

Postprint of an Empirical Study on the Evaluation of Dissemination Media for Archival Compilation Achievements

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Abstract

[Purpose/Significance] Through empirical research on the evaluation of dissemination media for archival literature compilation products, this study provides data support and reference for the effective dissemination of archival literature compilation products and the enhancement of user satisfaction. [Method/Process] Evaluation indicators for dissemination media of archival literature compilation products were established through three approaches: literature collection, expert interviews, and questionnaire surveys. Principal component analysis was employed to calculate the weights of each indicator, and the MUSA model and benchmarking analysis were applied to conduct an empirical satisfaction study on four types of dissemination media for archival literature compilation products. [Results/Conclusion] The evaluation results of user satisfaction for the four dissemination media were obtained, identifying the main competitive advantages, main competitive disadvantages, weaknesses, and priority improvement areas for each medium in the dissemination process of archival literature compilation products, thereby providing reference for theoretical research on the dissemination of archival literature compilation products and practical activities in archival literature compilation work.

Full Text

Preamble

Archival Documents Compilation Work Dissemination Media Evaluation: An Empirical Study

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Abstract

[Purpose/Significance] Through empirical research on the evaluation of archival documents compilation work dissemination media, this study provides data support and reference for the effective dissemination of archival compilation 成果 and the improvement of user satisfaction. **[Method/Process]** Evaluation indicators for archival documents compilation work dissemination media were established through literature review, expert interviews, and questionnaire surveys. Principal component analysis was used to calculate indicator weights, and the MUSA model combined with benchmarking analysis was applied to conduct an empirical study on user satisfaction with four types of archival documents compilation work dissemination media. **[Result/Conclusion]** The study obtained user satisfaction evaluation results for the four dissemination media, identified the main competitive advantages, disadvantages, weaknesses, and priority improvement areas for each medium in the dissemination process of archival compilation 成果, providing reference for both theoretical research and practical activities in archival documents compilation work.

Keywords: archival documents compilation work; dissemination media; MUSA model; benchmarking analysis

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The advent of the digital age has provided more possibilities for the selection of dissemination media for archival documents compilation 成果. With the expansion of audience groups, the value of archival compilation 成果 has evolved from a relatively single academic dimension to a social dimension, with increasingly rich social functions. However, problems such as weak dissemination power and low user awareness still exist in the dissemination process [1]. Meanwhile, due to variations in users' age, social experience, education level, interests, and other personal factors, their ability to utilize archival compilation 成果 differs, leading to different media selection preferences among users [2]. Therefore, it is necessary to analyze the dissemination media for archival documents compilation 成果 and propose corresponding optimization strategies to enhance dissemination power and influence, meet user needs and expectations, promote the continuous development of archival compilation work, and maximize the value of archival compilation 成果.

Literature Review

To further identify research by scholars in related fields on the dissemination of archival compilation 成果, we conducted searches in CNKI, VIP, and Wanfang databases using the themes “archival documents compilation dissemination,” “archival documents compilation 成果 dissemination,” “archival documents compilation and research dissemination,” and “archival documents compilation and research 成果 dissemination.” After removing duplicate and irrelevant literature, Gephi was used to visualize the main keywords from the obtained literature,

with the co-occurrence network of main research content shown in Figure 1 [Figure 1: see original paper].

As shown in Figure 1, research on archival documents compilation 成果 dissemination primarily focuses on archival compilation studies and communication science, archival culture, cultural dissemination, cultural selection, and modern information technology. Analysis reveals that domestic archival science research on archival compilation 成果 dissemination is mainly concentrated in three areas: basic theories of archival compilation 成果 dissemination, dissemination methods and channels, and archival compilation 成果 and culture.

2.1 Basic Theories of Archival Documents Compilation 成果 Dissemination

As a cultural production activity, archival documents compilation needs to address the dissemination problem between archival documents and social users, fundamentally exploring the relationship and theoretical significance between archival compilation and dissemination. Current research mainly includes the disciplinary positioning of archival compilation, dissemination concepts, and its relationship with communication science. Representative studies include: Hu Hongjie's analysis that archival compilation is a core discipline in archival science aimed at disseminating archival documents, requiring full embodiment of its "dissemination" function. He scientifically positioned and evaluated the compilation subject, methods, and 成果 from the perspectives of basic structure and functional analysis, proposing that single historical archival compilation 成果 can no longer meet existing needs, and that only by taking the existence status of compilation 成果 as important research content can the "procedures and methods of archival compilation work" have universal significance [3]. Tian Liyuan interpreted the "people-oriented" value concept from the perspective of archival compilation, proposing to establish humanistic care and take the public's universal interests as the standard, considering different individuals' dissemination needs for archival compilation 成果 [4]. Zeng Lichen argued that as an important method of cultural dissemination, archival compilation should actively adapt to mass cultural dissemination and innovate compilation concepts such as audience orientation, information equality and sharing, comprehensive benefits, and knowledge services [5]. Xie Qi'ai explored the relationship between archival compilation and communication science from historical, information science, and communication perspectives, analyzing the historical origins, basic information transmission processes and elements, and the important characteristic of archival compilation—dissemination [6]. These basic theoretical studies lay a good foundation for subsequent research on archival compilation 成果 dissemination.

