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# THE DRIVERS OF SHOWROOMING BEHAVIOR: A META-ANALYSIS

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**Abstract** Showrooming behavior refers to consumer behavior where consumers first physically evaluate products in offline channels and then compare the potential purchases in online channels. Although the drivers of showrooming behavior have gained interest from many quantitative researchers and resulted in multiple conflicting results, there is no established framework for these drivers. Therefore, we made a meta-analysis of the drivers of showrooming behavior. To analyze prior results, we conducted a systematic literature review resulting in 24 independent study samples that fit our criteria. Of these samples, 18 drivers were meta-analytically analyzed, resulting in 13 drivers being found to have a statistically significant association and five drivers being found to have no statistically significant association with showrooming behavior. As a theoretical contribution, we provide an established framework and solve prior conflicting findings. As a managerial contribution, we provide advice to decrease customers' competitive showrooming behavior according to the identified main drivers.

**Keywords:**  
showrooming  
behavior,  
meta-analysis,  
omnichannel,  
consumer  
behavior,  
cross-channel  
behavior.

# 1 Introduction

In the retail context, new means and technologies to diversify consumers' options in their decision-making process have multiplied. Thanks to advancements in information and communication technologies (ICTs), today's smart consumers can weigh their options based on online information, also simultaneously when shopping in offline stores (Verhoef et al., 2015; Holkkola et al., 2023a). These possibilities to seamlessly utilize both offline and online channels of the same retailer are referred to as omnichannel retailing, which is considered the next step of multichannel retailing (Lin et al., 2023; Makkonen et al., 2023; Rigby, 2011). However, also comparing multiple retailers' products is easy for smart consumers in the digital age. The phenomenon of consumers physically evaluating products in offline channels and comparing or buying the product in online channels is referred to as *showrooming behavior* (Fiestas & Tuzovic, 2021; Grewal et al., 2016). The verb "to showroom" originates from physical showrooms, where instead of buying the product directly, consumers can gain knowledge and consultancy of the displayed products and leave an order or buy it in other channels (Rapp et al., 2015; Fan et al., 2021). Thus, today's showroomers can be perceived as using offline stores as showrooms for products purchased online (Mehra et al., 2018; Brynjolfsson et al., 2013). According to statistics, showrooming behavior is very popular – it is estimated that 84% of consumers are doing it (Retail Touch Points, 2018). Although showrooming can happen in the same retailer's channels and, thus, be so-called loyal showrooming (Schneider & Zielke, 2020), showroomers have shown a tendency to ultimately buy the product via competing retailer's online channels (Spaid et al., 2019). This kind of competitive showrooming makes it a particularly challenging dilemma for brick-and-mortar (B&M) store retailers (Rapp et al., 2015). Indeed, *showroomers* are often attracted by the possibility of physically touching and feeling the product and still utilizing lower prices offered by online retailers, but the reasons and motives behind this cross-channel behavior are suggested to be more diverse than that (Gensler et al., 2017; Frassetto & Miquel-Romero, 2021). Therefore, identifying the drivers of showrooming behavior becomes important (Arora et al., 2022).

However, there is a research gap in systematically and statistically combining the existing quantitative results of the drivers of showrooming behavior. Also, our literature review shows that up to seven drivers have resulted in conflicting findings: gender, age, income, brand loyalty, online trust, offline service, and

