

Going Live?

Exploring Livestream Shopping in Sweden

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Abstract

Livestream shopping has emerged as a significant retail format in Asian markets, yet consumer adoption in Western markets remains underexplored. Drawing on the Technology Acceptance Model developed by Davis (1989), and subsequent technology acceptance research, this paper investigates how perceived usefulness, perceived ease of use, and perceived enjoyment influence Swedish consumer attitudes towards livestream shopping, and how these attitudes, in turn, shape behavioural intention to use the shopping format. The study further investigates whether age moderates the relationship between the three predictor constructs and attitude. Data were collected through an online consumer panel, resulting in 291 valid responses after data cleaning. The data were analysed using structural equation modelling with path analysis. The findings reveal a clear hierarchy among the attitudinal drivers: perceived enjoyment was the dominant predictor of attitude, followed by perceived usefulness, while perceived ease of use showed no significant direct effect. Attitude was a strong predictor of behavioural intention to use livestream shopping. Age moderated only the relationship between perceived ease of use and attitude, with ease of use becoming more influential among older consumers. The broadly neutral-to-negative descriptive scores suggest that livestream shopping remains relatively unfamiliar and weakly established among consumers. The findings support the conceptualisation of livestream shopping as a retail-entertainment format and extend the empirical base of technology acceptance in retail research.

Keywords: Livestream shopping, Technology Acceptance Model, Swedish retail, consumer attitudes, age moderation

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1. Introduction

1.1 Background

Have you ever performed that one small online ritual: added something to the cart, thought “I’ll decide later”, and then closed the tab? If so, you are not alone. Globally, approximately 70% of shopping carts are abandoned before a purchase is completed (Ma, 2026). Livestream shopping flips that ritual on its head by challenging traditional, asynchronous webstore browsing with live social events where product demonstration, interaction, entertainment, and offerings happen in real time (Levy & Grewal, 2023).

A livestream is a digital communication medium that allows users to interact synchronously with one another. Commonly, a broadcaster hosts the live event, creates content, and delivers it to the audience to consume and engage with in real time (Lin et al., 2021). Livestreams are commonly held on social media platforms; however, they can also occur on other digital platforms. In retail, livestreams allow businesses to showcase their offerings to audiences and have become an increasingly important way to promote products (Liu et al., 2023). Xie et al. (2025) define livestream shopping as “a virtual showroom where viewers can watch live presentations by a livestreamer promoting a series of products and purchase these products by clicking on product links” (p. 4079). The livestreamer (i.e., the host of the livestream) is usually a celebrity, influencer, or retail employee who demonstrates products and communicates with livestream viewers (i.e., customers) (Levy & Grewal, 2023).

Livestream shopping has qualities that bridge the gap between physical and digital retailing (Feng et al., 2025). Several strengths of physical retail, such as the ability for customers to thoroughly examine products, ask questions, receive advice, experience in-store entertainment, and have social interactions, are facilitated to some extent in livestream shopping (Levy & Grewal, 2023). Additionally, the retailer is not bound by physical space and can therefore invite an unlimited number of viewers (Ki et al., 2024). These factors, together with the global increase in social media usage in recent years (Statista, 2025), may help explain why this phenomenon has gained momentum. So far, the traction has mostly been in Asia; however, it is expected to continue spreading worldwide due to its immersive, digital nature (Levy & Grewal, 2023).

Historically, demonstrating products to customers is not new. Teleshopping, which is the “activity of buying products or services advertised on your television using your phone or the internet” (Cambridge Dictionary, n.d.), could be thought of as a predecessor to livestream shopping, since both concepts demonstrate and advertise products through video-based formats. However, a comprehensive literature review by Ki et al. (2024) identified three key differences between teleshopping and livestream shopping. Firstly, the media format differs. Teleshopping is television-based and asynchronous, whereas livestream shopping is internet-based, synchronous, and to a greater extent, interactive. Secondly, livestreams are hosted a wider range of professions than television broadcasts, such as social media influencers, celebrities, retail personnel, or even ordinary users on social media platforms. Thirdly, livestream shopping allows the viewer to be active; the customer is in greater control over the product demonstration and has access to the opinions of other viewers, whereas the teleshopper is passive.

Although research and data on Swedish livestream shopping remain limited, teleshopping has been a phenomenon in Sweden for many years. In the mid-1990s, TV-Gallerian was the first Swedish television channel to focus solely on showcasing products that customers could order from the comfort of their homes. The channel later merged into TV-Shop in 1997 (TVARK, n.d.) and continued the concept until the company was sold off in 2007 (Fagerlind, 2007), with limited information on its subsequent success.

Fast forward to 2025, livestream shopping generated approximately USD 175 billion in revenue worldwide and is expected to exceed USD 275 billion by 2030. However, these revenue streams are not distributed equally across the globe, with China accounting for approximately USD 126 billion in 2025. As for Sweden, it is estimated that live commerce accounted for approximately USD 85 million in revenue in 2025, with a user penetration of 13.4%, compared to 34.7% in China. Similar high user adoption patterns to those of China can be observed across several other Asian markets and the U.S. (Statista, 2026a). Interestingly, Sweden has a similar user penetration for general e-commerce to the likes of China and the U.S. (Statista, 2026b). Yet, despite the rapid growth and intercontinental discrepancy in live commerce adoption, little research has explored consumer attitudes and adoption in the Swedish retail market.

1.2 Purpose and Research Questions

The purpose of this study is to investigate consumer attitudes towards, and behavioural intentions to use, livestream shopping in the Swedish retail market. Drawing on technology acceptance research, the study examines how perceived usefulness, perceived ease of use, and perceived enjoyment influence Swedish consumer attitudes toward livestream shopping, and how these attitudes, in turn, affect their intention to use this shopping format. Notably, special attention is paid to how age might shape consumer attitudes. Taken together, this study aims to provide insights relevant to Swedish retailers currently using, or considering implementing, livestream shopping as a sales channel.

The research questions are as follows:

1. How do perceived usefulness, perceived ease of use, and perceived enjoyment influence consumer attitude toward livestream shopping?
2. How does consumer attitude toward livestream shopping influence consumers' intention to use the shopping format?
3. To what extent does age moderate the effects of perceived usefulness, perceived ease of use, and perceived enjoyment on consumer attitude toward livestream shopping?

1.3 Contribution

This study contributes to the body of literature on livestream shopping in three ways. First, it examines whether the belief-attitude-intention relationship established in markets where livestream shopping is well established, predominantly Asian markets, holds in culturally distinct Western markets. The cultural conditions under which these relationships were identified, such as collectivist group dynamics and relational trust in streamers (outlined in Section 2.3), differ systematically from the Swedish context, and cultural dimensions have been shown to moderate the core relationships in technology acceptance models (Jan et al., 2024). The study thereby tests the boundary conditions of technology acceptance for livestream shopping rather than assuming generalisability.

Second, Sweden's combination of high e-commerce maturity and limited livestream shopping penetration allows attitudinal drivers of adoption intentions to be examined in a setting where infrastructural readiness cannot explain non-adoption. Third, the study adds a demographic layer by examining age as a potential moderator. By understanding how different age groups of Swedish consumers respond to this retail format, businesses can better design livestream shopping activities that align with their target audience.

1.4 Delimitation

This study is delimited to the Swedish retail market. Focusing on a single market ensures contextual consistency and allows the study to examine livestream shopping within a specific national retail setting. The study is further delimited to consumer perceptions, specifically attitudes and behavioural intentions, rather than actual livestream shopping behaviour. Since livestream shopping is experienced in real time, respondents evaluated the format based on a standardised written explanation and visual example, rather than through direct participation in a livestream event. Finally, the study is delimited to a research framework focusing on perceived usefulness, perceived ease of use, perceived enjoyment, attitude, behavioural intention, and age. As such, the findings should be interpreted within the scope of the selected market, constructs, and methodological approach.

1.5 Structural Overview

Following this section, Section 2 presents the research background and identifies the research gap. Based on this, Section 3 develops a research framework comprising four direct hypotheses and three moderation hypotheses aimed at answering the research questions. Section 4 details the research methodology, including the research method, survey method and design, participants and data collection, data analysis, and sample. This section also discusses the study's reliability, validity and generalisability. Section 5 reports the results of the study. Section 6 discusses the theoretical contributions, managerial implications, limitations and directions for future research. Finally, Section 7 concludes the report findings.

