

# A SYSTEMATIC REVIEW OF STUDIES ON FLOW EXPERIENCE FROM 2010-2022. INSIGHTS AND DIRECTIONS FOR FUTURE RESEARCH

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## ABSTRACT

**Purpose:** This paper presents a systematic literature review on flow experience to identify the theoretical underpinnings, outcomes, antecedents, and empirical dimensions of the phenomenon used in social commerce empirical models.

**Research Design/ Methodology:** The PRISMA approach was used to identify relevant articles published between 2010 to 2022 March in the Web of Science database. Twenty-nine (29) articles were found to fulfill the selection criteria and were included in the present review.

**Results/ Findings:** Notably, a review of the selected articles found that 1) Stimulus-Organism-Response (SOR) model was the most popularly used underpinning theory; 2) Social commerce intention, adoption, and continuance were used quite evenly as the outcome of flow experience; 3) interactivity was the most applied antecedent of flow experience; and 4) the majority of the articles (24 out of 29) employed a multidimensional measure of flow experience with enjoyment, immersion, absorption, concentration, and time distortion being the most applied dimensions.

**Originality:** Unlike prior review studies on flow experience, the focus of the present study was on the social commerce context. Contributing to flow and social commerce literature, the study systematically reports how flow experience is conceptualized and applied in the social commerce context with special attention to underpinning theories, outcomes, antecedents, and dimensionality. By highlighting the ways to apply flow experience in the apps, the review provides specific useful insights to researchers and practitioners.

**Keywords:** *Flow Experience; Flow Theory; Social Commerce; Systematic Literature Review*

**Paper type:** Research Paper

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## INTRODUCTION

The notion of flow experience as well as the theory of flow has been highlighted in the context of e-shopping, users' continuance intention to social platforms, mobile shopping, and social commerce intention (Chang & Zhu, 2012; Chen et al., 2018; Huang Liao, 2017; Molinillo et al., 2018; Rahman et al., 2020). As Novak et al. (2000) point out, when users are involved in an online environment, they have a strong feeling of flow, which contributes to a better user experience. As a result, there has been sustained interest in flow research (Bao & Yang, 2022; Choi et al., 2007; Finneran & Zhang, 2003; Molinillo et al., 2018) in the online context over the years. However, comparatively less attention has been paid to the systematic analysis of the applications of flow in the social commerce context which thus merits further research.

The significance of flow as an influential antecedent in social commerce context has been widely acknowledged (Bao & Yang, 2022; Tian & Lee, 2022; Liu et al., 2016; Molinillo et al., 2018; Rahman et al., 2020; Tuncer, 2021; Zhang et al., 2014). However, despite academics' efforts to systematically review studies on the notion of flow (Bölen et al., 2021; deMatos et al., 2021; Perttula et al., 2017), the application of flow experiences in the social commerce literature is relatively under-researched. In line with recommendations in literature (e.g, Pelet et al., 2017; Tse et al., 2022) and published research (for example, deMatos et al., 2021; Lim & Rasul, 2022), this study has a dual focus, comprising a theoretical as well as a domain-based review whereby the theories, outcomes, antecedents, and dimensionality used are systematically analyzed to obtain a better understanding of flow application in the social commerce industry (Kalia et al., 2022). As suggested by researchers (deMatos et al., 2021), there is a significant gap in research on the concept of flow in many disciplines as scholars hitherto have been more interested in the study of flow across a spectrum of disciplines. Therefore, the present review sought to address the gap by analyzing the conceptualization and application of flow in social commerce context with special attention to underpinning theories, dimensionality, antecedents, and outcomes. The present review specifically aimed to address the four research questions delineated below:

RQ1: What is the theoretical basis used in the flow framework?

RQ 2: What are the outcomes of flow e?

RQ3: What are the antecedents of flow?

RQ4: What is the dimensionality used in flow?

