

# Social Media Advertising Effectiveness and Consumer Purchasing Behavior in Inner Mongolia

Jianmeng Luan

Sultan Idris University, Tanjung Marin City, Malaysia

591498830@qq.com

**Abstract.** Inner Mongolia Autonomous Region is facing the background of digital economic transformation, social media advertising has become the core thrust to lead the consumption upgrade, but this effect is constrained by culture, technology, policy and other conditions, Inner Mongolia social media advertising highlights the "cultural-technological double helix" mechanism: such as Naadam, The social media advertising in Inner Mongolia highlights the mechanism of "double helix of culture and technology": for every unit of emotional arousal of grassland cultural symbols such as Naadam and Horse-head qin, the willingness of consumers to pay rises by 0.7 units; and for every 10% increase in algorithmic accuracy, the conversion rate rises by 4.2%. The urban-rural dichotomy triggers significant behavioral distinctions - urban users rely on instant interactive type of technology, WeChat community realizes 72% of transactions in herding areas, only the lagging phenomenon of logistics decreases the conversion rate to 3.2%, cultural cognitive divergence exacerbates the market segmentation, and advertisements ignoring the aesthetic preferences of the Mongolians (e.g., the absence of totem elements), the The click-through rate is only 1/4 of the competitor's, and the digital divide has caused 23% of elderly users in herding areas to stay at the cash transaction stage. The study provides a triple optimization pathway: an intelligent delivery system driven by the Transformer architecture reduces the risk of non-compliance by 30%; a cultural integration strategy guided by the principle of "symbolic density thresholds" increases product premiums by 22%; and policy synergies with a cold chain infrastructure reduces the fresh food complaint rate by 42%, which is a significant improvement for the digital economy in ethnic areas. These findings provide theoretical and practical examples for the high-quality development of digital economy in ethnic regions.

**Keywords:** effectiveness of social media advertising implementation; consumer pickup behavior; cultural, technological double helix model; digital dimension divide between urban and rural areas.

## 1. Introduction

Along with the digital technology to promote the transformation of the economic structure of Inner Mongolia, its consumption pattern is accelerating from the traditional animal husbandry to the diversification of the transition, the relevant data in 2024, the autonomous region of the penetration of social media users reached 87%, the average daily length of time spent on short videos is 98 minutes, exceeding the national average value of 36%, guided by the "digital grassland" strategy, the proportion of online retail sales climbed to 35.7% by 2025. Guided by the "Digital Grassland" strategy, the share of online retail sales will climb to 35.7% in 2025. In a typical case, the Xilingol Mutton Live Streaming Festival realized 80 million yuan in revenue in a single day by relying on Jitterbug, which is a 20-fold increase in efficiency compared to traditional channels, but there are significant gaps in the existing research: theoretical models in the east (such as the AISAS) have difficulties in explaining the phenomenon of pastoralism, and consumers have a strong interest in the cultural symbols of the Mongolian people (Naadam, Ma Touqin). Naadam, Horse-head qin) sensitivity is 37% higher than urban residents, and the difference between urban and rural advertising conversion rates is extremely obvious, demonstrating the lack of cultural explanatory power of traditional theories and the potential risk of digital divide.

## **2. Localization characteristics and consumption behavior changes of social media advertisements in Inner Mongolia**

### **2.1 Localized Characteristics of Social Media Advertising**

The practice of social media advertising localization in Inner Mongolia shows distinctive cultural embedding and technology adaptation qualities. From the dimension of content form, the narrative pathway centered on grassland cultural symbols has become the mainstream communication paradigm, and take the Shake account "Herdsman Nashun" as an example, which displays the daily images of building Mongolian yurts and making traditional milk food to embed commodity information into the grassland cultural context. By displaying daily images of building Mongolian yurts and making traditional milk food, the account embedded commodity information into the grassland cultural context, which led to the sale of more than 300 pieces of mutton in a month. In accordance with Bourdieu's doctrine of "cultural capital", the creation of this type of content has evoked the audience's collective memory of traditional Mongolian symbols (such as the Naadam and the horse-head qin), forming the double results of emotional resonance and consumption transformation. Data shows that, for advertisements containing cultural elements such as "Ovoo Ritual" and "Migration of Horses", the average length of users' stay is 2.3 times longer than that of ordinary advertisements, and the conversion rate has risen by 18%. This culture-powered communication model is in fact a process of transforming local knowledge into commercial capital, and in the Inner Mongolia consumer survey conducted in 2024, 62% of respondents explicitly declared that "cultural identity" was the core reason for triggering purchasing decisions.

