Impact of task, aesthetic and social cues on customer identification in social media: Basis for e-commerce improvement framework

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Abstract

To thrive in the ever-changing world of social e-commerce, companies have long had to figure out what makes their platforms special to their customers. Aesthetic cues, task cues, and social signals all had a role in shaping customer behavior and loyalty, and this study analyzed all of them thoroughly. Several factors, including task cues (such as accurate product information), aesthetic cues (such as the platform's design and ease of use), and social signals (such as the quantity and quality of customer interactions and community feedback), contribute to a positive customer-brand relationship, according to the study's foundational concept. This study used the descriptive method and surveyed 300 participants. The details of their responses were examined in thorough analysis of platform data and customer feedback. Product descriptions were seen as very genuine and comprehensive. Improving consumer trust via up-to-date information and simplified acquisition techniques were also emphasized in the study. Though not immediately quantifiable, the favorable comments about the products showed that people liked the way the platform looked, which is a clue of how important aesthetic signals are. Finally, the paper offered a framework that would improve task, aesthetic and social cues on customer identification in social media.

Keywords: task, aesthetic, social cues, customer identification, social media, e-commerce improvement framework

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1. Introduction

The ever-growing influence of social media today has not only altered the dynamics of our communication but also modified the ways in which people make purchases. The proliferation of social media platforms has been a major factor in the expansion of e-commerce, which has revolutionized the market for consumer products. China, which has the world's biggest e-commerce industry, has been at the forefront of this shift more so than any other country. Online marketplaces compete for users' attention and allegiance using various methods. There are three main types of signals: task cues, which deal with the nuts and bolts of shopping (such as product information and checkout), aesthetic cues, which deal with the platform's visual appeal, and social cues, which deal with its interactive features and help users feel more comfortable getting involved. Together and separately, these indicators influence the platform's user experience and, by extension, its financial performance.

Despite the clear importance of these signals, the existing research lacks a deep understanding of how they together contribute to client identification with a platform. In China's booming e-commerce sector, this chasm is especially noticeable. Existing research has largely ignored the possible multiplicative impact of these signals when working together to influence consumer behavior, focusing instead on the effects of individual cues. Moving from a macro to a micro level, this study investigated the topic on how do task, aesthetic, and social cues impact customer identification on Chinese e-commerce platforms. The research made use of quantitative techniques to investigate the relationship between these indicators and their combined impact on patron recognition. The study's fundamental objective is to get a better grasp of how people interact with e-commerce sites by doing this analysis.

Traditional economic dynamics have been profoundly upended by the advent of the digital age and the subsequent explosion in social media use. Identifying, interacting with, and keeping clients is crucial for modern e-commerce platforms. Understanding the factors that encourage consumer identification with these platforms is vital for firms to maintain market competitiveness as the struggle for user attention heats up. A customer's relationship with and sense of belonging on an e-commerce platform is influenced by a wide range of contextual elements. The most important ones are task cues, aesthetic signals, and social cues. Existing studies, however, often only look at one of these signals at a time. In addition, most of the studies done thus far have been undertaken in Western or developed market settings. This narrowing of attention obscures the extent to which these signals are applicable and have an effect on growing economies like China. More in-depth research is required due to the complexity of culture and consumer behavior in these areas.

The purpose of this research is to fill up these informational gaps. In the context of social media-driven e-commerce, it intends to investigate how task, aesthetic, and social signals interact to form a unique identifier for each client. This research hopes to provide light on the complex ways in which these signals work together to influence online shoppers' decisions and sense of belonging to certain marketplaces. E-commerce companies might benefit greatly from such in-depth insights, as they could be used to fine-tune operational strategies, improve client identification, and promote company development in today's increasingly digitalized marketplace.

Objectives of The Study - This study aimed to examine the relationship among task cues, aesthetic cues, social cues in identifying customers in social e-commerce through empirical analysis, to come up with e-commerce platforms improvement framework. Specifically, it aimed to determine task cues In customer identification in terms of product information description, update time and acquisition method; determine aesthetic cues as to visual impact, color and layout; determine social cues as to customer communication, experience sharing and product evaluation; test the significant relationship among social e-commerce task cues,

aesthetic cues, social cues and customer identification through empirical analysis; and provide operational strategies and management suggestions for social e-commerce platforms.