2.2 Dissemination Methods and Channels of Archival Documents Compilation 成果

The dissemination of archival compilation 成果 is an important output of archival compilation work. Related research mainly focuses on cultural dissemination, dissemination methods, and channels, with digital publishing being the hottest topic. Cultural dissemination research includes dissemination subjects and selection, positioning and dilemmas, and cultural dissemination strategies, represented by scholars such as Zheng Hui [7], Hu Kun [8], and Wan Yunfei [9]. In research on dissemination methods and channels, Li Wenyi studied the intellectualization of archival compilation work, digital archival collections, and online publishing [10]. Su Junhua and Long Jiaqing investigated the weak dissemination influence of archival compilation 成果, analyzed four aspects—dissemination content, channels, power, and feedback mechanisms—using communication effectiveness analysis, and proposed suggestions including understanding service objects, unblocking dissemination channels, integrating cross-boundary forces, and improving feedback mechanisms [1]. Deng Dongyan and Yao Lun, through the practice of compilation work at Jiangxi Provincial Archives, proposed increasing promotion through gifting, exhibitions, signings, and press conferences [11]. Digital publishing research mainly includes the meaning, characteristics, and development of digital publishing, represented by Yang Xia [12-13], who analyzed the identity of digital and traditional publishing from aspects of essence, purpose, and principles, discussed integrated development ideas, and identified reasons for low user utilization—relatively conservative service concepts, limited digital development capabilities, unclear online operation models, and difficulties in digital copyright management—proposing strategies such as introducing online service public satisfaction evaluation, strengthening cooperation with professionals, promoting market-oriented development, and improving diversified digital copyright management.

2.3 Archival Documents Compilation 成果 and Culture

As a social and cultural activity, archival compilation 成果 carries the essence of social culture and the great mission of cultural inheritance. Research in this area is abundant, mainly focusing on cultural selection, cultural inheritance, and cultural functions. (1) Cultural selection: Domestic research focuses on characteristics, values, and path construction, represented by Fan Ruxia [14] and Cheng Tu [15]. (2) Cultural inheritance: This includes the relationship between archival compilation and cultural inheritance, the function of archival compilation in cultural inheritance, and its cultural contribution, represented by Li Meirong [16] and Fan Ruxia [17]. (3) Cultural function: Ding Huadong [18] and Shan Xudong [19] studied the social memory function of archival compilation 成果, while Wang Di explored its functions in memory cohesion, discourse media, and cultural identity [20].

In media evaluation research, Li Xuhua et al. analyzed the evolution of media evaluation methods, arguing that media evaluation is a comprehensive assess-

ment of media content quality, dissemination effect, and development level [21]. Song Huanjing and Zhang Xuyang investigated college students' trust in newspapers, magazines, television, radio, and internet, examining subjective media preferences, media evaluation, and media participation [22]. Yao Junxi used questionnaire surveys to explore the internal relationships between different media use, media dependence, and trust evaluation [23]. Shen Fei and Zhang Zhian researched audience evaluations of media credibility and compared the predictive validity of media credibility and performance indicators on four dependent variables: social issue perception, political cynicism, in-depth news processing strategies, and personal opinion expression [24]. Overall, domestic media evaluation research mainly focuses on media trust and credibility, with few empirical studies conducting multi-angle, multi-indicator evaluations, and even fewer systematic studies on dissemination media for specific content like archival compilation 成果.

In summary, domestic archival science research on archival compilation 成果 dissemination remains largely in the theoretical exploration stage, covering theoretical studies, dissemination methods, and archival culture. Existing literature provides a good theoretical foundation and some inspiration for dissemination methods. However, empirical research is scarce, especially from the user perspective and using quantitative methods. Quantitative research is valuable for evaluating archival compilation 成果 dissemination media, helping compilers understand users more objectively and improve dissemination effectiveness and user satisfaction.

Research Methods

3.1 MUSA Model

MUSA [25], or Multicriteria Satisfaction Analysis, was proposed and continuously developed by E. Grigoroudis and Y. Siskos. The model aggregates individual judgments into a collective value function, assuming that overall user satisfaction depends on satisfaction with individual service indicators ($X_1, X_2, \dots, X_n$), thereby explaining overall satisfaction through a series of evaluation indicators [26].