2. Research Background

2.1 Livestream Shopping Acceptance

Prior livestream shopping research suggests that consumer acceptance of the format is shaped by a combination of functional, experiential, and social evaluations. Although livestream shopping builds on e-commerce, it differs from traditional online shopping by embedding product information, product demonstration, real-time interaction, entertainment, and purchasing opportunities within the same digital environment (Cai et al., 2018; Picot-Coupey et al., 2023; Sun et al., 2019; Xie et al., 2025). This means that consumers do not evaluate livestream shopping only as a purchasing channel, but also as a technology-mediated shopping experience. Consequently, livestream shopping is particularly suitable for analysis through a technology acceptance lens that incorporates both utilitarian and hedonic perceptions.

A central insight from previous research is that livestream shopping can create utilitarian value by improving consumers' ability to evaluate products before purchase. Cai et al. (2018) found that consumers prefer livestream shopping over regular online shopping partly because it provides product demonstrations, richer product information, convenience, interaction, access to other opinions, and potential deals. Similarly, Sun et al. (2019) argue that livestream shopping changes traditional social commerce by allowing sellers to demonstrate products through real-time video, answer customer questions directly, and provide guidance during the shopping process. From an acceptance perspective, these findings suggest that consumers may evaluate livestream shopping positively when the format helps them obtain information, reduce uncertainty, and make more informed purchase decisions.

However, livestream shopping acceptance cannot be understood through functional evaluations alone. The format also contains hedonic and social qualities that distinguish it from other forms of e-commerce (Cai et al., 2018; Wongkitrungrueng & Assarut, 2020; Xie et al., 2025). Cai et al. (2018) explicitly show that livestream shopping combines shopping efficiency with entertainment, making consumer acceptance partly dependent on whether the experience itself is engaging.

The social nature of livestream shopping further strengthens the need to examine acceptance beyond conventional e-commerce assumptions. Wongkitrungrueng and Assarut (2020) show that livestream shopping can generate utilitarian, hedonic, and symbolic value, which influence customer engagement through trust in products and sellers. Similarly, Liao et al. (2023) find that streamers' interaction-oriented communication style can enhance viewers' immersion and parasocial interaction, which in turn influence purchase intention. Liu et al. (2023) also show that consumers' search and evaluation processes in livestream shopping are shaped by various cues, including broadcaster attractiveness and livestream vividness, which influence outcomes such as perceived enjoyment or purchase intention. Together, these studies suggest that consumer acceptance is a response to the interpersonal and experiential environment created during the livestream.

This becomes especially relevant when studying livestream shopping in an early-adoption Western context. Much of the existing empirical literature has examined livestream shopping in Asian markets, particularly China, where the format is more established and consumers may have greater prior familiarity with livestream-based purchasing (Cai et al., 2018; Liu et al., 2023; Sun et al., 2019; Wongkitrungrueng & Assarut, 2020; Xie et al., 2025). In such contexts, consumers may already understand how livestream shopping works and may evaluate the format based on accumulated experience. In Sweden, by contrast, livestream shopping remains less normalised despite high general e-commerce maturity. This makes acceptance a particularly relevant issue: Swedish consumers may be digitally capable, but still uncertain about whether livestream shopping is useful, easy to use, enjoyable, or worth adopting as part of their shopping behaviour.

Taken together, previous research indicates that livestream shopping acceptance depends on how consumers evaluate the format's functional value, usability, and experiential appeal. These dimensions provide the foundation for applying a technology acceptance perspective to livestream shopping in Sweden. The following section therefore introduces technology acceptance research and the key constructs used to examine how Swedish consumers form attitudes toward livestream shopping and behavioural intentions to use the format.

2.2 Technology Acceptance

2.2.1 Technology Acceptance Model

The Technology Acceptance Model (hereafter referred to as TAM) was originally developed by Davis (1989) to explain the acceptance of workplace information systems. The model is now widely used in retail research to understand and explain why consumers accept or reject technological systems (e.g., Childers et al., 2001; Kim & Forsythe, 2008; Luceri et al., 2022).

Davis (1989) highlights two main beliefs influencing whether people accept or reject information systems: (1) Perceived Usefulness and (2) Perceived Ease of Use. Perceived Usefulness (hereafter referred to as PU) is “the degree to which a person believes that using a particular system would enhance his or her job performance”, whereas Perceived Ease of Use (hereafter referred to as PEOU) is “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989, p. 320). These perceptions shape users’ attitudes, which ultimately influence their Behavioural Intention (hereafter referred to as BI) to use the technology (Davis et al., 1989).

2.2.2 Perceived Enjoyment

While TAM focuses on utilitarian aspects such as PU and PEOU (Davis, 1989), later extensions added additional determinants of system use, including Perceived Enjoyment (hereafter referred to as PE), which is defined as “the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated” (Davis et al., 1992, p. 1113).

This is particularly relevant for hedonic information systems, where users engage with the system for pleasure, entertainment, and self-fulfilling value rather than purely instrumental benefits (van der Heijden, 2004). Childers et al. (2001) explored the relationship between PE and attitude toward online shopping, finding that PE was a significant predictor of attitude toward online shopping. Similarly, Venkatesh et al. (2012) found that both utilitarian and hedonic benefits are important drivers of technology use in consumer contexts, highlighting the importance of viewing consumer acceptance of consumer-facing technologies through a PE lens.

2.2.3 Age

Age has further been explored in relation to technology acceptance within the Unified Theory of Acceptance and Use of Technology model (hereafter referred to as UTAUT) developed by Venkatesh et al. (2003). UTAUT combines eight technology acceptance and usage models, including TAM, into a unified model. The model consists of various determinants of BI for workplace systems, two of which are (1) performance expectancy and (2) effort expectancy. Performance expectancy is partially derived from PU in TAM, whereas effort expectancy is partially derived from PEoU in TAM. UTAUT also contains moderators, including age. Age was shown to moderate the effects of several relationships in the model, with younger workers placing greater emphasis on performance expectancy (i.e., usefulness), while older workers tended to rely more strongly on effort expectancy (i.e., ease of use) (Venkatesh et al., 2003).

The model was later extended by Venkatesh et al. (2012) into UTAUT2, which positioned the original UTAUT in a consumer context and added additional determinants of BI. One of these determinants was hedonic motivation, which was partially derived from PE research by Childers et al. (2001) and van der Heijden (2004). In this model, age was shown to moderate the effect of hedonic motivation, together with gender and system experience, such that the effect was stronger for younger men with less system experience. Taken together, these findings suggest that age may influence how consumers evaluate both utilitarian and hedonic aspects of technology use.

2.3 Research Gap

Previous research on livestream shopping adoption has largely centred on markets where the phenomenon is well established, particularly in China. This concentration is theoretically consequential, as several of the mechanisms identified in this literature are embedded in conditions specific to those markets. Adoption in China has been explained partially through collectivist group dynamics, in which conformity and the opinions of other viewers weigh heavily on purchase decisions, and through interpersonal trust in the streamer as a relational bond (Ni & Ueichi, 2024).

Cross-cultural evidence suggests that these explanations do not transfer directly to Western consumers; Ni and Ueichi (2024) found that utilitarian attitudes toward livestream shopping were primarily shaped by trust in streamers among Chinese consumers, but by general online trust among American consumers. This suggests that the beliefs underpinning attitude formation vary across cultural contexts. More broadly, meta-analytic evidence shows that cultural dimensions moderate core relationships in technology acceptance models (Jan et al., 2024). Sweden differs systematically from the markets in which livestream shopping has been studied: it is strongly individualistic, low in power distance, and markedly feminine in Hofstede's framework, in contrast to the collectivist, high-power-distance profile of China (Hofstede et al., 2010). The relationships between usefulness, ease of use, enjoyment, and consumer attitude cannot therefore be assumed to have the same relative importance in a Swedish setting.