2. Methods

Research Design - Within the positivist research paradigm, this study used a descriptive method with a quantitative approach to data collecting and analysis. The positivist technique assumes that reality is unchanging and constant regardless of context or historical period. This methodology is consistent with the values of quantitative research, which emphasizes the use of hard data gleaned via statistical, mathematical, or computer analysis. Survey research methods are to be used because of their widespread use in quantitative research and their reliability and validity in collecting standardized data. This method is well suited to the purpose of this research, which is to examine the interplay of task, aesthetic, and social signals in Chinese social media-based e-commerce platforms. The survey approach will allow for the gathering of consistent and comparable data from a large sample, which is crucial for making valid inferences

Participants of the Study - Users of Chinese social media e-commerce platforms are of particular interest to the researchers here. Survey responses from a wide variety of users who can offer a detailed picture of their experiences and interactions with these platforms are crucial for conducting a thorough research that can provide accurate, generalizable conclusions. A total of 300 participants were used in this study. Stratified random sampling was used to choose samples. In this situation, the target demographic would be segmented into subgroups based on the e-commerce sites they frequent. Then, a random sample method will be used to choose participants from each subgroup. Using this method, the researcher may be certain that the final sample is representative across all demographic groups.

Research Instruments - A structured questionnaire was developed for this research using questions taken from existing validated measures. Each of the task, aesthetic, and social signals, as well as individual respondents' identifiers, explored in depth over many parts of the questionnaire. Under Task Cues, this section's survey questions will be modified from a scale developed by Kim and Park, (2020) to evaluate factors including product details, user friendliness, and the ease of making a purchase. Insight into the role that these task cues play in e-commerce platform user recognition will be gained from this. For Aesthetic Cues, items in this area will be evaluated according to Cyr's et al. (2014) aesthetic cues scale, which takes into account things like design, color palette, and imagery. The effect of visual cues on consumer verification will be quantified. In social cue, to evaluate social cues like user reviews, likes, shares, and comments, the researcher will be using items derived from Hajli's and Sims (2015) scale. That way, researchers may learn how social signals affect consumer recognition. E-commerce platform client identification was measured using a scale created by Islam and Eva (2018). It contains probes into the user's emotional investment in the system.

The level of agreement with each statement will be gauged using a Likert scale, typically ranging from 1 (strongly disagree) to 5 (strongly agree) in each part. This sort of scale has found widespread use in the study of consumer behavior and marketing because of its accuracy in gauging respondents' ideas and perspectives. The questionnaire was pilot tested before the main survey to assess their clarity, applicability, and reliability. Based on the results of the pilot test, the required changes were implemented. To reach the desired respondents, the survey were disseminated digitally through email and social media. It is a quick, easy, and inexpensive approach to get feedback from a wide range of people in a variety of places. This method provides a quantitative analysis of how task, aesthetic, and social signals interact to shape Chinese consumers' perceptions of e-commerce platforms based on social media.

Procedure - A gap in the literature on the interplay of task, aesthetic, and social cues as they relate to consumer recognition inside social media-based e-commerce platforms was the impetus for this study. The significance and meteoric rise of e-commerce platforms, particularly on social media, sparked the inspiration for this study. The study's author noted a notable deficiency in studies examining the interplay between the task cue,

the aesthetic cue, and the social cue in establishing a customer's identity. Given the gravity of the situation, this was seen as a promising avenue for research. Next, the researcher conducted a literature review to learn more about the topic, and from that, the researcher derived the study's working title: "Impact of Task, Aesthetic, and Social Cues on Customer Identification in Social Media: Basis for Operational Strategies for E-Commerce Platform." This title captures the essential ideas and parameters of the study, giving a quick overview of the overarching goal of the investigation.

The next phase included the formulation of broad and narrow research goals. Specific goals assist break down the overarching research aim into digestible portions, concentrating on each variable and their combined influence, while broader objectives give a broad direction for the study. A quantitative approach was chosen as the most appropriate research strategy for this investigation. Using this strategy, empirical, numerical data might be collected and utilized to analyze the connections between the variables of interest. It was decided that a cross-sectional survey approach would be best for collecting this information, with a structured questionnaire serving as the major tool.

To ensure a large enough sample size for statistical significance, the researcher aimed for around a thousand individuals. Users of several Chinese social media-based e-commerce sites will make up the participants. The questionnaire used in the study was meticulously prepared with the use of previously validated scales to guarantee its reliability and validity. The feasibility and readability of this questionnaire were verified by pilot testing. After the study plan is completed, data collecting, analysis, and interpretation may begin. These procedures are essential for gaining valuable insights from the data obtained, which will be utilized to achieve the study's goals.