Since both individual and overall satisfaction are based on qualitative criteria, the MUSA model derives overall value function y^* and partial value functions x_i^* to ensure maximum consistency between the value function and user satisfaction. The ordinal regression equation of the preference disaggregation model is as follows:

$$\tilde{y}^* = \sum_{i=1}^n b_i x_i^* - \sigma^+ + \sigma^- \quad \text{Formula (1)}$$

In Formula (1), $\tilde{y}^*$ represents the user's overall satisfaction evaluation function, x_i^* represents the user's partial satisfaction evaluation function, b_i represents

weights, n represents the number of indicators, and σ^+ and σ^- are judgment errors. The overall value function y^* and partial value functions x_i^* are monotonic functions normalized within the interval $[0, 100]$. Therefore, the following transformation equations are typically used to eliminate monotonicity constraints on y^* and x_i^* :

$$\begin{aligned} z_m &= y_{m+1}^* - y_m^* \quad \text{where } m = 1, 2, \dots, \alpha - 1 \\ w_{ik} &= b_i x_{i,k+1}^* - b_i x_{ik}^* \quad \text{where } k = 1, 2, \dots, \alpha_i - 1 \text{ and } i = 1, 2, \dots, n \end{aligned} \quad \text{Formula (2)}$$

In Formula (2), y_m^* is the estimated function of overall user satisfaction, and x_{ik}^* is the estimated function of satisfaction for a specific evaluation indicator. α and α_i represent the number of overall satisfaction levels and partial satisfaction levels, respectively.

Based on this, the basic evaluation model for user satisfaction indicators is as follows:

$$[\text{Minimize}] F = \sum_{t=1}^T \sum_{j=1}^M (\sigma_{tj}^+ + \sigma_{tj}^-)$$

Subject to constraints:

$$\sum_{i=1}^n \sum_{k=1}^{q_{tj}^{i-1}} w_{ik} - \sum_{m=1}^{q_{tj}-1} z_m - \sigma_{tj}^+ + \sigma_{tj}^- = 0 \quad \text{where } j = 1, 2, \dots, M \text{ and } t = 1, 2, \dots, T$$

$$\sum_{m=1}^{\alpha-1} z_m = 100, \quad \sum_{i=1}^n \sum_{k=1}^{\alpha_i-1} w_{ik} = 100$$

$$z_m, w_{ik}, \sigma_{tj}^+, \sigma_{tj}^- \geq 0 \quad \forall m, i, j, k, t \quad \text{Formula (3)}$$

In Formula (3), q_{tj} represents the user's overall satisfaction judgment, and q_{tj}^i represents the user's satisfaction judgment for each indicator. M represents the number of users, and T represents the number of evaluation objects. This formula considers additional information about user samples or evaluation objects, allowing error variables to be weighted to approach zero and become negligible.

In evaluation, overall and partial satisfaction indices s_t and s_{ti} can be regarded as basic evaluation performance indicators and assessed through the following equations:

$$s_t = \frac{1}{100} \sum_{m=1}^{\alpha-1} p_m y_m^* \quad \text{where } t = 1, 2, \dots, T$$

$$s_{ti} = \frac{1}{100} \sum_{k=1}^{\alpha_i-1} p_{ik} x_{ik}^* \quad \text{where } i = 1, 2, \dots, n \text{ and } t = 1, 2, \dots, T \quad \text{Formula (4)}$$

In Formula (4), p_m represents the frequency in overall satisfaction levels, and p_{ik} represents the frequency in partial satisfaction levels. Meanwhile, assuming the overall satisfaction index is the weighted sum of partial satisfaction indices, these indices can be reflected in Formula (3). Combining Formula (2) and Formula (4), the additional constraints take the following form:

$$b_i s_{ti} \approx \sum_{i=1}^n b_i s_{ti} \quad \text{where } i = 1, 2, \dots, n \text{ and } t = 1, 2, \dots, T$$

$$\sum_{t=1}^T w_{i\delta} - \sum_{t=1}^T z_{\delta} = 0 \quad \text{where } \delta = 1, 2, \dots, T \quad \text{Formula (5)}$$

The above analysis shows that the MUSA model application requires three factors: overall satisfaction index, individual indicator satisfaction index, and indicator weights. Both overall and individual satisfaction indices range from [0, 100], reflecting user satisfaction levels. Indicator weights sum to 100%, showing each indicator's relative importance in the evaluation system [27].

Based on average indicator satisfaction indices and weights, an action diagram can be drawn with four quadrants determined by performance and weight levels. Performance reflects each medium's evaluation status through average indicator satisfaction. This enables benchmarking and priority ranking for improvements, as shown in Figure 2 [Figure 2: see original paper].

Quadrant I (Transfer Resources): Indicators here show high performance but low weight. These are well-developed and require no further substantial investment; resources should be transferred to other quadrants.