Furthermore, Sweden combines high digital and e-commerce maturity with limited livestream shopping penetration. The format generated USD 85 million in revenue in Sweden in 2025 (Statista, 2026a), suggesting that limited adoption is unlikely to be explained by digital infrastructure or consumer digital literacy alone, making attitudinal drivers particularly relevant to examine. Wongkitrungrueng and Assarut (2020) have accordingly called for researchers to explore livestream shopping in other cultural contexts, especially Western ones. To address this research gap, this study surveys Swedish consumers to gather insight into their attitudes and adoption intentions toward livestream shopping.

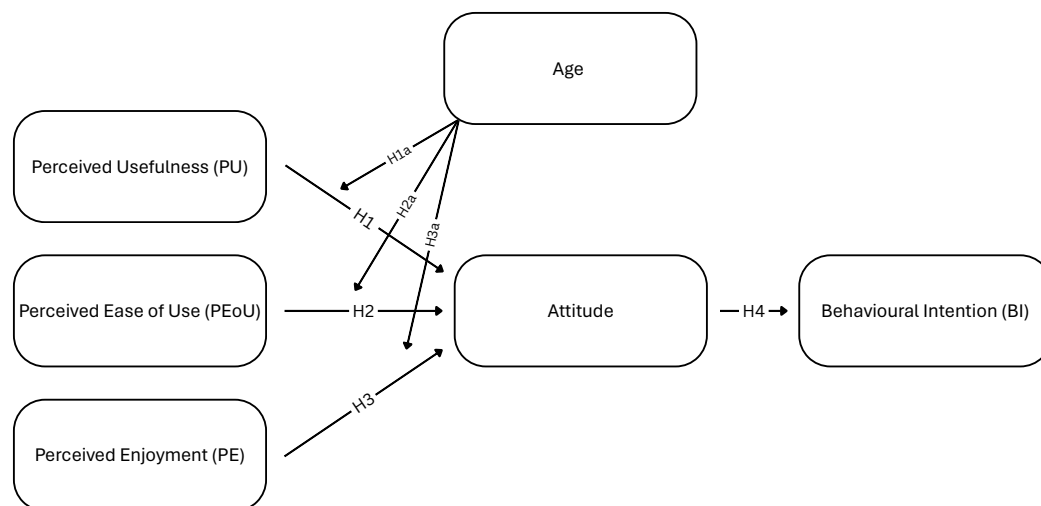
3. Research Framework and Hypotheses

To address the identified research gap, this study is based on TAM (Davis, 1989) and the extension of enjoyment proposed by Davis et al. (1992). Although the original TAM also theorises a relationship between PEOU and PU (Davis, 1989), the present study follows the logic of Childers et al. (2001) by treating PU, PEOU, and PE as parallel predictors of consumer attitude in a retail context (see Appendix 1).

This study also draws on UTAUT and UTAUT2 to incorporate age as a potential moderator (Venkatesh et al., 2003; Venkatesh et al., 2012). The resulting framework, illustrated in Figure 1, consists of four direct hypotheses (H1–H4) and three moderation hypotheses (H1a–H3a).

Hypotheses H1 and H2 are grounded in the TAM and examine the relationships among PU, PEOU, and attitude. Hypothesis H3 incorporates PE as an additional dimension, while H1a–H3a examine the moderating role of age in these relationships. Finally, H4 investigates the relationship between attitude and BI.

Figure 1. Research Framework



3.1 Perceived Usefulness

Shopping online can entail uncertainty for customers as they cannot physically examine products before purchase (Levy & Grewal, 2023). Traditional webstores are often limited to static imagery and text when communicating product qualities. However, livestream shopping allows customers to ask product-related questions, receive advice, view products in a more lifelike setting, and consider other viewers' opinions, thereby reducing uncertainty in the decision-making process (Liao et al., 2023; Liu et al., 2023). In TAM terms, these qualities constitute the performance-related benefits that underpin PU: the format enables consumers to make better-informed purchase decisions with less risk of disappointment than asynchronous webstore browsing (Davis, 1989; Levy & Grewal, 2023).

The relationship between PU and attitude is among the most consistently supported in technology acceptance research (Schepers & Wetzels, 2007). The relationship has also been confirmed in online retail settings (Childers et al., 2001), and specifically for livestream shopping; Cai et al. (2018) found that PU significantly predicted product-based intention, suggesting that consumers are more likely to engage with livestream shopping when it helps them evaluate products.

The improved shopping experience may lead consumers to perceive livestream shopping as useful, thereby positively influencing their attitude toward the format (Davis, 1989). This outlines the first hypothesis:

H1. *Perceived usefulness positively influences consumer attitude toward livestream shopping.*

Venkatesh et al. (2003) found that the effect of performance expectancy on technology acceptance was moderated by age, with younger users placing greater emphasis on performance-related gains than older users. Although their model examined BI rather than attitude, they argue that observed attitude-BI relationships may partly stem from the effects of performance- and effort-related beliefs on attitude, drawing on Davis et al. (1989). Accordingly, while UTAUT does not retain attitude as a core construct, the present study follows TAM logic by examining attitude as the evaluative stage through which beliefs about livestream shopping are reflected prior to BI.

Empirical support for age differences at the attitudinal stage is provided by Morris and Venkatesh (2000), who found that younger users' technology usage decisions were more strongly driven by attitude toward using the technology, whereas older users relied more on the subjective norm and perceived behavioural control. Based on this, younger consumers are expected to evaluate livestream shopping more strongly by how effectively it improves their shopping experience. Therefore, age is expected to moderate the relationship between PU and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers:

H1a. *Age moderates the relationship between perceived usefulness and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers.*

3.2 Perceived Ease of Use

In digital retail, the PEOU of a system is an important dimension influencing consumer attitudes in online shopping contexts (Childers et al., 2001). Livestream shopping places particular demands on ease of use since the consumer must follow a live broadcast, interact through chat functions, and complete purchases through embedded product links in real time (Xie et al., 2025). A format experienced as effortless allows consumers to direct their attention toward the products and the content rather than toward operating the interface, whereas a format experienced as demanding may produce frustration that colours the overall evaluation (Davis, 1989; Childers et al., 2001). If livestream shopping is perceived as intuitive and easy to navigate, consumers are more likely to develop positive attitudes toward the format (Davis, 1989). This logic supports the second hypothesis:

H2. *Perceived ease of use positively influences consumer attitude toward livestream shopping.*

Moreover, effort expectancy in UTAUT suggests that the influence of ease-related perceptions may vary by age, with effort expectancy being more salient for older users (Venkatesh et al., 2003). This pattern is consistent with Morris and Venkatesh (2000), who found that older users placed greater weight on perceived behavioural control, a construct closely related to ease-of-use perceptions, when forming usage decisions.

As discussed in relation to H1a, UTAUT examines behavioural intention rather than attitude; however, the present study applies its age-related logic to the attitudinal stage, as attitude represents consumers' evaluative response to technology-related beliefs (Davis et al., 1989).

Since PEOU captures whether livestream shopping is perceived as effortless and understandable, older consumers may evaluate it more strongly based on whether the format feels easy to use. Consequently, age is expected to moderate the relationship between PEOU and consumer attitude toward livestream shopping, such that the relationship is stronger for older consumers.

H2a. *Age moderates the relationship between perceived ease of use and consumer attitude toward livestream shopping, such that the relationship is stronger for older consumers.*

3.3 Perceived Enjoyment

Previous studies have shown that hedonic value exists in livestream shopping (e.g., Cai et al., 2018; Wongkitrungrueng & Assarut, 2020; Xie et al., 2025). The format combines entertainment, real-time social interaction, and the immediacy of live events, qualities that distinguish it from the predominantly utilitarian character of traditional webstores (Levy & Grewal, 2023). The relevance of enjoyment for acceptance of such systems is well established: van der Heijden (2004) demonstrated that for systems with a hedonic character, PE supersedes PU as a determinant of acceptance, identifying the hedonic nature of a system as a boundary condition of the original TAM. Given that livestream shopping carries both utilitarian and hedonic value, PE constitutes a theoretically necessary complement to PU and PEOU in the present framework (Davis et al., 1992; van der Heijden, 2004).