exploratory shopping, which need further research. In the past decades of Information Systems (IS) research, meta-analysis has been proven as an efficient way to synthesize prior results and tackle contradictory findings and, thus, provide more reliable knowledge (Jeyaraj & Dwivedi, 2020). Meta-analysis consists of a Systematic Literature Review (SLR) and a statistical analysis where the data consists of samples from existing studies. Synthesizing the data from prior showrooming studies is vital for retail practitioners who want to retain existing or find new customers in the digital age (Mehra et al., 2018). Arora et al. (2017, 2022) also called for more research on the factors behind showrooming behavior. In addition, Holkkola et al. (2022a) call for research on showrooming drivers that have resulted in contradictory study results, such as gender. The goal of this paper is to fill this gap in the literature. Thus, we statistically synthesize the existing quantitative results concerning the drivers of showrooming behavior by identifying (1) *what the main drivers of showrooming behavior are* and (2) *whether the drivers that seem contradictory in prior literature actually drive showrooming behavior*. Despite the researchers' growing interest and multiple quantitative studies on showrooming behavior, no meta-analytical framework for the drivers of showrooming behavior has been proposed. Sahu et al. (2021) have made a descriptive SLR on showrooming and webrooming. Webrooming refers to behavior where the information search and actual purchase happen in the opposite channels compared to showrooming (Konus et al., 2008). The findings of Sahu et al. (2021) bring together various drivers of showrooming behavior but do not provide a statistical synthesis of drivers' average associations, statistical significance, and the correctness of conflicting prior results. Nor do they consider publication bias, which arises when statistically significant rather than not significant findings are more typically submitted to and accepted by peer-reviewed publications (Jeyaraj & Dwivedi, 2020).

Therefore, in this paper, we statistically synthesize the existing quantitative results concerning the drivers of showrooming behavior. To find all the drivers studied, we carried out an SLR on existing showrooming literature. Then, we integrated the existing constructs and executed a meta-analysis to find out the mean associations of the existing samples. In the next section, prior findings on showrooming behavior are presented. In the third section, the meta-analysis method is presented. The fourth section presents the findings of this study and, finally, the fifth section provides a discussion and conclusion.

## 2 Showrooming behaviour

The causes and consequences of showrooming behavior have gained interest from researchers. The consequences of showrooming behavior have included, for example, an increase in consumers' innovative purchase tendencies (Sahu et al., 2021), a negative impact on offline store staff's performance (Rapp et al., 2015; Park & Hur, 2023), and a positive effect on revisit intention (Holkkola et al., 2023b). Thus, although the showrooming phenomenon could be perceived as a challenge for offline retailers, the findings in prior literature seem multifaceted. Also, the drivers of showrooming have been studied with a great variety of variables. Sahu et al.'s (2021) SLR found 42 drivers of showrooming and webrooming behavior from prior studies. They classified these drivers into three categories: customer-led, company-led, and situational drivers.

According to Sahu et al. (2021), customer-led showrooming drivers include, for instance, consumers' capabilities and normative beliefs. Also, consumers' socio-demographic characteristics behind showrooming behavior have been studied (Holkkola et al., 2022a). Some studies report that younger age increases showrooming behavior (Kolehmainen, 2018; Holkkola et al., 2022a) whereas other studies propose that age has no effect on the matter (Dahana et al., 2018; Li et al., 2018; Fang et al., 2021). This raises the question of which result is correct. Also in terms of gender, contradictory results have been found. For instance, Dahana et al. (2018) found that gender has no effect on showrooming behavior while Holkkola et al. (2022a) found women to showroom more than men. Regarding consumers' income, higher income has been associated with more active showrooming behavior (Fang et al., 2021; Holkkola et al., 2022a). However, Jo et al. (2020) found no association between income and multichannel shopping behavior. In prior literature, consumers' online trust and the lack of perceived online risks have also resulted in conflicting findings. Arora and Sahney (2018) found that consumers' online trust increases their showrooming behavior. However, Quach et al. (2022) found that privacy risk has no effect on showrooming behavior, although, based on Arora and Sahney's (2018) findings, the perceived privacy risk could be hypothesized to decrease showrooming behavior and the perceived lack of privacy risk to increase showrooming behavior. Similarly, Kolehmainen (2018) found no association between security risk and showrooming behavior.

The company-led showrooming drivers, in turn, consist of the things that are under a retailer's control, such as price, customer service, and channel integration (Sahu et al., 2021). In prior quantitative studies, many of these company-led showrooming drivers have resulted in effects with the same direction: either positive or negative. For instance, Li et al. (2018), Fang et al. (2021), and Goraya et al. (2022) all found a positive effect of channel integration on showrooming behavior, although the strength of these effects varied. In line with this positive effect, utilizing a retailer's online channels is suggested to enhance consumers' perceptions of the same retailer's channel integration and available services (Fang et al., 2021). However, some associations between showrooming behavior and company-led drivers have even resulted in opposite results. For instance, the effects of customer service in an offline store on showrooming behavior have been found both positive (Arora & Sahney, 2018; Shankar et al., 2021) and negative (Burns et al., 2018), whereas other studies (Kang, 2018) have found no association between them, thus underlining the need for this meta-analytical review.

