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222. THE IMPACT OF SOCIAL COMMERCE (SALES THROUGH STREAMS) ON IMPULSIVE PURCHASING BEHAVIOR

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Annotation. Live-stream shopping on social media is presented as a factor that intensifies impulsive consumer behavior. The role of modern IT tools – such as recommendation algorithms and real-time notifications—in increasing the likelihood of unplanned purchases is emphasized. Examples of platform strategies that create urgency and heighten emotional engagement are provided. The potentially manipulative nature of these mechanisms and the ethical risks associated with them are examined. The need for more responsible digital platform design to reduce unnecessary consumer spending is highlighted.

Keywords. Social commerce, live stream shopping, impulsive buying, IT technologies, recommendation algorithms, design, real time interaction, data manipulation, digital platforms, consumer behavior.

The rapid development of social commerce in recent years has fundamentally transformed the structure of the digital economy, turning online platforms into complex technological ecosystems built on recommendation algorithms, real time analytics, and interactive streaming technologies. What once appeared to be a simple combination of online stores and social networks has evolved into a highly optimized environment designed to influence user behavior.

The advertising model used by network switches for monetization is already quite common. However, advertisers always face the problem of losing some customers when they click through from a branded social media page to a company's website for purchases. Selling within social networks has become a viable and active option for advertisers. It's worth noting that the term "social commerce" was coined by Yahoo! in 2005 and was associated with the socialization of existing sales tools, for example, through the ability to share content between customers and creating wish lists.

Modern IT infrastructures not only expand the possibilities of online retail but also significantly increase consumers' susceptibility to impulsive purchases, highlighting the need to analyze the mechanisms underlying this phenomenon [1]. Livestream commerce has become not merely a new sales format but a space where human psychological characteristics and technological tools interact in such a way that the boundary between voluntary choice and manipulation becomes increasingly blurred.

The rise of mobile internet access among young people aligns well with their tendency toward impulse buying. Younger generations are more likely to make impulse purchases (according to researchers, 35 % of purchases are impulse purchases for customers aged 18 to 34 and 15 % for those aged 65+). Figure 1 presents the statistics of impulsive purchases.



Figure 1 – Impulsive purchases statistics

Impulsive consumption during livestreams emerges under the influence of two interconnected groups of factors – psychological and technological. Psychological mechanisms determine how users perceive and process information in the highly dynamic environment of live broadcasts. One of the key factors is cognitive overload: the constant flow of comments, animations, visual effects, and countdown timers reduces an individual's ability to evaluate information rationally. Under conditions of limited cognitive resources, users rely more heavily on emotional reactions and quick heuristic decisions, making them particularly vulnerable to unplanned purchases. The effect of "momentary presence" also plays a role as it may reduce critical thinking

and increases trust in what is happening on screen. This sense of immersion is further reinforced by the real time nature of livestreams, which creates a psychological pressure to act quickly and remain engaged.

Social proof is another powerful psychological stimulus. Messages such as “1,200 people bought this in the last 10 minutes” create a sense of mass approval, while parasocial relationships with charismatic hosts generate trust comparable to interpersonal relationships. The host is perceived not as a salesperson but as a familiar figure whose opinion seems sincere and credible. In one documented case, an algorithm repeatedly recommended streams from a particular influencer with whom a viewer had developed an emotional attachment, resulting in spontaneous spending of more than \$300. Gamified elements – spinning wheels, sudden discounts, “mystery boxes” – further activate the brain’s reward system and shift attention from the product’s actual utility to the emotional excitement of obtaining a perceived special deal [2]. These elements create the perception of reward, even though they primarily serve as tools for stimulating purchases. The psychological impact of such mechanisms is comparable to that of gambling environments, where unpredictability and intermittent rewards reinforce impulsive behavior.

Another important psychological factor is the reduction of perceived financial risk. Livestream platforms often integrate seamless payment systems, one click purchasing, and digital wallets, which make the act of spending feel abstract and less consequential. When the payment process is frictionless, users are less likely to reflect on the long-term implications of their decisions. This effect is amplified by the temporal pressure created by countdown timers and limited time offers, which encourage users to prioritize immediate gratification over rational evaluation.

Technological factors amplify psychological ones by creating a structurally manipulative environment [3]. One of the most common tools is the use of dark patterns – interface elements intentionally designed to steer users toward purchases. Artificial scarcity (“only 2 units left”), aggressive countdown timers, and exaggerated discount claims exploit fear of missing out and distort time perception. These elements create the impression that a decision must be made immediately or the opportunity will be lost. Algorithmic personalization further strengthens these mechanisms: machine learning systems analyze user behavior, identify those most prone to impulsive purchases, and promote content containing strong emotional or urgency-based triggers. As a result, each user receives an individually tailored set of stimuli that maximizes the likelihood of making a purchase.

