Emotional Interaction Design Strategies for Users' Social Media Usage Motivation

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Abstract. This paper changes the research perspective of social media interaction design, takes McQuail's "media-personal interaction" model as the starting point, combines emotional design, and illustrates the research idea of social design based on the motivation of users' social media use, and proposes four types of social interaction design: instinctive design, information design, communication design, and value design. It also concludes that social interaction design should be designed around the four design types and focus on different levels of emotional design for different users' social media usage motives. This study provides new design ideas and design methods for social design in social media.

Keywords: Social Media · Interaction Design · Social Design · Emotional Design

1 Introduction

In human society, socialization relies on social behavior to interact with others in various forms to achieve certain purposes. Therefore, social motivation is the fundamental reason that drives social behavior and is the essence of social interaction. Nowadays, as SNS socialization becomes more and more widespread in the process of network development, the virtual property of online socialization has broken the traditional social tradition based on "local" and "blood" [1], which has challenged social relationships. Bill Mogridge has also mentioned that technology is not the essence of interaction design, but rather the emotional experience that users have during the interaction is more significant [5]. This suggests that it is important to explore the entry point of emotional design in interpersonal social interaction from social motivation and to explore the matching interaction methods in the field of online social media interaction design.

2 Social Design Based on User's Media Usage Motivation

Online social networking is a virtual presentation and expansion based on offline interpersonal interaction, and it is also a tool for people's entertainment, information expansion, interpersonal interaction, and self-improvement [3]. Therefore, based on users' different
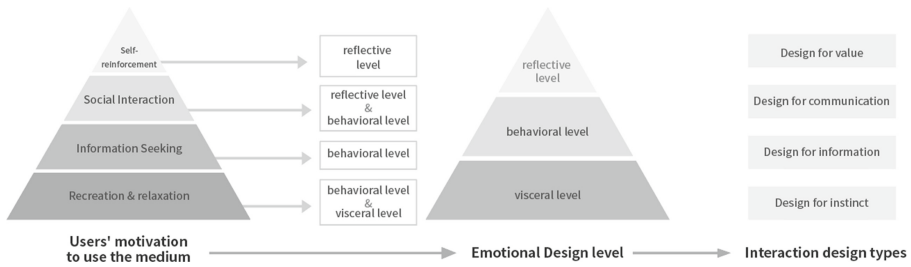
Fig. 1. Construction and geometrical dimensions of specimens.

usage motives, online social platforms will match the interaction design principles and focus on planning and presenting content and functions.

According to sociologist McQuail's theoretical model, there are four types of user-medium interactions, including entertainment, personal relationships, personal subjectivity, and monitoring, which correspond to four motivations: entertainment and relaxation, information seeking, social interaction, and self-enhancement. According to Maslow's hierarchy of needs, the lowest level of motivation for using media is based on physiological needs for entertainment and relaxation, while information seeking and social interaction are at the middle level, and the highest level is based on self-actualization. Therefore, this paper places the user's media usage motivation in the context of emotional design and corresponds to three design levels of emotional design (visceral level, behavioral level, and reflective level), analyses the interaction characteristics corresponding to each usage motivation, and proposes four types of interaction design for online social media, as shown in Fig. 1.

3   Case Study of Interaction Design Based on User Motivation

3.1   Socialization Based on the Motivation of Entertainment and Relaxation: Focus on Pleasure Design

Social applications for users' entertainment and relaxation motivation have recreational characteristics, and in interaction design, it should start from the visceral level. The design is centered around the sense of pleasure, giving users a constant stream of surprises as rewards from the content level, while avoiding increasing the user's operational difficulty while presenting a large amount of information.

Case Description
Tinder is a social application that caters to users' motivation to relax and entertain themselves with its core function of socializing with strangers. Users swipe strangers' photos to match with strangers in both directions, thus establishing social connections with strangers and forming a light social network, while experiencing freshness and satisfying their curiosity in the process of socializing.

(1) From the visceral level- Reward strategies

Tinder users choose who they like and dislike by swiping through strangers' informational cards, and the anticipation and curiosity of the next user keep stimulating users to swipe through photos. At the same time, only when both users choose to "like" each other will they be matched and start chatting. This kind of random social matching increases users' expectations of the unknown, and a successful match becomes a random reward that encourages users to keep exploring. In this process, users are stimulated to secrete dopamine and experience physiological pleasure, thus achieving the purpose of satisfying their entertainment needs.

