The 'Gamification' of E- Commerce App Media in the Process of Humanistic Transformation

-- Taking 'Taobao' App as an Example

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Abstract: In the era of media convergence, the shift from instrumentalism to humanism in digital media is evident, with gamification emerging as a distinct representation of this transformation. This trend, driven by a human desire for more immersive and sensory-rich media experiences, is particularly pronounced in e-commerce apps, as exemplified by the success of the Taobao app's gamification strategies. The positive market response to Taobao's gamification illustrates its effectiveness in meeting users' personalized needs, empowering them to actively choose and shape their content consumption. This shift transforms media from a mere tool to a multifaceted entity, connecting with human emotions and acting as a compassionate extension of the user. Moreover, gamification proves instrumental in fostering a participatory economy, emphasizing the value of user communities and generating social capital. The Taobao app's integration of gamification not only increases user loyalty but also enhances their ability to contribute value to the platform, establishing a mutually beneficial economic model. As gamification continues to influence media culture, its sustainable development in a fast-paced environment necessitates ongoing industry dedication. The success of gamification, particularly in e-commerce applications, highlights its pivotal role in shaping the evolving landscape of digital media toward a more human-centric experience.

Keywords: Media convergence, Digital media, Gamification Humanism

1. Introduction

The traditional media environment has changed significantly in recent years as media convergence has increased. The introduction of new media has improved the technological and functional shortcomings of traditional media, making it a more sensitive extension of people. The media has demonstrated a tendency in line with human evolution, adjusting to the harmony of human senses in the information- exchange process, obtaining autonomy in the creation of content technology, and moving toward a composite media with aggregated functions. The evolution of "gamification" is a prominent feature of the media's humanization. The concept of "gamification" in digital media is not mature, and there is no uniform standard for defining it. Currently, "gamification" is widely understood as the act of selectively adding elements from games to online features, but not with the end goal of creating mature game products. Although the study of gamification of digital media is still in its infancy, there is no doubt that games have had a profound impact on human civilization and are still having a significant impact on all facets of human life. We will discover that the switch from digital media to humanism is a historical decision based on this. Humans typically pick the most engaging mental activities—driven by the "game" instinct—and as science and technology have advanced, this tendency has gotten more pronounced. This has indirectly increased the demands on various media technologies. The increased gamification of mobile applications is especially noticeable in digital media. The iPhone was introduced in 2007, and the Apple Store opened in 2008, ushering in a major shift in mobile media. The multimedia process of mobile devices accelerated rapidly under the new technology and economic model, and all participants in the mobile economy collaborated to create a mutually beneficial and win-win development environment, making cell phones the most important platform for contemporary media consumption, communication, and production.

At the same time, the mobile software industry has begun an unprecedented period of rapid growth.[1] The significant revenue generated by the digital game medium has led to its widespread use in areas other than entertainment, and mobile applications are no exception, with gamification becoming one of the most desirable strategies for attracting target audiences and ultimately achieving profitability.[2] However, it is worth noting that the explosive proliferation of mobile applications has brought unprecedented challenges and business opportunities. The application market's homogeneity is extremely serious, resulting in shorter and shorter life cycles for all types of applications. Because of their large user base and ability to cash in quickly, e-commerce mobile app users face particularly fierce competition. In this context, large e-commerce platforms, such as Taobao, have gradually captured a larger market by improving their gamification and expanding the platform's functions and the breadth of information dissemination to increase user stickiness.

As the No. 1 online shopping platform in Asia, the Taobao app's strategy and achievements in the 'gamification' process are important representatives for studying the overall humanization trend of e-commerce app media. The first section defines and compares the concepts of 'gamification,' 'e-commerce app,' and 'humanization of digital media,' laying the theoretical groundwork for the subsequent analysis. The second section focuses on the Taobao app's gamification strategy as an example of humanized development of e-commerce media in the gamification process. The third section summarizes the practical implications of gamifying e-commerce app media based on the previous analysis, namely the satisfaction of users' individual needs and the development of a participatory economy.