This study was organized in the following way First, it provided the background to and rationale for a review of studies on the phenomenon of flow in social commerce. Then it presents the research question and the research methodology delineating the systematic method adopted for including different studies in the study. Subsequently,

it presents the key findings in relation to the outlined research questions. Then, it provides the conclusions to the review and offers suggestions for future research.

## RESEARCH METHODOLOGY

This systematic review was conducted by adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) reporting checklist (Liberati et al., 2009). PRISMA was chosen above other existing protocols because of its comprehensiveness, its use in a variety of disciplines throughout the world outside of medicine, and its ability to improve uniformity among reviews (Gera et al., 2022; Kruzan et al., 2022; Tang et al., 2021) This research followed the PRISMA guidelines for conducting the review by following the four stages of identification, screening, eligibility, and inclusion.

The literature search process was carried out on the Web of Science (WoS) database. WoS is widely acknowledged as most robust database bibliographic database (Auger, 2008; Chang et al., 2021; Fink, 2019). Furthermore, multiple past reviews show that researchers can depend on WoS database due to the robustness of its content and publications as well as the rigorous review procedure it follows (Gera et al., 2022; Kalia et al., 2022). The majority of researchers have chosen the WoS database over others for systematic review analysis since it includes highly reputable publications from a variety of categories. Its Journal Citation Report (JCR) is a broadly recognized metric of research impact among academics (Birkle et al., 2020; Chang et al., 2021; Gomezelj, 2016; Ingale & Paluri, 2020; Rialti et al., 2019; Ruggeri et al., 2019) and provides a database of citations, which is an authoritative resource for evaluating publications (Milian et al., 2019).

To determine the final search keywords for the literature study, several preliminary searches to acquire an overview of the literature were conducted. Advanced search query builder available in WoS database was utilized in order to perform the preliminary search and final keyword search. The final search terms were applied specifically to the field of 'topic' that covers searchers' title, abstract, author keywords and keywords plus in order to ensure the search terms coverage are relevant and accurate for this research. After several preliminary searches, the search process was finalized on 26 April 2022 and WoS provided 211 results from WoS Core Collection. The final search strings and Boolean operators used were: (((TS=(flow)) AND TS=(social commerce)) AND TS=(flow OR optimal experience)) AND TS=(social commerce OR social e-commerce).

### *Inclusion and Exclusion Criteria*

The evaluation focused on publications that fulfilled the inclusion criteria but did not fall within the exclusion criteria. In this research, publications met the inclusion criteria if they a) were published between 2000 and 2022 March and b) were published

in the English language c) within peer-reviewed journals d) which could be assessed in full text and e) applied the concept or theory of flow in the context of social commerce. The year of 2000 was selected as the starting point as there was a surge in interest in flow theory among academics and researchers globally after the 2000s (Ozkara et al., 2017). The concept of 'social commerce' was first introduced by Yahoo in 2005 and rapidly became a strategy for big online businesses like Amazon, Groupon, and eBay to add value to commercial entities through the application of customer involvement (Wang & Zhang, 2012).

### Screening Process

The PRISMA flow chart of the research selection process comprised four major stages: identification, screening, eligibility verification, and final inclusion. The screening step consisted of three major stages: "inclusion decision based on inclusion/exclusion criteria," "inclusion decision based on title and keywords," and "inclusion decision based on speed reading." Finally, full-text articles were assessed for eligibility verification and the 'final selection' was pooled.