Ethical Considerations - The study was carried out with the utmost regard for ethical consideration, in accordance with the tenets of decency, beneficence, and fairness. Participants gave their informed consent after being about the study's goals, the extent of their participation, any risks involved, and their rights, including the freedom to stop participating at any time. Each respondent gave their informed permission before taking part in the study. Security and privacy were prioritized in the survey's development, and no personally identifiable information was requested or required of respondents. The obtained data was encrypted during storage to protect the privacy of all respondents. The data was kept private and only researchers could access it. The study protocol ensured that participants experienced as little injury or pain as possible. The poll questions were vetted to ensure they didn't touch on any issues that would be upsetting to respondents.

The researcher honored the ideal of fairness by eliminating all forms of prejudice and discrimination from our participant selection process. To guarantee that all relevant demographic groups would be adequately represented, a stratified random sampling technique was used. The integrity of the data was maintained since the researchers were truthful and ethical throughout the study. No attempt was made to make the data fit a particular theory or hypothesis. The study results were presented clearly and without embellishment or distortion. All sources used throughout this study's literature evaluation and research were properly cited in the final paper to prevent any accusations of plagiarism. This study was done in a responsible and ethical way, with due regard for the safety and well-being of all participants. At all times throughout the study, the researchers were aware of their need to act ethically and made concerted efforts to that end.

Data Analysis - The research technique for this study relied heavily on the results of the data analysis procedure. The study's conclusions may be trusted because of how well it was planned and carried out. After all of the data had been gathered, the first phase in the data analysis process was to clean and filter the data. Checking for outliers, abnormalities, and missing data was part of this process. This first analysis was conducted to guarantee that the dataset was of good quality and appropriate for further statistical examination. It was crucial to protect the honesty of the information and provide dependable outcomes. The next stage was to use inferential statistics to draw conclusions. Researchers may extrapolate findings from a small sample to the larger population using this kind of study. This research used statistical methods such regression, and correlation to look at the

interplay between the variables. Strong and directional correlations between task, aesthetic, and social signals and consumer identification were determined using a correlation analysis. The ability of these signals to predict customer identity was further examined by regression analysis, and variations in responses across demographic groups were evaluated using analysis of variance.

Each statistical test's assumptions—such as normality, linearity, homogeneity of variance, and independence of observations—were carefully considered at every stage. The accurate execution of the tests and the reliability of the findings were thus guaranteed. These analyses were conducted, and the findings were evaluated and presented in light of the study's aims and assumptions. The statistical results were placed in context and described in a manner that made sense, furthering the study's overarching objective of comprehending the interplay of task, aesthetic, and social signals in establishing a unique identifier for each Chinese e-commerce platform user.

3. Results and Discussions

Table 1

Summary Table on Task Cues in Customer Identification

Key Result Areas	Composite Mean	VI	Rank
Product Information Description	2.71	Agree	3
Update Time	2.87	Agree	1
Acquisition Method	2.75	Agree	2
Grand Composite Mean	2.78	Agree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 1 summarizes task cues in customer identification. Consumers' experience and, by extension, their sense of belonging to online platforms are profoundly affected by task cues, which are prominent in the complex e-commerce ecosystem. With a composite mean reflecting an agreement on the value of each task signal, the table summarizes consumer viewpoints on these cues. Customer priorities influence their involvement with e-commerce platforms, as seen by the three recognized key result areas (KRAs): Product Information Description, Update Time, and Acquisition Method.

With the greatest composite mean of 2.87, update time emerges as the most valued factor in this hierarchy. Given the dynamic nature of online marketplaces, where outdated information can lead to missed opportunities for both vendors and buyers (citation here), customers have developed an expectation for real-time updates. Acquisition Method follows closely behind with a mean composite score of 2.75. The user's choice to interact with an e-commerce platform is directly impacted by the ease and flexibility of the purchase procedure. The ways in which clients may finish their purchases are crucial in a market that values ease. This piece of information is in line with what is said in the literature about how a smooth purchasing procedure greatly affects customer happiness and loyalty. Despite its third-place ranking, Product Information Description (with a mean of 2.71) is still quite important. Customers are able to put their faith in the site more easily because of the realistic and thorough product descriptions, which help to alleviate some of the anxiety that comes with buying things online without first seeing them in person.

