

**Evaluating Success: Perceived Importance and Use of Engagement Metrics in Digital
Agricultural Communication Platforms**

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Introduction

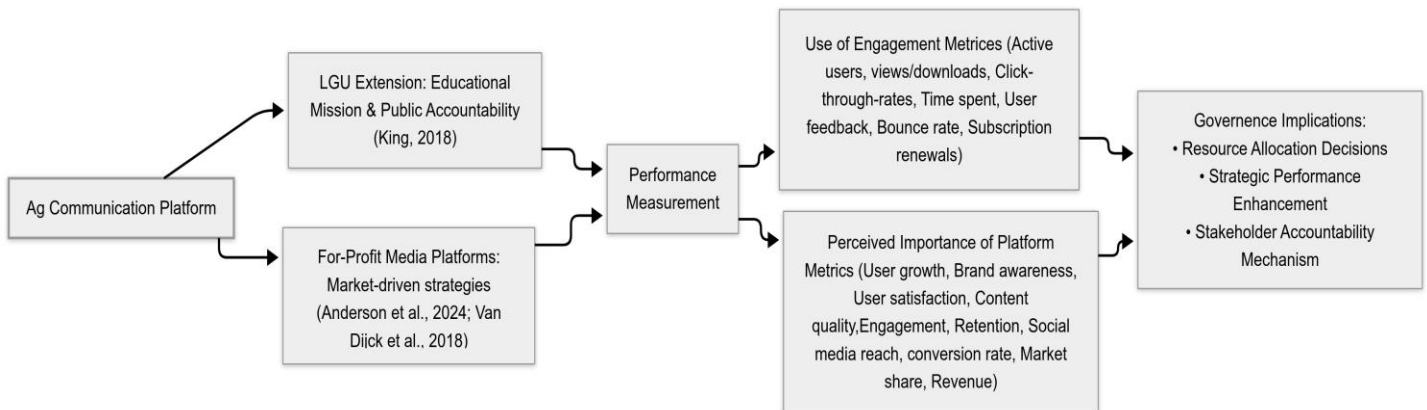
The flow of agricultural information between researchers, Extension professionals, and publics has been completely changed due to the rapid digitization in communication practices (King, 2018). Formal knowledge delivery today mainly occurs through land-grant university (LGU) Extension and for-profit agricultural media entities. As dissemination becomes increasingly digital, performance evaluation now prioritize user engagement, tracking basic metrics like active users, content views, and click-through rates to more advanced indicators like retention and conversion rate to guide strategic decisions (Steede et al., 2018; Yang et al., 2025).

Agricultural communication practitioners have increasingly recognized the value of engagement analytics. For example, Doyle et al. (2023) analyzed Facebook engagement metrics among Florida fruit and vegetable farms, by comparing their presence, post types, and engagement rates to inform marketing practices. However, little is known about what metrics are valued and implemented by agricultural communication platforms and how do governance structures, missions, and resources affect these choices? This study addresses this gap by examining metric use patterns and identifying implementation gaps that may affect platform performance and effectiveness.

Conceptual Framework

The conceptual framework for this study is rooted on Platform Governance Framework (Chen et al., 2022) which demonstrates how governance structures influence performance evaluation approaches. LGU and for-profit platforms differ in terms of their governance structure and operations, with LGU aiming to achieve public missions by disseminating research-based information to communities (Anderson et al., 2024). Conversely, for-profit platforms served specialized user groups to fulfill their market-driven objectives, including user retention and revenue generation (Chen et al., 2022, Van Dijck et al., 2018). The conceptual framework (Figure 1) illustrates how governance structures drive performance measurement, and how the usage of these metrics, in turn, has governance implications.

Figure 1
Conceptual Framework of the Study



Methods

A survey was administered to assess the perceived importance placed and usage pattern of different metrics across agricultural communication platforms. A purposive sampling was used to select a total of 33 platform managers (LGU Extension = 14 and for-profit media = 19) from platforms that publish technical, science-based agricultural information. This is a part of a bigger study where researchers are aiming to map the relationship between platform affordances and user outcomes. This poster section included two survey components: (1) ranking 10 platform metrics on a 10-point scale (1 = *most important*, 10 = *least important*) and (2) a binary response (1 = *yes*, 0 = *no*) identifying which specific engagement metrics were tracked and utilized by the platform. Descriptive statistics (means, frequencies, and percentages) were analyzed using IBM SPSS Version 29.0 to rank and compare responses across platform types.

Findings

Perceived Importance of Platform Metrics

The importance of engagement metrics is based on the self-reported responses of platform managers from both LGU and for-profit platforms. Overall, engagement ($M = 3.67$, $SD = 3.23$) was the highest-ranked success metric across platforms, followed by content quality ($M = 4.48$, $SD = 2.67$) and user satisfaction ($M = 4.51$, $SD = 2.75$). For-profit platforms prioritized revenue and market share more than LGU platforms.

Usage Pattern of Engagement Metrics

Result revealed differences in perceived importance and actual measurement of engagement metrics. Basic metrics including *number of active users* and *content views/downloads* showed high usage ($n = 28$, 84.80%), but more advanced analytics such as *retention rate* ($n = 9$, 27.30%) and *conversion rate* ($n = 6$, 18.20%) were limited in use. The usage across all metrics was higher for for-profit platforms compared to LGUs; for example, 94.10% of for-profit platforms measured *click-through rates* versus only 50.00% of LGUs, and *subscription renewals* were 41.20% versus 18.80%, respectively.

Implications, Conclusions and Recommendations

This study presented a gap between the perceived importance placed on different platform metrics and their actual usage patterns. For-profit platforms exhibited greater usage of analytics, which might be due to their market-driven priorities and flexible governance structures. In contrast, LGU platforms may face barriers including resource limitations, technical capacity, and institutional accountability that limits them to use basic performance indicators (Anderson et al., 2024, King, 2018). The metrics identified as important by managers across platform types are useful tools for tracking user behavior and tailoring communication practices to audience needs and preferences

These findings support the platform governance mechanism by demonstrating how governance structures influence performance measurement practices. To improve platform effectiveness, LGU platforms would benefit from targeted training in engagement analytics and adoption of standardized metric to better understand users and guide future engagement strategies.

Collaborative efforts between LGU and for-profit entities can further improve knowledge exchange and best practice dissemination in digital age. Future research should explore the barriers to metric analytics adoption and assess the impact of use of analytics on user level outcomes.

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