Quadrant II (Leverage Opportunities): Indicators show “double-high” performance and weight, representing competitive advantages that should be actively optimized when opportunities arise.

Quadrant III (Pending Status): Indicators are at a competitive disadvantage with low user satisfaction. Though currently low-weight, their development cannot be ignored to prevent future importance increases.

Quadrant IV (Action Opportunities): Indicators have below-average user satisfaction but high impact, requiring urgent attention and improvement.

Thus, the improvement priority order is: Quadrant IV > Quadrant II > Quadrant III > Quadrant I.

3.2 Benchmarking Analysis

Benchmarking (also called benchmark management or 定点超越) is a management method that improves efficiency by comparing with, analyzing, and learning from excellent practices of benchmark organizations [28]. First proposed and used by Xerox in 1979, it was introduced to the library field in the 1980s

to achieve better performance through sharing business data, management processes, and service policies [29]. Early practitioner Robert Camp defined it as “the process of organizations seeking best practices to achieve superior performance” [30]. Based on different management goals and scopes, benchmarking can be divided into internal benchmarking (evaluating internal indicators with internal best as benchmark), competitive benchmarking (comparing with external peers or competitors), and functional generic benchmarking (learning from excellent organizations in certain fields) [31].

To study the advantages and disadvantages of print, electronic, network, and mobile media in archival compilation 成果 dissemination, this research primarily uses competitive and functional generic benchmarking for analysis and recommendations. By combining MUSA model and benchmarking with perception mapping, we can more intuitively compare and analyze satisfaction evaluation results.

A relative performance diagram can be drawn based on the MUSA model and benchmarking analysis. Relative performance compares each medium’s average indicator satisfaction with the other three media. The purpose is to more intuitively compare the relationship between evaluation objects’ satisfaction indices and competitors’ indices to identify strengths and weaknesses and propose improvements, as shown in Figure 3 [Figure 3: see original paper].

Quadrant I (Strive): The evaluation object’s indicator performance is high but still lower than competitors. Improvement necessity is low due to limited room for enhancement.

Quadrant II (Competitive Advantage): The evaluation object’s indicator performance is high and competitively advantageous.

Quadrant III (Competitive Disadvantage): The evaluation object’s indicator performance is low, representing a competitive disadvantage.

Quadrant IV (Waiting): Although the indicator performance is not outstanding, it is still higher than competitors, requiring special monitoring for potential conversion to competitive advantage.

Using Figures 2 and 3, we can evaluate each indicator of archival compilation 成果 dissemination media more intuitively. Comparing indicators within a single medium reveals weaknesses, while comparing specific indicators across media identifies advantages and future development directions. Reasonable evaluation indicators are prerequisites for empirical research, so we first construct the evaluation indicator system.

Evaluation Indicators for Archival Documents Compilation Work Dissemination Media

To ensure comprehensiveness and rationality, we used literature research, expert interviews, and questionnaire surveys to test and refine the extracted evaluation

indicators.

4.1 Preset Evaluation Indicators

To establish initial evaluation indicators, we interviewed 10 archival science experts and archive workers engaged in compilation work, extracting 20 preset indicators based on user utilization characteristics. Specific indicators, definitions, and sources are shown in Table 1 .

Table 1: Evaluation Indicators for Archival Documents Compilation Work Dissemination Media

No.	Indicator	Definition	Source
1	Form Diversity	Ability to present archival compilation 成果 through text, images, audio, video, multimedia, etc.	Nie Yunxia et al. [32]
2	Search Function	Media's ability to organize and process archival compilation 成果 to provide retrieval services and display relevant information	Xiang Mengmeng et al. [33]
3	Shareability	Ability of users to disseminate and share archival compilation 成果 with other media or users	Liu Jinhong et al. [34]
4	Portability	Convenience of carrying the archival compilation 成果 presented by the media	Cui Qian [35]
5	Segmentation	Media's ability to provide personalized services by segmenting users based on information needs differences	Li Haitian et al. [36]
6	Interactivity	Media's ability to communicate and interact with users	Ding Huadong et al. [37]