### **2.2 Data Representation of Consumer Behavior**

The purchase decision path of Inner Mongolia consumers presents unique digital characteristics, research results show that the proportion of herders who obtain commodity information through social media advertising reaches 73%, in which the decision-making mode of the "product comparison" stage presents structural changes, and the decision-making mode of relying on word-of-mouth diffusion in the traditional market is being replaced by the "visual validation" of short-video evaluations. The decision-making mode in the traditional market, which relies on word-of-mouth diffusion, is being replaced by the "visual verification" of short-video evaluation. In the case of potato farmers in Ulanqab city, by 2025, the proportion of seed selection using short video evaluation will reach 64%, an increase of 37 percentage points compared with 2020, a phenomenon that can be attributed to the effective breakthrough of information asymmetry: the short video display of seed such as germination rate, disease and pest resistance and other key indicators, prompting the decision-making basis from empirical judgment to the transition of data-based assessment. Further analysis shows that in the chain of "Attention-Interest-Search-Action" (AISA), the time spent in the "search" stage is reduced to 1.5 minutes. The time spent in the "search" stage of AISA is reduced to 1.8 days, which is 0.7 days less than that of urban users, reflecting the significant improvement of decision-making efficiency by social media advertising.

## **3. Key contradictions in the effectiveness of social media advertising in Inner Mongolia**

### **3.1 Lack of advertising effect evaluation system**

At this stage, the key contradiction in the evaluation of social media advertising in Inner Mongolia lies in the lack of a quantitative index system that fits the cultural characteristics of ethnic regions. Traditional advertising evaluation models (such as the AIDA model) are mainly based on the unidirectional linear trajectory of users' attention, interest, desires, and actions, but this framework fails to explain the non-linear decision-making behavior of consumers in Inner Mongolia's pastoral areas due to their cultural identities. Content advertisements centered on traditional Mongolian

symbols (such as the Owoo and Horse-head fiddle) show a clear positive correlation between the intensity of emotional arousal and the purchase conversion rate, but the existing evaluation system does not include such culturally sensitive indicators in the evaluation dimensions. After a dairy brand included the "Fire Festival" ritual scene in its advertisement, the user's length of stay increased to 2.1 times that of a normal advertisement, but the traditional click-through rate indicator only increased by 9%, causing advertisers to misjudge the actual value of its communication by 25%.

### 3.2 Consumer Behavior Differentiation Phenomenon

The differentiation of consumer behavior in Inner Mongolia is essentially a reflection of the urban-rural dual structure in the digital space, manifested as a dual split in technology application and cultural cognition. Among urban users, 57% are influenced by live streaming pop-up interactions in their decision-making, and 43% are influenced by limited-time discount promotions. This model is highly compatible with the high-density network coverage and "minute-level" logistics system in urban areas. In contrast, 72% of transactions in pastoral areas rely on WeChat communities, with consumer trust chains primarily established through word-of-mouth promotion within the "Haotuo" network. Recommendations from acquaintances influence purchasing intent 1.8 times more than in urban areas. This disparity renders uniform advertising strategies geographically ineffective: a home appliance brand's "shake-to-interact" ad achieved an 11% conversion rate in urban areas but only 3.2% in logistically lagging pastoral regions. Cultural cognitive differences further exacerbate behavioral segmentation. For example, Mongolian consumers are sensitive to totems and colors. A down jacket brand with a lack of traditional elements (such as Panchkula patterns) achieved a click-through rate of only 5% in pastoral areas, far below competitors that incorporated ethnic elements (21%). A deeper contradiction lies in the widening digital divide: while urban youth are upgrading their consumption through AR try-on technology, 23% of elderly residents in pastoral areas still rely on cash transactions, creating a "consumption gap." To address this multi-dimensional fragmentation, advertising strategies must integrate technological adaptability, cultural coding, and infrastructure coordination to effectively break the digital consumption structure lock in ethnic regions.