Drawing on the established relationship between PE and attitude in online shopping contexts (Childers et al., 2001), consumers who perceive livestream shopping as enjoyable are expected to develop a more positive attitude toward the format. Therefore, the third hypothesis is:

H3. *Perceived enjoyment positively influences consumer attitude toward livestream shopping.*

UTAUT2 suggests that the influence of hedonic motivation may vary across age groups, with hedonic motivation being more salient for younger users (Venkatesh et al., 2012). Similar to H1a and H2a, UTAUT2 examines BI rather than attitude; however, the present study applies this age-related moderation to the attitudinal stage, following the aforementioned logic. Since PE captures the extent to which livestream shopping is enjoyable in its own right, younger consumers may evaluate the format more strongly based on its enjoyable qualities. Consequently, age is expected to moderate the relationship between PE and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers.

H3a. *Age moderates the relationship between perceived enjoyment and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers.*

3.4 Attitude and Behavioural Intention to Use

Beyond attitude toward a system, the user's BI is also worth considering. The attitude-intention relationship predates TAM and originates in the theory of reasoned action, which holds that behavioural intentions are formed jointly by attitudes toward the behaviour and subjective norms (Fishbein & Ajzen, 1975). TAM is built on the idea that the more positive an individual's attitude is toward performing a behaviour, the more likely that individual is to perform it (Davis et al., 1989).

The relationship is among the most robust in the technology acceptance literature: meta-analytic evidence confirms a strong positive effect of attitude on BI across study contexts (Schepers & Wetzels, 2007). In livestream shopping specifically, consumer attitude toward the format has been linked to intentions to watch and purchase (Ni & Ueichi, 2024), suggesting that the attitudinal mechanism extends to this retail format. Therefore, consumers who have a positive attitude toward livestream shopping are expected to be more likely to use livestream shopping, leading to the following hypothesis:

H4. *Consumer attitude toward livestream shopping positively influences behavioural intention to use livestream shopping.*

4. Methodology

4.1 Research Method

As the study aimed to test specific hypotheses and examine relationships grounded in previous research, a conclusive research design was deemed appropriate. More specifically, the study adopted a descriptive research design to describe and analyse relationships among constructs. Conclusive research is quantitative in nature, and although a qualitative or mixed-method approach could have provided insights into the motivations underlying consumers' attitudes and behavioural intentions, such methods were less aligned with the study's objective of testing predefined hypotheses. To test the hypothesised relationships between the constructs, Structural Equation Modelling (hereafter referred to as SEM) with path analysis was subsequently applied.

The hypotheses were tested through a survey instrument (see Appendix 2). Since the survey was administered once and a single sample was drawn from the target population, the study adopted a single cross-sectional design (Malhotra, 2019). This design was considered appropriate given the study's timeframe and budget, as the study did not aim to measure changes in attitudes or behaviours over time.

4.2 Survey Method and Design

The study employed a structured survey method with fixed-alternative questions, enabling standardised data collection and efficient processing of quantitative responses. This approach was considered appropriate as it reduced response variability and enabled the statistical testing of predefined hypotheses (Malhotra, 2019). The survey was distributed electronically via the internet, which may reduce social desirability bias and encourage more honest responses (Bryman, 2012).

Prior experience with livestream shopping was not required for participation, as the study aimed to examine Swedish consumers broadly rather than only existing livestream shopping users. Given this, varying levels of prior familiarity with livestream shopping were expected; respondents were first provided with a written explanation and a visual example of the phenomenon to establish a shared baseline understanding.

The questionnaire was then structured into eight blocks, totalling 30 structured questions (see Table 1). Block 1 examined familiarity with livestream shopping (Q1–Q2), Block 2 measured PU (Q3–Q6), Block 3 measured PEOU (Q7–Q10), Block 4 contained an attention check (Q11), Block 5 measured PE (Q12–Q17), Block 6 measured attitude (Q18–Q24), Block 7 measured BI (Q25–Q27), and Block 8 collected demographic information (Q28–Q30). The blocks were arranged to follow a logical response flow, moving from prior experience to perceptions and attitudes, then future behavioural intention, before ending with demographic questions, which may be perceived as more sensitive by respondents, and are therefore commonly placed at the end of the questionnaire (Malhotra, 2019). Before full distribution, a small pretest was conducted to ensure that the questionnaire was understandable and functioned as intended.

Block 1 consisted of two dichotomous questions measuring respondents' prior awareness of, and experience with, livestream shopping. These questions were used to describe the sample but were not included in the structural model. The main constructs used in the hypothesis testing were measured in Blocks 2, 3, 5, 6, and 7. Attitude served as the dependent variable for PU, PEOU, and PE, while BI served as the dependent variable for attitude. Age, collected in Block 8, was used as a moderator of the relationships between the three independent variables and attitude (see Figure 1). Respondent gender and main occupation were also collected in Block 8 and were used to describe the sample, but were not included in the structural model.

The measurement items were adapted from Childers et al. (2001) and Venkatesh et al. (2003), resulting in a questionnaire that used non-comparative scales. For all items adapted from Childers et al. (2001), the term "TAS" (Technology Assisted Shopping) was replaced with "livestream shopping". For all items adapted from Venkatesh et al. (2003), the phrase "the system" was replaced with "livestream shopping", while "next <n> months" was replaced with "future". The adapted items were measured using balanced itemised rating scales.

Blocks 2, 3, 5, and 7 used 7-point multi-item Likert scales, whereas Block 6 used a 7-point multi-item semantic differential scale. These blocks were designed to be analysed using a summated scale approach, for which Malhotra (2019) emphasises the importance of applying a consistent scoring procedure. Therefore, reverse-coded items measuring PE from Childers et al. (2001) were excluded from the questionnaire to simplify interpretation and reduce the risk of respondent confusion. Since reverse-coded items could be used to assess respondent consistency, an attention check was instead included as an additional data-quality measure (see Attention Check in Appendix 2).

Table 1. Questionnaire Blocks, Hypotheses and Item References

No.	Questionnaire Block	Hypothesis	Item Reference
1	Familiarity	–	Malhotra (2019)
2	Perceived Usefulness	H1	Childers et al. (2001)
3	Perceived Ease of Use	H2	Childers et al. (2001)
4	Attention Check	–	Malhotra (2019)
5	Perceived Enjoyment	H3	Childers et al. (2001)
6	Attitude	H1–H3	Childers et al. (2001)
7	Behavioural Intention	H4	Venkatesh et al. (2003)
8	Demographics (Age)	H1a–H3a	Malhotra (2019)

4.3 Participants and Data Collection

The target population of the study consisted of Swedish consumers aged 18 years and above. The sampling unit was therefore the individual Swedish adult consumer. Respondents were recruited through Prodege, a U.S.-based online market research provider, meaning that the practical sampling frame consisted of Swedish adults accessible through Prodege’s respondent network. The distribution through Prodege was personally funded.

The only eligibility criteria were that respondents had to be located in Sweden and be at least 18 years of age. The lower age threshold was applied because the study concerns consumer attitudes and behavioural intentions related to an online shopping format, and individuals under 18 generally have limited legal capacity to enter into purchase agreements without guardian approval in Sweden (Konsumentverket, 2026). No additional demographic quotas were applied. Consequently, the study used a non-probability convenience sampling approach with a recruited online panel sampling technique (Bryman, 2012). This resulted in variation across age and gender groups (see Section 4.5), although the sample should not be interpreted as statistically representative of the Swedish consumer population.

The survey itself was designed in Qualtrics. The survey was launched on 21 April 2026 and remained open until 29 April 2026. Following Malhotra's (2019) guideline that SEM models generally require 200 to 400 respondents, depending on model complexity and data characteristics, the target sample size was set at approximately 300 respondents. In total, 347 responses from unique respondents were received before data cleaning. Before starting the survey, all respondents were informed of its purpose, the language (English), and the estimated duration. Respondents were also informed that their participation was voluntary and anonymous, that they could withdraw their consent at any time, and that the data would be deleted upon completion of the project.

4.4 Data Analysis

The data analysis strategy was selected based on the study's research design, the characteristics of the collected data, and the purpose of testing relationships between theoretically derived constructs. As the study aimed to examine both direct and moderated relationships between multiple variables, a multivariate data analysis strategy was considered appropriate (Hair et al., 2019).

Prior to analysis, the data were exported from the survey distributor using numeric response codes rather than text labels, enabling quantitative analysis. In line with the data-preparation process described by Malhotra (2019), the dataset was both coded and cleaned before statistical analysis.