No.	Indicator	Definition	Source
7	Visualization	Media's ability to convert archival compilation 成果 into graphical displays with interactive processing	Yu Yuanyuan et al. [38]
8	Intelligence	Media's ability to actively meet various user needs	Zeng Lichen [39]
9	Accessibility	Ease of obtaining, downloading, and using archival compilation 成果 presented by the media	Wang Jingshan [40]
10	Ease of Use	Simplicity of using archival compilation 成果, making it easy for users to learn and master	Deng Shengli et al. [41]
11	Stability	Ability to preserve archival compilation 成果 and ensure long-term, effective access	Wang Chao et al. [42]
12	Pleasure	Emotional experience of joy, delight, and relaxation when using the media	Zhang Fei et al. [43]
13	Trust	Emotional experience of security, reliability, and trustworthiness toward the media	Zhao Jinlou et al. [44]
14	Satisfaction	Emotional experience when user needs are fulfilled	Zheng Yu [45]
15	Dissemination Scope	Breadth and reach of media dissemination	Yuan Yi [46]
16	Dissemination Timeliness	Timeliness and effectiveness of media dissemination	Zhang Yanfeng et al. [47]
17	Dissemination Effect	Precision and degree of achieving dissemination goals and expectations	Su Junhua et al. [1]

No.	Indicator	Definition	Source
18	Credibility	Comprehensive ability to provide credible services	Zhang Yue et al. [48]
19	Affinity	Media's ability to make users feel close and achieve "genuine communication and meaning sharing"	Liu Kunfeng et al. [49]
20	Audience Diversity	Ability to attract audiences of different ages, occupations, education levels, and knowledge backgrounds	Gong Jia [50]

4.2 Evaluation Indicator Testing

After presetting the evaluation indicators, we tested them through a questionnaire survey. The questionnaire had two parts: (1) basic user information (age, gender, education, occupation), and (2) user perceptions of indicator importance, measured on a 5-point Likert scale (1-5 representing increasing importance). Distributed via Wenjuanxing and telephone surveys from April 10-14, 2019, we collected 319 questionnaires, with 267 valid responses (83.70% validity rate). The sample covered 19 provinces/municipalities including Jiangsu, Jilin, Shandong, Zhejiang, Henan, Anhui, Hubei, Liaoning, Guangdong, Beijing, Jiangxi, and Yunnan, involving various occupations such as government agencies, public institutions, enterprises, freelancers, farmers, and students.

4.2.1 Sample Characteristics Descriptive analysis of the 267 valid questionnaires shows: Age-wise, 20-39 year-olds accounted for 65.92%, followed by 40-59 year-olds at 20.6%, indicating most respondents were young and middle-aged. Gender distribution was balanced at 47.94% male and 52.06% female. Education-wise, respondents were mainly college-educated or above, with 40.45% holding bachelor's degrees or college diplomas and 23.6% holding master's degrees or higher, indicating good educational backgrounds. Occupation-wise, students and enterprise/public institution workers accounted for 29.21% and 38.2% respectively. The diverse sample distribution demonstrates high credibility and reference value.

4.2.2 Statistical Analysis of Evaluation Indicators Using SPSS 21.0, we conducted statistical analysis of the valid questionnaires, calculating means and standard deviations, and used factor analysis to determine indicator weights, as shown in Table 2 .

Table 2: Statistical Analysis of Evaluation Indicators

Indicator	Mean	Standard Deviation	Weight (%)
Form Diversity	4.131	0.7354	5.12
Search Function	4.199	0.7753	4.89
Shareability	4.161	0.8212	5.03
Portability	4.131	0.8356	5.12
Segmentation	3.951	0.8619	4.76
Interactivity	4.131	0.8220	5.12
Visualization	4.116	0.8012	5.08
Intelligence	4.206	0.8111	5.18
Accessibility	4.213	0.7615	5.21
Ease of Use	4.154	0.8181	5.14
Stability	4.165	0.8228	5.16
Pleasure	4.052	0.8464	5.02
Trust	4.232	0.7970	5.23
Satisfaction	4.082	0.7746	4.95
Dissemination Scope	4.086	0.8414	4.97
Dissemination Timeliness	4.165	0.8228	5.16
Dissemination Effect	4.071	0.7924	4.91
Credibility	4.303	0.7703	5.33
Affinity	4.079	0.7964	4.98
Audience Diversity	4.007	0.8741	4.85

The minimum mean value is 3.951, with all other indicators exceeding 4, indicating high user recognition of the 20 evaluation indicators. All standard deviations are less than 1, showing consistent recognition among users. Therefore, these indicators are reasonable and suitable as final evaluation indicators. Compared to other indicators, “Affinity,” “Satisfaction,” and “Pleasure” have higher weights, indicating these three features have greater influence on users’ media selection. “Search Function,” “Trust,” and “Accessibility” have lower weights, showing these indicators have less impact on media selection.

Empirical Study of Archival Documents Compilation Work Dissemination Media

After testing the 20 evaluation indicators, we constructed the evaluation indicator system and conducted an empirical study. Dissemination media are carriers of compilation 成果, serving as means and tools to disseminate content and information. Literature surveys show diverse media for archival compilation 成果, including newspapers, magazines, books, television, computers, and mobile phones. Dissemination forms are also varied, including chronologies, photos, documentaries, websites, and WeChat articles. Based on media characteristics and technical support, current dissemination media are categorized into three types: print media, electronic media, and network media. Network media can be further divided into traditional network media (computers) and mobile media

(mobile phones, tablets, e-readers). Thus, archival compilation 成果 dissemination media are summarized into four categories: print media (books, newspapers, magazines, journals), electronic media (radio, film, television), network media (computers using multimedia technology but not portable), and mobile media (portable devices like mobile phones and tablets) [36].

