



The Effects of Content Management Systems on Effective School Management: Evidence from the University of Bamenda, Cameroon

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Abstract: Universities everywhere are being pushed to run tighter, more transparent, and more responsive administrations, and much of that pressure now lands on how well institutions manage their digital information. This study looked at whether Content Management Systems (CMS) actually make a difference to effective school management, taking the University of Bamenda in Cameroon as a case. We surveyed 145 administrators, lecturers, and support staff, drawn from an estimated population of 1,000 through proportionate stratified and purposive sampling, and analysed their responses using descriptive statistics and Spearman's rank-order correlation. The picture that emerged was fairly clear: CMS use and effective school management were positively and significantly related ($\rho = .541, p < .001$), a moderate-to-large association by conventional standards. In practice, this means staff who work with better-organised, more accessible digital systems also tend to report smoother coordination, communication, planning, and decision-making. The null hypothesis was rejected. We conclude that CMS are not a peripheral IT concern but a genuine lever for administrative performance, and we recommend that the university back this up with real investment in ICT infrastructure, sustained staff training, and clearer policy on how digital content should be managed.

Keywords: Content Management Systems; school management; digital governance; educational administration; tertiary education; Cameroon.

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Introduction

Universities today operate under conditions their predecessors did not have to contend with: larger student numbers, tighter accountability regimes, and an expectation that decisions be backed by evidence rather than habit. Meeting these demands increasingly depends on how well an institution manages its own information (Laudon & Laudon, 2022). Digital transformation in higher education is not simply a matter of buying new software; it involves rethinking how institutional strategy, governance, and day-to-day operations are carried out (Bond et al., 2024; Dwivedi et al., 2023). Content Management Systems sit at the centre of this shift. Once associated mainly with running a website, CMS platforms have grown into fuller information-management environments that let institutions create, store, retrieve, and share digital content from a single, centralised system (Rockley & Cooper, 2012; Nakano, 2018).

The reason this matters is straightforward: universities generate enormous volumes of information policy documents, committee minutes, student records, quality-assurance reports and if that information is scattered or hard to retrieve, the result is duplicated work, slower decisions, and administrators who are essentially working blind (Laudon & Laudon, 2022). Institutions that have invested in coherent digital-governance systems tend to show it in their performance, outpacing those still relying on fragmented, paper-heavy processes (Bond et al., 2024; Alenezi & Akour, 2023). None of this is limited to elite, well-resourced systems. Universities in Sub-Saharan Africa are pursuing the same digital transformation agenda, often while managing far tighter budgets and less mature ICT infrastructure (Ssekakubo et al., 2011), which makes the question of whether CMS genuinely deliver administrative benefit even more pressing in this context.

Statement of the Problem

Good decisions need good information, and school managers who can draw on accurate, current data tend to make better calls than those working from guesswork (Rodríguez-Abitia & Correa, 2021). Yet in much of Sub-Saharan Africa, this remains an aspiration more than a reality. Institutions continue to struggle with slow administrative processes, patchy ICT infrastructure, and communication channels that do not always get the right information to the right people in time (Heeks, 2002; Ssekakubo et al., 2011). The University of Bamenda is a case in point: while the institution has taken visible steps to digitise its administration, staff still describe difficulty locating documents, coordinating across departments, and getting timely access to institutional information. What is less clear is whether the CMS already in use are actually contributing to better management, or whether they remain underused, poorly integrated tools that have not yet

translated into the administrative gains they promise. This study sets out to answer that question directly, focusing on the University of Bamenda.

Objective of the Study

The objective of this study was to examine the effects of Content Management Systems on effective school management at the University of Bamenda.

Research Hypothesis

H0: There is no statistically significant relationship between Content Management Systems and effective school management at the University of Bamenda.

H1: There is a statistically significant relationship between Content Management Systems and effective school management at the University of Bamenda.

Theoretical Framework

Administrative Management Theory (Henri Fayol, 1841–1925)

This study leans on Fayol's Administrative Management Theory, still one of the most durable frameworks for thinking about how organisations are run. Fayol argued that management boils down to five interlocking functions which are; planning, organising, commanding, coordinating, and controlling which is supported by a set of guiding principles such as division of work, unity of command, order, and equity. The reason the theory still holds up more than a century later is that these functions do not disappear with new technology; they simply need better information to run on. A CMS does not replace planning, coordination, or control it feeds them, giving managers faster access to the documents and data those functions depend on. That is the theoretical thread connecting CMS use to effective school management in this study.

Empirical Review

Recent research on digital governance in higher education paints a fairly consistent picture: institutions with well-integrated information systems tend to coordinate better and plan more effectively than those without. Rodríguez-Abitia and Correa (2021) found that universities with mature digital-governance frameworks reported clearer institutional coordination and more transparent planning processes, while Alenezi and Akour (2023) linked digital transformation initiatives more broadly to stronger administrative integration and communication. Bond et al. (2024), reviewing a decade of research on digital transformation in higher education, noted that institutions with more developed digital ecosystems weathered the disruption of the COVID-19 period considerably better, largely because their information systems kept communication and documentation running when in-person contact could not.

That said, the literature is not uniformly optimistic. Ifenthaler and Yau (2020) and Dwivedi et al. (2023) both caution that technology alone rarely produces the gains institutions hope for; it tends to work only where staff have the skills to use it and leadership is genuinely behind it. This point matters here, because it is precisely the gap of infrastructure without capacity that is often blamed for stalled digital-transformation efforts in developing-country universities (Heeks, 2002; Ssekakubo et al., 2011). On the management side, Bush (2020) and Hallinger (2022) both argue that effective educational leadership today is inseparable from the communication systems leaders have at their disposal, and Marks and Al-Ali (2020) similarly found that universities with more digitally mature administrations showed stronger organisational responsiveness. Taken together, this body of work suggests that CMS can genuinely strengthen school management, but that the outcome depends as much on people and policy as on the software itself — a tension this study examines directly at the University of Bamenda.