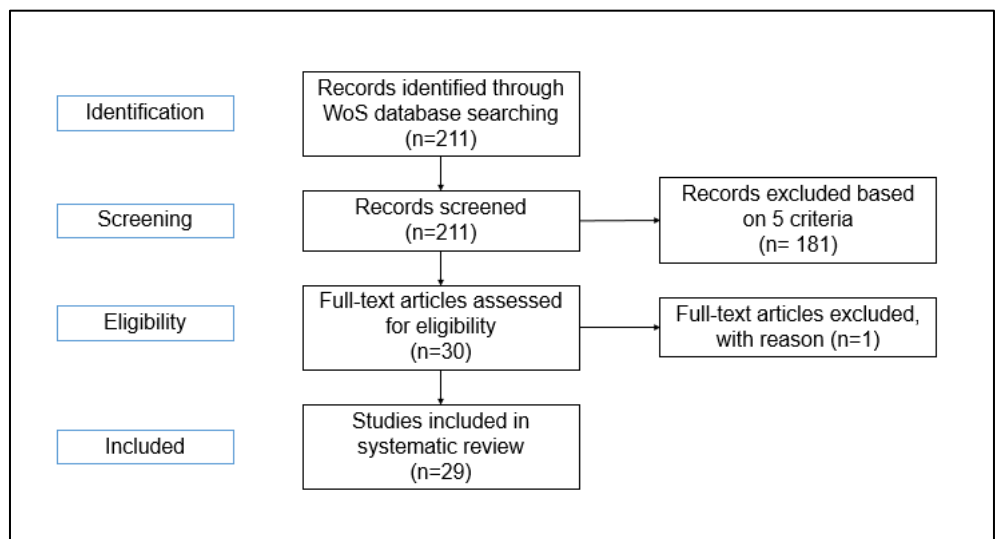


Figure 1: Flow chart of study selection procedure using PRISMA approach

As summarized in Figure 1, in the initial search, 211 results were collected based on the keywords applied in WoS database. Then, five inclusion criteria were formed in order to filter the relevant studies for this research. The first inclusion criterion included the studies that were published between the year 2000 to 2022. After manual coding by applying filtering function in MS Excel, four results were excluded as the papers were published in 1993, 1995, 1996 and 1998. Then, 11 results were filtered out because the papers were published in non-English publications such as Portuguese, Chinese, Spanish, German and Italian papers. In addition, 58 publications were excluded because they were published in book chapter, proceedings and editorial materials. One retracted publication was excluded as well. Next, nine papers were

removed as full-text articles were not accessible through WoS database. Subsequently, the title, keywords, abstracts were checked to assess its relevance to the research topic. As a result, 98 studies were excluded as the research areas did not apply flow in the context of social commerce. Consequently, 30 articles were qualified to be included for the systematic review process.

The initial literature search yielded 211 results, which were filtered down to 30 articles by applying the five inclusion and exclusion criteria indicated in the preceding section. As an outcome, only peer-reviewed journal articles were analyzed and 181 items were not included owing to five exclusion criteria. To exclude unrelated content, all of these articles were further filtered based on their full-text articles. Publications that were not conducted within the scope of this research or that employed flow beyond the context of social commerce were eliminated as a result of this step. For instance, one article was eliminated as it did not fulfil the criterion of applying flow in the social commerce context even though it mentioned the terms 'flow' and 'social commerce' in the abstract. Finally, the total number of identified articles after final selection was 29.

## **DATA ANALYSIS AND RESULTS DISCUSSION**

### *Key Theoretical Perspectives Used with Flow Concept/ Flow Theory*

For the first research question, on the theoretical basis of flow framework within the social commerce context, a total of 24 theories was found (see Table 1). That is, flow theory or flow concept was utilized in conjunction with different theories and models, the majority of which were derived from the social behavioural studies. The SOR Model was the most explored theoretical lens, with 13 publications. Moreover, other widely applied theories were the Unified Theory of Acceptance and Use of Technology (UTAUT), Technology Acceptance Model (TAM), and Social Presence Theory, with six, five, and five articles, accordingly. This outcome was expected given the prevalence of behavioural theories in the field of information systems (Bölen et al., 2021).

### *Outcome of Flow*

To answer the research question two, the articles were checked on its final outcomes, whether it was on the intention, adoption, or continuance stage as the outcome variables. Some publications focused on two or three stage outcome variables, resulting in the number of articles exceeded 29 which had been included for final selection. Table 2 and Appendix A1 indicated the research stream classification of the studies that were assessed. As can be seen from Table 2, it is clear that extensive research has been undertaken on users' social commerce intentions. With 15 reviewed papers, the major study stream was focusing on users' intentions. Aside from that, the study streams on social commerce adoption and continuance had also gained a substantial amount of research attention, with each receiving ten publications. In these study streams, researchers focused on explaining antecedents that influenced

potential users' decision to adopt social commerce, as well as the users' continuance behavioral patterns within the framework of flow concept or flow theory.