After determining evaluation objects, we collected data through questionnaires covering basic user information and satisfaction evaluation. To ensure quality, we explained the four media types with examples and provided detailed definitions for each indicator. Finally, we used the MUSA model and benchmarking analysis to conduct satisfaction empirical analysis, asking respondents to rate 20 indicators for each medium on a scale: Very Dissatisfied [0-20), Dissatisfied [20-40), Neutral [40-60), Satisfied [60-80), Very Satisfied [80-100].

5.1 User Satisfaction and Performance Analysis

From April 17-19, 2019, we distributed questionnaires via Wenjuanxing, collecting 226 responses with 189 valid (83.63% validity rate). The survey covered 18 provinces/municipalities including Jiangsu, Anhui, Henan, Zhejiang, Hubei, Jilin, Guangdong, Fujian, Shandong, and Shanghai, encompassing students, enterprise/public institution workers, farmers, and individuals. Respondents were mostly aged 20-39 (over 40%), with balanced gender distribution. Most held bachelor's degrees or college diplomas (60.32%), and were mainly students (34.92%) and enterprise/public institution workers (33.33%), indicating good educational backgrounds and broad occupational distribution.

User satisfaction analysis includes average satisfaction and overall satisfaction for each indicator, as shown in Table 3 .

Table 3: Average Satisfaction by Indicator

No.	Indicator	Print Media (%)	Electronic Media (%)	Network Media (%)	Mobile Media (%)
1	Form Diversity	67.04	67.57	65.77	66.51
2	Search Function	66.93	67.04	64.81	67.35
3	Shareability	65.98	71.06	67.25	69.47
4	Portability	68.52	66.08	67.67	68.94
5	Segmentation	65.56	68.62	66.08	68.84
6	Interactivity	67.15	66.61	67.04	68.73
7	Visualization	66.83	69.05	65.87	66.93
8	Intelligence	68.73	70.53	69.26	69.47
9	Accessibility	68.73	67.99	67.78	70.00

No.	Indicator	Print Media (%)	Electronic Media (%)	Network Media (%)	Mobile Media (%)
10	Ease of Use	64.60	71.16	70.11	68.25
11	Stability	67.88	71.48	70.63	64.71
12	Pleasure	70.53	70.00	69.75	70.53
13	Trust	68.41	68.94	67.46	67.25
14	Satisfaction	68.62	69.37	69.15	67.99
15	Dissemination Scope	67.80	69.68	68.31	70.42
16	Dissemination Timeliness	65.13	70.74	70.11	68.97
17	Dissemination Effect	67.78	70.00	70.74	68.41
18	Credibility	70.63	70.21	69.58	68.41
19	Affinity	67.46	68.62	69.89	70.32
20	Audience Diversity	68.10	70.74	71.38	70.85

Mobile media has the highest overall satisfaction, followed by network media, electronic media, and print media with the lowest. Based on Table 3, we created action diagrams for the four media, shown in Figure 4 [Figure 4: see original paper].

Figure 4: Action Diagram of Archival Documents Compilation Work Dissemination Media

The four media share some similarities: “Shareability” and “Dissemination Effect” are in the Transfer Resources quadrant for all four, indicating high satisfaction but low weight, suggesting resources could be shifted to other indicators. “Stability,” “Satisfaction,” “Affinity,” and “Pleasure” are in the Leverage Opportunities quadrant for all four, showing high weight and performance—these are competitive advantages to optimize. “Credibility” and “Form Diversity” are in Pending Status, requiring observation of weight changes. “Intelligence” and “Portability” are in Action Opportunities, showing high weight but low satisfaction, requiring priority attention.

Beyond these commonalities, each medium shows distinct patterns:

Print Media: “Segmentation,” “Interactivity,” “Audience Diversity,” and “Dissemination Scope” are in Action Opportunities, indicating poor performance requiring urgent improvement.

Electronic Media: “Segmentation” and “Audience Diversity” are in Leverage Opportunities (high satisfaction), while “Interactivity” and “Dissemination

Scope” are in Action Opportunities (weaknesses).

Network Media: “Segmentation,” “Dissemination Scope,” and “Audience Diversity” are in Leverage Opportunities (advantages), while “Interactivity” is in Action Opportunities.

Mobile Media: “Segmentation,” “Interactivity,” “Dissemination Scope,” and “Audience Diversity” are in Leverage Opportunities (high satisfaction and importance).

