

System quality as the primary driver of CMS effectiveness in a digital newsroom

Fitri Julia Wardani*, Anton Subarno

Office Administration Education, Sebelas Maret University, Surakarta, Indonesia

Email: fitrijulia75@student.uns.ac.id

Abstrak

Transformasi cepat dalam jurnalistik digital meningkatkan kebutuhan akan Content Management System (CMS) yang andal untuk mendukung alur kerja redaksional secara real-time. Penelitian ini bertujuan menguji pengaruh perceived ease of use dan system quality terhadap efektivitas penggunaan CMS pada pegawai Tribunnews.com Solo, baik secara parsial maupun simultan. Penelitian menggunakan pendekatan kuantitatif korelasional. Populasi berjumlah 51 pegawai aktif Tribunnews.com Solo, dengan sampel 45 pegawai yang ditentukan menggunakan teknik disproportionate stratified random sampling. Data dikumpulkan melalui kuesioner tertutup skala Likert 1–4 dan dianalisis dengan regresi linear berganda menggunakan IBM SPSS. Hasil penelitian menunjukkan bahwa (1) perceived ease of use tidak berpengaruh positif dan signifikan terhadap efektivitas penggunaan CMS ($p = 0,523$; $t = 0,645$); (2) system quality berpengaruh positif dan signifikan terhadap efektivitas penggunaan CMS ($p < 0,001$; $t = 3,980$); serta (3) perceived ease of use dan system quality secara simultan berpengaruh positif dan signifikan terhadap efektivitas penggunaan CMS ($p < 0,001$; $F = 15,930$) dengan kontribusi sebesar 43,1%. Temuan ini mengindikasikan bahwa peningkatan efektivitas penggunaan CMS lebih ditentukan oleh keandalan sistem dibandingkan kemudahan antarmuka, sedangkan perceived ease of use memerlukan pengembangan fungsionalitas fitur sesuai kebutuhan redaksional.

Kata kunci: alur kerja redaksional; jurnalistik; model penerimaan teknologi; persepsi kemudahan penggunaan; regresi berganda

Abstract

The rapid transformation of digital journalism has intensified the demand for reliable content management systems (CMS) that can sustain real-time editorial workflows. This study examined the partial and simultaneous effects of perceived ease of use and system quality on the effectiveness of CMS use among staff at Tribunnews.com Solo. A quantitative correlational design was employed. Data were collected through a modified four-point Likert questionnaire from 45 active employees drawn from a population of 51 using disproportionate stratified random sampling, and were analyzed by multiple linear regression in IBM SPSS. The results indicate that perceived ease of use had no significant effect on CMS effectiveness ($p = .523$; $t = 0.645$), whereas system

* Corresponding author

Citation in APA style: Wardani, F.J., & Subarno, A. (2026). System quality as the primary driver of CMS effectiveness in a digital newsroom. *Jurnal Informasi dan Komunikasi Administrasi Perkantoran*, 10(4), 451-461. <https://dx.doi.org/10.20961/jikap.v10i4.119260>

quality exerted a positive and significant partial effect ($p < .001$; $t = 3.980$). The two variables jointly explained 43.1% of the variance in CMS effectiveness ($p < .001$; $F = 15.930$). These findings suggest that in a high-pressure newsroom populated by expert users, stable and reliable system infrastructure is a stronger determinant of effective CMS use than interface ease; enhancing perceived ease of use requires targeted feature development aligned with editorial needs.

Keywords: editorial workflow; journalism; multiple regression; perceived ease of use; technology acceptance model

Received May 18, 2026; Revised July 11, 2026; Accepted July 18, 2026; Published Online July 02, 2026

<https://dx.doi.org/10.20961/jikap.v10i4.119260>

Introduction

Over recent decades, the evolution of information technology has fundamentally transformed a wide range of sectors, and the media industry is no exception (Mustamin et al., 2025). Long before the digital era, mass information dissemination began with the fifteenth-century printing revolution, which enabled literacy to reach broad segments of society (Ningrum et al., 2024). The rise of the internet subsequently produced a boundaryless information landscape in which data can be accessed instantaneously and globally. This shift has positioned online media as the primary channel for information dissemination, displacing the traditional roles of print and broadcast media. At the same time, however, the sheer volume of information flowing through digital channels demands a high level of adaptive capacity from news providers to mitigate the risk of misinformation amid intense pressure to publish rapidly.

Current pressures on the digital media industry increasingly center on the speed of news production without compromising verification. The Reuters Institute Digital News Report 2024 (Newman et al., 2024) shows that social media has become the primary source of news for 48% of the global population. This phenomenon is more pronounced in Indonesia, where 79% of the public relies on online news media, 60% on television, 48% on social media, and 9% on print as their principal source of information; 84% of access occurs through smartphones, 53% through computers, and 35% through tablets (Newman et al., 2024). The high proportion of mobile-based access compels newsrooms to compete continuously in delivering attractive, high-quality, and up-to-date content on a moment-by-moment basis (Ningrum et al., 2024).