Some researchers categorized the outcomes of flow based on perspectives such as affective, conative, and cognitive (Bölen et al., 2021). In this research, positive attitude, enjoyment, loyalty, satisfaction, sPassion, and affirmation were studied as affective outcomes of flow. In addition, social commerce intention, social commerce adoption, purchase intention, sWOM intention, return intention, repurchase intention, and continuance intention were commonly examined as the conative outcomes of flow. Furthermore, perceived value and hedonic value were investigated as the cognitive outcome of flow. It is worth highlighting that there is a research gap to distinguish the impact of flow on discontinuance behavior of the users.

*Table 1: Theory/Model Used with Flow Concept/Theory*

Theory/Model	#
Stimulus-Organism-Response (SOR) Model	13
Unified Theory of Acceptance and Use of Technology (UTAUT)	6
Technology Acceptance Model (TAM)	5
Social Presence Theory	5
Social Exchange Theory	4
Theory of Reasoned Action (TRA)	3
Social Support Theory	3
Innovation Diffusion Theory (IDT)	3
Uses and Gratifications Theory (UGT)	3
Theory of Planned Behaviour (TPB)	2
Expectation Confirmation Theory	2
Social Interaction Theory	2
Social Network Theory	1
Value-based Adoption Model (VAM)	1
Social Identity Theory (SIT)	1
Social Cognitive Theory	1
Self-Presentation Theory	1
Trust Transfer Theory	1
Service-Dominant (S-D) Logic Theory	1
Sternberg's Triangular Theory of Love	1
Social Capital Theory	1
Self-Congruence Theory	1
Cognitive Dissonance Theory	1
Service Ecosystem Theory	1

Table 2: Distribution of Studies by Outcome of Flow

No.	Research Stream/ Outcome of Flow	#
1	Social Commerce Intention	15
2	Social Commerce Adoption	10
3	Social Commerce Continuance	10

### *Antecedents of Flow*

To answer research question three, antecedents of flow used by the 29 articles were reviewed (see Table 3 and Appendix A1) as well as the detailed incorporated findings that investigated the antecedents of flow. A total of 31 antecedents of flow were investigated in the publications included in this review. Interactivity was the most studied antecedent of flow with six articles included this variable used in the relevant frameworks. Tian and Lee (2022), for instance, demonstrated how social media interactivity can favorably affect perceived value, immersive experience, and continued purchase intention. Additionally, Li et al. (2021) came to the conclusion that user-website interaction, user-user interaction, and user-social friend interaction can greatly affect flow experience, leading to impulsive buying and repetitive purchases in a social commerce setting. Besides that, Zhang et al. (2014) found that perceived interactivity was the significant factor that impacted flow and flow can lead to social commerce intention.

As shown in Table 3, researchers also studied trust, information quality, system quality, perceived social presence, sPassion, telepresence, perceived personalization, perceived similarity, perceived expertise, perceived familiarity, hedonic motivation and others as the antecedents of flow. Previous research investigated the antecedents of flow in the social commerce context and reported similar results. For example, Liu et al. (2016) concluded that the three environmental stimuli such as perceived expertise, perceived similarity, and perceived familiarity were influential antecedents of flow experience which will eventually lead to positive behavioral outcome such as purchase intention in social platforms.

Nevertheless, the findings were different in research findings summarized by Zhou (2020), indicated that not all interactivity dimensions significantly influence flow. The results indicated that four factors of social interaction, which included perceived control, perceived personalization, perceived expertise and perceived familiarity, had significant effects on flow and eventually led to purchase intention and social sharing intention. However, two dimensions: perceived responsiveness and perceived similarity were found insignificant in affecting flow experience.