Data cleaning was conducted manually in Microsoft Excel and involved screening for responses containing missing values, a failed attention check, completion times below 60 seconds or above 60 minutes, and response patterns indicating insufficient response quality, measured as a standard deviation of zero across balanced itemised rating scales. Missing values were handled through case-wise deletion, meaning that respondents with one or more missing values were excluded from the analysis. After data cleaning, 291 valid responses remained out of the original 347 collected.

Following data cleaning, the multi-item scales were transformed into composite variables. The relevant questionnaire items for each construct were combined into mean-scored indices representing PU, PEOU, PE, attitude and BI. The use of mean-scored indices also allowed the composite variables to remain interpretable on the original 7-point scale. Although the individual Likert-type and semantic differential items are ordinal, the mean-scored composite variables were treated as interval-level throughout the quantitative analysis.

Age was originally measured using categorical age brackets and subsequently recoded to approximate midpoint values to allow inclusion as a continuous moderator in the analysis. Prior to the moderation analysis, the predictor variables and age were mean-centred to facilitate interpretation and reduce non-essential multicollinearity between interaction terms and their component variables.

The analysis began with descriptive statistics to summarise the final sample and the construct-level responses. Pearson correlation analysis was then conducted to examine bivariate associations between the main constructs. Following this, the data were analysed using SEM with path analysis, implemented in Python using the semopy library. SEM is a multivariate statistical technique that enables simultaneous testing of multiple directional relationships between independent and dependent variables (Hair et al., 2019). Path analysis was appropriate because the study used mean-scored indices for each construct and aimed to test the directional relationships among them. Therefore, the analysis focused on the structural relationships among PU, PEOU, PE, attitude, and BI, rather than estimating a separate measurement model for each survey item. Path coefficients are reported as unstandardised estimates (*b*), as all constructs were measured on the same 7-point scale.

The analysis was conducted in two stages: First, a Base Model was estimated to test the direct relationships proposed in H1–H4, with attitude regressed on PU, PEOU, and PE, and BI regressed on attitude. Second, a Moderated Model extended the Base Model by introducing age as a moderator of all three predictor-attitude relationships (H1a–H3a), adding a centred age variable and three interaction terms to the attitude equation. Each interaction term captured whether the strength of a predictor’s effect on attitude varied as a function of the respondent’s age.

To determine whether the Moderated Model provided a statistically significant improvement over the Base Model, a regression-based F-test was conducted on the attitude equation. The explanatory power of each structural equation was evaluated using the coefficient of determination (R^2), reported in Section 5. A significance threshold of $\alpha = .05$ was applied throughout.

4.5 Data Sample

The final sample consisted of 291 Swedish respondents. Of these, 117 identified as male (40.2%), 173 as female (59.5%), and 1 as other (0.3%). The age distribution spanned all adult age groups, with the largest share in the 35–44 bracket ($n = 67$) and the smallest in the 65+ bracket ($n = 21$). A full demographic breakdown is provided in Appendix 3.

Regarding prior exposure to livestream shopping, 65% of respondents reported having heard of it before completing the survey, while 40% reported having previously watched a livestream shopping event.

4.6 Reliability, Validity and Generalisability

Since the study used multi-item scales, the measurement instrument was evaluated for reliability and validity. Reliability was assessed using Cronbach’s alpha (α) for each summated scale. As shown in Appendix 4, all five summated scales demonstrated internal consistency, with alpha values ranging from 0.857 to 0.942. These values exceed the 0.6 threshold considered acceptable by Malhotra (2019). In addition to Cronbach’s alpha, Composite Reliability (CR) and Average Variance Extracted (AVE) were computed for each construct to further assess reliability and convergent validity.

Since the analysis used path analysis with observed composite variables rather than latent-variable SEM, standardised loadings were approximated using item-composite correlations rather than estimated through confirmatory factor analysis. This was consistent with the composite operationalisation of constructs used throughout the analysis. As shown in Appendix 4, all constructs exceeded the recommended CR threshold of 0.70 and AVE threshold of 0.5 (Hair et al., 2019), with CR values ranging from 0.904 (PEoU) to 0.963 (BI), and AVE values ranging from 0.659 (attitude) to 0.896 (BI). All item-composite correlations exceeded the 0.70 threshold, further strengthening convergent validity (Hair et al., 2019).

Discriminant validity was assessed by comparing the square root of each construct's AVE with its correlations with the other constructs. In all cases, the square root of AVE exceeded the corresponding inter-construct correlations, indicating that each construct was more strongly related to its own indicators than to other constructs in the model. Content validity was supported by adapting survey items from established theoretical concepts and previous studies (see Section 4.2).

Finally, to the extent that the observed structural relationships were consistent with theoretically expected relationships derived from prior research, the results also supported nomological validity (Malhotra, 2019). Taken together, these results provide support for the reliability and validity of the measurement instrument within the scope of the study.

Although probability sampling would have been preferable for maximising generalisability and reducing the risk of self-selection bias (Bryman, 2012), using an online panel was considered appropriate given the study's time and budget constraints. Since panel respondents may differ systematically from the broader Swedish consumer population, the findings should be generalised with caution. Moreover, adapting scales from established instruments used in previous research (Childers et al., 2001; Venkatesh et al., 2003) supports the content validity of the measurement approach. However, as the items were adapted to the context of livestream shopping and administered to Swedish consumers via a single online survey, it cannot be assumed that the scales perform identically to their original formulations or across alternative data-collection methods.

5. Results

This section presents the results of the analysis. The analysis examines the direct and moderated relationships among the constructs outlined in the research framework, using SEM with path analysis.

5.1 Preliminary Analysis

Table 2 presents the descriptive statistics for the five constructs included in the analysis. As the items were measured on 7-point scales, the scale midpoint of 4.0 serves as a reference point for interpreting whether responses leaned positive or negative. Mean values ranged from 3.360 for PU to 4.058 for PE, indicating that responses were broadly neutral-to-negative across most constructs, with only PE marginally exceeding the scale midpoint. PE recorded the highest mean among the three predictors ($M = 4.058$, $SD = 1.597$), while PU recorded the lowest mean ($M = 3.360$, $SD = 1.630$). PEoU and attitude were positioned close to the midpoint with means of 3.983 and 3.938, respectively. BI recorded a lower mean ($M = 3.624$, $SD = 1.827$), suggesting that respondents' intention to use livestream shopping was somewhat weaker than their overall attitude toward it. Standard deviations ranged from 1.390 to 1.827, indicating sufficient variation in responses for subsequent analysis.

Table 2. Descriptive Statistics for Composite Constructs

Construct	<i>N</i>	Mean	<i>SD</i>	Min	Max
PU	291	3.360	1.630	1.0	7.0
PEoU	291	3.983	1.523	1.0	7.0
PE	291	4.058	1.597	1.0	7.0
Attitude	291	3.938	1.390	1.0	7.0
BI	291	3.624	1.827	1.0	7.0

Note. Constructs were measured using mean-scored indices on a 1–7 scale. $N = 291$.

5.2 Correlation Analysis

As shown in Table 3, all correlations between the main constructs were positive and statistically significant ($p < .001$), aligning with the theoretically expected direction. PE showed the strongest correlations with both attitude ($r = .706$) and BI ($r = .823$), consistent with its dominant role in the subsequent path analysis. PEOU showed the weakest correlation with both attitude ($r = .557$) and BI ($r = .669$). However, as reported in Section 5.3, PEOU did not have a significant direct effect on attitude once the other predictors were included in the path model.

Correlations between the predictor variables ranged from $r = .729$ (PU–PEOU) to $r = .773$ (PU–PE), indicating relatively strong intercorrelations. While these correlations suggest conceptual overlap between the predictors, discriminant validity was supported, as reported in Section 4.6. Therefore, the degree of overlap was not considered sufficient to invalidate the model estimates (Hair et al., 2019).

Table 3. Pearson Correlation Matrix

	PU	PEoU	PE	Attitude	BI
PU	1.000				
PEoU	.729***	1.000			
PE	.773***	.744***	1.000		
Attitude	.625***	.557***	.706***	1.000	
BI	.782***	.669***	.823***	.722***	1.000

Note. *** $p < .001$. $N = 291$. All correlations are statistically significant.