To win the competition for traffic while maintaining credibility, editorial strategies now depend on the tight integration of rigorous journalistic standards with capable digital technology (Ningrum et al., 2024). Timely information updates are no longer optional; they are a prerequisite for retaining reader engagement. Consequently, the ability of editorial teams to manage complex workflows in real time requires technical infrastructure that guarantees efficient practitioner performance. In this context, information systems become the operational engine of digital media. The dependence of the media industry on digital technology parallels the broader organizational need for reliable information systems. Frisdayanti (2019) defines an information system as an organized set of elements that manage data from collection to distribution, functioning as a decision-support instrument within organizations.

Although information systems play a vital role in enhancing organizational effectiveness, their implementation continues to face several obstacles in practice. Arujisaputra (2025) argues that the primary barriers to optimizing corporate performance typically stem from error-prone manual systems and weak inter-departmental coordination. The effectiveness of information technology use, in turn, is determined by three critical factors: synergy across software applications, the availability of technological infrastructure across organizational units, and personnel readiness to operate the system to its full potential (Hulu et al., 2024). These arguments suggest that the effectiveness of information systems depends on the synergy between technical system reliability and user readiness.

The importance of information systems is equally evident in journalism, where rapid and accurate information flows are essential. Contemporary journalism has moved decisively toward online publication in an effort to capture readers whose habits have migrated toward online technologies (Rungsisawat & Chankoson, 2020). Within this environment, the need for effective information systems has intensified as digital information volumes have grown. According to a survey by the Indonesian Cyber Media Association (Asosiasi Media Siber Indonesia, 2021), 93.3% of cyber media in Jakarta and 43.2% of cyber media outside Jakarta have adopted in-house content management systems (CMS) as the primary infrastructure for portal management. A CMS is designed to help media organizations manage news content across writing, editing, archiving, and real-time publication. It provides flexibility in managing information, allowing content updates without affecting the appearance or functionality of the website (Sembiring & Hasanah, 2025).

The effectiveness of an information system is commonly assessed through the DeLone and McLean Information Systems Success Model, which integrates system quality, information quality, service quality, and user satisfaction. DeLone and McLean (2016) argue that this model is a widely used evaluation standard because it provides a concise yet comprehensive assessment of system success, particularly through the system quality dimension. Complementing the D&M framework, the Technology Acceptance Model (TAM) proposed by Davis (1989) foregrounds the subjective perspective of users, positioning perceived ease of use as a critical construct. Integrating the core elements of the D&M and TAM models therefore enables a more comprehensive appraisal of CMS effectiveness. The resulting analysis extends beyond technical system performance to encompass user adoption and the perceived contribution of the system to organizational productivity. Nevertheless, CMS use is not free of obstacles, whether technical or user-experience related.

Prior studies have examined information system effectiveness across sectors, including government, agriculture, and private enterprise. Sholeha (2023) emphasized the effectiveness of personnel information systems; Piandayani (2024) focused on the SIRUP system in the agricultural sector; and Muslim et al. (2022) and Pranoto et al. (2024) investigated accounting information system effectiveness in corporate settings. Safri (2024) documented technical problems such as cut-off failures in accounting information systems that indicated sub-optimal operation. Nitasya et al. (2024) reported that the effectiveness of the Regional Government Information System (SIPD) was undermined by system stability issues and limited operational features, particularly in the financial reporting of Regional Public Service Agencies (BLUD). Despite this diverse literature on determinants of information system effectiveness, empirical evidence specifically addressing the effectiveness of CMS use remains limited. This gap underscores that CMS effectiveness continues to be an under-examined but consequential challenge in contemporary organizations.

Indications of low CMS use effectiveness are also observed among employees of *Tribunnews.com* within PT *Tribun Berita Online Solo*. The urgency of system effectiveness in this unit reflects the characteristics of the media industry, which demands real-time news production under rigorous performance standards. Under optimal conditions, writing a single news article at *Tribunnews.com Solo* is expected to be completed within 30 minutes, while the technical process of editing and uploading a single article into the CMS should take approximately two minutes. Interviews with employees, however, revealed several technical difficulties, including additional manual steps required to update headlines (HL), a non-intuitive insert-link procedure, the absence of automatic typo detection, login failures, limitations in processing special character inputs, and a restricted set of special characters, particularly for mathematical notation. These difficulties are reinforced by staff feedback expressing a need for an activated scheduling mode and for automatic typo detection in the body text.

Rusminah and Hilmiati (2021) found that perceived ease of use exerted a positive and significant effect of 47.9% on information system use. Aziziyah (2021) similarly reported that perceived ease of use contributed 20.1% to information system use, implying that the more easily a system can be used, the more likely users are to adopt it. Perceived ease of use refers to the belief that a computing system can be readily understood and operated (Rahayu & Purbandari, 2020). A further determinant of CMS use effectiveness is system quality. High system quality enables both individual and organizational performance to be optimized. Purwanto and Pawirosumarto (2017) found that system quality significantly influenced system use, contributing 25.4%, indicating that

improvements in system quality drive meaningful increases in use. Anjarbati and Pribadi (2022) likewise reported that system quality had a positive and significant effect of 35.6% on information system use.

