Analysis of the "Dust-Gathering" Phenomenon in Bilibili Favorites from an Information Management Perspective: A Case Study of University Students in Qingdao (Postprint)

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Abstract

This study adopts a qualitative research perspective to analyze university students' bookmarking behavior on Bilibili within the information management context, and conducts a follow-up study on the interviewees' bookmark folder "dust-gathering" phenomenon. Using snowball sampling, starting from the researcher's WeChat contacts and through interviewee recommendations, a total of 17 interviewees were recruited, and semi-structured telephone interviews were conducted to investigate these interviewees' usage of Bilibili bookmark folders and the "dust-gathering" situation therein. Employing grounded theory as the research method, through open coding, axial coding, and selective coding, and conducting theoretical saturation testing on the codes, the study ultimately identified 60 initial concepts, 18 conceptual categories, and 2 main categories, refined these concepts, and combined them with a framework to form a map of relationships among the various categories. Through the research findings, this paper proposes the following viewpoints: University students' information management behavior in Bilibili bookmark folders is influenced by both subjective and objective factors; the "bookmark folder dust-gathering" behavior, as an outcome, tends to emerge at various stages of the bookmarking process; subjective factors play a significant role in college students' information processing regarding bookmark folders, particularly information anxiety; simultaneously, it was found that college students' media literacy plays an important role in the information processing of bookmark folders. This paper serves as a concrete supplement and expansion to macro-level information management behavior in the new media era.

Full Text

The "Gathering Dust" Phenomenon in Bilibili Favorites from an Information Management Perspective

Analysis: A Case Study of University Students in Qingdao

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Abstract: This study employs a qualitative research approach to analyze university students' favorites behavior on Bilibili within the context of information management, conducting a longitudinal investigation of the "gathering dust" phenomenon in participants' favorites folders. Using snowball sampling, we initially selected participants from the researcher's WeChat contacts and subsequently obtained referrals, ultimately recruiting 17 interviewees. Through semi-structured telephone interviews, we examined these participants' usage patterns of Bilibili favorites and the extent to which their saved content accumulated unviewed. Grounded theory served as our methodological framework, with data analyzed through open coding, axial coding, and selective coding, followed by theoretical saturation testing. This process yielded 60 initial concepts, 18 conceptual categories, and 2 main categories. By refining these concepts and integrating them into a theoretical framework, we constructed a conceptual map illustrating relationships among categories. Our findings reveal that university students' information management behavior regarding Bilibili favorites is influenced by both subjective and objective factors, with the "favorites gathering dust" outcome potentially emerging at any stage of the curation process. Subjective factors, particularly information anxiety, play a crucial role in how students process information in their favorites. Additionally, the study demonstrates that media literacy significantly impacts information processing within favorites folders. This research contributes specific empirical evidence to broader information management theory in the new media era.

Keywords: Information Management, Bilibili, Favorites, Gathering Dust, Media Literacy

1. Research Background (Introduction)

In the early 21st century, humanity entered the information age, with information quantity growing at an exponential rate. The contemporary university student cohort has matured amid this explosion of information, experiencing its profound effects firsthand. Digital natives—those born into and raised alongside information technology and its applications—are intimately familiar with IT products and services, having habituated to living, learning, and working within these ecosystems [1]. With the rise of social media platforms and continuous evolution of new media, communication has become effortlessly accessible. Generation Z, having grown up amid rapid developments in information and communication technology, is adept at using various electronic devices and accustomed to learning and living with digital companions.

Concurrently, Bilibili, as a cultural community and video platform densely populated by younger generations, has continuously evolved with the times and is becoming a primary learning venue for young people. Numerous professional research institutions and university professors have established presences on Bilibili, transforming it into a de facto "online university" for contemporary youth. Diverse information needs can be satisfied on Bilibili, providing fertile ground for favorites behavior to flourish. The overwhelming velocity of information makes it difficult to process everything, and in today's fragmented, fast-paced information landscape, "gathering dust" has become a popular internet term. The phenomenon of favorites folders accumulating unviewed content has grown increasingly common, making users' information management behaviors ever more critical. This study investigates the causes and motivations behind this "gathering dust" phenomenon, seeking to uncover the anxieties and challenges underlying this behavior among university students, thereby enriching the conceptualization of media literacy in the new era.

2. Literature Review

Collection behavior, a human practice since antiquity, has gradually migrated to the digital realm with the rapid development of internet technology in modern times. No definitive definition of online collection behavior currently exists. Jin Fang (2013) examined young children's collection behavior from family and educational perspectives [18].