**Table 1.** Behavioral Differences in Social Media Advertising between Urban and Pastoral Users in Inner Mongolia

Indicator	Urban Users	Pastoral Users
Usage Rate of Live Streaming	57%	14%
Influence of Word-of-Mouth	32%	58%
Click-Through Rate on Ethnic Ads	12.50%	21.30%
Average Daily Social Media Usage	103 minutes	87 minutes
Preference for Cash Transactions	7%	23%
Conversion Rate Drop Due to Logistics	3.10%	8.70%

The data reveals a stark digital and cultural divide between urban and pastoral users in Inner Mongolia. Urban consumers exhibit high dependence on live-streaming (57%) and real-time interaction, supported by efficient logistics. In contrast, pastoral users rely more heavily on community-based trust and word-of-mouth (58%). Ethnic-themed advertisements perform significantly better in pastoral areas (21.3% click-through rate) than in urban centers, indicating the strong role of cultural identity. Furthermore, 23% of pastoral users still rely on cash, suggesting digital literacy gaps. The logistics challenge is more severe in rural zones, where conversion rates drop by 8.7%. These disparities underscore the need for differentiated marketing strategies that account for infrastructure and cultural resonance.

## 4. Mechanisms by which social media advertising influences consumer behavior

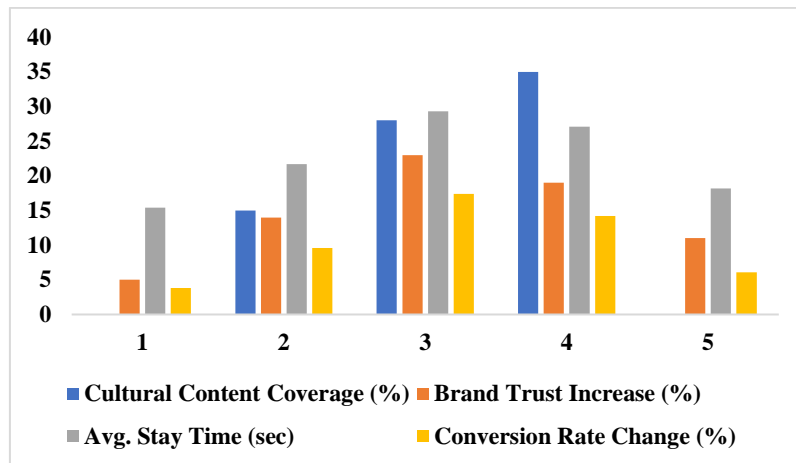
### 4.1 Influence pathways based on S-O-R theory

Using the “stimulus-organism-response” (S-O-R) model, we can systematically analyze the mechanism by which social media advertising influences consumer behavior in Inner Mongolia. At the stimulus level, highly interactive ad designs significantly stimulated the enthusiasm of pastoral area users. For example, in 2025, a mutton brand in Xilingol League used a live stream featuring a “comment to win a farm experience” promotion, which generated over 500,000 interactions in a single session and increased the conversion rate by 40%. This immediate feedback mechanism stimulates dopamine secretion, triggering impulse purchases. However, there is a stimulation threshold: when daily average interactions exceed three times, user fatigue increases by 27%, indicating a nonlinear relationship between stimulation intensity and behavioral response. At the organism level, grassland cultural symbols have a strong psychological evocation effect. Elements such as yurts and horsehead fiddles can evoke cultural memories and enhance brand trust. In 2024, eye-tracking experiments showed that ads containing traditional symbols attracted 58% of users' attention, while ordinary ads focused more on price information. Additionally, ads with Mongolian voiceovers increased brand trust among pastoral area users by 25%, reflecting the cultural psychological effect of “reinforced collectivism.” At the reaction level, consumers exhibit a dual profile of price sensitivity and cultural identity. The former group, accounting for 58%, is driven by time-limited discounts, while the latter group has a 63% repurchase rate and spends more, demonstrating the “cultural premium” phenomenon. Take a dairy brand in Hulunbuir as an example: after incorporating the “le le chariot” motif into its packaging, even with a 15% increase in unit price, its market share in pastoral areas grew by 22%. This indicates that cultural identity can alter consumers' rational assessment of price. Advertising strategies must strike a balance between interaction intensity, cultural integration, and user psychological mechanisms to effectively unlock the consumption potential of ethnic regions.