The sub-optimal effectiveness of CMS use among Tribunnews.com Solo employees is therefore a critical issue that warrants immediate attention. By analyzing the drivers of system effectiveness in depth, this study seeks to contribute to organizational productivity, faster news publication workflows, and the competitive positioning of digital media in the information age. Existing findings on the roles of perceived ease of use and system quality remain inconsistent, and no prior study has simultaneously examined their effects on CMS use effectiveness in the specific context of Tribunnews.com Solo. Moreover, the demographic and occupational characteristics of the population and sample in this study differ meaningfully from those in previous research. These considerations motivate the following research questions: (1) Does perceived ease of use significantly and positively affect CMS use effectiveness among Tribunnews.com Solo employees? (2) Does system quality significantly and positively affect CMS use effectiveness among Tribunnews.com Solo employees? (3) Do perceived ease of use and system quality simultaneously exert a positive and significant effect on CMS use effectiveness among Tribunnews.com Solo employees?

The study is grounded in a conceptual framework that positions perceived ease of use (X1) and system quality (X2) as key determinants of the effectiveness of content management system use (Y). The framework assumes that the more reliable and easier a system is to operate, the more effective its use in managing content will be. Accordingly, three hypotheses are proposed: perceived ease of use has a positive and significant effect on CMS use effectiveness (H1); system quality has a positive and significant effect on CMS use effectiveness (H2); and perceived ease of use and system quality simultaneously have a positive and significant effect on CMS use effectiveness (H3).

Research Methods

This study adopted a quantitative correlational approach, chosen because it yields data suitable for testing and verifying hypotheses about the presence or absence of statistical effects. The study involved two independent variables perceived ease of use and system quality and one dependent variable: the effectiveness of content management system use. The research was conducted in four stages: preparation, data collection, data processing, and report writing. Implementation ran from September 2025 to April 2026. The population comprised all 51 active employees of the Tribunnews.com Solo unit at PT Tribun Berita Online Solo. A sample of 45 employees was drawn using disproportionate stratified random sampling.

Data were collected through a modified closed-form questionnaire measured on a four-point Likert scale. The instrument was pilot-tested with respondents whose characteristics matched those of the study sample. Items were developed from indicators derived for each construct, yielding an initial pool of 41 items: 13 items for perceived ease of use, 13 items for system quality, and 15 items for CMS use effectiveness. Instrument validity was assessed using Pearson product-moment correlation; items were retained when obtained exceeded r_{table} . With a pilot sample of 30 respondents and $\alpha = .05$, r_{table} equaled .361. Validity testing retained all 15 CMS-effectiveness items, 12 of the 13 perceived-ease-of-use items, and 11 of the 13 system-quality items, yielding a final instrument of 38 items. Reliability was assessed using Cronbach's alpha, with a threshold of $\alpha > .60$. All variables surpassed this threshold, as shown in Table 1.

Table 1
Reliability Test Results for Each Variable

Variable	Cronbach's Alpha	Threshold	Note
CMS Use Effectiveness (Y)	0,892	0,60	Reliable
Perceived Ease of Use (X ₁)	0,809	0,60	Reliable
System Quality (X ₂)	0,922	0,60	Reliable

Source: Data processed by researchers (2026)

As shown in Table 1, all instruments exceeded the reliability threshold and were therefore judged suitable for data collection. The indicators for perceived ease of use covered ease of learning, ease of becoming skillful, clarity and understandability, flexibility, and controllability. The indicators for system quality covered reliability, access speed, security, system integration, and accessibility. The indicators for CMS use effectiveness covered information quality, individual performance, organizational performance, and perceived usefulness.

Data were analyzed using multiple linear regression in IBM SPSS Statistics version 26. The analytical procedure began with data tabulation and continued with prerequisite testing normality, linearity, multicollinearity, heteroscedasticity, and autocorrelation. Autocorrelation was assessed using the runs test, with the criterion that no autocorrelation exists when the significance value exceeds .05; the obtained significance was .229, satisfying the assumption. Hypothesis testing then proceeded through t-tests (partial effects), an F-test (simultaneous effect), and the coefficient of determination (R^2). In addition, the relative and effective contributions of X_1 (perceived ease of use) and X_2 (system quality) to Y (CMS use effectiveness) were computed. Relative contributions estimate each predictor's share of the regression sum of squares, while effective contributions multiply the relative contribution by R^2 to quantify each predictor's actual contribution to the dependent variable. These statistical procedures were used to test and validate the hypotheses and to produce statistically meaningful results.