Regarding situational showrooming drivers, brand loyalty and exploratory shopping have resulted in contradictory results. Brand loyalty has been associated both positively (Quach et al., 2022) and negatively (Borges, 2018) with showrooming behavior. In addition, Burns et al. (2018) found no association between these (Burns et al., 2018). In exploratory shopping, consumers are involved and immersed in products (Christodoulides & Michaelidou, 2010; Quach et al., 2022) and may experience flow, which consists of immersion, enthusiasm, and losing track of time (Rose et al., 2012). Exploratory shopping has resulted in positive (Quach et al., 2022) and statistically not significant (Herrero-Crespo et al., 2022) associations with showrooming behavior. Banerjee and Longstreet (2016) conceptualized showroomers as having high consciousness in both physical and virtual dimensions, which is related to the immersion aspect of exploratory shopping. Also, shopping enjoyment, which is a component of customers' flow, is more typical for multi-channel shoppers than for single-channel or low-commitment shoppers (Konus et al., 2008). However, shopping enjoyment did not affect customers' showrooming intention (Kolehmainen, 2018). Thus, exploratory shopping and its related components have resulted in both positive and statistically not significant effects on showrooming and multichannel behaviors in general. Based on the above, multiple conflicting drivers need further analysis.

### **3 Methodology**

#### **3.1 Data Collection and Coding**

The literature search for the meta-analysis was performed using various search terms, such as “showrooming”, “research shopping”, “omnichannel retailing”, “multichannel retailing”, and “cross-channel retailing” in several databases (ABI/INFORM, Scopus, ProQuest Central, Emerald, EBSCO Business Source Premier, ProQuest Dissertations and Theses, and Google Scholar). In addition, several proceedings of IS conferences (AMCIS, Bled eConference, ECIS, HICCS, ICIS, MCIS, PACIS, WHICEB, and Wirtschaftsinformatik) were searched or manually screened. In our inclusion criteria, studies had to 1) address showrooming behavior; 2) provide quantitative empirical results based on independent samples; 3) provide the required information for effect size integration; and 4) be written in English. The search resulted in 24 independent samples with a total of 12,129 respondents. These samples were from studies that were published between 2017 and 2024 (see Appendix 1). The resulting data was coded according to the guidelines of Rust and Coil (1994). More specifically, information representing effect sizes, sample sizes, and reliability of measurements was extracted. Correlation coefficients were selected to represent effect sizes. If the studies did not report correlation coefficients, we converted other statistics to correlations using the procedures by Lipsey and Wilson (2001) as well as Peterson and Brown (2005). Also, if studies reported multiple correlations for the same relationship, average correlations were calculated.

#### **3.2 Effect-Size Integration and Construct Integration**

Effect size integration followed the random-effect approach by Hunter and Schmidt (2004). First, we corrected effect sizes in terms of reliability: effect sizes were divided by the square root of the product of reliabilities of independent and dependent variables. If this information was missing, the average correlation of the construct was used. Next, effect sizes were corrected in terms of sample sizes. Average correlations were calculated using the random-effect approach (Hunter & Schmidt, 2004). Regarding constructs, we found 86 constructs that were studied as drivers of showrooming behavior. Some of them had only been used in a single study and some in several studies. Some constructs measured the same thing as other constructs in other studies,

such as the constructs of online risk and privacy risk. When analyzing the data, we integrated these overlapping constructs which are presented in Table 1.