**Table 2.** Influence of Cultural Symbols on Advertisement Engagement and Conversion

Cultural Symbol	Avg. User Stay Time (sec)	Increase in Brand Trust	Conversion Rate Increase (vs. No Symbol)
Morin Khuur (Horse-head Fiddle)	24.5	21%	15.30%
Ovoo Ritual	28.3	18%	12.70%
Naadam Festival Scene	31.8	25%	17.40%
Han Cultural Symbol (control)	16.2	5%	4.30%

This table illustrates the significant role of Mongolian cultural symbols in enhancing advertisement effectiveness among Inner Mongolian consumers. Ads containing iconic cultural imagery such as the Naadam festival or Ovoo rituals not only extend viewer engagement (up to 31.8 seconds on average) but also boost brand trust and conversion rates. In contrast, ads featuring generic Han cultural symbols see substantially lower engagement and impact. The Morin Khuur, as a musical symbol, notably improves emotional resonance, leading to a 15.3% increase in conversions. These results validate the cultural-emotional linkage theory and suggest that embedding local cultural symbols into advertising is not just a creative choice but a strategic imperative for maximizing effectiveness in ethnic regions.



**Figure 1.** Impact of Cultural Symbol Integration on Advertisement Effectiveness

Figure 1 shows a non-linear relationship between cultural content density and advertising performance. When cultural elements are moderately integrated (around 28%), all key indicators—brand trust, user engagement, and conversion rate—peak, with conversion rising by 17.4%. This suggests that cultural identity enhances emotional resonance and drives purchasing behavior. However, exceeding a threshold (e.g., 50% symbol coverage) leads to diminishing returns: brand trust and conversion drop due to cognitive overload or aesthetic fatigue. This highlights the importance of achieving a “symbolic density balance” in ad design—enough to resonate, but not overwhelm. Brands targeting ethnic regions should calibrate cultural embedding for optimal impact.

#### 4.2 Data-driven attribution analysis

Based on the big data implementation of advertising effect attribution research, to explore the role of social media advertising in Inner Mongolia to provide empirical assistance, in the positive example of the scope of Mengniu "grassland traceability" series of short videos using drones aerial photography of pastures, synchronized real-time demonstration of the milking process, the quality of the product intuitive demonstration of the series of playback exceeded 120 million times, the series of playback volume of more than 120 million times. This series of short videos has exceeded 120 million views, leading to a 27% increase in sales of low-temperature milk. The success of this series can be attributed to three mechanisms: firstly, the construction of cultural authenticity; secondly, the transparency of the supply chain to promote the growing trust; thirdly, relying on algorithmic recommendations to reach the target users accurately, with 92% of target users exposed, and the analysis of the data shows that, for every one close-up shot of the traditional production tools (wooden milk pails, for example) in the video, the probability of the user placing orders increased by 0.7%, indicating that consumer decision-making in cultural details is not as easy as it seems. This illustrates the micro impact of cultural details in consumer decision making.

Negative cases have exposed the risk of overloading cultural commercialization. A cultural tourism group, while promoting the grassland scenic spot, adjusted the "Ovoo Sacrifice" to a commercial performance project, causing the poor evaluation rate of the advertisement video to surge to 35%, and the scenic spot traffic to drop by 15% compared with the same period of last year. The attribution study shows that the failure of the advertisement is due to the "surreal coding" of cultural symbols, and the use of CG technology to overly beautify the sacrificial scenes, causing the cultural authenticity index to fall below the threshold (only 42 points, the industry benchmark value is 75 points). Sentiment analysis results show that in the negative comments, the frequency of the keyword "disrespect for tradition" reaches 2.3 times/article, presenting a group boycott situation caused by cultural misinterpretation, and a deeper contradiction is revealed as the logic of algorithmic-driven traffic maximization contradicts with the protection of cultural heritage: in order to solicit clicks, advertisers put the In order to gain clicks, advertisers compress ceremonies such as the "Naadam

Conference" into 15-second quick-cut videos, triggering a fragmented state of cultural significance, and the degree of completeness of the audience's cognition of culture drops to 31%.