2. The Evolution of Humanization of Digital Media and 'Gamification' Communication

The 'McLuhan of the digital age,' Paul Levinson, initially put forth his theory regarding the development of the humanization tendency in media in his book 'Human History Rewind.' Since that time, the phrase "humanization trend" has been formally coined and has received significant attention in academic circles. According to Paul Levinson, media evolution is progressing in the direction of adapting to human sensory delights and is becoming more and more human and less artificial. In addition, Paul Levenson describes three stages in the development of media's humanization. According to his description of these three periods, the humanization of the media refers primarily to the media's evolutionary state in the third period, namely, that to achieve the convenience of human information capture and transmission, it is necessary to restore the balance of human senses and communication time and space that was lost in the second period, which is further interpreted as 'the humanization of technology, naturalization, and especially the humanization of the media.'[3] This is also the specific connotation of media humanization. This connotation has two aspects: the first is the humanization of the media, which is the naturalization of the media; the media's access to

information from the outside world must have a realistic aspect, consistent with the characteristics of the natural world in which humans live; and the second is that the media meets the needs of human beings in the sensory balance of information communication. From these two points, we can easily conclude that Paul Levinson's evolutionary theory of media humanization trends emphasizes the subjectivity and subjective initiative of humans in the process of information communication and that each change in media technology is driven by the growing needs of humans themselves. As a result, the humanization of media technology must reflect human essential characteristics and meet their sensory needs. The humanization of media has three distinct manifestations, according to this viewpoint. First, the media, as an extension of the human senses, continues to evolve toward physical sense harmony; second, the media must meet the needs of human information dissemination and communication; and third, the media evolves toward a composite media with aggregated functions.[4]

Paul Levinson's theory of humanizing media development is based on changes in media technology and their inherent tendency, but it also includes another layer of meaning, namely that the communication media produced by technological change are also in line with the humanization trend in the change of communication form and content.[5]This point in the theory is important to recognize because it is determined by the practical nature of communication, and its existence provides realistic theoretical support to the theory of media humanization. Simultaneously, this layer of meaning can assist us in better understanding the humanization trend of mobile applications as an emerging medium. A medium is a material that can connect people, people, and things, or things and things in a broad sense, whereas a medium in a narrow sense is a physical form that can carry and transmit information, whereas the physical form includes the abstract existence of entities and physical energy. Mobile apps fit the description in both broad and narrow definitions of the medium, and the obvious gamification of e-commerce apps under the category of mobile apps follows the internal logic of the humanization trend theory of media evolution, which can be used as a study object to see the concrete representation of the medium in the evolutionary process in a small way.

Richard Bartels of the University of Essex was the first to introduce the concept of 'gamification,' which he defined as "turning something that is not gamified into a game" in the 1980s. [6] The concept of 'gamification' began to gain widespread attention in various industries in 2010, and the same year, 'Google Trends' included the word change, and in 2011, the word 'gamification' was selected by Oxford.[7] The term 'gamification' was selected as a candidate for the Oxford Dictionary Buzzword of the Year in 2011, defined as 'the use of gamification mechanics and gamified experience design to digitally inspire and motivate people to achieve their goals'.[8] In the book 'The Gamification Revolution' by Gabe Zscherman and Jocelyn Lind, gamification is defined as 'the use of design concepts from games - loyalty programs and principles of behavioral economics - to drive user interaction and engagement'.[9]Although the term 'gamification' has received a lot of attention, there is no clear definition of the concept of 'gamification' in academic circles. The most authoritative definition of 'gamification' is proposed by Kevin Weinbach, a professor at the University of Pennsylvania, who believes that gamification is the placement of game elements and game design techniques in non-game contexts.[10]

In summary, while there are various interpretations of 'gamification,' its core connotation remains the same: using elements or mechanisms from games to elicit user motivation and achieve other goals in a non-gamified context. Take, for example, e-commerce apps in the mobile app medium, which guide and drive users' behavioral drivers through gamification mechanisms to achieve their sales goals. E-commerce applications must compete with overseas rivals as well as domestic rivals for user resources in light of the severe competition among international online shopping platforms.[11] As a result, 'gamification' is a key stimulant in the marketing theory of customer behavior and decisionmaking. In the e-commerce app medium, Taobao's approach to a series of gamification explorations deserves to be analyzed as a special case.[12]