**Table 1: Results of construct integration**

<b>Construct</b>	<b>Definition</b>	<b>Aliases</b>
Showrooming self-efficacy	Consumers' judgments of their capabilities and resources to showroom (Makkonen et al., 2022)	Perceived behavioral control
Consumer innovativeness	Consumers' perceived innovativeness and power to seek information in the channels of their choice (Huh et al., 2022)	Smart shopper feelings, consumer empowerment
Online trust	Trust in online vendors (Tan & Sutherland, 2004) and data protection (Mahrous & Hassan, 2017)	Security risk (reversed), privacy risk (reversed)
Attitude toward showrooming	Customers' attitudes toward and positive evaluations of showrooming (Arora et al., 2020)	–
Social influence	The extent to which consumers' showrooming behavior is influenced by other people and social norms (Rejón-Guardia & Luna-Nevarez, 2017)	Socialization, subjective norm
Offline search value	The extent how much offline evaluation helps consumers (Rajkumar et al., 2021; Kim, 2004).	In-store search value, perceived search benefits, feel of product
Offline service	The desire for offline assistance (Kim & Stoel, 2005) and social encounters (Haytko & Baker, 2004) as well as satisfaction with the store staff (Reynolds & Beatty, 1999)	Desire for customer service, sales staff assistance, desire for social interaction, attentiveness convenience
Channel integration	The extent to which consumer perceives all information systems and their management successfully integrated across channels (Shi et al., 2020)	Cross-channel integration, information integration, perceived integration
Ease of use of online purchase	The degree to which customers believe that switching to online purchasing would be effortless (Davis, 1989; Arora & Sahney, 2018)	Effort expectancy
Monetary savings	The expected monetary saving benefits of showrooming (Atkins & Kim, 2012)	Deals and discounts, cost savings, price comparison
Better assortment	The access to assortments with a wide range of products, brands, prices, and qualities (Eastlick & Feinberg, 1999; Kahn & Wansink, 2004; Emrich et al., 2015)	Assortment seeking, perceived assortment, better product assortment
Perceived usefulness of showrooming	The expected usefulness and functionality of showrooming to achieve desired outcomes (Davis, 1989; Venkatesh et al., 2003; Chimborazo-Azogue et al., 2021)	Performance expectancy
Brand loyalty	Customers' attitudinal and behavioral loyalty to a brand (Baldinger & Rubinson, 1996)	–
Product involvement	The level of importance and relevance of the purchase to a consumer (Zaichkowsky, 1986)	Purchase involvement
Exploratory shopping	Shopping by being involved (Christodoulides & Michaelidou, 2010) and immersed (Quach et al., 2022) in products	Exploratory information seeking, exploratory acquisition, flow



After having integrated parallel constructs, we excluded the remaining constructs that had been used in less than three studies (Tyrväinen et al., 2023). After this, 18 constructs remained in the final model. We wanted to include every construct that had been studied in a sufficient number of samples, because, as Dahana et al. (2018) reasoned, “any factor associated with these [offline and online] behaviors is expected to eventually influence the extent to which consumers engage in showrooming”.

## 4 Results

The results of effect-size integration for each integrated construct in terms of the number of analyzed samples ( $k$ ), the total  $N$  of these samples, the reliability-adjusted, sample size weighted average correlation (RC), the lower ( $CI_{low}$ ) and upper limits ( $CI_{high}$ ) of its 95% confidence intervals, the  $Q$ -statistic,  $I^2$  statistic, and fail-safe  $N$  (FSN) to address the file-drawer problem are shown in Table 2.

**Table 2: Results of effect-size integration**

	$k$	$N$	RC	$CI_{low}$	$CI_{high}$	$Q$	$I^2$	FSN
<b>Customer-led drivers</b>								
Age	7	3721	-0.031	-0.254	0.200	279.388***	97.852	–
Gender	6	3225	-0.002	-0.093	0.089	29.818***	83.230	–
Income	5	2725	0.109***	0.072	0.146	3.011	0.000	34
Showrooming self-efficacy	8	3693	0.385***	0.276	0.485	91.622***	92.360	1130
Consumer innovativeness	4	1287	0.291***	0.165	0.408	17.674**	83.026	117
Online trust	3	1365	0.201	-0.183	0.531	92.099***	97.828	–
Attitude toward showrooming	5	1862	0.557***	0.456	0.637	28.288***	85.860	883
Social influence	4	1676	0.375**	0.157	0.559	61.107***	95.091	193
<b>Company-led drivers</b>								
Offline search value	4	1230	0.419***	0.225	0.581	44.814***	93.305	242
Offline service	4	1513	0.243	-0.071	0.513	125.893***	97.617	–
Channel integration	3	2148	0.327***	0.221	0.426	8.147*	75.450	107
Ease of use of online purchase	4	2097	0.357***	0.163	0.524	65.312***	95.410	325
Monetary savings	9	3544	0.361***	0.175	0.523	293.238***	97.270	978
Better assortment	3	1275	0.221**	0.063	0.386	17.639***	88.660	42