Methodology

The study used a quantitative, descriptive-correlational survey design. The target population was approximately 1,000 administrators, lecturers, and support staff at the University of Bamenda, from whom a sample of 145 respondents was drawn, 55 administrators, 40 lecturers, and 50 support staff using proportionate stratified sampling combined with purposive sampling to ensure each staff category was fairly represented. A structured questionnaire, built around a five-point Likert scale, was used to capture perceptions of CMS use and of effective school management; the instrument was reviewed by subject experts for content validity and tested for internal consistency before full administration. Responses were analysed in SPSS and Microsoft Excel, using frequencies, percentages, means, and standard deviations to describe the data, and Spearman's rank-order correlation coefficient (ρ) to test the hypothesis at the 0.05 significance level the appropriate choice given the ordinal nature of Likert-scale responses.

Results

Demographic Distribution of Respondents

Table 1 shows how the 145 respondents were distributed across professional categories.

Table 1

Distribution of Respondents by Professional Category (N = 145)

Category	Frequency	Percentage (%)
Administrators	55	37.9
Lecturers	40	27.6
Support Staff	50	34.5
Total	145	100.0

Descriptive Statistics

Overall, respondents held a favourable view of the University's CMS ($M = 4.10$, $SD = 0.76$). Communication support was rated highest ($M = 4.21$, $SD = 0.68$), while workflow management, though still rated positively, came in lowest ($M = 3.97$, $SD = 0.83$) — a fairly natural place for a gap to show up, since automating workflows tends to be one of the harder things to get right (Table 2). Effective school management followed a similar pattern, with an overall mean of 4.16 ($SD = 0.72$) and communication effectiveness rated highest ($M = 4.24$, $SD = 0.69$) (Table 3).

Table 2

Descriptive Statistics for Content Management Systems

Dimension	Mean	SD	Interpretation
Information accessibility	4.18	0.71	High
Digital content organization	4.10	0.76	High
Document management	4.05	0.80	High
Communication support	4.21	0.68	High
Workflow management	3.97	0.83	High
Overall CMS	4.10	0.76	High

Table 3*Descriptive Statistics for Effective School Management*

Dimension	Mean	SD	Interpretation
Administrative efficiency	4.19	0.70	High
Strategic planning	4.08	0.75	High
Organizational coordination	4.13	0.73	High
Communication effectiveness	4.24	0.69	High
Managerial decision-making	4.17	0.71	High
Overall Effective School Management	4.16	0.72	High

Correlation Results and Hypothesis Testing**Table 4***Spearman's Correlation between Content Management Systems and Effective School Management*

Variables	ρ	p-value	Decision
Content Management Systems ↔ Effective School Management	.541	< .001	Reject H_0

A correlation of .541 puts this squarely in moderate-to-large territory, and with a p-value well under .001, the relationship is not something that could plausibly be put down to chance. We therefore rejected the null hypothesis. In practical terms, respondents who rated their CMS more favourably also tended to report smoother decision-making, better communication, more efficient planning, cleaner data management, and stronger coordination across the institution.

Discussion of Findings

The central finding here — a moderate, statistically significant link between CMS use and effective school management ($\rho = .541$, $p < .001$) — fits comfortably within the wider literature on digital governance in higher education. It echoes Rodríguez-Abitia and Correa (2021), who found that universities with stronger digital-governance

frameworks reported better institutional coordination, and it lines up with Bond et al.'s (2024) observation that institutions with more mature digital ecosystems tend to hold up better under pressure, precisely because their information keeps flowing when other channels break down.

At the same time, a correlation of .541, while solid, is not overwhelming, and that is worth sitting with rather than glossing over. Ifenthaler and Yau (2020) and Dwivedi et al. (2023) make the point that technology on its own rarely moves the needle; it needs staffs who know how to use it and leadership willing to back it with policy. The University of Bamenda's results are consistent with that reading CMS clearly help, but they are not doing all the work, and the gap is likely made up of exactly the capacity and infrastructure constraints that Heeks (2002) and Ssekakubo et al. (2011) describe as common across resource-limited university systems in the region. Bush (2020) and Hallinger (2022) would probably read the communication findings here as unsurprising: if leadership increasingly runs on digital communication, then a platform that organises and distributes that communication is naturally going to show up as a factor in how well the institution is managed.

Framed against Fayol's theory, the results suggest that CMS are doing exactly what the theory would predict of any good information system feeding the classical functions of planning, organising, coordinating, commanding, and controlling with better material to work from. What the data cannot tell us is direction of causality, and that limitation is discussed below. But taken on its own terms, the finding gives a reasonably confident answer to the question the study set out to ask: CMS use is meaningfully connected to how effectively the University of Bamenda is managed.

Conclusion

This study set out to find out whether Content Management Systems make a real difference to how well the University of Bamenda is managed, and the evidence says they do. Staffs who work with better-functioning CMS report smoother communication, planning, and decision-making, and the relationship is strong enough to rule out coincidence. CMS, in other words, are not simply a convenient way to keep a website updated they function as part of the institution's administrative backbone. Hence the following recommendations were made. The University of Bamenda should continue investing in ICT infrastructure, reliable connectivity, adequate hardware, and properly maintained digital systems with a dedicated budget for upkeep rather than one-off purchases. Also, staff at every level, not just IT personnel, need regular, practical training on the CMS platforms they are expected to use, since the benefit of these systems depends heavily on whether people know how to get the most out of them. Lastly, the university should put clear policy behind its digital-content practices covering document standards, access rights, and data quality

so that CMS use is consistent rather than left to individual initiative.

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