Results and Discussion

Research Results

The final 38-item instrument was administered via closed-ended questionnaire to the 45 sampled respondents. Data were processed and analyzed using IBM SPSS Statistics version 26. Analyses included descriptive statistics for the two independent variables perceived ease of use (X_1) and system quality (X_2) and the dependent variable, CMS use effectiveness (Y). Descriptive statistics are presented in Table 2:

Table 2
Descriptive Statistics of Study Variables

	Perceived Ease of Use	System Quality	CMS Use Effectiveness
N	45	45	45
Mean	36,93	32,24	44,51
Std. Error of Mean	0,643	0,569	0,888
Median	37	32	43
Mode	37	32	42
Std. Deviation	4,314	3,815	5,957
Variance	18,609	14,553	35,483
Range	22	18	23
Minimum	26	25	35
Maximum	48	43	58
Sum	1662	1451	2003

Source: Data processed by researchers (2026)

As shown in Table 2, the CMS use effectiveness variable produced a minimum score of 35, a maximum of 58, a mean of 44.51, and a standard deviation of 5.957 across 15 items scored on a modified four-point Likert scale (total score = 2,003). The perceived ease of use variable produced a minimum score of 26, a maximum of 48, a mean of 36.93, and a standard deviation of 4.314 across 12 items (total score = 1,662). Finally, the system quality variable produced a minimum score of 25, a maximum of 43, a mean of 32.24, and a standard deviation of 3.815 across 11 items (total score = 1,451).

Prerequisite tests included normality, linearity, multicollinearity, and heteroscedasticity checks. The Asymp. Sig. (2-tailed) value of the normality test was .345 ($> .05$), indicating that the data were normally distributed. Linearity was supported by deviation-from-linearity significance values of .130 for perceived ease of use and .389 for system quality, both greater than .05, indicating linear relationships between each predictor and CMS use effectiveness.

Multicollinearity testing yielded tolerance and VIF values of .611 and 1.634 for perceived ease of use, and .612 and 1.637 for system quality. Because tolerance values exceed .10 and VIF values fall below 10, multicollinearity was not detected. Heteroscedasticity was assessed using the Glejser test, which produced significance values of .915 for perceived ease of use and .109 for system quality. The scatterplot showed data dispersed randomly above and below the zero line without a systematic pattern, and both predictors' significance values exceeded .05, indicating that the regression model was free of heteroscedasticity.

The results of hypothesis testing t-tests, F-test, coefficient of determination (R^2), and effective and relative contributions of X_1 and X_2 to Y are presented in Tables 3, 4, and 5.

Table 3
Results of the t-Test and Multiple Linear Regression Analysis

	B	T _{value}	Sig.	Std. Error	Beta
(Constant)	9.779	1.486	.145	6.580	
Perceived Ease of Use	.133	.645	.523	.206	.096
System Quality	.925	3.980	.000	.232	.593

Source: Data processed by researchers (2026)

As shown in Table 3, the significance value for perceived ease of use (X_1) was .523 ($> .05$), and the obtained t-value (0.645) was lower than the critical value ($t_{table} = 2.018$, $\alpha = .05$, $df = 42$). These results indicate that perceived ease of use did not significantly affect CMS use effectiveness (Y). In contrast, system quality (X_2) produced a significance value of $< .001$ ($< .05$) and a t_{value} of 3.980 (> 2.018), indicating a significant and positive partial effect on CMS use effectiveness.

Table 4
Results of the F-Test

	Sum of Squares	df	Mean Square	F	Sig.
Regression	673.458	2	336.729	15.930	.000b
Residual	887.787	42	21.138		
Total	1561.244	44			

Source: Data processed by researchers (2026)

Table 4 shows a significance value in the Sig. column of $< .001$ ($< .05$) and an F_{value} of 15.930, which exceeds the critical F_{value} of 3.22 ($\alpha = .05$, $df_1 = 2$, $df_2 = 42$). These results indicate that perceived ease of use (X_1) and system quality (X_2) exert a positive and significant simultaneous effect on CMS use effectiveness (Y).

Based on the regression coefficients reported in Table 3, the resulting regression equation is:

$$\hat{Y} = 9.779 + 0.133 X_1 + 0.925 X_2$$

where Y denotes CMS Use Effectiveness, X_1 denotes Perceived Ease of Use, and X_2 denotes System Quality. The equation can be interpreted as follows. The constant of 9.779 indicates that when both predictors equal zero, the predicted value of CMS use effectiveness is 9.779. The regression coefficient for X_1 (0.133) indicates that a one-unit increase in perceived ease of use, holding X_2 constant, is associated with a 0.133-unit increase in CMS use effectiveness. The regression coefficient for X_2 (0.925) indicates that a one-unit increase in system quality, holding X_1 constant, is associated with a 0.925-unit increase in CMS use effectiveness.