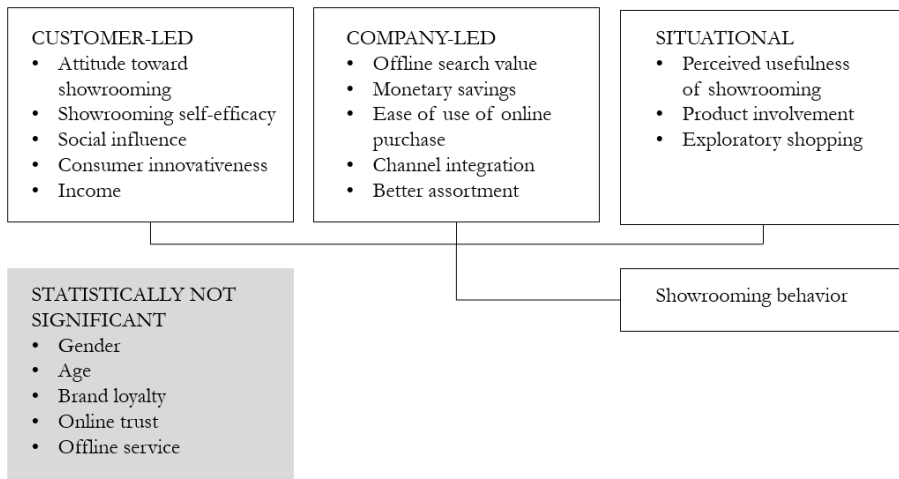
<b>Situational drivers</b>								
Perceived usefulness of showrooming	3	1794	0.537***	0.395	0.654	28.397***	92.960	459
Brand loyalty	4	1906	0.078	-0.113	0.264	49.471***	93.940	20
Product involvement	6	2464	0.320***	0.183	0.445	65.410***	92.360	424
Exploratory shopping	3	2480	0.207*	0.022	0.379	45.662***	95.620	81

Based on our analysis, 18 constructs have been commonly studied related to showrooming, and, of them, 13 constructs were found to drive showrooming behavior. Regarding customer-led drivers, we found that showrooming behavior positively correlated with income (RC = 0.109,  $p < 0.001$ ), social influence (RC = 0.375,  $p < 0.01$ ), showrooming self-efficacy (RC = 0.385,  $p < 0.001$ ), consumer innovativeness (RC = 0.291,  $p < 0.001$ ), and attitude toward showrooming (RC = 0.557,  $p < 0.001$ ). In contrast, the correlations with age, gender, and online trust were not statistically significant. Regarding company-led drivers, we found that channel integration (RC = 0.327,  $p < 0.001$ ), monetary savings (RC = 0.361,  $p < 0.001$ ), better assortment (RC = 0.221,  $p < 0.01$ ), the ease of use of online purchasing (RC = 0.357,  $p < 0.001$ ), and offline search value (RC = 0.419,  $p < 0.001$ ) all positively correlated with showrooming behavior. Interestingly, the correlation with offline service was not statistically significant. Regarding situational drivers, product involvement (RC = 0.320,  $p < 0.001$ ), exploratory shopping (RC = 0.207,  $p < 0.05$ ), and the perceived usefulness of showrooming (RC = 0.537,  $p < 0.001$ ) positively correlated with showrooming behavior, whereas the correlation with brand loyalty was not statistically significant. The statistically significant Q-statistics for the homogeneity test and I<sup>2</sup> statistics indicate heterogeneity across effect sizes for most of the relationships. Thus, further studies should test the moderating effects of these relationships.