5.3 Direct Effects (H1–H4)

The Base Model estimated the direct effects of PU, PEOU, and PE on attitude, as well as the effect of attitude on BI. As shown in Table 4, PE emerged as the strongest predictor of attitude ($b = .481$, $p < .001$), providing support for H3. Its effect was substantially larger than the effects of the remaining predictors. PU also had a significant positive effect on attitude ($b = .166$, $p = .005$), supporting H1. PEOU, however, had a near-zero and non-significant effect on attitude ($b = .004$, $p = .950$), meaning that H2 was not supported. Finally, attitude had a strong and significant positive effect on BI ($b = .949$, $p < .001$), supporting H4.

Table 4. Base Model Results (H1–H4)

H	Outcome	Predictor	<i>b</i>	SE	<i>z</i>	p-value	Result
H1	Attitude	PU	.166	.059	2.812	.005	Supported
H2	Attitude	PEoU	.004	.060	0.062	.950	Not supported
H3	Attitude	PE	.481	.062	7.798	< .001	Supported
H4	BI	Attitude	.949	.053	17.784	< .001	Supported

Note. *b* = path coefficient; *SE* = standard error; *N* = 291.

5.4 Moderation Effects (H1a–H3a)

The Moderated Model extended the Base Model by introducing a mean-centred age variable and three interaction terms. These interaction terms tested whether the effects of PU, PEOU, and PE on attitude varied with respondents' age. As seen in Table 5, age had a small but statistically significant negative main effect on attitude ($b = -.008, p = .046$), indicating that older respondents reported slightly less positive attitudes toward livestream shopping, with the other predictors held constant.

Of the three hypothesised moderation effects, only the interaction between PEOU and age was statistically significant ($b = .010, p = .026$), providing support for H2a. The positive coefficient indicates that the effect of PEOU on attitude increased with age, suggesting that ease of use became a more important driver of attitude among older respondents. The interaction between PU and age was not statistically significant ($b = -.008, p = .069$), meaning that H1a was not supported, although the results approached the conventional significance threshold. The interaction between PE and age was also non-significant ($b = -.003, p = .532$), meaning that H3a was not supported.

Table 5. Moderated Model Results (H1a–H3a)

H	Outcome	Predictor	<i>b</i>	SE	<i>z</i>	p-value	Result
–	Attitude	Age	-.008	.004	-1.991	.046	Main effect
H1a	Attitude	PU × Age	-.008	.004	-1.816	.069	Not supported
H2a	Attitude	PEoU × Age	.010	.004	2.227	.026	Supported
H3a	Attitude	PE × Age	-.003	.005	-.625	.532	Not supported

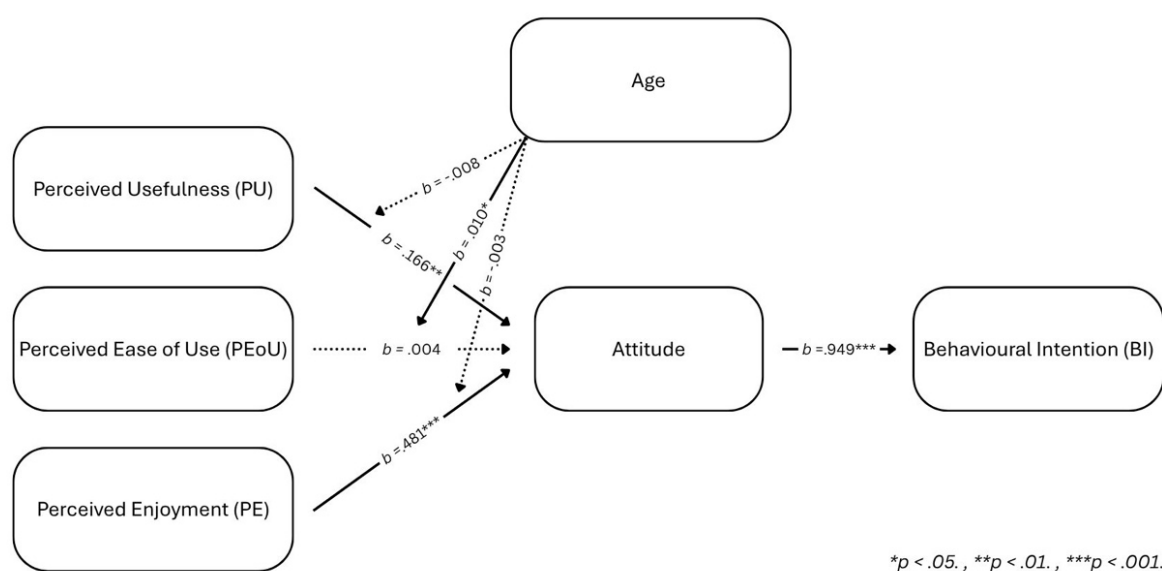
Note. Interaction terms were calculated using mean-centred variables. *b* = path coefficient; *SE* = standard error; *N* = 291.

5.5 Model Comparison and Explanatory Power

The explanatory power of both models was evaluated using the coefficient of determination (R^2) for each endogenous variable. According to Hair et al. (2019), R^2 values above 0.5 are considered substantial in behavioural research. The Base Model explained 51.6% of the variance in attitude ($R^2 = .516$) and 52.3% of the variance in BI ($R^2 = .523$), indicating substantial explanatory power for both endogenous variables. The Moderated Model explained 53.4% of the variance in attitude ($R^2 = .534$) and 52.3% of the variance in BI ($R^2 = .523$). Thus, the inclusion of age and the interaction terms increased the explained variance in attitude by 1.8 percentage points, while the explained variance in BI remained unchanged, as age was not modelled as a direct or moderating predictor of BI.

To determine whether this improvement was statistically significant, a regression-based F-test was conducted to compare the Base Model and the Moderated Model for the attitude equation. The results indicated that the Moderated Model provided a statistically significant improvement over the Base Model, $F(4, 283) = 2.791$, $p = .027$. Therefore, the Moderated Model was retained as the final model for interpretation (see Figure 2).

Figure 2. Moderated Path Model with Unstandardised Path Coefficients



Note. Solid arrows indicate statistically significant paths; dotted arrows indicate non-significant paths.

5.6 Hypothesis Summary

Of the seven hypothesised relationships, four were supported. PE and PU had significant positive effects on attitude, while PEOU did not. Attitude had a strong positive effect on BI. Age moderated the relationship between PEOU and attitude, supporting H2a.

Table 6. Hypothesis Summary

Hypothesis	Statement	Result	<i>b</i> / <i>p</i> -value
H1	Perceived usefulness positively influences consumer attitude toward livestream shopping.	Supported	<i>b</i> = .166 <i>p</i> = .005
H2	Perceived ease of use positively influences consumer attitude toward livestream shopping.	Not supported	<i>b</i> = .004 <i>p</i> = .950
H3	Perceived enjoyment positively influences consumer attitude toward livestream shopping.	Supported	<i>b</i> = .481 <i>p</i> < .001
H4	Consumer attitude toward livestream shopping positively influences behavioural intention to use livestream shopping.	Supported	<i>b</i> = .949 <i>p</i> < .001
H1a	Age moderates the relationship between perceived usefulness and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers.	Not supported	<i>b</i> = -.008 <i>p</i> = .069
H2a	Age moderates the relationship between perceived ease of use and consumer attitude toward livestream shopping, such that the relationship is stronger for older consumers.	Supported	<i>b</i> = .010 <i>p</i> = .026
H3a	Age moderates the relationship between perceived enjoyment and consumer attitude toward livestream shopping, such that the relationship is stronger for younger consumers.	Not supported	<i>b</i> = -.003 <i>p</i> = .532

6. Discussion

This paper set out to examine how Swedish consumers form attitudes toward livestream shopping, how these attitudes translate into an intention to use the format, and how the influence of the predictor constructs varies with consumer age. Drawing on TAM (Davis, 1989; Davis et al., 1989) and the motivational extension through PE proposed by Davis et al. (1992), the study modelled PU, PEOU, and PE as predictors of attitude, with attitude, in turn, predicting BI. Building on the age-moderation logic of UTAUT and UTAUT2 (Venkatesh et al., 2003; Venkatesh et al., 2012), age was incorporated as a demographic moderator of the relationships between the predictor constructs and attitude.