Automated social signals also play an important role. Notifications such as “Anna from Germany just bought this” may be generated by bots, yet they create the illusion of high activity and social momentum. The user feels immersed in a dynamic community where purchases are constantly being made, which reduces their ability to analyze the situation independently. The opacity of algorithmic decision making makes these processes even more problematic, as users cannot understand why they see certain offers or how personalized their content truly is. Consequently, an environment emerges in which consumer behavior is predicted, analyzed, and directed in real time without the user’s awareness. Figure 2 depicts impulse buying decisions.



Figure 2 – An example of impulse buying decisions

Another technological factor is the integration of cross platform behavioral tracking. Livestream platforms collect extensive data on user preferences, viewing patterns, interaction history, and even micro behaviors such as hesitation before clicking a button. This data is used to build predictive models that estimate the likelihood of impulsive purchasing. When the system detects behavioral cues associated with impulsivity – such as rapid scrolling, repeated viewing of similar products, or engagement with limited time offers – it adjusts the content feed to increase exposure to persuasive stimuli. This creates a feedback loop in which impulsive tendencies are not only exploited but reinforced.

The combination of psychological and technological factors creates a significant ethical challenge. Personalization, which could theoretically improve user experience, becomes a tool for exploiting cognitive biases [4]. The line between recommendation and manipulation becomes increasingly blurred, and the

consequences extend beyond individual regret. High return rates typical of livestream purchases generate logistical and environmental burdens, while the constant optimization of engagement metrics encourages platforms to intensify manipulative practices, forming a cycle that benefits the platform but harms the consumer. Moreover, such mechanisms may contribute to the development of dependency like behavior, where users return to streams not for the sake of purchasing but for emotional engagement. This raises broader concerns about digital wellbeing and the long-term psychological effects of constant exposure to persuasive technologies.

Despite these challenges, there are ways to make livestream commerce more ethical and consumer – oriented. At the platform level, it is possible to increase transparency around recommendation algorithms and introduce friction-based design elements such as additional confirmation steps before checkout, and develop tools to support – spending limits, reminders about previous purchases, and the option to disable fast checkout. Platforms can also implement mechanisms that help users evaluate their actions more consciously, such as displaying a history of impulsive purchases or issuing warnings about excessive activity. Introducing “cool down periods” before completing a purchase could further reduce impulsive behavior by encouraging reflection.

At the user level, digital self-regulation strategies can be effective: disabling one click purchasing, using browser extensions that block dark patterns, setting personal financial limits, and practicing a deliberate pause before making a purchase to reduce the influence of urgency cues. Improving digital literacy is equally important, as many users do not realize how strongly interface design affects their decisions. Learning to recognize manipulative interface elements may reduce the likelihood of impulsive purchases. Additionally, understanding the psychological mechanisms behind livestream commerce – such as social proof, scarcity, and reward-based stimulation – can empower users to make more informed decisions [5].

The phenomenon of livestream commerce demonstrates how deeply digital technologies can shape human behavior. Algorithms become not just tools but active participants in shaping users' desires and reactions. In such an environment, it is especially important to preserve the ability to pause and reflect – that brief moment when a person can consider the real value of a purchase. A sustainable digital economy must be built not on suppressing this moment of awareness but on supporting it. The degree to which platforms and users consciously approach this transition will determine whether livestream commerce becomes a tool for progress or a new form of dependency.

In conclusion, improving the sales conversion rate requires not only enhancing the technical, organizational, and content aspects of the stream but also creating conditions in which customers make more informed purchasing decisions, while the business reduces unnecessary expenses in logistics and overall economic processes. Optimizing the digital platform ensures stable access to product information, helping viewers better understand product features and avoid impulsive purchases that often lead to returns and additional shipping costs. Specialists' competence ensures that the audience receives accurate, clear, and structured information about the product, encouraging a more thoughtful approach to buying and reducing the likelihood of choosing the wrong item. A well-executed product demonstration, emphasis on real advantages, and transparency of characteristics allow customers to assess in advance whether the product suits their needs, which decreases the number of returns and reduces the logistical burden. High-quality and informative content helps the audience navigate the assortment, understand the value of the product, and make decisions based on real needs rather than emotional impulses. As a result, the share of conscious purchases increases, unnecessary costs related to returns, reshipping, and storage decrease, and the overall economic efficiency of the sales chain improves.

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