Since the dawn of the information explosion in the 21st century, the exponential growth in information volume has profoundly impacted university students situated at its epicenter. As a crucial component of the subjects of mass information, university students' rapid learning capabilities and openness to novelty have increasingly highlighted their prominent position as internet users, making them active across various information platforms. Students' agency in information rights has dismantled traditional information monopolies, with multi-layered, multi-perspective, multi-path, and multi-channel information sources endowing them with powerful information control and transmission capabilities, comprehensively enhancing their abilities to articulate, feedback, and synthesize information [2].

Meanwhile, the information explosion brings unprecedented convenience alongside significant challenges. Li, Liu, and Zhang's study on social media user fatigue and passive usage behavior from a cognitive load perspective indicates that processing overloaded information readily produces "information fatigue syndrome," manifesting as analytical incapacity, compulsive information seeking, heightened anxiety and insomnia, and self-doubt and burnout during decision-making [3]. Other scholars' research demonstrates that information overload creates pressure and burden for users, indirectly influencing unwillingness to use through the mediating effect of thought suppression [7]. Therefore, this study argues that understanding the "gathering dust" phenomenon in internet-era favorites folders requires focusing on users' daily motivations and psychological

states. Grounded in information management theory and employing grounded theory methodology, this research interprets the phenomenon of Bilibili favorites gathering dust among university students from a user-centered perspective.

3. Research Methods

(1) Research Design and Data Collection

This study adopts a qualitative research approach guided by grounded theory, supplemented by NVivo 11 software. Grounded theory is a methodological approach for theory construction in qualitative research that compensates for the overly procedural nature of positivist research, enabling researchers to distill fundamental theories from phenomena through inductive methods (Huang Ying) [4]. Originally proposed by Glaser and Strauss through their publication *The Discovery of Grounded Theory* and subsequent works, grounded theory primarily employs comparative thinking, utilizing various data collection methods to develop concepts, propositions, and theories from empirical materials—a method increasingly adopted across disciplines [5] (Chen Yang).

Data were collected through semi-structured interviews. Using snowball sampling via WeChat, we selected 17 university students currently studying in Qingdao who had experience using Bilibili favorites as interview participants. Applying grounded theory, we coded interview materials from these 17 participants, primarily conducting open coding, axial coding, and selective coding to inductively derive main categories from extensive first-hand data. By refining concepts, comparing hypotheses, and integrating findings from an information storage perspective, we constructed a model of university students' personal information processing and utilization behavior on Bilibili.

Sample selection followed principles of balance. The 17 participants ranged in age from 21 to 23, all enrolled in Qingdao universities, distributed across junior and senior years. The sample comprised 7 males and 10 females, with 10 majoring in liberal arts, 1 in economics, and 7 in science and engineering. Interviews were conducted via telephone and WeChat text chat, each lasting between 30 minutes and one hour. Fourteen in-depth interview transcripts were selected as coding sources, with the remaining 3 used for comparison. Theoretical saturation testing was performed on the selected 14 transcripts.

(2) Coding Analysis

1. Open Coding Open coding involves organizing interview content, fragmenting each transcript to create as many categories as possible, placing elements into the most appropriate categories until saturation is reached. This process requires constant comparison and refinement, coding sentence by sentence, and grouping similar items until initial categories emerge. As shown in Figure 1, coding and categorization of interview content yielded 60 initial concepts and 18 conceptual categories.

2. Axial Coding Axial coding establishes connections among the codes developed during open coding and proposes more abstract concepts, such as causal, differential, or intervening relationships [5]. This study clustered and organized the 18 conceptual categories generated through open coding to form 2 main categories, clarifying the correspondence between main and sub-categories to provide preliminary theoretical support for the conceptual framework, as shown in Table 2 .

3. Selective Coding Selective coding identifies the core concept among those developed in the previous step, establishing a storyline that allows this core concept to encompass as much research material as possible. Through organizing and coding interview data, this study identified two main categories—subjective factors and objective factors—and selectively extracted "Factors Influencing the Favorites Gathering Dust Phenomenon" as the core category. Based on these categories, we constructed a storyline of personal information processing and utilization behavior on Bilibili, as shown in Figures 3 and 4. Steps marked with asterisks represent nodes where the "favorites gathering dust" phenomenon readily occurs, all influenced by subjective and objective factors. This led to the proposition that the gathering dust phenomenon in Bilibili favorites results from the combined effect of personal and platform-related subjective and objective factors. Subjective factors—including "needs," "costs," and "memory"—constitute the dominant causes, while "location" and "platform rules" represent objective factors. Notably, the "location" factor within objective factors encompasses the "memory" factor from subjective factors. Individuals' usage behavior regarding Bilibili favorites constitutes personal information management. Interviews revealed that the frequency of reviewing favorites correlates positively with participants' media literacy. Participants with higher media literacy demonstrated tendencies toward high circulation and frequent cleaning of their favorites, while those who "made full use" of their favorites also exhibited good overall usage patterns across other media platforms.