3. A case study of gamification exploration of e-commerce app: Taobao app

Taobao is an online store that was founded in 2003 by Alibaba, China's largest e- commerce company. Taobao is Asia's largest retail store and the dominant player in the e-commerce market, with nearly 500 million registered users, over 60 million daily visitors, and more than 80% of China's market share. The Taobao app is Taobao's official mobile app, and its features are more comprehensive than the web version, and it is easier and more convenient to use, making it a more mainstream way to shop. Taobao app's gamification exploration is more than just a technical enhancement and optimization; it emphasizes the user's 'experience' as the center, through game design to meet the user's needs from all angles, and thus promote their consumption behavior. From the standpoint of service marketing, the platform creates games for players to enjoy, but players' participation is also included in the game production process. The production of the game service is completed only when players participate in the game and realize value creation while playing the game. However, because gaming and the sense of experience in games are very personal, games exist only if the game services provided by developers can provide users with game-like experiences.[13] Based on this, the Taobao app chose to use the customization elements of virtual reality games to meet the personalized needs of users during the gamification exploration process to achieve game service completion.

3.1. Extension of self: virtual community and social function

The Taobao app includes a 'Taobao Life' game section for users. Each Taobao user can customize and dress up his or her avatar in Taobao Life to his or her liking. The virtual character's features, skin tone, makeup, and facial expressions can all be customized. The avatar also has its own home, and users can earn coins to decorate their homes. Taobao users can enjoy personalized customization and a fully autonomous experience.

Numerous studies have found that gamers project their real-life selves onto the avatars of video games. The more similar the avatar's image is to the real player's visual characteristics, the stronger the player's psychological identification with the avatar and the more likely he or she is to see the avatar as an extension of themselves. The stronger this feeling, the more likely it is that the player's autonomous needs will be met.[14] Taobao users will frequently complete tasks to earn Taobao gold to purchase more exquisite clothing and accessories to enhance their virtual character image. These tasks to earn coins are repeated every day, and some, like the "daily check-in," require only a single click to reap the benefits. However, these seemingly simple tasks are repeated repeatedly, making the act of playing games a daily habit.

Daily habits are formed as people pursue their life goals, and the formation of habits and the pursuit of goals are inextricably linked, with rewards further reinforcing habits. Once a habit is formed, people will behave by their immediate mental response, rather than relying on goal pursuit and reward mechanisms. [15] Taobao app takes advantage of this feature by initially providing users with gold coins to complete the initialization of their virtual image and establish their image identity and then motivating them to complete daily repetitive tasks to satisfy their needs via the reward mechanism. Finally, users develop the habit of playing Taobao app games daily, which implies that users may generate more value in Taobao app games. This habit is similar to the life of a work punch card, shopping points, and so on. From the user's point of view, 'Taobao Life' is a virtual community online where users earn coins through their efforts to build a more idealized version of themselves. Of course, the Taobao app provides users with social interaction in this virtual community, which is another important way to meet their needs.

Users' sense of belonging will be further satisfied in a virtual reality game when they perceive the social presence there.[16] Users of Taobao Life can communicate with their friends. They can compare the number of likes and achievement points they have accumulated as well as view one

another's clothes and images. High-density friendships have additional opportunities to engage in various contests and earn prizes. Users can visit the houses of their friends through the 'My Home' page and 'like' them.

Users can perceive a strong social presence and a need for connection in such a game environment, which not only meets their requirements for emotional intimacy but also strengthens their sense of belonging. Users' desire for personal competition and autonomy is constantly satisfied in the game's social environment, and their desire to shop grows. Taobao has also set up many elements in the game to guide users' consumption, such as the 'browse the product page for 15 seconds' in the taskbar, to promote users' consumption behavior. Users are more likely to buy products on the Taobao app if they spend more time in the game environment and socialize with others. Each actual purchase is rewarded with coins in the virtual game, and the avatar's value grows in proportion to the amount spent. Furthermore, when a certain amount of money is spent, various achievements are earned, and these data are visible to others. The Taobao app's virtual environment allows users to fully enjoy the freedom of self-direction and self-determination, while also allowing them to form deep emotional ties with others on the platform, satisfying their 'inner needs' all the time. Users become engrossed in the game out of a desire for 'relevance' and become inextricably linked to the platform, creating value for it.[17]

3.2. Innovative Gamification Rewards

It is insufficient to satisfy users' needs through gamification because users' original intention is not to use the Taobao app for gaming or socializing. The Taobao app is appealing to a large number of users because it is constantly updated with new content and activities.[18] Taobao app will launch different activities at different times to invite users to participate in the relaxed game atmosphere, where users can not only get mental pleasure but also substantial rewards. The most important aspect is that these rewards allow them to purchase goods at a lower cost. When the user's experience value or gold coins reach the required level, the system will issue a bonus package that can be used for shopping cash reductions. The user's level in the game increases as they complete more tasks and receive more red packets.