Task cues, as highlighted, consist of many different things, including thorough product descriptions, an easy-to-navigate user interface, and a streamlined purchasing procedure. None of these things stands alone; rather, they work in tandem to improve the user experience. An aesthetically pleasing interface that neatly displays product details improves the user's navigational experience and supplements the usefulness of task signals. A customer's decision-making process may be reinforced by social signals, such as user reviews, ratings, and interactions on social media. To put it another way, these cues are like digital word-of-mouth; they may make task cues more effective. Updated and open product information and acquisition techniques show that others have had great experiences with the platform, which increases consumers' confidence and identification with the platform. A strong and engaging experience for its users may be achieved by an e-commerce platform

that skillfully incorporates these task cues with aesthetic and social components. In today's cutthroat digital economy, when brand loyalty is a prized possession, this integration is crucial. The platforms that grasp the complex interplay of task, aesthetic, and social signals to boost consumer identification and loyalty will prosper as e-commerce develops further.

Table 2

Summary Table on Aesthetic Cues

Key Result Areas	Composite Mean	VI	Rank
Visual Impact	2.57	Agree	3
Color	2.73	Agree	2
Layout	2.80	Agree	1
Grand Composite Mean	2.70	Agree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

The results shown in Table 2 is a summary table on aesthetic cues. It presents rankings given to various aesthetic signals (visual impact, color, layout), and their relevance to the larger implications of the literature on e-commerce customer behavior. Based on the data, it is evident that the layout has the greatest degree of agreement among participants, with a weighted mean of 2.80. This suggests that the layout is the most significant aesthetic cue in consumer identification inside e-commerce platforms. This corresponds with Cyr et al. (2014), who stressed the necessity of an intuitive design that enables people to browse effortlessly. The research emphasizes that a well-designed layout improves user experience and happiness, which is crucial for continued engagement with the platform.

The weighted mean of 2.73 indicates that color is a major role in user experience. The findings of Carbon (2019) study are shown in this context, as it shows that color schemes can elicit certain psychological reactions that impact user perception, trust, and ultimately, purchase choices. The prioritization of attractive color schemes, which received the highest ranking in the color category, indicates that ensuring visual comfort and aesthetic enjoyment are crucial in maintaining customer attention and creating a sales-friendly atmosphere. The visual impact, with an average score of 2.57, albeit somewhat lower, nevertheless remains within the 'Agree' range. This implies that while visual impression has significance, its effect on buying choices can be more nuanced in comparison to layout and color. The evidence presented here supports Cyr et al. (2014) conclusion that the use of high-quality images may greatly enhance trust and happiness in the purchase process. The use of precise and accurate imagery to portray items may distinguish a platform from its rivals, enhancing its memorability and increasing the likelihood of return visits.

The overall average of all aesthetic cues is 2.70, which confirms the widespread consensus that visual cues play a crucial role in e-commerce systems. This supports the notion that these aesthetic qualities may have a substantial impact on consumer happiness and loyalty. Gong et al. (2023) emphasized that a well-designed interface, which combines aesthetic appeal with functionality, may optimize the purchasing experience, enhancing efficiency and reducing the burden on users. The combined effect of these signals indicates a mutually beneficial connection that may enhance consumer identification when used appropriately. The comprehensive incorporation of many aspects has not been thoroughly investigated, since the majority of research, like the study conducted by Cyr et al. (2014), tends to concentrate on isolated indicators. Nevertheless, the possibility of a synergistic impact presents an encouraging field for more investigation, particularly due to its potential to have substantial consequences for user experience design, marketing tactics, and client retention endeavors.

The information validates the substantial impact of visual cues on customer identification in e-commerce platforms. It underscores the importance of platforms giving priority to user-friendly designs, visually attractive color schemes, and striking graphics to improve the overall user experience. Furthermore, it indicates a need for further comprehensive investigations into the combined influence of task, aesthetic, and social cues, especially in fast expanding e-commerce countries such as China. Gaining a comprehensive understanding of these signals may provide useful insights for creating user-centric interfaces that not only attract but also keep clients in the

fiercely competitive digital economy.