4. Research Findings

(1) Personal Information Processing Behavior

At different stages of personal information processing in Bilibili favorites, subjective factors simultaneously exert both positive and negative influences, with negative effects potentially emerging at each node. These negative subjective effects constitute the dominant cause of the favorites gathering dust phenomenon.

From an information storage perspective, the core operations of personal information management are input—storage—output. Therefore, complete personal information management behavior primarily includes three processes: finding/re-finding activities, keeping activities, and meta-level activities [6].

1. Information Finding and Keeping Behaviors Both information finding and initial information keeping behaviors are influenced by objective and subjective factors. Subjective factors often actively facilitate collection behavior, as individuals tend to save specific information to their favorites. Meanwhile, objective factors such as time also promote collection behavior. As one participant noted: "Sometimes when I don't have time to watch something immediately, I save it to favorites thinking I'll watch it later" (Participant 12). Time constraints often precipitate collection behavior.

2. Meta-Level Activities The subsequent "gathering dust phenomenon" in favorites primarily involves meta-level activities, where subjective factors play the predominant role. Therefore, this study assumes that meta-level activities are not differentially influenced by objective factors. Meta-level activities constitute a crucial component of personal information management behavior, serving as a bridge between needs and information [6]. This study focuses on four dimensions of meta-level activities: (1) information organization—considering how to categorize information into folders or tag systems; (2) information maintenance—including backup, updating, and format conversion for short-term or long-term preservation; (4) measurement and evaluation—assessing the advantages and disadvantages of current personal information management temporal elements and evaluating alternative solutions; (5) meaningfulness and comprehensibility—requiring awareness of what information is owned and its application needs [6].

(1) Information Organization

This refers to the categorization of favorites content. When saving an item to favorites, individuals face two choices: categorizing the content or saving it to the default folder without classification. Assuming objective factors remain constant, individuals who categorize exhibit significantly lower probabilities of favorites gathering dust compared to those using default folders. Moreover, every participant's favorites contained some "gray zones" in default folders that were infrequently cleaned, demonstrating that categorization is a critical factor influencing whether favorites gather dust.

(2) Information Curation

In the context of favorites management, this manifests as reviewing and cleaning saved content. Reviewing involves two behaviors: first, digesting saved content, which fulfills the original motivation for saving; second, failing to digest content, which directly leads to the favorites gathering dust phenomenon. Information cleaning comprises two components: first, removing invalid videos. This cleaning behavior provides positive psychological reinforcement, as one participant stated: "After cleaning out invalid videos, I feel my favorites become more organized." However, no evidence was found that this behavior influences the gathering dust phenomenon. Second, cleaning dust-gathering videos represents a passive adaptation to the phenomenon and tends to recur among participants.

(2) Causes of Favorites Gathering Dust

1. Needs Needs constitute the primary factor causing the favorites gathering dust phenomenon, whether interpreted positively or negatively. In the information explosion era, individuals select content for favorites based on needs and selectively learn from their saved content based on needs. Constrained by time costs, favorites capacity exceeds individuals' capacity to process information. Consequently, "immediate utility" serves as the greatest motivator for individuals to open favorites and learn saved content, although this behavior is occasionally "intercepted" by search engines.

2. Costs Costs—including time costs and energy costs—represent significant barriers preventing individuals from digesting and absorbing saved content. According to Schramm's formula of probability, the higher the effort required to digest content in favorites, the greater the psychological preparation or time and energy investment demanded from users.

3. Memory The frequency of favorites usage heavily depends on individual memory. After saving specific information, when encountering situations requiring that information, individuals can only be motivated to search and learn from their favorites if they remember having previously saved relevant content.

4. Technology Search engine technology has made information acquisition easier and more convenient in the information explosion era. Although search engine content and favorites content intersect yet remain irreplaceable, some participants indicated that even when relevant videos exist in favorites, they still prefer using search engines. Only when the quality of relevant content in favorites is exceptionally high do they opt to use saved content. In this process, information timeliness and content quality are decisive factors influencing usage.

5. Research Summary

Favorites folders, developed as a standard feature across information applications to help users better manage massive amounts of information, have gradually become prone to "gathering dust" in the context of information explosion, contradicting their original purpose as information processing tools. Interview findings reveal that among the 17 participants, only 2 had developed systematic and standardized personal information management systems. The remaining participants had not formulated personal strategies to cope with data explosion in the information age and lacked conscious adaptive information management practices. Additionally, some participants exhibited differentiated favorites processing patterns across platforms. For instance, Participant 6 indicated they did not manage their Bilibili favorites but regularly cleaned their Douyin favorites. In the ever-evolving new media environment, information processing and media literacy have become essential learning auxiliary skills for university students in

the new era and represent manifestations of media literacy among contemporary youth.

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Note: Figure translations are in progress. See original paper for figures.