5.2 Relative Performance Benchmarking Analysis

Benchmarking analysis focuses on comparing the four media’s evaluation indicators. Relative performance assessment helps identify competitive advantages and disadvantages for each medium, enabling improvement of weaknesses and enhancing overall performance.

Figure 5: Relative Performance Diagram of Archival Documents Compilation Work Dissemination Media

As shown in Figure 5 [Figure 5: see original paper], the four media each have distinct advantages and disadvantages:

Print Media: “Stability” and “Trust” are in Competitive Advantage quadrant. Most indicators including “Form Diversity,” “Search Function,” “Shareability,” “Portability,” “Segmentation,” “Interactivity,” “Visualization,” “Intelligence,” “Ease of Use,” “Pleasure,” “Dissemination Scope,” “Dissemination Timeliness,” and “Audience Diversity” are in Competitive Disadvantage. “Affinity,” “Satisfaction,” and “Dissemination Effect” are in Strive quadrant—high satisfaction but lower than other media. Given high weights for “Affinity” and “Satisfaction,” improvement is needed. “Accessibility” and “Credibility” are in Waiting quadrant—low satisfaction but higher than competitors, requiring monitoring.

Electronic Media: “Affinity,” “Stability,” “Audience Diversity,” “Pleasure,” “Visualization,” “Trust,” and “Ease of Use” are in Competitive Advantage. “Dissemination Timeliness,” “Dissemination Scope,” “Form Diversity,” “Accessibility,” “Search Function,” “Interactivity,” “Portability,” “Credibility,” and “Intelligence” are in Competitive Disadvantage. “Interactivity” has high weight and requires attention.

Network Media: “Affinity,” “Dissemination Effect,” “Satisfaction,” “Search Function,” “Segmentation,” “Audience Diversity,” “Visualization,” “Pleasure,” “Ease of Use,” “Dissemination Scope,” and “Shareability” are in Competitive Advantage. “Dissemination Timeliness,” “Trust,” “Portability,” “Credibility,” and “Accessibility” are in Competitive Disadvantage. Among these, “Trust” and “Accessibility” have low weight, so priority can be given to improving the other three indicators.

Mobile Media: “Affinity,” “Dissemination Effect,” “Dissemination Scope,” “Satisfaction,” “Shareability,” “Segmentation,” “Dissemination Timeliness,”

“Interactivity,” “Search Function,” “Ease of Use,” “Audience Diversity,” “Pleasure” are in Competitive Advantage. “Trust” is in Competitive Disadvantage. “Stability” is in Strive quadrant—high satisfaction but lower than other media. “Form Diversity,” “Accessibility,” “Portability,” “Intelligence,” and “Credibility” are in Waiting quadrant—satisfaction is not outstanding but still higher than other media, requiring opportunity monitoring for conversion to competitive advantage.

Discussion and Conclusions

Using the MUSA model and benchmarking analysis, we evaluated user satisfaction with four media for archival compilation 成果 dissemination, identifying each medium’s competitive advantages, disadvantages, weaknesses, and priority improvement areas. Results are summarized in Table 4 .

Table 4: Competitive Analysis Results

	Main Competitive Medium Advantages	Main Competitive Disadvantages	Priority Improvement Areas
Print Media	Stability, Trust, Credibility, Accessibility	Search Function, Audience Diversity, Dissemination Timeliness, Dissemination Scope, Pleasure, Ease of Use, Segmentation, Interactivity, Visualization, Intelligence, Shareability, Portability	Pleasure, Segmentation, Interactivity, Audience Diversity, Portability
Electronic Media	Affinity, Stability, Audience Diversity, Pleasure, Visualization, Trust, Ease of Use	Dissemination Timeliness, Intelligence, Credibility, Search Function, Portability, Interactivity, Form Diversity, Dissemination Scope	Interactivity, Portability, Intelligence

	Main Competitive Medium Advantages	Main Competitive Disadvantages	Priority Improvement Areas
Network Me- dia	Shareability, Dissemination Scope, Ease of Use, Visualization, Audience Diversity, Segmentation, Search Function, Satisfaction	Dissemination Timeliness, Trust, Portability, Credibility, Accessibility, Form Diversity, Interactivity	Interactivity, Intelligence, Portability
Mobile Me- dia	Affinity, Intelligence, Portability, Search Function, Interactivity, Dissemination Timeliness, Segmentation, Pleasure, Shareability, Dissemination Scope, Dissemination Effect	Trust, Stability	Stability, Trust, Credibility

The analysis reveals characteristics and competitive situations of the four media, helping archival workers identify optimal media for different compilation 成果, thereby expanding dissemination scope, improving utilization and satisfaction, and enhancing service quality.