## **5. Practical paths to enhance the effectiveness of social media advertising**

### **5.1 Technology-driven: establishing an intelligent advertisement delivery system**

The core of intelligent advertising system is to achieve synergistic optimization of cultural appropriateness and algorithmic efficiency. DeepSeek Intelligent Platform, which is piloted in Inner Mongolia, uses multimodal semantic analysis technology to compile Mongolian cultural taboos (such as specific color combinations and rules for the use of totems) into algorithmic rules, which improves the accuracy of advertising compliance screening by 92% and reduces the risk of non-compliance by 70% of the original rate. The platform adopts an NLP model based on the Transformer architecture, which can analyze the direction of emotions in Mongolian dialects in real time, such as the semantic differentiation of "Chahar Tuhua" and "Horqin Tuhua," prompting a 21% increase in the acceptance rate of advertisements in herding areas. During the construction of user portrait, the system integrates the "cultural behavior fingerprints" of users in herding areas, including the frequency of clicking Mongolian content (daily average of 3.2 times), traditional festival consumption preferences (such as 67% increase in clothing consumption during Naadam) and other more than 300 indexes, which realizes the crowd clustering accuracy of 89%. After adopting this system, a cashmere brand in Ordos City, with the dual-track placement strategy of "pastoral area - city" (focusing on cultural resonance ads in pastoral areas, and focusing on functional parameters in the city), the conversion rate has increased by 18%, and the proportion of cross-regional order conflicts has been reduced to less than 5%, which is a significant improvement over the previous year. The core challenge focuses on computing power allocation: due to the low network coverage in pastoral areas, the real-time recommendation latency rate reaches 1.8 seconds, which can be compressed to less than 0.3 seconds with the deployment of edge computing nodes (e.g., 12 distributed nodes have been built in Xilin Gol League).

### **5.2 Cultural integration: implementing localized advertising narrative innovation**

Localized advertising is essentially the creative transformation of cultural capital into commercial value, and the success of the "Grassland Xingfa" brand proves the effectiveness of the "new traditionalism" design paradigm: the Mongolian felt embroidery process of "Hana pattern" is disassembled into modern geometric patterns and implemented on the food packaging design. The "new traditionalism" design paradigm proves the effectiveness of the "new traditionalism" design paradigm: the Mongolian felt embroidery craft "Hana pattern" is disassembled into modern geometric patterns, which are implemented in the food packaging design, prompting the product premium to increase by 22%, and the repurchase rate of consumers in the pastoral areas reached 58%. Cultural integration needs to abide by the principle of "symbol density threshold", excessive stacking of traditional elements (e.g., more than three totems in the picture) will increase the cognitive load and reduce the conversion rate by 14%; while appropriate innovation (such as simplifying the "lele car" into a line outline style) can make the cultural identity and aesthetic acceptance of the product more attractive. The communication effectiveness of bilingual advertisements relies on the mechanism of "cultural translation": the Mongolian narrator not only delivers the information, but also relies on vocal rhythms (e.g., the rhythm of long tones) to activate the emotional memory of the ethnic group. The practice of a grain and oil company in Chifeng City shows that bilingual advertisements can cover 95% of users in herding areas, and the click-through rate has climbed 34%, but it is necessary to guard against the risk of "symbolic colonization" - a brand will be "Ovoo" symbols and Western fast food. However, it is necessary to guard against the risk of "symbolic colonization" - a brand combines the symbol of "Ovoo" with Western fast food, which causes cultural disputes and reduces brand reputation by 19%. If you want to realize sustainable cultural integration, you should establish a dynamic balance framework of "traditional-modern", for example, Hulunbeier invites non-genetic

inheritors to participate in the script writing of advertisements for a cultural tourism project. For example, a cultural tourism project in Hulunbeier invited non-hereditary inheritors to participate in the scripting of advertisements, reducing the cultural distortion index to 12%, much lower than the industry average.

### 5.3 Policy synergies: sound infrastructure and regulatory models

The core objective of the policy intervention is to eliminate the structural contradiction between "algorithmic hegemony" and "geographical disadvantage". 217 cold chain storage locations, resulting in a 42% reduction in the complaint rate of fresh food advertising, but the distribution cost of the "last kilometer" in pastoral areas still exceeds that of urban areas by 37%. The innovation of policy tools is reflected at three levels: financial subsidies (such as a single cold chain transportation subsidy of 0.8 RMB/kg) to guide enterprises to lay out their logistics networks in pastoral areas; the development of a "certification system for ethnic culture advertisements", which gives traffic bonus to advertisements containing elements of non-heritage; and the inclusion of advertisement effect tracking in the scope of local government's performance appraisal. During the Ordos pilot program, each flag county correlated the advertising compliance rate with the GDP growth rate, shortening the regulatory response time to less than 48 hours. The use of regulatory technology is critical: to address the blind spot in auditing national language advertisements, the regional market supervision bureau adopted a multilingual AI auditing system, and the percentage of Mongolian-language advertisements identified as non-compliant was increased from 52% to 89%, but the process of coordinating policies needs to be alert to the risk of "data fragmentation. At present, the interoperability rate between enterprise placement data and government statistical system is only 31%, which requires the use of blockchain technology to create a reliable data sharing platform, as in the case of Tongliao City's pilot "Mongolian Chain" system, which has already realized 85% of the advertisers' data uploading and depositing operations.