Taobao, for example, launched an online cat-raising activity for the 2021 Double Eleven. Users can assist their cats in growing by completing tasks to earn 'meow coins' (the name of gold coins in the game during the Double Eleven event). The more 'meow coins' it costs as the cat grows. Users can also unlock more chapters of the story at the same time. Users will receive a cash bonus every time the virtual kitty grows, which can be redeemed at any time when the bonus bar is full for a \$61.80 cash bonus. When the virtual kitty reaches the highest level, users can split the 1-billion-yuan cash bonus with other users on the specified date, with a maximum bonus of 4,999 yuan. Taobao launched a similar game mechanism on the 12th of the same year, in which users can divide 30 million yuan of red envelopes by completing the task of planting trees in the Golden Coin Manor.

The Taobao app creates reward mechanisms that are similar but different in these games, and the reward mechanism is frequently adjusted based on the events. Users can get rewards by participating in games in different forms. and the time and frequency of those rewards vary according to the length of the activity. The games are either too easy or too difficult for users to continue participating, so the games designed by the Taobao app are mostly easy to difficult. Users can obtain a large number of game rewards by performing simple operations at the beginning of the game, but these rewards are frequent but relatively low in value. As the game's difficulty increases, the platform guides and encourages users to keep playing by issuing higher-value rewards in stages. It should be noted that each Taobao game and its corresponding rewards are time-limited, and users who complete the game within the specified time will not only receive the corresponding rewards but also specific badges. These rewards (for example, cash credit bonuses) entice users to spend money online and take

advantage of instant discounts during the campaign period. Although the reward mechanism and activity form are different, the connotation is the same: through continuous technological optimization to create more appealing game content, and through the novel game, reward mechanisms attract users to participate in the game, and finally induce users to produce specific consumption behavior.

The Taobao app's gamification exploration is not limited to the two successful strategies mentioned above, but there is no doubt that its scope is very broad. With the help of game elements, the Taobao app can be said to connect all aspects of users to the platform. The platform is concerned with and encourages every user's consumption and growth on the platform. It greatly reduces the guilt of consumption. The presence of games makes consumption more meaningful and pleasurable. The use of gamification elements changes the serious relationship between buying and selling, and the Taobao app and users achieve a win-win relationship more akin to that of a friend.

4. Conclusion

In today's media convergence environment, the trend of digital media shifting from instrumentalism to humanism is becoming more and more obvious, and gamification is becoming more and more obvious as a unique representation of this shift in digital media. The human desire for more natural and sensory-satisfying media has accelerated the gamification of media. In the globalized media and various cultural industries, a new aesthetic of play is emerging, where the pleasures of play are transformed into adult entertainment culture, with its rituals, patterns, and rules, as well as its possibilities, potentials, and manifestations.[19] This gamification is especially noticeable in e-commerce apps. The two Taobao app gamification strategies were examined as special cases in the previous section, and their positive market response demonstrates that the gamification of e-commerce mobile applications is relatively successful. Gamification satisfies the audience subject's personalized needs. Users are no longer simply passive recipients of information; they have the right to choose what information they receive and how they receive it. In this process, media evolves from a single tool to a complex body with multiple identities, and media connects with human emotions and acts as an extension of the human, providing users with more humane care while providing effective information and assisting them in reconstructing themselves in the digital field.

Simultaneously, gamification aids in the development of a new economic model - a participatory economy. The participatory economy values the use value of the user community and generates social capital for the participants. Participants in this process can gain self-satisfaction by acting autonomously in a network, community, or organization, while also providing additional benefits to others, websites, or other stakeholders.[20] The participatory economy is based on social media, where the accumulated users become a profitable asset, and their ideas, actions, and needs can become a new resource for the industry to seek progress.[21] Gamification has aided the Taobao app in developing this participatory economy, allowing users and the platform to participate in this economic model together. Users' loyalty and ability to create value for the platform are greatly increased, and users rely more on and trust the platform to realize their self-worth. Gamification is gradually occupying a central position in media culture and exerting an increasing influence. However, to realize the sustainable development of "gamification" in a fast-growing environment, industries must continue to put in significant effort.

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