & Information Technology*, 41(5), 1002–1018. <https://doi.org/10.1080/0144929X.2020.1849403>
- Rogers, E. M. (1962). *Diffusion of innovations*. Free Press.
- Saiti, B., Aliyu Ardo, A., & Guran Yumusak, I. (2022). Why Non-Muslims subscribe to Islamic banking? *Qualitative Research in Financial Markets*, 14(2), 247–269. <https://doi.org/10.1108/QRFM-01-2018-0005>
- Sauer, J., Sonderegger, A., & Schmutz, S. (2020). Usability, user experience and accessibility: Towards an Integrative model. *Ergonomics*, 63(10), 1207–1220. <https://doi.org/10.1080/00140139.2020.1774080>
- Schreiber, J. B. (2017). Update to core reporting practices in structural equation modeling. *Research in Social and Administrative Pharmacy*, 13(3), 634–643. <https://doi.org/10.1016/J.SAPHARM.2016.06.006>
- Sharma, K., & Elioth Lulandala, E. (2023). OTT platforms resilience to COVID-19 – a study of business strategies and consumer media consumption in India. *International Journal of Organizational Analysis*, 31(1), 63–90. <https://doi.org/10.1108/IJOA-06-2021-2816>
- Singh, N., & Sinha, N. (2020). How perceived trust mediates Merchant's intention to use a mobile wallet technology. *Journal of Retailing & Consumer Services*, 52(March 2019), 101894. <https://doi.org/10.1016/j.jretconser.2019.101894>
- Statista. 2020. "OTT video-India| statista market forecast."
- Talwar, S., Dhir, A., Kaur, P., & Mäntymäki, M. (2020). Barriers toward purchasing from online travel agencies. *International Journal of Hospitality Management*, 89(August), 102593. <https://doi.org/10.1016/J.IJHM.2020.102593>
- Tam, C., Santos, D., & Oliveira, T. (2020). Exploring the influential factors of continuance intention to use mobile apps: Extending the expectation confirmation model. *Information Systems Frontiers*, 22(1), 243–257. <https://doi.org/10.1007/s10796-018-9864-5>
- Tanveer, A., Zeng, S., Irfan, M., & Peng, R. (2021). Do perceived risk, perception of self-efficacy, and openness to technology matter for solar PV adoption? An application of the extended theory of planned behavior. *Energies*, 14(16), 5008. <https://doi.org/10.3390/EN14165008>
- Thakur, R. (2018). The role of self-efficacy and customer satisfaction in driving loyalty to the mobile shopping application. *International Journal of Retail and Distribution Management*, 46(3), 283–303. <https://doi.org/10.1108/IJRDM-11-2016-0214>
- Upadhyay, N., Upadhyay, S., Abed, S. S., & Dwivedi, Y. K. (2022). Consumer adoption of mobile payment services during COVID-19: Extending meta-UTAUT with perceived severity and self-efficacy. *International Journal of Bank Marketing*, 40(5), 960–991. <https://doi.org/10.1108/IJBM-06-2021-0262>
- Vahdat, A., Alizadeh, A., Quach, S., & Hamelin, N. (2020). Would you like to shop via mobile app technology? The technology acceptance model, social factors and purchase intention. *Australasian Marketing Journal*, 29(2), 187–197. <https://doi.org/10.1016/J.AUSMJ.2020.01.002>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*, 27(3), 425–478. <https://doi.org/10.2307/30036540>

- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119–134. <https://doi.org/10.1007/s11747-015-0455-4>
- Webb, M., & Doman, E. (2019). Impacts of flipped classrooms on learner attitudes towards technology-Enhanced Language learning. *Computer Assisted Language Learning*, 33(3), 240–274. <https://doi.org/10.1080/09588221.2018.1557692>
- Wilmer, H. H., Sherman, L. E., & Chein, J. M. (2017). Smartphones and cognition: A review of research exploring the links between mobile technology habits and cognitive functioning. *Frontiers in Psychology*, 8 (APR), 605. <https://doi.org/10.3389/fpsyg.2017.00605>
- Yener, D., & Taşçıoğlu, M. (2020). Innovation resistance: A rising tide of consumerismpp. 155–175. <https://doi.org/10.4018/978-1-5225-8270-0.CH009>
- Yousaf, A., Mishra, A., Taheri, B., & Kesgin, M. (2021). A cross-country analysis of the Determinants of customer Recommendation intentions for over-the-top (OTT) platforms. *Information & Management*, 58(8), 103543. <https://doi.org/10.1016/J.IM.2021.103543>
- Yuen, K. F., Cai, L., Guanqiu, Q., & Wang, X. (2020). Factors influencing autonomous vehicle adoption: An application of the technology acceptance model and innovation diffusion theory. *Technology Analysis & Strategic Management*, 33(5), 505–519. <https://doi.org/10.1080/09537325.2020.1826423>
- Zolkepli, I. A., & Kamarulzaman, Y. (2015). Social media adoption: The role of media needs and innovation characteristics. *Computers in Human Behavior*, 43 (February), 189–209. <https://doi.org/10.1016/J.CHB.2014.10.050>