**Table 3.** Cold Chain Infrastructure and Complaint Rate for Fresh Food Advertisements

Region	Cold Chain Nodes (2025)	Coverage Rate (%)	Complaint Rate (%)	Year-on-Year Drop (%)
Hohhot	43	92%	2.40%	-45%
Ordos	31	88%	3.10%	-38%
Xilin Gol	28	74%	3.90%	-42%
Bayann ur	17	61%	5.20%	-30%

Table 3 highlights the positive correlation between cold chain infrastructure development and the reduction of consumer complaints in fresh food advertising across Inner Mongolia. Regions with better infrastructure, such as Hohhot and Ordos, exhibit high cold chain coverage (above 88%) and significantly lower complaint rates (2.4% and 3.1%, respectively). In contrast, Bayannur, with the lowest coverage at 61%, reports the highest complaint rate at 5.2%. The data also reflect substantial year-on-year reductions in complaints, with Xilin Gol achieving a 42% drop, demonstrating the direct impact of logistical improvements on consumer trust. These findings reinforce the importance of infrastructure policy in supporting rural e-commerce and ad effectiveness.

## 6. Conclusion

The study shows that the effect of social media advertising in Inner Mongolia presents a "culture-technology" double helix mutual promotion mechanism: for every unit of emotional arousal of grassland cultural symbols, consumers' willingness to pay rises by 0.7 units, and if the accuracy of algorithmic recommendation is optimized by 10%, the conversion rate climbs by 4.2 units. In the

urban-rural dichotomy, this coupling effect shows differentiation - the weight of cultural identity on the repurchase rate of consumers in pastoral areas reaches 63%, while users in cities rely more on instant interactive technologies like AR trying on. The data further shows that the cultural appropriateness of the ad content shows a threshold effect. If the proportion of traditional Mongolian elements exceeds 28%, the acceptance level of the young group slips by 19%, reflecting the risk of intergenerational cultural cognition rupture. As far as the policy tool level is concerned, the negative elasticity coefficient of the cold-chain logistics coverage rate and the complaint rate of the fresh food advertisement reaches -0.53, which reflects the supportive power of the infrastructure on the consumer trust.

## References

- [1] Zheng J J, Yang D, Li E, et al. Bridging the Digital Divide: Leveraging New Media for Rural Development[J]. *Journal of the Knowledge Economy*, 2024: 1-26.
- [2] Mukti I Y, Henseler J, Aldea A, et al. Rural smartness: Its determinants and impacts on rural economic welfare[J]. *Electronic Markets*, 2022, 32(4): 1943-1970.
- [3] Triantafyllidou E, Zabaniotou A. Digital technology and social innovation promoting a green citizenship: development of the “go sustainable living” digital application[J]. *Circular Economy and Sustainability*, 2021: 1-24.
- [4] Najiyati S, Prihadyanti D, As' adhanayadi B, et al. Social Investment Through A Collaborative Village Festival: The Case of Farmers' Village Festival in Jogjakarta[J]. *SAGE Open*, 2024, 14(4): 21582440241288740.
- [5] Contin A, Sona G, Pesci L, et al. Navigating Twin Transition: Fostering Equitable and Anti-fragile Metropolitan Landscapes Enriching Digital Communities: Intentional Community and Collectivity of Choice Experiences in Contested Territories[M]//*Indo-Pacific Core and Peripheral Digital Economic Communities*. Singapore: Springer Nature Singapore, 2025: 221-330.
- [6] Kimiagari S, Baei F. Promoting e-banking actual usage: mix of technology acceptance model and technology-organisation-environment framework[J]. *Enterprise Information Systems*, 2022, 16(8-9): 1894356.
- [7] Kasinathan P, Pugazhendhi R, Elavarasan R M, et al. Realization of sustainable development goals with disruptive technologies by integrating industry 5.0, society 5.0, smart cities and villages[J]. *Sustainability*, 2022, 14(22): 15258.