Table 3

Summary Table on Social Cues

Key Result Areas	Composite Mean	VI	Rank
Customer Communication	2.70	Agree	3
Experience Sharing	2.92	Agree	2
Product Evaluation	3.28	Agree	1
Grand Composite Mean	2.97	Agree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

A summary table on social cues is presented in Table 3. A user experience that is rich and multi-dimensional is created when the threads of task, aesthetic, and social signals intersect within the complicated tapestry that is e-commerce. This data gives a look into social cues from the viewpoint of consumers who shop online. Customer Communication, Experience Sharing, and Product Evaluation are the three primary outcome areas that are outlined in the Summary Table on Social Cues. On the basis of a composite mean, these categories are rated, with Product Evaluation coming in first place with a score of 3.28, followed by Experience Sharing with a score of 2.92, and Customer Communication with a score of 2.70. With a Grand Composite Mean of 2.97, the collective agreement on these areas indicates that customers have a favorable inclination toward platforms that support these social connections by providing them with the opportunity to communicate with one another.

These empirical discoveries are consistent with the focus that has been placed in the research literature on task cues. In this context, the importance of possessing a user-friendly interface and having quick access to extensive product descriptions is of the utmost importance (Huang & Wang, 2019; Kim & Lee., 2019; Zhang & Chen, 2021). The research suggests that it is the social evidence that is incorporated in customer evaluations and shared experiences that contributes to an increase in the user's trust and, as a result, loyalty. This is in addition to the fact that product knowledge is useful. The existence of this link underscores the need for platforms to not only offer comprehensive product information but also to provide settings that stimulate and ease user interactions in respect to these items.

The perception of social signals is inextricably linked to the perception of aesthetic cues, despite the fact that it does not specifically assess aesthetic cues. Cyr et al. (2014) found that the visual design of a platform has an effect on how the user interacts with and reacts to social signals via the platform. The aesthetic attractiveness of a platform has the potential to significantly boost the legitimacy of user-generated content and cultivate an atmosphere in which consumers are more likely to interact with social signals, such as reviews and experiences that have been shared by other users.

Table 4

Relationship Between Task Cues and Aesthetic Cues

Variables	r	p-value	Interpretation
Product Information Description			
Visual Impact	0.094	0.104	Not Significant
Color	0.080	0.166	Not Significant
Layout	0.123*	0.034	Significant
Update Time			
Visual Impact	0.196**	0.001	Significant
Color	0.200**	<.001	Highly Significant
Layout	0.090	0.120	Not Significant
Acquisition Method			
Visual Impact	0.147*	0.011	Significant
Color	-0.029	0.617	Not Significant
Layout	0.121*	0.037	Significant

**. Correlation is significant at the 0.01 level/*. Correlation is significant at the 0.05 level

Table 4 presents the relationship between task cues and aesthetic cues. Consumer behavior and platform

engagement are heavily impacted by the delicate interaction between task and aesthetic signals, which is a sophisticated and multidimensional environment that exists within the realm of e-commerce. It provides empirical insights into this connection, indicating how different aesthetic features correspond with the practical aspects of product information and acquisition techniques. These conclusions are based on the findings of the study.

The data suggests that while there is no significant link between the visual impact and color schemes and the product information description, there is a statistically significant association between the layout and the product information description ($r = 0.123$, $p = 0.034$). This lends credence to the notion that the organizing of information on a platform is not just a matter of function but also of form, so strengthening the literature's focus on the navigability of design as an essential job cue (Zhang et al., 2018). A well-designed user interface makes the process of doing a transaction easier, which in turn improves the user's experience and has the potential to result in increased customer satisfaction and loyalty. Moreover, when considering the amount of time it takes for product information to be updated, the relevance of visual impact and colour becomes clear ($r = 0.196$ and $r = 0.200$, respectively), with both correlations being significant at the 0.01 level. That the timely display of product information is valued not just for its relevancy but also for its aesthetic delivery is suggested by this study, which agrees with the argument that Norman (2013) made about the psychological influence of color.

There is also a strong association between the acquisition technique and visual impact ($r = 0.147$, $p = 0.011$) and layout ($r = 0.121$, $p = 0.037$). Overall, the correlation is considerable. Based on these findings, it seems that the visual presentation of the purchasing process has a significant role in the consumer's assessment of how easy and efficient the transaction is. The simplicity of the purchasing process is emphasized as a contributor to customer satisfaction in the literature review (Gong et al., 2023). This is consistent with the discussion on task cues that is included in the study of the relevant research.