## 5 Discussion and Conclusion

Although consumers' showrooming behavior has gained interest from IS and marketing researchers, there is no common consensus about the phenomenon and its main drivers. Therefore, in this study, we aimed to produce a comprehensive framework for the drivers of showrooming behavior. We conducted a meta-analysis, which is a useful way of drawing more consistent conclusions from prior and possibly contradictory results (Grewal et al., 2018). This meta-analysis includes results from 24 independent study samples from

studies published between 2017 and 2024. In total, these study samples included 12,129 respondents. To our best knowledge, this is the first meta-analysis concerning showrooming behavior. Therefore, this meta-analysis fills this research gap and answers Arora et al.'s (2017, 2022) and Holkkola et al.'s (2022a) calls for further research on drivers of showrooming behavior. By doing so, this study provides useful generalizations by identifying (1) what the main drivers of showrooming behavior are and (2) whether the drivers that seem contradictory in prior literature actually drive showrooming behavior. Based on our findings, we also make two additional observations concerning possible moderators and the applicability of the Technology Acceptance Model (TAM) (Davis, 1986). The findings of this study are summarized in Figure 1 and discussed below.



**Figure 1: Established framework of the drivers of showrooming behavior**

The theoretical implications of this meta-analysis are twofold. Firstly, we provide an established framework of the drivers of showrooming behavior presented above. The drivers are categorized as customer-led, company-led, and situational drivers according to Sahu et al.'s (2021) proposal. Within each category, the order of the drivers is determined according to the strength and statistical significance of their association with showrooming behavior. The strongest drivers are in line with prior quantitative showrooming studies that are presented in Appendix 1. Among the strongest drivers are attitude toward showrooming, the perceived usefulness of showrooming, and the ease of use of online purchase, which are also in line with the TAM model (Davis, 1986).

Secondly, this meta-analysis resolves how the conflicting drivers from prior studies relate to showrooming behavior. These conflicting drivers are gender, age, income, brand loyalty, online trust, offline service, and exploratory shopping. Additionally, income's positive effect on showrooming behavior (Fang et al., 2021) but statistically not significant effect on multichannel shopping (Jo et al., 2020) have raised questions. The statistically not significant drivers found in this meta-analysis are presented in the grey box in Figure 1. Although Holkkola et al. (2022a) suggest that women are more probable showroomers, gender is not associated with consumers' showrooming behaviors, in line with Dahana et al. (2018). Also, although younger age has been suggested to increase one's showrooming behavior (Kolehmainen, 2018; Holkkola et al., 2022a), we find that age has no effect either. This is again in line with Dahana et al. (2018).

Further, we find that customers' brand loyalty is not associated with their showrooming behavior. This is in line with Burns et al. (2018) and refutes the opposing effects proposed by Quach et al. (2022) and Borges (2018). Regarding consumers' online trust, its association with showrooming behavior is statistically not significant although Arora and Sahney (2018) suggested that online trust increases showrooming. Our finding is in line with Kolehmainen (2018) and Quach et al. (2022). Regarding offline service, the positive but statistically not significant association is in line with Kang (2018). Thus, our meta-analysis refutes Burns et al.'s (2018) suggestion that a negatively perceived offline service increases showrooming behavior. Our finding that offline service does not associate with showrooming probes one to think why the desire for customer service as well as its availability and quality is not connected to showrooming behavior. Unlike other conflicting drivers, exploratory shopping was found to drive showrooming behavior. This is in line with Quach et al. (2022) and supports Konuş et al.'s (2008) findings regarding multichannel shopping.

The managerial insights provided by this study help offline retailers develop strategies to prevent competitive showrooming. For them, company-related drivers are not easily managed because it is difficult to compete against online retailers in terms of monetary savings and wide assortment. Also, as offline service and brand loyalty do not decrease showrooming behavior, it seems that new means are needed to retain the potential showroomers loyal. By recognizing the customer segments and situations prone to showrooming,

retailers can better target their measures. Also, high product involvement increases showrooming behavior, and we believe this is because consumers want to have more information about the product and different options when shopping for high-involvement products. Thus, sufficient product information provided by the store is recommended for preventing competitive showrooming. This could also diminish one of the strongest drivers of this framework: the perceived usefulness of showrooming behavior.