Table 5*Coefficient of Determination (R²) Results*

R	R Square	Adjust R Square	Std. Error of the Estimate
.657 ^a	.431	.404	4.598

Source: Data processed by researchers (2026)

As presented in Table 5, the coefficient of determination (R²) is .431, indicating that perceived ease of use (X₁) and system quality (X₂) jointly explain 43.1% of the variance in CMS use effectiveness (Y). The remaining 56.9% is accounted for by other factors not examined in this study. The effective contribution ($\beta \times \text{correlation coefficient} \times 100\%$) of perceived ease of use to CMS use effectiveness was 4.5%, while the effective contribution of system quality was 38.6%; the sum matches the R² value reported above. The relative contribution ($\text{SE}(X)\% \div R^2$) of perceived ease of use to CMS use effectiveness was 10.44%, and the relative contribution of system quality was 89.56%. The total relative contribution therefore equals 100%.

Discussion

Analysis of the perceived ease of use variable indicates that it did not exert a positive and significant effect on CMS use effectiveness, with a significance value of .523 ($> .05$) and $t = 0.645$, which is smaller than the critical value of 2.018; H₀ is therefore accepted and H₁ rejected. This finding runs against the Technology Acceptance Model (Davis, 1989), which generally treats perceived ease of use as a principal determinant of system effectiveness and assumes that ease of use is proportional to user effectiveness. In the context of an online media organization characterized by high-tempo work, the ease of the workflow is no longer the decisive determinant of effectiveness. Journalists at Tribunnews.com Solo already possess high digital literacy and are habituated to technology; regardless of how complex or simple the CMS is, employees are required to work effectively to meet publication targets. This finding contrasts with Sasvito (2024), who reported that perceived ease of use explained 36.1% of the variance in intention to use a CMS an intention that is a strong precursor to effective use. That divergence likely reflects differences in respondent profile and use context: Sasvito's (2024) respondents were entrepreneurs who prioritized ease of use as an initial attractor, whereas the present sample comprises expert journalistic staff. Salleh et al. (2022) similarly reported a positive and significant effect of perceived ease of use on user satisfaction, which itself is a strong predictor of effective CMS use. The present findings, however, align with Kusumo and Rosyadi (2023), who reported no significant effect of perceived ease of use on user satisfaction with the Gojek application satisfaction being a key criterion for the success of a system. Despite differences in context and respondent profile, an underlying similarity emerges. Where Kusumo and Rosyadi's (2023) non-significant result was driven by the high digital literacy of general consumers, the present result reflects the high daily intensity of system use among professional staff. For expert users, ease of use ceases to be a primary determinant because CMS operation has become routinized; technical system quality thus assumes greater importance for performance than mere interface ease. These findings collectively suggest that perceived ease of use does not invariably determine the effectiveness of information system use, particularly when other factors such as system quality or user experience play a stronger role.

Descriptive analysis of the questionnaire data indicates that the highest-rated item on the perceived-ease-of-use scale was item 3, with a total score of 176. This suggests that respondents perceive the CMS interface and features to be highly understandable, so that employees do not require lengthy time or complex training to operate the system independently. The finding is consistent with Kusumo and Rosyadi (2023), who observed that learnability is central to enabling users to reach their goals rapidly. In the context of journalistic CMS, this learnability provides a baseline for staff to operate the system fluently, supporting effective use throughout the news production process without meaningful technical friction.

Analysis of the system quality variable indicates that it exerted a positive and significant effect on CMS use effectiveness, with a significance value of $< .001$ and $t = 3.980$, exceeding the

critical value of 2.018; H_0 is therefore rejected and H_2 accepted. This finding corroborates the DeLone and McLean (2016) information system success framework, which identifies system quality as a principal driver of use intensity and user satisfaction, and, in turn, of individual and organizational effectiveness. In this context, a high-quality CMS enables editorial workflow to run without technical interruption, meaningfully raising news-production throughput. The finding is supported by García-Avilés et al. (2016), who showed that innovations within a CMS play a crucial role in accelerating editorial workflow. Although that study employed a comparative-strategy design across traditional and digital media, both studies converge on the point that a capable system is the primary lever for efficiency. Whether at the scale of large Spanish media houses or a local Indonesian news unit, reliable system quality remains a key determinant of effective use in news production. Laumer et al. (2017) likewise reported that system quality contributed 51.1% to user satisfaction, itself a prerequisite for effective CMS use. Isnaeningsih et al. (2021), studying the ISMUBA application in education, reported that system quality had a positive effect on user satisfaction equal to 48.7% ($p < .001$), and satisfaction is in turn a prerequisite for sustained effective system use. Although those studies focused on education, the observed pattern parallels the findings in journalism: whereas in education system quality facilitates teachers' content management, in a newsroom system quality is central to the speed of news distribution, which in turn increases CMS use effectiveness among staff. A similar result was reported by Asnawi (2017) for the VSAT IP information system at PT SCMedia, where system quality positively and significantly influenced user satisfaction an expression of effective system use. Although the industries differ, a fundamental commonality emerges: system reliability automatically enhances effectiveness. Together, these studies underscore that access speed and technical stability are the foundational determinants of user satisfaction with a system, which in turn adds value to employee productivity.