6.1 Print Media Improvements

Print media's main advantages are "Stability," "Trust," "Credibility," and "Accessibility"—users highly trust its long-term access and content reliability. Main disadvantages include "Search Function," "Audience Diversity," "Dissemination Timeliness," "Dissemination Scope," "Pleasure," "Ease of Use," "Segmentation," "Interactivity," "Visualization," "Intelligence," "Shareability," and "Portability." Priority improvements are "Pleasure," "Segmentation," "Interactivity," "Audience Diversity," and "Portability," which have high weights but low satisfaction.

Recommendations: 1. **Optimize services and establish user feedback mechanisms:** Innovate service concepts, transform attitudes, and facilitate communication with readers through user feedback columns, letters, or calls. 2. **Deepen user understanding and develop segmented services:** Un-

derstand user needs to reasonably divide newspaper/magazine sections, maintaining core readership while expanding user groups and enriching audience diversity. 3. **Simplify and optimize carrier capacity:** For overly thick publications, consider multi-volume publishing with lightweight paper and simple binding to improve portability.

6.2 Electronic Media Improvements

Electronic media's main advantages are "Affinity," "Stability," "Audience Diversity," "Trust," "Pleasure," "Visualization," and "Ease of Use." Main disadvantages are "Dissemination Timeliness," "Intelligence," "Credibility," "Search Function," "Portability," "Interactivity," "Form Diversity," and "Dissemination Scope." Priority improvements are "Interactivity," "Portability," and "Intelligence."

Recommendations: 1. **Active interaction for effective communication:** Strengthen user participation through hotlines and text messages. 2. **Holistic assessment of pros and cons:** While portability is limited, television's wide audience and high penetration can compensate. 3. **Technological innovation and AI exploration:** Use AI hosts for continuous radio programs, customize 推送 content based on preferences, or use AI speakers for more precise, convenient sensory experiences.

6.3 Network Media Improvements

Network media's main advantages are "Shareability," "Dissemination Scope," "Ease of Use," "Visualization," "Audience Diversity," "Segmentation," "Search Function," and "Satisfaction." Main disadvantages are "Dissemination Timeliness," "Trust," "Portability," "Credibility," "Accessibility," "Form Diversity," and "Interactivity." Priority improvements are "Interactivity," "Intelligence," and "Portability."

Recommendations: 1. **Real-time interaction and socialized interaction models:** Users are both receivers and active contributors. Establish live feedback channels for real-time interaction and public visibility of comments. 2. **Super integration and cloud technology platforms:** Intelligence requires systematic engineering. Build a cloud platform integrating search, integration, mining, evaluation, and sharing functions with massive archival resources, enabling searchable, classifiable, serialized, and complete content.

6.4 Mobile Media Improvements

Mobile media's main advantages are "Affinity," "Intelligence," "Portability," "Search Function," "Interactivity," "Dissemination Timeliness," "Segmentation," "Pleasure," "Shareability," "Dissemination Scope," and "Dissemination Effect." Main disadvantages are "Trust" and "Stability." Priority improvements are "Stability," "Trust," and "Credibility."

Recommendations: 1. **Unified standards for long-term access:** Unify format standards and select authoritative, stable platforms to avoid file invalidation or format incompatibility. 2. **Moderate traffic and official voice:** As gatekeepers, workers should release content strategically and authoritatively through official Weibo, WeChat, and APPs to improve credibility and user trust.

Archival compilation 成果 hold important social value, recording and inheriting culture and history while permeating daily life. This empirical study of print, electronic, network, and mobile media helps archival workers select the most appropriate dissemination channels based on content, characteristics, and purposes, improving utilization, satisfaction, and service quality. However, realizing the value of archival compilation 成果 is influenced by multiple factors beyond media, including content, form, audience, and dissemination environment. Future research should comprehensively consider these factors for more systematic and referential results.

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Author Contributions

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The Empirical Research on the Evaluation of the Archival Documents Compilation Work Media

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Abstract: [Purpose/significance] Through empirical research on the evaluation of archival documents compilation work media, this paper hopes to provide data support and reference for the improvement of effective dissemination and user satisfaction of archival compilation 成果. [Method/process] Through literature collecting, expert investigation, and questionnaire surveys, this paper establishes the evaluation index of archival documents compilation work media. It uses principal component analysis to calculate index weights, and applies the MUSA model and benchmarking management method to conduct empirical analysis on the satisfaction of four archival documents compilation work media. [Result/conclusion] The evaluation results of user satisfaction of four archival documents compilation work media are actually obtained, and the competitive advantages, competitive disadvantages, weaknesses, and priorities for improvement of each medium in the dissemination process are located. This paper can provide reference for the theoretical research and practical activities of archival documents compilation work.

Keywords: archival documents compilation work; media; MUSA model; benchmarking

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

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