6.1 Theoretical Contributions

This paper responds to scholars, such as Wongkitrungrueng and Assarut (2020), who have called for empirical investigation of livestream shopping outside the Asian markets where the phenomenon is currently well established, and contributes to the literature by examining livestream shopping in an early-adoption Western consumer context. Previous research has documented consumer responses to livestream shopping in markets where the format is more mature, while less attention has been given to how consumers in early-adoption markets, such as Sweden, evaluate the format.

The study also contributes to the boundary-condition discussion in technology acceptance research. The findings suggest that core belief-attitude-intention mechanisms remain relevant in a Western early-adoption setting, while the relative importance of the predictors appears to differ. In particular, the dominance of PE and the weak average effect of PEOU indicate that livestream shopping adoption in Sweden may depend less on basic usability alone, and more on whether the format is perceived as experientially valuable.

At the same time, the findings show that age matters selectively, as it strengthened the relationship between PEOU and attitude. The broadly neutral-to-negative descriptive responses further suggest that livestream shopping remains an emerging, not fully normalised, retail format among Swedish consumers.

RQ1: How do perceived usefulness, perceived ease of use, and perceived enjoyment influence consumer attitude toward livestream shopping?

The findings reveal a clear hierarchy among the attitudinal drivers: PE emerged as the dominant predictor of attitude ($b = .481$), with a path coefficient substantially larger than those of either PU or PEOU. PU also had a significant positive effect ($b = .166$), although considerably smaller in magnitude, whereas PEOU showed a near-zero, non-significant effect ($b = .004$).

This pattern is consistent with previous research highlighting the importance of hedonic value in shaping consumer responses to digital retail formats (e.g., Childers et al., 2001; Luceri et al., 2022), and supports the conceptualisation of livestream shopping as a hybrid retail-entertainment format rather than a purely utilitarian channel. The non-significant direct effect of PEOU further suggests that ease of use may function as a baseline condition rather than a differentiating driver of attitude.

This aligns with Venkatesh et al. (2003), whose model comparisons indicate that effort-related perceptions are not always among the strongest direct predictors of technology acceptance when other determinants are modelled simultaneously. Taken together, these findings suggest that adoption research relying solely on the original TAM framework risks overlooking hedonic motivations that may be central to consumer adoption in entertainment-oriented contexts such as livestream shopping.

RQ2: How does consumer attitude toward livestream shopping influence consumers' intention to use the shopping format?

The path from attitude to BI was strong and significant ($b = .949$), indicating that consumers with more positive attitudes toward livestream shopping were more likely to report an intention to use the format. This suggests that, even in a market where livestream shopping is not yet fully normalised, attitude remains an important mechanism through which consumers' evaluations of the format translate into adoption intentions. This pattern also reaffirms the role of attitude as a proximal predictor of BI and supports retaining attitude as a meaningful construct in TAM-based research, even as later frameworks, such as UTAUT, have moved away from it.

RQ3: To what extent does age moderate the effects of perceived usefulness, perceived ease of use, and perceived enjoyment on consumer attitude toward livestream shopping?

Age emerged as a meaningful moderator of one of the three predictor-attitude relationships. Among the three hypothesised interactions, only the PEOU $\times$ Age interaction was statistically significant, with the influence of PEOU on attitude increasing meaningfully with age.

The PU $\times$ Age interaction approached the conventional significance threshold ($b = -.008$, $p = .069$) and was directionally consistent with the hypothesised strengthening of PU influence among younger respondents. The PE $\times$ Age interaction was also directionally consistent with the hypothesis, but the effect was small and statistically non-significant ($b = -.003$, $p = .532$), suggesting that PE functions as a relatively consistent driver of attitude across the adult age range.

This finding is consistent with the age-related logic of Venkatesh et al. (2003), who demonstrated that the influence of effort expectancy on BI strengthens with age in organisational settings. Although the present study examines PEOU in relation to attitude rather than effort expectancy in relation to BI, the finding suggests a parallel pattern. Specifically, PEOU had no detectable average effect on attitude, but became more influential among older respondents. This result shows that age can reveal conditional effects not visible in the average direct effect and emphasises the value of incorporating demographic moderators into TAM-based research on retail technologies.

6.2 Managerial Implications

For retailers operating in the Swedish market, understanding what drives consumer adoption of livestream shopping is increasingly relevant. Livestream shopping continues to expand globally, while the Swedish market remains at a relatively early stage of adoption (Statista, 2026a). This creates an opportunity for retailers to shape consumer expectations of the format as it continues to develop. While the study did not set out to evaluate specific commercial outcomes, the findings offer insights for retailers who are currently using or considering using livestream shopping as part of their digital retail strategy.

First, PE outweighs PU in shaping consumer attitudes ($b = .481$ vs. $b = .166$), highlighting the importance of designing livestream shopping as entertainment-led rather than purely transactional. The results suggest that affective qualities of the livestream carry greater weight in shaping attitudes than functional benefits. This is also consistent with research showing that engagement and immersion are central to livestream shopping (Liao et al., 2023). Therefore, retailers should treat livestream shopping not simply as a substitute for traditional product pages, but as a hybrid retail-entertainment format, where the entertainment makes the shopping experience engaging while still supporting purchase evaluation.

Second, while PEOU was not a significant driver of attitude overall, age moderated this relationship. The effect of ease of use on attitude increased with age, suggesting that it becomes more important for older consumers. This implies that retailers targeting older segments may benefit more from emphasising usability. A clear and intuitive interface with minimal cognitive friction could positively influence how older consumers perceive the retail format.

Lastly, the strong path from attitude to BI ($b = .949$) suggests that efforts to shape positive consumer attitudes toward livestream shopping may translate into a stronger intention to use the format. Since PE was the dominant driver of attitude, the strongest managerial lever appears to be the affective quality of the viewing experience. Retailers producing genuinely enjoyable broadcasts are therefore better positioned to foster positive attitudes and adoption intentions, while functional but unengaging streams are unlikely to generate the same response.

6.3 Limitations and Future Research

First, the study employed a single cross-sectional design. While this design was appropriate given the scope of the study, it limits the ability to detect changes in attitudes or behavioural intentions. Since the present study collected data only once, it cannot determine whether attitudes toward livestream shopping will become more positive, negative, or remain stable as the format develops. Future research could therefore use longitudinal designs to examine how consumer attitudes and behavioural intentions evolve as livestream shopping becomes more established in Sweden.

Second, the study relied on a structured survey with fixed-alternative questions. This approach was suitable for collecting standardised quantitative data and testing predefined hypotheses; however, predetermined response alternatives may be less suitable for capturing beliefs, feelings, and motivational factors (Malhotra, 2019). This is relevant because not all respondents were familiar with livestream shopping and may therefore have evaluated the format based on a written explanation and visual example rather than direct experience.

Future research could complement survey-based designs with qualitative methods, such as depth interviews, to better understand respondents' underlying motives and interpretations. Further quantitative research could also extend the model by examining gender or familiarity as moderators, or by testing whether the relationships differ between hedonic and utilitarian products in Swedish livestream shopping settings. Researchers could also expose participants to video-based or interactive stimuli before surveying them.

Third, the sample was drawn through non-probability convenience sampling via an online consumer panel. Although this allowed efficient data collection and produced demographic variation in the sample, it should not be interpreted as statistically representative of the Swedish consumer population. This is particularly important because online panel respondents may be more digitally engaged than the average consumer, which could influence how they perceive a digital shopping format such as livestream shopping. Future research could therefore use probability-based sampling or apply demographic quotas to improve representativeness.

Finally, the analysis used SEM with path analysis based on observed composite variables rather than a full latent-variable SEM approach. While this approach was appropriate for testing the hypothesised structural relationships, it does not explicitly model measurement error in the same way as latent-variable SEM. Future research could therefore apply a full latent-variable SEM approach and test alternative model specifications.

7. Conclusion

This thesis examined how Swedish consumers form attitudes toward livestream shopping and how these attitudes influence intention to use the format. Drawing on TAM and the extended role of enjoyment, the study tested the effects of PU, PEOU, and PE on attitude, while also examining whether age moderated these relationships.