## Appendices

**Table A1. Item list in wave 1**

Sl No.	Name of construct	Statement	Labelling	FL
1	Usage Barriers	OTTs are complicated to use	USB1	0.76
		In my opinion OTT is not really convenient to watch	USB2	0.74
		I feel OTT services are not fast to use	USB3	0.72
		The options of OTT platforms are unclear	USB4	0.77
		I feel difficult to remember the personal credentials in OTT platforms	USB5	0.75
2	Value Barriers	I feel OTT subscriptions are not economical	VAB1	0.88
		The use of OTT decreased my control over payment details	VAB2	0.85
		I feel that OTT viewing does not offer any advantages than the alternatives	VAB3	0.87
3	Risk barriers	I feel when I am viewing OTT, the network connectivity will be lost	RSB1	0.81
		I fear that when I am using OTT, I may tap on unnecessary contents	RSB2	0.83
		I feel that my username and password can be lost and misused	RSB3	0.85
		I feel that when I am using OTT, I may spend more money	RSB4	0.8
		I feel that hacking personal details through OTT is easy	RSB5	0.82
4	Tradition Barriers	When I use OTT, I miss socializing in movie theatres	TRB1	0.72
		I find difficult to get proper information of contents in OTT	TRB2	0.70
		In my opinion the services offered by OTT platforms are not pleasant	TRB3	0.71
		I feel the customer services of OTT platforms are not good	TRB4	0.74
5	Image Barriers	I feel that OTT is too complicated to be useful	IMB1	0.88
		I feel that OTT platforms are difficult to handle	IMB2	0.86
6	Technological Vulnerability barriers	I often fail to get enough sleep due to OTT addiction	TVB1	0.82
		My social life is suffered due to OTT	TVB2	0.89
		I feel like neglecting important things due to OTT	TVB3	0.88
		I feel I will be addicted to OTT	TVB4	0.85
		I feel OTT may interfere with my work schedules	TVB5	0.8
		I feel apprehensive about using OTT	TVB6	0.83
		The options in OTT are confusing to me	TVB7	0.84
		I prefer to avoid OTT because it is unfamiliar to me	TVB8	0.87
		I hesitate to use OTT due to fear of technology	TVB9	0.86
7	Individual barriers	I don't feel OTT is so exciting to use	INB1	0.78
		I feel uncomfortable to use new technological products	INB2	0.8
		I don't feel like switching to OTT	INB3	0.77
		I am more satisfied with traditional methods of watching movies	INB4	0.79
8	Ideological barriers	I am skeptical about OTT services	IDB1	0.88
		I don't think that OTT's will be success	IDB2	0.85

(Continued)

9	Continuation Intention	I feel that my use of OTT will increase in the future	COI1	0.86
		I intend to use OTT in future	COI2	0.83
		If I get an opportunity, I will use OTT	COI3	0.88
		I will always try to use OTT	COI4	0.87
		I plan to use OTT frequently	COI5	0.85
10	Consumer Resistance	I am likely to oppose using OTT services	CRE1	0.75
		I am likely to be opposed to the discourses extolling the benefits of OTT services	CRE2	0.74
		I feel that OTT is not meant for me	CRE3	0.72
11	Habit	It is very hard to not to use OTT	HBT1	0.78
		I am a habitual use of OTT	HBT2	0.75
		I feel weird not to use OTT	HBT3	0.77
		I need some other distraction not to use OTT	HB4	0.8
		Using OTT has become a routine in my life	HB5	0.74

**Table A2. Determination of reliability and validity in wave 1**

Variable	Cronbach $\alpha$	CR	AVE	1	2	3	4	5	6	7	8	9	10	11
USB	0.72	0.70	0.56	<b>0.75</b>										
VAB	0.76	0.72	0.75	0.32	<b>0.87</b>									
RSB	0.75	0.74	0.68	0.24	0.31	<b>0.82</b>								
TRB	0.74	0.72	0.72	0.26	0.31	0.28	<b>0.85</b>							
IMB	0.73	0.71	0.76	0.19	0.23	0.24	0.27	<b>0.87</b>						
TVB	0.77	0.75	0.84	0.28	0.31	0.26	0.22	0.18	<b>0.92</b>					
INB	0.78	0.74	0.78	0.33	0.39	0.27	0.18	0.42	0.31	<b>0.88</b>				
IDB	0.74	0.72	0.86	0.29	0.34	0.27	0.19	0.41	0.39	0.41	<b>0.93</b>			
COI	0.75	0.73	0.85	-0.39	-0.42	-0.40	-0.28	-0.19	-0.33	-0.27	-0.17	<b>0.92</b>		
CRE	0.77	0.75	0.74	0.44	0.35	0.38	0.29	0.27	0.18	0.12	0.16	0.25	<b>0.86</b>	
HBT	0.76	0.73	0.59	0.37	0.29	0.27	0.22	0.23	0.38	0.32	0.37	0.28	0.29	<b>0.76</b>