Descriptive analysis of the questionnaire data further indicates that the highest-rated item on the system-quality scale was item 10, with a total score of 186. This suggests that employees consider the availability of a stable CMS at all times highly supportive of work mobility outside office hours. The finding is consistent with Laumer et al. (2017) and Asnawi (2017), who emphasized that reliable and stable system quality is a crucial factor for user satisfaction and, by extension, for the effectiveness of CMS use in supporting routine operations.

The two variables perceived ease of use (X_1) and system quality (X_2) also exerted a significant simultaneous effect on CMS use effectiveness, with a significance value of $< .001$ and $F = 15.930$, exceeding the critical F_{value} of 3.22; H_0 is therefore rejected and H_3 accepted. Through perceived ease of use, employees retain a baseline of operational fluency across CMS features despite occasional procedural obstacles. System quality, meanwhile, is the primary driver that guarantees a stable and responsive platform. When both align, their synergy provides the infrastructural support that employees need to complete tasks more efficiently. The effective- and relative-contribution analyses further show that system quality has a larger influence on CMS use effectiveness than perceived ease of use, indicating that system quality contributes more substantively to effective CMS use at *Tribunnews.com Solo*.

This study aligns with Fajriah (2024), who examined mobile banking use and found that system quality and perceived ease of use together are key determinants of positive user responses. The relevance to the present study lies in the principle that when an information system whether in banking or journalism provides stable technical performance and simple navigation, users can more optimally achieve their functional goals. In a CMS context, this manifests as faster and more frictionless news publication. Similar support is provided by Purnomo and Hardianto (2025), whose study of TikTok Shop use among Generation Z showed that system quality and application ease of use meaningfully influence user experience. Although the object of study differs, the indicators of the constructs and the quantitative approach align with the present study, reinforcing the point that in the digital age, effective operation of a system depends substantially on the reliability of its underlying infrastructure.

Taken together, these results reinforce the argument that CMS use effectiveness in a digital newsroom is not merely a function of journalistic skill but the outcome of a synergy between a robust system and an easily operable interface. Theoretically, the study contributes to the joint development of the Technology Acceptance Model (Davis, 1989) and the DeLone and McLean (2016)

information systems success framework by providing empirical evidence that in routinized, high-pressure editorial workflows the system quality construct exhibits stronger predictive power than perceived ease of use a pattern that has not been extensively tested on CMS platforms in the digital media industry. The finding thus refines the interpretation that information systems success theory is universally applicable while noting that the relative weight of each construct varies with the task and operational pressures inherent to specific industrial contexts, including a digital-journalism industry with strict publication-speed standards. Practically, the results recommend that Tribunnews.com Solo management prioritize improvements in system quality through two intervention clusters: streamlining the editorial workflow including the headline update procedure, a more intuitive insert-link feature, and activation of a scheduling mode and strengthening system capabilities, including support for special characters and mathematical notation, resolution of login failures, and integration of automatic typo detection in the body text. Implementing both clusters is expected to produce optimal editorial standard operating procedures, so that the ease of use already perceived by staff can translate into statistically measurable gains in effectiveness.

Conclusion

This study shows that perceived ease of use and system quality exert a positive and significant simultaneous effect on the effectiveness of CMS use among employees of Tribunnews.com Solo. Partially, however, only system quality has a significant effect, while perceived ease of use makes no independent contribution. Theoretically, these findings advance the integration of the Technology Acceptance Model (Davis, 1989) and the DeLone and McLean (2016) Information Systems Success Model: the non-significance of perceived ease of use at the partial level extends understanding of the boundary conditions of the ease-of-use construct in mandatory, routinized systems within high-target work environments, while the dominance of system quality reinforces its centrality within the D&M framework as the primary determinant of effectiveness in work that demands high technical reliability. Practically, system reliability and stability are shown to be substantially more consequential for CMS use effectiveness in a digital newsroom than interface ease alone, so that raising system quality should be a management priority at Tribunnews.com Solo. This study is limited in its variable coverage and in its focus on a single media organization. Future work is recommended to test additional variables such as perceived usefulness, information quality, and user satisfaction; to extend the object of study to multiple news portals with differing CMS characteristics in order to enhance generalizability; and to adopt longitudinal designs that can measure changes in effectiveness before and after system feature updates, so that causal relations among the variables can be identified with greater precision.