## *Dimensions of Flow*

On the dimensionality of flow (Research Question 4), as can be seen in Table 4, most articles (24 out of 29) used multidimensional conceptualization of flow. Csikszentmihalyi (1990) theorized the flow notion in nine dimensions which are challenge–skill balance, clear goals, unambiguous feedback, action-awareness merging, concentration on task, sense of control, loss of self-consciousness, temporal transformation, and autotelic experience. In this research, eleven distinct dimensions were found being used in the 29 articles reviewed. The four most frequently used dimensions of flow included enjoyment, immersion (absorption), concentration, and time (temporal) distortion.

*Table 3: Distribution of Articles by Antecedents of Flow*

Antecedents of Flow	#
Social Media Interactivity/ Interactivity/ Perceived Interactivity	6
Trust	4
Information Quality	3
System Quality	3
Perceived Social Presence	3
Passion	2
Telepresence	2
Perceived Personalization	2
Perceived Similarity	2
Perceived Expertise	2
Perceived Familiarity	2
Hedonic Motivation/ Hedonic Value	2
Perceived Value	1
Usability	1
Challenge	1
Skill	1
Service Quality	1
Social Capital Affinity	1
Visibility	1
Guidance Shopping	1
Metavoicing	1
Perceived Control	1
Perceived Responsiveness	1
Perceived Sociability	1



Social Support	1
Performance Expectancy	1
Effort Expectancy	1
Social Influence	1
Aesthetic Experience	1
Relational Experience	1
Emotional Experience	1

According to Hoffman & Novak (1996), flow measurement can be classified as unidimensional or multidimensional. According to the Table 4, majority of the articles employed multidimensional flow in their framework. Only five articles (Article 2, 4, 21, 22, and 24) applied unidimensional flow in their research (Baker et al., 2019; Herrando et al., 2017; Huang, 2016; Liao et al., 2022; Xie et al., 2020). The article number listed in Table 4 was referenced to the publication title in Appendix A1. There were expected variances in flow dimensions among the studies that used a multidimensional view of flow. For example, Chen et al., (2018) included immersion (absorption), concentration, and time (temporal) distortion whereas Liu et al. (2016) studied enjoyment, immersion (absorption), interaction, and exploratory behavior. In short, researchers viewed flow to be multidimensional or unidimensional construct.

The most applied dimension of flow was enjoyment (18 articles). This is followed by 17 articles that adopted the dimension of immersion or absorption. The terms ‘immersion and ‘absorption’ were often used interchangeably in the past studies. Other than that, 13 articles investigated concentration as the dimension of flow, nine papers studied time or temporal distortion, five papers examined curiosity, four papers used interaction, three papers researched on engagement and exploratory behavior each, and two past studies applied sense of control. Lastly, only an article studied clear goal and challenge-skill balance each as the dimension of flow.

*Table 4: Distribution of Articles by Dimensions of Flow*

Dimension of Flow/Article No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total	
Enjoyment	✓			✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓					✓	✓	✓	✓	✓	18
Immersion/Absorption	✓		✓	✓				✓		✓	✓	✓	✓	✓	✓	✓	✓			✓				✓	✓		✓	✓	✓	✓	17
Concentration			✓				✓	✓	✓		✓	✓				✓			✓	✓	✓			✓		✓	✓				13
Time /Temporal Distortion			✓		✓		✓	✓	✓		✓					✓					✓										9
Curiosity	✓					✓				✓				✓															✓	5	
Interaction	✓												✓				✓							✓							4
Engagement			✓															✓				✓									3
Exploratory Behavior													✓		✓		✓	✓													3
Sense of control										✓																✓					2
Clear goal						✓																									1
Challenge-skill balance											✓																				1

## RECOMMENDATIONS

Based on the findings, the research opportunities for further investigation were highlighted in this section. Future study directions were identified, including the

examination of new research fields or the understudied antecedents, outcomes, and dimensions of flow. Based on the findings of this literature analysis, researchers and practitioners are offered some suggestions for further investigation.