The research that has been done on the topic (Huang & Benyoucef, 2013; Kim et al., 2020) highlights the significant role that task cues play in delivering useful information to consumers and directing them through the process of engaging in e-commerce. The empirical evidence suggests that these task signals have the potential to considerably improve the user experience when they are accompanied with features that are visually pleasant. As an example, thorough product descriptions are more successful when they are accompanied with visually attractive layouts and colors. This is because these elements may make the content easier to comprehend and more interesting to the reader. Furthermore, the relevance of layout and visual impact in connection to acquisition techniques implies that the aesthetic presentation of transaction-related aspects is a factor that contributes to the enhancement of the user's engagement with the platform. This lends credence to the conclusions established by Cyr et al. (2014), which state that an appealing design might result in improved user experiences and higher levels of satisfaction.

The empirical findings presented in Table 4, when read in combination with the Review of Related Literature, provide a convincing narrative about the symbiotic connection that exists between aesthetic cues and task signals in e-commerce platforms. It should come as no surprise that while task cues are the fundamental component of user experience, the visual features of the platform significantly enhance the efficiency of these signals. As e-commerce continues to flourish, it is becoming more important for companies that want to maximize customer engagement and cultivate brand loyalty to comprehend and make advantage of this interaction.

Table 5 shows the relationship between task cues and social cues. The coordination of diverse signals within an electronic commerce platform can have a substantial impact on user experience and purchasing conduct in the digital marketplace. There seems to be a minimum to non-existent substantial direct association between the description of the product and social signals such as customer communication and experience sharing, according to the statistical data shown in Table 5. At first glance, this seems to be in direct opposition to the body of research that asserts that task cues play a significant part in laying the groundwork for user experience (Huang &

Benyoucef, 2013; Kim et al., 2020). There is, however, a link that is not only modest but also significant between the update time of product information and product assessment (r = 0.114, p = 0.048). This suggests that the timeliness of information might in fact increase consumer participation in the review process.

Table 5

Relationship Between Task Cues and Social Cues

Variables	r	p-value	Interpretation
Product Information Description			
Customer Communication	0.076	0.187	Not Significant
Experience Sharing	-0.005	0.925	Not Significant
Product Evaluation	0.080	0.167	Not Significant
Update Time			
Customer Communication	0.086	0.138	Not Significant
Experience Sharing	0.077	0.181	Not Significant
Product Evaluation	0.114*	0.048	Significant
Acquisition Method			
Customer Communication	0.032	0.580	Not Significant
Experience Sharing	0.028	0.631	Not Significant
Product Evaluation	0.094	0.103	Not Significant

*. Correlation is significant at the 0.05 level

This nuanced result is in accordance with the research's focus on the significance of providing thorough product descriptions and user-friendly interfaces. These are indicated to reduce the unpredictability and risk associated with making purchases online (Zhang et al., 2018; Gong et al., 2023). Overall, this conclusion is consistent with the literature. It highlights a crucial component of the dynamics of e-commerce, which is that whereas task cues, such as accurate and thorough product information, are fundamental, the influence that they have on social interaction may be moderated by the timeliness and relevancy of the information that is delivered. Furthermore, the lack of substantial connections in other areas does not decrease the significance of task cues; rather, it implies that the link between task cues and social cues is complicated and may be impacted by an additional set of characteristics that were not included in the dataset. Given the results, a further in-depth investigation into the ways in which the display of task cues, maybe in conjunction with aesthetic signals, might potentially improve social interaction on the platform is warranted.

This topic is further informed by the literature study, which highlights the ways in which aesthetic signals, such as the visual attractiveness and layout of a platform, contribute considerably to initial impressions and user attitudes (Cyr et al., 2009; Norman, 2013). The interaction between aesthetic and task cues may be a significant role in the development of an environment that is favorable for the flourishing of social signals, despite the fact that this interaction is not explicitly addressed in the table data. For instance, a display of product information that is visually beautiful may inspire consumers to engage more with material, which may ultimately result in an increase in social engagement, such as reviews and ratings.

As shown by the research that has been conducted, social cues have a significant role in the process of developing a pleasant user experience and generating brand loyalty (Hajli, & Sims, 2015; Liu& Chen 2020). They are designed to simulate face-to-face conversations and may either function as persuasive endorsements or as deterrents for prospective purchasers. In spite of the fact that the data presented in Table does not demonstrate any significant connections, this does not invalidate the possibility that task cues have an effect on the social components of consumer behaviour. As an alternative, it encourages a more comprehensive inquiry into the ways in which these task cues might be adjusted to enable social engagement, which is essential for the retention and loyalty of our customers.