**Table A3. Item list in wave 2**

<b>Name of construct</b>	<b>Statement</b>	<b>Labelling</b>	<b>FL</b>
Perceived price	I feel OTT services are affordable due to low subscription fees	PEP1	0.78
	I feel OTT offers value for money	PEP2	0.75
	There is no additional cost associated with the OTT subscription	PEP3	0.8
Perceived usefulness	The various options and functions of OTT offer more advantages	PEU1	0.68
	The functions of OTT provide more added value	PEU2	0.66
	Using OTT will increase the effective viewing	PEU3	0.69
	Using OTT will make it easy to watch movies and series	PEU4	0.67
	Using OTT will improve my viewing experience	PEU5	0.7
Perceived trialability	The OTT platform enables free trial period	PET1	0.76
	In OTT it is easy to try and see how it performs	PET2	0.78
Perceived Relative Advantage	OTT viewing is more effective than theatre experience	PER1	0.75
	OTT is more convenient than film theatre viewing	PER2	0.74
	Using OTT gives me better control over watching contents	PER3	0.77
	Watching OTT contents are easier than traditional ways	PER4	0.79

(Continued)



**Table A3. (Continued)**

<b>Name of construct</b>	<b>Statement</b>	<b>Labelling</b>	<b>FL</b>
Perceived Compatibility	OTT enable me to watch the contents in self-paced mode	PEC1	0.67
	OTT is compatible with most aspects of the way I prefer to watch	PEC2	0.64
	Using OTT platforms gives a new experience to me	PEC3	0.66
	Use of OTT platforms are consistent in the way I think contents should be watched	PEC4	0.68
Perceived Reversibility	I can discontinue the OTT subscription any time	PEV1	0.73
	I can reverse my decision after initial free trials	PEV2	0.71
	I have the option to use OTT for a specific period	PEV3	0.75
Perceived Self-efficacy	I know how to use the OTT platforms	PES1	0.82
	I am confident in my ability to understand various features and options in OTT viewing	PES2	0.8
	I think I can use OTT platform easily without prior experience	PES3	0.84
Initial user experience	The OTT platforms are compatible in my mobile phones, laptop and PC's	IUE1	0.77
	The OTT platforms are easy to use	IUE2	0.73
	The contents are well organized in OTT apps	IUE3	0.75
	I enjoy watching OTT contents without advertisements	IUE4	0.78

(Continued)

**Table A3. (Continued)**

Name of construct	Statement	Labelling	FL
Willingness to Subscribe	The likelihood of continuing in OTT is more	WTS1	0.82
	I am willing to subscribe for OTT in future	WTS2	0.8
	I will recommend OTT platform to others	WTS3	0.83
Propagation mechanism	I receive clear communications regarding OTT platforms	PRM1	0.76
	The information regarding OTT platforms is convincing	PRM2	0.74
	The information regarding OTT services is credible	PRM3	0.73
	I receive informative communications regarding OTT services	PRM4	0.78
	The OTT related information are more attractive	PRM5	0.77
Continued Usage Behaviour	I intend to continue using OTT rather than discontinuing the services	CUB1	0.81
	My intentions are to continue using OTT than to use any alternative means	CUB2	0.79
	If I could, I would like to continue using OTT services	CUB3	0.82

**Table A4. Determination of reliability and validity in wave 2**

Variable	Cronbach $\alpha$	CR	AVE	1	2	3	4	5	6	7	8	9	10	11
PEP	0.77	0.74	0.78	<b>0.88</b>										
PEU	0.76	0.73	0.68	0.24	<b>0.82</b>									
PET	0.80	0.76	0.77	0.33	0.37	<b>0.87</b>								
PER	0.74	0.72	0.76	0.21	0.26	0.34	<b>0.87</b>							
PEC	0.75	0.73	0.66	0.32	0.38	0.18	0.28	<b>0.81</b>						
PEV	0.78	0.74	0.73	0.42	0.39	0.37	0.26	0.39	<b>0.85</b>					
PES	0.76	0.73	0.82	0.19	0.22	0.29	0.35	0.33	0.40	<b>0.90</b>				
IUE	0.73	0.70	0.76	0.29	0.34	0.27	0.42	0.47	0.37	0.38	<b>0.87</b>			
WTS	0.78	0.74	0.82	0.28	0.34	0.33	0.41	0.28	0.19	0.42	0.39	<b>0.90</b>		
PRM	0.72	0.70	0.76	0.29	0.33	0.38	0.27	0.17	0.27	0.33	0.40	0.37	<b>0.87</b>	
CUB	0.74	0.71	0.81	0.37	0.18	0.32	0.39	0.24	0.17	0.42	0.37	0.19	0.23	<b>0.90</b>