Challenge Severity vs. Retention Strategy Effectiveness: A Quadrant Map for Audience Retention in Extension and Ag Media Digital Outlets

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Introduction

Digital infrastructures are widely used to facilitate agricultural advisory, outreach, and news functions (Ingram & Maye, 2020; Klerkx, 2021). It is imperative for communicating entities to adapt to changing audience expectations and the information landscape. Land-grant extension and agricultural (Ag) media operate many digital outlets for knowledge delivery (Lubell & McRoberts, 2018). Extension is a public entity operating under complex administrative and policy systems for decision authority and resource allocation (Prokopy et al., 2015). By contrast, Ag media operates in competitive markets where revenue structures shape audience engagement (Napoli, 2011). They shared a common challenge of retaining audiences where credibility, visibility, and audience attention are continuously contested (Ingram & Maye, 2020). Users' retention depends not only on content quality or delivery optimization but also on the ability to execute functions under constraints (Bawden & Robinson, 2009). A key managerial need in this case is to determine whether the strategies used by these entities to retain audiences are sufficient to address the operational challenges they face. This study maps each participating extension and agricultural media entities on a challenge severity vs. strategy effectiveness quadrant to identify capacity gaps and priority zones for retention investment.

Theoretical Framework

The study is guided by the contingency theory, which states that organizational effectiveness depends on the fit between contingencies and organizational responses (Donaldson, 2001). In this study, managers perceived operational challenges represent contingencies, and perceived effectiveness of retention strategies represents the organizational adaptive response. Mapping these two constructs in a quadrant matrix represents fit and misfit. For instance, high challenge paired with high strategy effectiveness suggests adaptive fit, whereas high challenge paired with low effectiveness represents misfit, conditions where strategies are not sufficient to address challenges (Bawden & Robinson, 2009; Donaldson, 2001).

Purpose

The purpose of this study was to position agricultural communication entities in quadrant matrix defined by (i) severity of operational challenges and (ii) effectiveness of retention strategies, and to demonstrate capacity gaps and priority zones for each participating entity.

Methodology

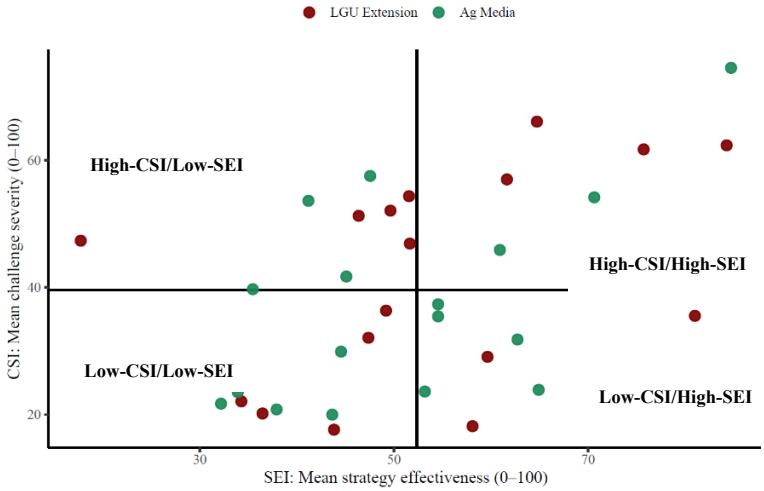
Survey data were collected from communication/digital managers of 34 purposively selected organizations (17 extension and 17 Ag media). Participants rated the effectiveness of 11 retention strategies: timely content, customization, content formats, free access, social media, regular updates, marketing campaigns, feedback systems, navigation ease, responsiveness, and gamification on a 0-100 scale (0 = not effective; 100 = highly effective). They also rated severity of 11 challenges: audience reach, digital literacy, content quality, credibility, content creation, user engagement, competition, technological infrastructure, data privacy, personnel limitations, and funding (0 = not a challenge; 100 = most pressing). Two indices were computed: Challenge Severity Index (CSI) (mean of 11 challenges rating) and Strategy Effectiveness Index (SEI) (mean of 11 strategies rating) for each entity. Organizations were plotted in a quadrant map (x-axis = *SEI*; y-axis = *CSI*), with cutlines set at overall sample means (*CSI*= 39.58, *SEI* = 52.37).

Results

Extension managers reported higher means for both constructs (*CSI* = 41.79, *SEI* = 53.71). Out of all, 7 fell into the high-CSI/high-SEI, 9 into high-CSI/low-SEI, 8 into low-CSI/high-SEI, and 10 into low-CSI/low-SEI quadrants (Figure 1). Extension entities were split across quadrants (high/high, $n = 4$; high/low, $n = 5$; low/high, $n = 3$; low/low, $n = 5$), the majority of Ag media were concentrated in the lower-challenge zone (high/high, $n = 3$; high/low, $n = 4$; low/high, $n = 5$; low/low, $n = 5$). For extension, the top three reported challenges were personal limitations, user engagement, and funding sustainability; for Ag media, they were personnel limitations, funding, and technological infrastructure. Across both sectors, managers believe that free access, timely content, and easy navigation are the most effective retention strategies.

Figure 1

Challenge Severity vs Strategy Effectiveness Quadrant Matrix



Discussion, Conclusions and Implications

This study presents a quadrant map to show fit/misfit between the challenge severity and retention strategies effectiveness. Those entities positioned in high CSI/low SEI zones represent a “capacity-gap” or contingency misfit (Donaldson, 2001). In this zone, strategies are not enough to meet operational demands. Conversely, a high CSI/high SEI zone suggests adaptive fit, where strategies are workable despite constraints. Low CSI/high SEI zones possess extra resources that can be allocated to innovation, experimentation, or diffusion of best practices (Bourgeois, 1981). A low CSI/low SEI zone can be stable but may be vulnerable if things change. These placements imply that retention initiatives should be assessed through a capacity lens. Practically, entities in the capacity-gap zone should prioritize targeted investment for capability before adding new digital strategies. Adaptive fit organizations should continue with what is working by formalizing procedures to reduce performance failure under constraints. Entities with excess-capacity should pilot innovations and share replicable practices, whereas low-capacity entities should improve readiness by investing in a viable strategy to support access, timeliness, and navigation. Overall, the map helps managers identify capacity gaps and opportunities to scale in digital services.

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