References

- Anjarbati, N., & Pribadi, U. (2022). Pengaruh kualitas sistem, kualitas informasi, dan kualitas pelayanan terhadap penggunaan smart government di Kabupaten Lampung Selatan. *Jurnal Caraka Prabu*, 6(1), 104–122. <https://doi.org/10.36859/jcp.v6i1.937>
- Arujisaputra, E. T. (2025). Penerapan sistem informasi untuk meningkatkan efisiensi operasional dan pengambilan keputusan di perusahaan. *Journal Scientific of Mandalika (JSM)*, 6(3), 700–709. <https://doi.org/10.36312/vol6iss3pp700-709>
- Asnawi, M. F. (2017). Pengaruh kualitas sistem, kualitas informasi, kualitas layanan, dan partisipasi pengguna terhadap kepuasan pengguna sistem: Studi kasus pada bagian operasional VSAT IP PT Semesta Citra Media. *Seminar Nasional Teknologi Informasi dan Multimedia*, 5(1), 157–162. <https://ojs.amikom.ac.id/index.php/semnasteknomedia/article/view/1614>
- Asosiasi Media Siber Indonesia. (2021). *Indonesian digital media landscape report 2021: Survey on cyber media condition in Indonesia*. <https://cms.amsi.or.id/uploads/dokumen/5/5/55.pdf>
- Aziziyah. (2021). Peranan persepsi manfaat sebagai mediasi dalam pengaruh persepsi kemudahan penggunaan dan kepercayaan terhadap penggunaan e-commerce pada aplikasi Traveloka. *Jurnal Ilmu Manajemen*, 9(1), 205–216. <https://doi.org/10.26740/jim.v9n1.p205-216>

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- DeLone, W. H., & McLean, E. R. (2016). Information systems success measurement. *Foundations and Trends in Information Systems*, 2(1), 1–116. <https://doi.org/10.1561/29000000005>
- Fajriah, M. (2024). Analysis of the influence of the system quality, perception of usability, and perception of ease of use on user satisfaction in BWS mobile banking with the technology acceptance model (TAM) approach. *Jurnal Syntax Transformation*, 5(9), 1104–1112. <https://doi.org/10.46799/jst.v5i9.1005>
- Frisdayanti, A. (2019). Peranan brainware dalam sistem informasi manajemen. *JEMSI: Jurnal Ekonomi dan Manajemen Sistem Informasi*, 1(1), 60–69. <https://doi.org/10.31933/jemsi.v1i1.47>
- García-Avilés, J. A., Carvajal-Prieto, M., De Lara-González, A., & Arias-Robles, F. (2016). Developing an index of media innovation in a national market. *Journalism Studies*, 1–18. <https://doi.org/10.1080/1461670X.2016.116149>
- Hulu, L. E. P. A., Sihombing, V., & Juledi, A. P. (2024). Evaluasi efektivitas sistem informasi manajemen sumber daya manusia di perusahaan multinasional. *Jurnal Sistem Informasi, Teknik Komputer, dan Teknologi Pendidikan*, 4(1), 42–45. <https://doi.org/10.55338/justikpen.v4i1.138>
- Isnaeningsih, H. N., Fitriati, A., Pujiarto, P., & Astuti, H. J. (2021). The influence quality of information, system quality, and service quality on satisfaction and user performance. *Jurnal Manajemen Bisnis*, 12(2), 266–281. <https://doi.org/10.18196/mb.v12i2.11185>
- Kusumo, M. H., & Rosyadi, I. (2023). Pengaruh perceived ease of use, perceived usefulness, dan kualitas pelayanan terhadap kepuasan pengguna Gojek. *Jurnal Manajemen Dirgantara*, 16(1), 50–67. <https://doi.org/10.56521/manajemen-dirgantara.v16i1.876>
- Laumer, S., Maier, C., & Weitzel, T. (2017). Information quality, user satisfaction, and the manifestation of workarounds: A qualitative and quantitative study of enterprise content management system users. *European Journal of Information Systems*, 26(4), 333–360. <https://doi.org/10.1057/s41303-016-0029-7>
- Muslim, A. B., Yani, N. A., & Permatasari, M. D. (2022). Pengaruh kecanggihan teknologi informasi, kemampuan teknik personal dan pengalaman kerja terhadap efektivitas penggunaan sistem informasi akuntansi (studi kasus pada SiCepat Ekspres Indonesia). *Jurnal Akuntansi Bisnis Pelita Bangsa*, 7(01), 17–39. <https://doi.org/10.37366/akubis.v7i01.434>
- Mustamin, M., Mahdar, & Menungsa, A. S. (2025). Transformasi media cetak ke media digital (studi pada Harian Rakyat Sultra). *Jurnal Ilmiah Ilmu Sosial dan Pendidikan (JISDIK)*, 3(2), 1–6. <https://jurnal.unusultra.ac.id/index.php/jisdik/article/view/418>
- Newman, N., Fletcher, R., Robertson, C. T., Arguedas, A. R., & Nielsen, R. K. (2024). *Digital news report 2024*. Reuters Institute for the Study of Journalism. <https://doi.org/10.60625/risj-vy6n-4v57>
- Ningrum, D. R., Sutantri, & Mala, I. K. (2024). Strategi redaksi dalam menjaga keakuratan dan kecepatan berita di media online: Analisis peran jurnalis dalam meningkatkan kualitas berita. *Jurnal Multilingual*, 4(2), 196–209. <https://ejournal.penerbitjurnal.com/index.php/multilingual/article/view/829>
- Nitasya, D., Handajani, L., & Astuti, W. (2024). Implementasi sistem informasi pemerintah daerah: Apakah efektif dalam mendukung pelaporan keuangan OPD. *Jurnal Kendali Akuntansi*, 2(1), 243–255. <https://doi.org/10.59581/jka-widyakarya.v2i1.2064>
- Piandayani, P. (2024). Efektivitas penggunaan sistem informasi rencana umum pengadaan (SIRUP) di Dinas Pertanian Kabupaten Asahan. *JMIAP (Jurnal Manajemen dan Ilmu Administrasi Publik)*, 6(2), 212–222. <https://doi.org/10.24036/jmiap.v6i2.762>
- Pranoto, F. W., Agustin, F., Nanda, M. Y., & Ermayanti, D. (2024). Pengaruh kecanggihan teknologi dan kemampuan teknik personal terhadap efektivitas penggunaan sistem informasi akuntansi pada PT Bank Rakyat Indonesia. *Jurnal Ilmiah Ekonomi Global Masa Kini*, 15(1), 58–65. <https://doi.org/10.36982/jiegm.v15i1.4227>