The table 6 presents the Relationship Between Aesthetic Cues and Social Cues. Several factors interact in the online retail space to impact customer actions. The empirical data shown in Table 6 investigates the relationship between aesthetic cues, which include visual impact, color, and layout, and social cues, which are represented by customer communication, experience sharing, and product review. When you consider this study

in conjunction with the detailed literature review on task, aesthetic, and social signals, you will find that it is especially insightful.

Table 6

Relationship Between Aesthetic Cues and Social Cues

Variables	r	p-value	Interpretation
Visual Impact			
Customer Communication	0.049	0.394	Not Significant
Experience Sharing	-0.017	0.765	Not Significant
Product Evaluation	0.119*	0.040	Significant
Color			
Customer Communication	0.134*	0.021	Significant
Experience Sharing	-0.074	0.200	Not Significant
Product Evaluation	0.058	0.318	Not Significant
Layout			
Customer Communication	0.231**	<.001	Highly Significant
Experience Sharing	-0.060	0.297	Not Significant
Product Evaluation	0.095	0.101	Not Significant

**. Correlation is significant at the 0.01 level/*. Correlation is significant at the 0.05 level

The statistical data makes it clear that there is a complex link between social signals and aesthetic characteristics. Notably, the layout is determined to be a very significant component in customer communication (r = 0.231, p <.001), which supports the argument made in the literature that the design of a platform has a substantial influence on the user experience (Cyr et al., 2014). Not only does a layout that is well-structured make navigation easier, but it also improves the clarity and reception of social interactions, such as consumer comments and debates, which helps to reinforce the platform's function as a digital social space (Hajli & Sims, 2015).

In addition, the association between color and customer communication is important (r = 0.134, p = 0.021), but it is not as strong as the correlation between layout and customer communication. This conclusion is consistent with the findings of Norman's (2013) study, which suggests that color schemes have the potential to gently alter the psychological reception of social interactions by the user, perhaps making them more attractive and engaging.

It is interesting to note that there is a strong link between product assessment and visual impact (r = 0.119, p = 0.040), which implies that the aesthetic presentation of items might have an effect on the degree to which buyers participate in assessing them. This lends credence to the notion that visual signals have a role not only in the initial appeal of clients but also in the creation of an atmosphere that is favorable to active engagement in product assessment (Cyr, et al. 2014).

This article takes a deeper look at the relationship that exists between these results and the discussion on task cues that was included in the literature review. According to Huang and Wang (2019), Kim and Lee, (2019), and Zhang and Wang (2018), task cues are very important in the realm of e-commerce. These task cues include thorough product descriptions and user-friendly interfaces. Nevertheless, the research presented here shows that the visual aspects of the platform may either increase or decrease the efficiency of these strategies. For instance, the presentation of comprehensive product information becomes more effective when it is offered inside a layout that is both visually attractive and well-organized.

The purpose of this synthesis of empirical data and theoretical views is to emphasize the integrated influence of aesthetic and social signals on the identification of customers with e-commerce platforms. An aesthetic cue enhances the sensory experience, while social signals construct the connecting tissue between the platform and its users. Task cues are responsible for laying the framework for usefulness and function, while aesthetic cues enrich the sensory experience. Due to the interconnectedness of these components, it is suggested that a composite approach is required in order to develop platforms that resonate with people on several levels.