(2) From the behavioral level - Simplify interaction actions

When using Tinder, users only need to swipe left and right to indicate their likes or dislikes, which is simple and easy to repeat with a single finger. Since users need to do a lot of filtering in the process of finding social partners, which can easily lead to input information overload, so only simple gestures can simplify the operation, avoid the extra burden of inputting information at the user's end, and maximize the user's psychological pursuit of entertainment and relaxation.

3.2 Socialization Based on Information-Seeking Motivation: Focus on Information Design

Social platforms that serve users' information-seeking motives have information integration as their main function while emphasizing the combination of information and social circle expansion. In the interaction design process of such social platforms, the focus is on the behavioral design level to create an orderly information structure for users and to realize the mutual transformation of information and social circle expansion.

Case Description
Quora is a question and answer social platform, which relies on the question and answer format to build a social network based on knowledge and information and interpersonal circles. Therefore, how to realize the mutual benefit of information and social circles: expanding interpersonal relationships through information interaction, and using interpersonal relationships to obtain and gather information is the key to Quora's social design.

(1) From the behavioral level - Information classification

Quora provides users with a quick entrance to search for questions and ask questions on the home page, enabling a quick start to the act of finding answers and asking questions. It also classifies the types and topics of questions by tags. This form of tagging and classifying information not only allows questions and answers to be tagged and classified for easy information dissemination and search. At the same time, you can

browse a certain category of questions and answers directly through the tag classification to enhance the accessibility of information, thus improving the efficiency of users in browsing information.

(2) From behavioral level - Two-way expansion of social and information

Unlike other question and answer sites, Quora focuses on leveraging social connections to get questions answered. It even encourages users to post Quora questions to social networking sites like Twitter and Facebook, giving the question more exposure [4]. At the same time, by replying with high-quality answers, users can also gain more users' recognition and followers, to expand new social circles with information.

3.3 Socialization Based on Social Interaction Motivation: Focus on Communication Design

Users' social interaction is mainly motivated by the need for relationship maintenance and emotional belongingness in different social circles. For this user motivation and demand, social platforms need to focus on both the behavioral design layer and the reflective design level, and to satisfy users' emotional belongingness through reflective design based on dividing users' social levels by the behavioral design level.

Case Description
Facebook is a social platform with social interaction as the core, providing users with online social relationship networks. Its users are mostly motivated by social interactions to expand and maintain interpersonal relationships and other social behaviors on the platform, which means that user socialization involves both the efficiency of weak relationship social expansion and the maintenance of strong relationship emotional level. Therefore, the combination of behavioral design level and reflective design level is more important in the level of emotional design.

(1) From behavioral level - divide social circles

Since the multi-level social relationship of users in Facebook determines the difference of users' social behavior, Facebook provides various communication modes in the function setting of users' communication, including Friends mode of one-way invitation and Group mode of multi-way synchronization, to distinguish the dissemination target and scope of messages. Also, the posting function allows users to select visible and invisible friends, further helping users to classify the hierarchy of social relationships.

(2) From reflective level- the sense of group inclusion

Based on the need of users' social relationship maintenance, Facebook starts from the reflective design level, through the shared and open information flow (Personal information, Location, Check-in) and enhanced feedback response design (Like, Comment, Share), to ensure that users can maintain relationship stickiness in the continuously

updated social information and interactive feedback, to achieve the purpose of enhancing users' sense of participation and community integration in social relationships.

3.4 Socialization Based on Self-reinforcing Motivation: Focus on Value Design

In social platforms, users' self-reinforcement motivation often drives users to pursue higher self-worth from social activities. Based on this feature, platforms need to make reflective layer design the focus of social design and create value experience touchpoints around users' social behavior.

Case Description
Nike run club is a sports application that provides sports guidance and sports socialization for runners, aiming to encourage users to gain personal value achievement through sports. Therefore how to enhance users' willingness to exercise and gain personal value in exercise through reflective design level is the focus of interaction design.

(1)   From reflective level - Positive Feedback

This part of positive feedback is divided into two sources: the first is positive feedback from the application to the user. Users get positive feedback in the form of badges and achievements by completing tasks and challenges, thus enhancing their self-worth. The second is by opening the cheer function in Nike run club, the program will show the user's exercise status in the user's dynamic, friends through the expression of these dynamics (likes or comments) will be translated into the user in the exercise process cheer in the headphones. These encouragements from friends also serve as positive feedback to help users strengthen their self-worth.