The findings show that PE was the strongest driver of consumer attitude toward livestream shopping, followed by PU. PEOU did not have a significant direct effect on attitude, suggesting that usability may function more as a baseline condition than as a primary attitudinal driver. Attitude, in turn, strongly predicted intention to use livestream shopping. Age moderated only the relationship between PEOU and attitude, indicating that ease of use becomes more important among older consumers.

Overall, the study suggests that livestream shopping in Sweden should be understood as a retail-entertainment format rather than simply another functional online shopping channel. For retailers, this means that enjoyable livestream experiences are likely to be more important than purely transactional ones. At the same time, the broadly neutral-to-negative descriptive responses indicate that livestream shopping remains relatively unfamiliar and weakly established among Swedish consumers.

The thesis therefore contributes to livestream shopping research by extending TAM-based insights to an early-adoption Western retail context and highlighting the selective role of age in shaping consumer evaluations. So, while the abandoned shopping cart may remain a familiar online ritual, livestream shopping offers retailers a chance to make online shopping feel less like closing a website tab and more like an experience worth staying for.

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9. Artificial Intelligence Disclosure

In the process of writing this paper, the following Artificial Intelligence (AI) tools were used: ChatGPT, Claude, Google Gemini, and Grammarly. For the statistical analysis, Google Gemini was used to assist with writing and troubleshooting Python code in Google Colab. However, all analytical decisions were made by the authors.

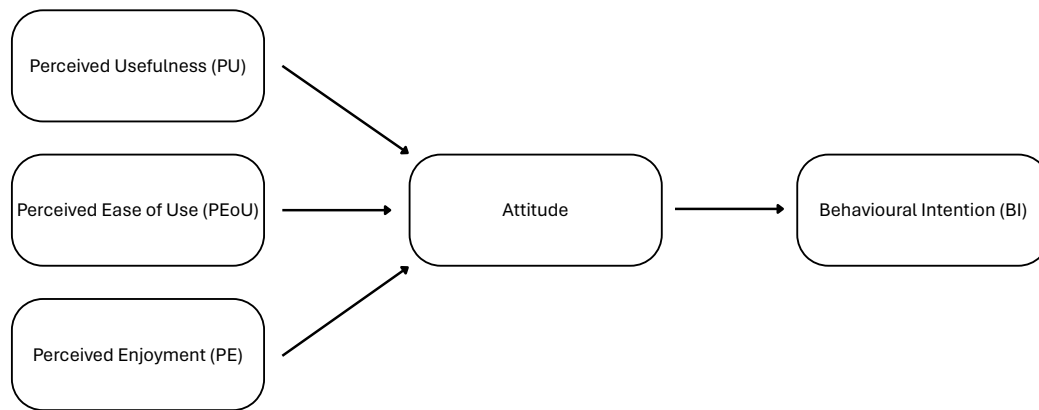
ChatGPT and Claude were used to assist with language refinement and feedback on clarity and argumentation. Typical prompts included requests such as “Is this sentence intuitive?” or “Suggest a rewrite for clarity,” meaning that the tools were used as sounding boards. They were also used to formulate Boolean search strings for literature, while source selection and evaluation were conducted by the authors. Gemini was used to create the image included in the survey, providing a visual representation of how livestream shopping could look. Grammarly was used for spell-checking and grammar in the final phase of writing.

All reasoning, hypothesis development, interpretations, and academic judgements remain entirely the authors’ own. AI was not used to generate citations, summarise sources, or produce unverified academic content. Every reference was read and verified by the authors.

AI was most valuable for language refinement and coding-related tasks, while its use for academic reasoning required the greatest degree of caution. On occasion, AI models provided confident but imprecise methodological guidance, which required claims to be verified against relevant sources. This process often took longer than working through the issue independently. We therefore encourage future students and researchers to treat AI as a discussion partner rather than a methodological authority.

10. Appendix

10.1 Appendix 1: Adapted Technology Acceptance Model



10.2 Appendix 2: Complete Survey

Information

Enkäten är på engelska. Om du inte känner dig bekväm med att svara på engelska ska du ej fylla i denna enkät. Annars kan du fortsätta genom att ta del av informationen nedan.

Thank you for taking the time to complete this survey. This text is intended to provide you with information relevant to your participation in the study. This survey is part of a bachelor's thesis within the Retail Management program at the Stockholm School of Economics. The survey is distributed in collaboration with Prodege. Participation is voluntary and anonymous.

The survey consists of a short explanation of livestream shopping followed by some quick questions. The survey will take about 5 minutes to complete. You may withdraw your consent at any time without providing a reason, and any collected data will be permanently deleted. The thesis written by the students will not contain any information that can identify you as a participant in the survey. All data will be permanently deleted once the project is concluded. You are welcome to read more about your rights concerning personal data [here](#).

By continuing, you confirm that you consent to participate in this study.

Livestream Shopping

What is livestream shopping?

Livestream shopping is a form of online shopping where products are presented in real time through a live video stream, often on a website or social media platform.

During the livestream, a host (such as a brand representative or influencer) demonstrates and talks about products, while viewers can watch, ask questions via chat, and interact with the host and other viewers.

Viewers can typically purchase the featured products directly during or shortly after the livestream. Livestream shopping combines elements of online shopping, social media, and live entertainment.

Please look at the visual example below.



Familiarity

Before this survey, had you heard of livestream shopping?

☐ Yes

☐ No

Before this survey, had you ever watched a livestream shopping session?

☐ Yes

☐ No

Perceived Usefulness

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Livestream shopping would improve my shopping productivity							
Livestream shopping would enhance my effectiveness in shopping							
Livestream shopping would be useful in buying what I want							
Livestream shopping would improve my shopping ability							

Perceived Ease of Use

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Livestream shopping would be clear and understandable							
Livestream shopping would not require a lot of mental effort							
Livestream shopping would be easy to use							
Livestream shopping would allow me to shop the way I want to shop							

Attention Check

Please mark number 5:

- ☐ 3
☐ 5
☐ 7
☐ 9

Perceived Enjoyment

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Shopping with livestream shopping would be fun for its own sake							
Shopping with livestream shopping would make me feel good							
Shopping with livestream shopping would involve me in the shopping process							
Shopping with livestream shopping would be exciting							
Shopping with livestream shopping would be enjoyable							
Shopping with livestream shopping would be interesting							

Attitude

For each pair of opposite adjectives, please indicate where your opinion on livestream shopping lies (1 = left, 7 = right):

	1	2	3	4	5	6	7
Bad / Good							
Inferior / Superior							
Unpleasant / Pleasant							
Boring / Interesting							
Poor / Excellent							
Not worthwhile / Worthwhile							
Not useful / Useful							

Behavioural Intention to Use

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
I intend to use livestream shopping in the future							
I predict I would use livestream shopping in the future							
I plan to use livestream shopping in the future							

Demographics

What is your age?

- ☐ 18–24
- ☐ 25–34
- ☐ 35–44
- ☐ 45–54
- ☐ 55–64
- ☐ 65+

What gender do you identify as?

- ☐ Male
- ☐ Female
- ☐ Other

What is your current main occupation?

- ☐ Student
- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Unemployed
- ☐ Retired
- ☐ Other

10.3 Appendix 3: Demographic Overview

Age	n	%
18–24	44	15.1
25–34	65	22.3
35–44	67	23.0
45–54	59	20.3
55–64	35	12.0
65+	21	7.2
Gender		
Female	173	59.5
Male	117	40.2
Other	1	0.3
Occupation		
Employed full-time	182	62.5
Student	34	11.7
Employed part-time	33	11.3
Unemployed	22	7.6
Retired	19	6.5
Other	1	0.3
Prior awareness (heard of livestream shopping)		
Yes	190	65.3
No	101	34.7
Prior experience (watched a livestream shopping session)		
Yes	116	39.9
No	175	60.1

10.4 Appendix 4: Reliability and Validity Statistics

Construct	Items	Cronbach's α	CR	AVE
PU	4 (Q3–Q6)	.927	.949	.823
PEoU	4 (Q7–Q10)	.857	.904	.701
PE	6 (Q12–Q17)	.936	.949	.758
Attitude	7 (Q18–Q24)	.913	.931	.659
BI	3 (Q25–Q27)	.942	.963	.896