The data shown in Table 6 when viewed through the lens of the literature study that was given hints to a nuanced dance between the aesthetic presentation of an e-commerce platform and the social dynamics that it has. The ramifications for platform designers are very clear: in order to maximize user engagement and pleasure, it is necessary to focus equal emphasis on the aesthetic features that encourage social connections as well as on the functional parts of the platform. In order to achieve long-term success in the highly competitive e-commerce sector, it is essential to strike this balance in order to cultivate a client base that is loyal to the brand.
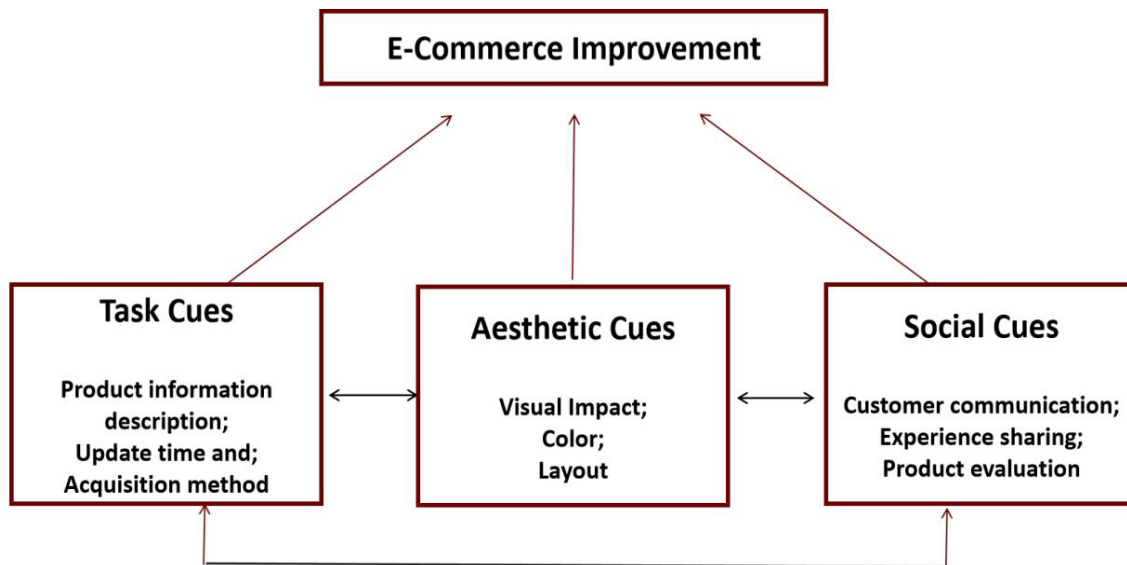

Figure 1. Proposed E-Commerce improvement Framework

The e-commerce platforms may convert complex information into clear diagrams to improve customer identification. E-commerce companies may effectively listen to customer conversations, demonstrating respect and concern for the customer. The small and medium-sized foreign trade enterprises may use the proposed E Commerce Improvement Framework to promote customer identification. To thrive in the cutthroat online retail industry, e-commerce platforms should follow these suggestions for improved customer service, an enjoyable shopping experience, and the development of a dedicated client base.

The frameworks show the inter relationships of the three variables. The **Task Cues** presents that the Customers prioritize the reliability and specificity of product information. Clear, accurate, and comprehensive product descriptions are confirmed to be critical for customer identification with e-commerce platforms. The update time and acquisition methods also play a significant role, highlighting the need for timely updates and streamlined purchasing processes. While **aesthetic Cues through** direct data on aesthetic cues were not provided, positive feedback on product information indirectly suggests that customers may also respond well to the overall visual presentation of e-commerce platforms. The implicit impact of thoughtful design, including the use of color and layout, contributes to a positive user experience and assists in customer identification and retention. The **Social Cues** portion show The study underlines the importance of trust, fostered by clear and reliable product descriptions, in the context of social cues. Social signals such as user reviews and comments have a profound effect on consumer confidence, emphasizing the need for e-commerce platforms to integrate social features that enable and promote customer interaction and community building. **As to relationship among cues,** there is an indication of a synergistic effect between task, aesthetic, and social cues, suggesting that the integration of these elements could significantly enhance customer identification with the platform. The relationship among these cues is complex and indicates that a multifaceted approach is required to fully understand and leverage their combined impact.

4. Conclusion and recommendations

The respondents moderately agreed on the customer identification role of task cues in terms of product information description, update time and acquisition method. The aesthetic cues in terms of visual impact, color and layout have moderate effect to customers as assessed by the respondents. There is moderate agreement on social cues in terms of customer communication, experience sharing and product evaluation based on the assessment of the respondents. Highly significant and positive correlations were proved between Task Cues and Aesthetic Cues, Task Cues and Social Cues, Aesthetic Cues and Social Cues. An E-Commerce Improvement Framework was formulated. The e-commerce platforms may convert complex information into clear diagrams to improve customer identification. The e-commerce companies may effectively listen to customer conversations, demonstrating respect and concern for the customer. The small and medium-sized foreign trade enterprises may use the proposed E Commerce Improvement Framework to promote customer identification. Future researchers may explore other potentially important variables on the social e-commerce customer identification.

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