(2)   From the reflective level-The sense of competition and integration in a group

In Nike run club, users can participate in team sports, which can be either cooperative or competitive. In team sports competition, users can gain a sense of competition in the process of sports to stimulate a sense of achievement, while in group cooperation sports, the sense of collective integration brought by teamwork can enhance the user's own personal value.

4 The Relationship Between User Motivation and Social Media Interaction Design

The above analysis shows that with the development of business models and media technologies, Internet products and services gradually show a trend of socialization [2]. The different motivations of users in different social media lead to differences in users' social needs and social behavior habits, which require social media to form targeted interaction design strategies for different user motivations. Instinctive design for users' entertainment and relaxation motivation, information design for users' information-seeking motivation, communication design for users' social interaction motivation, and value design
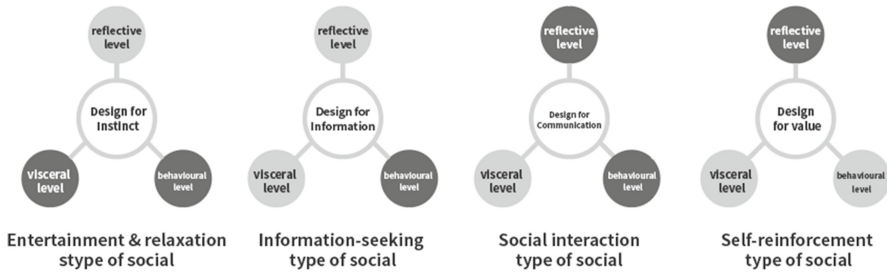
Fig. 2. Emotional design levels focused on four interaction design types.

Users' motivation to use the medium	Emotional design level	Interaction design types	Interaction design strategy	
Recreation & relaxation	visceral level	Instinctive design	① Unknown Strategy	② Simplify interactive actions
	behavioral level			
Information Seeking	behavioral level	Information design	① Information Categories	② Social - information two-way expansion
Social Interaction	behavioral level	Communication design	① Dividing social circles	② Social relationship integration and maintenance
	reflective level			
Self-reinforcement	reflective level	Value design	① Positive Feedback	② Sense of community and inclusion

Fig. 3. Interaction design strategies for users' social media usage motivations.

for users' self-reinforcement motivation all have three emotional design levels: visceral, behavioral, and reflective, but each will have its focus, as shown in Fig. 2. Through the above analysis of the four types of social media social design, we can see that social media focus more on instinctive design based on the visceral level and behavioral level, when targeting users' entertainment and relaxation motivation, more on information design based on the behavioral level when targeting users' information-seeking motivation, more on communication design based on behavioral level and reflection level when targeting users' social interaction motivation, and more on value design when targeting users' self-reinforcement motivation. For the user's self-reinforcement motivation, the value design based on reflection design is more important, as shown in Fig. 3.

5   Conclusion

This paper uses sociological theory to expand the connotation of interaction design, and proposes four types of interaction design and corresponding interaction design strategies by exploring the user motivation of social media, and based on the emotional design hierarchy, to delineate the interface content, form, and interaction mode, guide users to use while satisfying their needs, also explain and illustrate the interaction design strategies through typical social application case studies respectively. The four interaction design strategies proposed in this paper based on user motivation not only enrich the research framework of social design and interaction design at the theoretical level, but also can be used as interaction design strategies in social design to serve social practice.

References

1. Hui Xuan. (2016). The New Form of Interpersonal Communication in the Era of Mobile Internet: The Reconstruction of Traditional "Relationship" by "WeChat" as an Example. Media Insights (03),10-12. doi:https://doi.org/10.19480/j.cnki.cmgc.2016.03.003.
2. Huiying Yang. Research on Online Social Environment Building Based on Experience Design [D]. Jiangnan University,2019.
3. McQuail, D. (1987). Mass communication theory: An introduction. Sage Publications, Inc.
4. Ovadia, S. (2011). Quora. com: another place for users to ask questions. Behavioral & Social Sciences Librarian, 30(3), 176–180.
5. Xiangyang Xin. Interaction Design Arising from Chaos [J]. Design, 2011 (2) :45.