- Purnomo, A. P. A., & Hardianto, A. W. (2025). Pengaruh kualitas sistem dan kemudahan penggunaan aplikasi terhadap kepuasan pelanggan TikTok Shop pada generasi Z di wilayah Jakarta. *Jurnal Transaksi*, 17(1), 14–32. <https://doi.org/10.25170/transaksi.v17i1.7124>
- Purwanto, S. K., & Pawirosumarto, S. (2017). Pengaruh kualitas sistem, kualitas informasi, dan kualitas layanan terhadap penggunaan sistem e-learning di Program Pascasarjana Universitas Mercu Buana. *Jurnal Manajemen*, 21(2), 282–305. <https://doi.org/10.24912/jm.v21i2.237>
- Rahayu, S., & Purbandari, T. (2020). Pengaruh persepsi kepercayaan, persepsi kegunaan, persepsi kemudahan, persepsi kenyamanan, dan keamanan terhadap minat penggunaan aplikasi investasi (Studi kasus pada investor yang terdaftar di PT Indopremier Cabang Solo). *Jurnal Riset Manajemen dan Akuntansi*, 8(1), 83–96. <http://repository.widyamandala.ac.id/id/eprint/796>
- Rungsrisawat, S., & Chankoson, T. (2020). Engagement with online media. *Journal of Security and Sustainability Issues*, 9(4), 1379–1391. [https://doi.org/10.9770/jssi.2020.9.4\(22\)](https://doi.org/10.9770/jssi.2020.9.4(22))
- Rusminah, R., & Hilmiati, H. (2021). Pengaruh persepsi kemanfaatan dan persepsi kemudahan penggunaan terhadap penggunaan layanan aplikasi GoFood. *Distribusi – Journal of Management and Business*, 9(1), 87–98. <https://doi.org/10.29303/distribusi.v9i1.158>
- Safri. (2024). Analisis gagal cutoff sistem informasi akuntansi pada tutup buku database di PT XYZ tahun 2023. *Jurnal Bisnis dan Akuntansi Unsuraya*, 9(1), 72–84. <https://doi.org/10.35968/jbau.v9i1.1174>
- Salleh, S. M., Aziz, M. A. A., Hamza, S. F. M., Mohammed, N. H., & Yusof, H. S. S. (2022). Relationship between ease of use, content, and user satisfaction on enterprise content management system (ECM). *Journal of Advanced Research in Business and Management Studies*, 26(1), 10–16. <https://doi.org/10.37934/arbms.26.1.1016>
- Sasvito, N. (2024). Pengaruh persepsi kemudahan dan persepsi manfaat terhadap minat pelaku bisnis digital membuat landing page menggunakan content management system. *Journal of Multidisciplinary Science*, 1(2), 135–142. <https://doi.org/10.59631/multidiscience.v1i2.252>
- Sembiring, S. H. A., & Hasanah, Y. N. (2025). Implementasi content management system (CMS) dan fitur pemesanan online untuk mendukung proses ekspor: Studi kasus GoCean Export. *E-Proceeding of Management*, 12(3), 628–633. <https://openlibrary.telkomuniversity.ac.id/pustaka/231609/implementasi-content-management-system-cms-dan-fitur-pemesanan-online-untuk-mendukung-proses-ekspor-studi-kasus-gocean-export-wrap-entrepreneurship.html>
- Sholeha, P. R. (2023). Efektivitas penggunaan sistem informasi kepegawaian dalam manajemen PNS di Kantor Wilayah Kementerian Hukum dan Hak Asasi Manusia Lampung. *Jurnal Progress Administrasi Publik*, 3(1), 24–31. <https://doi.org/10.37090/jpap.v3i1.942>