#### *Suggestion 1*

Future studies should consider including personality traits as the drivers of flow experience which will impact flow state and outcomes of flow.

Different facets of personality were taken into consideration as the drivers of flow, as according to deMatos et al. (2021) on the concept of flow experience in the context of tourism. The propensity to experience flow, also known as flow proneness, has also been associated to a variety of personality traits, including autotelic personality and internal locus of control, both of which have been shown to influence flow experience. However, it was noticed that personality factors were undervalued in the existing articles that focused on flow experience in the context of social commerce. Past research attempted to determine the role of personality traits in explaining individual preferences for social media use, often focused on the Big Five personality traits (Marengo et al., 2020). As a result, researchers should include personality traits as a predictor of user behavior, an antecedent of flow and the effects should be evaluated more precisely, particularly in the context of social commerce, where people seek intrinsically flow experiences.

#### *Suggestion 2*

Further research is needed to distinguish and elaborate on the motivations that will yield or impact flow experience for social commerce users and how they affect social commerce performance.

The reviews supported the significance of motivations in affecting social commerce activities, researchers suggested that future study should consider incorporating both extrinsic and intrinsic motivation when investigating mobile commerce user behavior and assess their respective influence on user behaviors (Zhou et al., 2010). Prior research investigated the impact of live streaming commerce technology on purchase intentions (Liao et al., 2022) as well as the motivation of users to use live streaming in terms of its benefits (Zhao & Bacao, 2021). Other researchers have looked at the motivations, values, and antecedents of consumer behavior using different theoretical perspectives such as UGT (Ming et al., 2021; Zhang et al., 2014).

Previous researchers established the research model of virtual user experiences for the social commerce environment, including social support, social presence, and flow, and investigated the functions of these three virtual experiences in encouraging customer engagement. This framework was proposed to be effective for investigating consumer behavior in a social commerce context (Zhang et al., 2014). Therefore, researchers and managers should have a better knowledge of how various motivations influence flow experience and eventually affects the adoption and usage

of social commerce platforms, as well as how these motivations might sustain their continuance intention and actual behaviors.

### *Suggestion 3*

Future study should evaluate a broader set of flow outcomes when examining the social commerce experience and performance.

Flow outcomes entail different aspects including the positive and negative consequences (deMatos et al., 2021). This review study found that most articles only acknowledged the positive outcomes of flow such as positive attitude (Baker et al., 2019; Kim et al., 2020), enjoyment (Chen et al., 2018), loyalty (Demirkan, 2015; Herrando et al., 2019; Zhou et al., 2010), engagement (Algharabat & Rana, 2021; Demirkan, 2015; Zhang et al., 2017), satisfaction, and affirmation (Barker et al., 2015). However, in the selected publications, none of them looked into the negative outcomes of flow experience. This research gap should be enhanced as how deMatos et al. (2021) suggested.

According to the findings, the flow state might potentially produce negative consequences such as feeling of guilt and fatigue. For example, it is valuable to examine the relationship between flow state and social commerce discontinuances such as discontinuation, regressive discontinuance, switching, quitting, or replacing. This necessitates further research on the role of flow in the discontinuance of social commerce usage in the future (Bölen et al., 2021). Hence, a more comprehensive investigation of the outcomes (both positive and negative outcomes) should be considered in order to have a better understanding of its role in the social commerce context.

## **CONCLUSION**

Although the current review identified key trends and research directions of flow concept or flow theory in social commerce research, the study was constrained in a number of ways. First, this study examined only English journal articles from the WoS database, although this may be seen as a trade-off for the review to retain a high-quality content in the findings. Future systematic literature reviews may consider papers published in a range of languages or academic databases such as Emerald Insight or Scopus. Second, while this study covered papers published in 2022, the number of papers included in the review was restricted because the search was completed in April of 2022. According to the publication trend delineated in the findings, research in the social commerce context is expected to increase in the years ahead. All articles published in 2022 meeting the inclusion criteria may be included in future research.