This study has certain limitations. Despite the conducted SLR, it is possible that some samples, especially those of unpublished works and dissertations, have inadvertently been left outside this meta-analysis. In addition, the drivers have been analyzed separately, and thus some drivers might not necessarily have been found to have a statistically significant effect on showrooming behavior if analyzed together in the same model. Also, regarding the socio-demographic drivers, it is worth noting that the effects must be interpreted with caution as typically most studies were not representative samples of any target population. Future research should investigate the potential moderators for the identified drivers. For instance, the product type's moderating effect could be investigated. Empirical future research could study novel showrooming drivers and platforms. For instance, consumers' sustainability attitudes could be studied as a new driver for showrooming behavior. According to our SLR, sustainability attitudes have not been studied as drivers of showrooming behavior, although responsible consumers are suggested to search for sustainability information online (Holkkola et al., 2022b; Wilska et al., 2023). Also, future research should study which types of information and platforms would retain the potential showroomers in the same retailers' offline or online channels. For instance, exploratory shopping via different in-store technologies (Paananen et al., 2023), immersive technologies, online showrooms, and metaverse environments could be studied.

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### Appendix 1: Selected samples and constructs for the meta-analysis

	Paper	Selected constructs
1	Holkkola et al. (2023b)	self-efficacy, age, gender, income
2	Arora & Sahney (2018)	sales staff assistance (offline service), feel of the product (offline search value), socialization (social influence), subjective norm (social influence), online trust, perceived behavioral control (showrooming self-efficacy), deals and discounts (monetary savings), cost savings (monetary savings), better product assortment (better assortment), ease of use of online purchase, perceived usefulness of showrooming, attitude toward showrooming, perceived integration (channel integration)
3	Fang et al. (2021)	information integration (channel integration), age, gender
4	Li et al. (2018)	cross-channel integration (channel integration), age, gender, income
5	Liu & Liu (2024)	brand loyalty
6	Shankar et al. (2021)	attentiveness convenience (offline service), product involvement
7	Dahana et al. (2018)	product involvement, age, gender
8	Rajkumar et al. (2021)	smart shopper feelings (consumer innovativeness), enhanced product evaluation (offline search value), monetary savings
9	Chimborazo-Azogue et al. (2022)	attitude toward showrooming
10	Quach et al. (2022)	flow (exploratory shopping), reversed privacy risk (online trust), brand loyalty
11	Huh & Kim (2022)	consumer innovativeness
12	Kang (2018)	desire for social interaction (offline service), price comparison (monetary savings), assortment seeking (better assortment)
13	Borges (2018)	brand loyalty, product involvement, age, gender, income
14	Burns et al. (2018)	desire for customer service (offline service), brand loyalty
15	Kolehmainen (2018)	reversed security risk (online trust), perceived behavioral control (showrooming self-efficacy), attitude toward showrooming
16	Chokkannan et al. (2023)	product involvement, age
17	Goraya et al. (2022), sample 1	consumer empowerment (consumer innovativeness), perceived assortment (better assortment), channel integration
18	Goraya et al. (2022), sample 2	consumer empowerment (consumer innovativeness), perceived assortment (better assortment), channel integration
19	Arora et al. (2020)	in-store search value (offline search value), showrooming self-efficacy, attitude toward showrooming, product involvement
20	Arora et al. (2017)	perceived search benefits (offline search value), subjective norm (social influence), showrooming self-efficacy, perceived behavioral control (showrooming self-efficacy), attitude toward showrooming
21	Chimborazo-Azogue et al. (2021)	subjective norm (social influence), ease of use of online purchase, perceived usefulness of showrooming, product involvement

22	Herrero-Crespo et al. (2022)	exploratory information search (exploratory shopping), exploratory acquisition (exploratory shopping), ease of use of online purchase, perceived usefulness of showrooming
23	Holkkola et al. (2022a)	age, gender, income
24	Makkonen et al. (2022)	self-efficacy