Third, the scope of present research was limited to peer-reviewed journals to achieve the research objectives. In future reviews, such articles may serve as a trajectory that broadens to include research available in conference proceedings and book chapters which would allow the survey to highlight any critical information overlooked in the

present research. Fourth, the factors associated with flow in the examined publications were not subject to meta-analysis in this study. This precludes an in-depth investigation of the relationship strength differences among the antecedents, dimensions, and outcomes of flow. Future research may strive to conduct a meta-analysis on this research topic.

Despite these limitations, this study made important contributions by presenting the developing research trends in flow concept or flow theory applied in social commerce context underpinned by theories and models, theoretical framework, and conceptual classification. The primary goal of this study was to present a comprehensive systematic literature evaluation of the current research state of flow experience in the context of social commerce. To attain this purpose, four research questions were developed and findings from a systematic literature review were analyzed to answer these questions. Given the fact that there has been multiple studies in this area, the findings indicated that the approach of understanding the viewpoints of users and brands is not fully established. There is much potential within future research for understanding and forecasting users' behavior.

The expanding number of publications published in the recent decade, in particular, highlighted the significant attention devoted to flow concepts in social commerce settings. The technological advancements in recent years can explain the increase in published articles. For instance, augmented reality technologies have revolutionized the way people engage with one another all over the world via social platforms, while social media and e-commerce innovations have altered how individuals and businesses communicate and exchange value. The past papers performed research in these technological contexts. Due to technological breakthroughs, individuals are linked via social media and the trends in e-commerce technologies have a major influence on online buying.

Social commerce is transforming technology and users' experience as a whole. Social commerce is growing in popularity, and companies striving to cope with the fast growth of platforms and strategies. As they compete for audiences and commercials, the major social networks are all investing heavily in commerce technologies. From TikTok Commerce to Instagram Checkout, the social platforms get users to begin buying in-app and enjoy seamless experience (Business Insider, 2021). As a result, this study suggests that future researchers may consider applying the theoretical lens of flow experience to investigate the relationship between users' behavior and emerging innovative technologies as well as social commerce features such as intelligent automated bot checkouts, shoppable links and artificial intelligence (AI).

Overall, the findings of this systematic review may be utilized by practitioners to enhance the integration of social commerce features, which would primarily improve the flow experience among users and reduce cognitive dissonance when adopting social commerce platforms. The insights may then be utilized by the institutions to design marketing strategies and marketing campaigns aimed at enticing potential social commerce platform users. Aside from that, the results can serve as the guide

for academics in understanding the present state of knowledge and contribute to directions for future research in the area of social commerce marketing.

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## APPENDIX

### *Conceptual Classification*

Article No.	Authors and	Research Stream /	Antecedents of Flow	Theory/Model
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	Publication Year	Outcome of Flow		
1	Molinillo et al. (2018)	Social Commerce Intention	-	Social Support Theory,
				Stimulus-Organism-Response Model,
				Social Exchange Theory,
				Theory of Reasoned Action (TRA),
				Theory of Planned Behaviour (TPB),
				Technology Acceptance Model (TAM)
2	Xie et al. (2020)	Social Commerce Intention,	-	UTAUT,
		Social Commerce Continuance		Social Network Theory,
				Expectation Confirmation Theory
3	Chen et al. (2018)	Social Commerce Intention	-	Value-based Adoption Model (VAM),
				Expectation Confirmation Theory,
				Social Identity Theory (SIT)
4	Baker et al. (2019)	Social Commerce Adoption	Perceived Social Presence, Telepresence	Social Presence Theory,
				UTAUT,
				Theory of Reasoned Action (TRA),
				Technology Acceptance Model (TAM)
5	Tian & Lee (2022)	Social Commerce Continuance	Social Media Interactivity, Perceived Value	Stimulus-Organism-Response Model

6	Demirkan (2015)	Social Commerce Continuance	-	-
7	Herrando et al. (2019)	Social Commerce Intention,	Usability,	Stimulus-Organism-Response Model
		Social Commerce Continuance	sPassion	
8	Li et al. (2021)	Social Commerce Adoption,	User-Website Interaction, User-User Interaction, User-Social Friends Interaction	Stimulus-Organism-Response Model,
		Social Commerce Continuance		Social Interaction Theory,
				Social Presence Theory,
				Social Exchange Theory
9	Kim et al. (2020)	Social Commerce Continuance	Challenge, Skill, Interactivity, Information Quality, System Quality	Technology Acceptance Model (TAM)
10	Rahman et al. (2020)	Social Commerce Intention,	-	Social Presence Theory,
		Social Commerce Adoption		UTAUT,
				Theory of Reasoned Action (TRA),
				Theory of Planned Behaviour (TPB),
				Technology Acceptance Model (TAM),
				Innovation Diffusion Theory,
				Social Cognitive Theory
11	Barker et al. (2015)	Social Commerce Adoption	Social Capital Affinity	-

12	Tuncer (2021)	Social Commerce Intention	Visibility, Guidance Shopping, Metavoicing	Stimulus-Organism-Response Model
13	Zhou (2020)	Social Commerce Intention	Perceived Control, Perceived Responsiveness, Perceived Personalization, Perceived Similarity, Perceived Expertise, Perceived Familiarity	Stimulus-Organism-Response Model,
				UTAUT,
14	Zhang et al. (2014)	Social Commerce Intention	Perceived Interactivity, Perceived Personalization, Perceived Sociability, Social Support, Social Presence	Social Exchange Theory
				Stimulus-Organism-Response Model,
				Self-Presentation Theory,
				Uses and Gratifications Theory
15	Algharabat & Rana (2021)	Social Commerce Adoption	Community Trust	Social Presence Theory,
				Social Support Theory,
				Trust Transfer Theory,
				Service-Dominant (S-D) Logic Theory
16	Herrando et al. (2018)	Social Commerce Adoption	sPassion	Stimulus-Organism-Response Model
17	Liu et al. (2016)	Social Commerce Intention	Perceived Expertise, Perceived Similarity, Perceived Familiarity	Stimulus-Organism-Response Model
18	Goyal et al. (2021)	Social Commerce Adoption,	-	Social Support Theory,

		Social Commerce Continuance,		Social Presence Theory,
		Social Commerce Intention		Trust Transfer Theory
19	Ming et al. (2021)	Social Commerce Adoption	Social Presence Of Live Streaming Platform, Social Presence Of Viewers, Social Presence Of Streamers, Telepresence, Consumers Trust	Stimulus-Organism-Response Model,  Uses and Gratifications Theory
20	Zhao & Bacao (2021)	Social Commerce Intention	Performance Expectancy, Effort Expectancy, Social Influence, Hedonic Motivation, Trust	UTAUT,  Innovation Diffusion Theory
21	Herrando et al. (2017)	Social Commerce Adoption	-	Sternberg's Triangular Theory of Love
22	Huang (2016)	Social Commerce Adoption	-	Stimulus-Organism-Response Model,  Social Capital Theory
23	Lee & Kim (2017)	Social Commerce Continuance	Information Quality, System Quality, Service Quality, Hedonic Value	Uses and Gratifications Theory
24	Liao et al. (2022)	Social Commerce Intention	Interaction Orientation	Stimulus-Organism-Response Model,  Social Interaction Theory
25	Vazquez et al. (2021)	Social Commerce Intention	Aesthetic Experience, Relational Experience, Emotional Experience	Stimulus-Organism-Response Model

26	Zhou et al. (2010)	Social Commerce Continuance	Information Quality, System Quality, Trust	Technology Acceptance Model (TAM),
				Innovation Diffusion Theory,
				UTAUT
27	Islam et al. (2021)	Social Commerce Intention	-	Self-Congruence Theory
28	Nandi et al. (2021)	Social Commerce Continuance	Perceived Interactivity	Cognitive Dissonance Theory
29	Zhang et al. (2017)	Social Commerce Intention	-	Service Ecosystem Theory