

Facing algorithmic uncertainty: cross-platform labor strategies of small and medium-sized video creators on mainstream platforms

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Abstract. With the rise of the creator economy, more content creators now distribute across TikTok, YouTube, and Instagram to expand influence and diversify income. Yet these platforms differ in style, visibility, and monetization, posing new challenges and uncertainties for creators' work. This study examines small-to-medium-sized digital creators to explore how they adapt their labor strategies across platforms and the key factors driving these adjustments. Through semi-structured in-depth interviews with approximately 15 creators, the research identifies algorithmic uncertainty, the accumulation of emotional labor, and the volatility of income models as primary drivers prompting creators to modify their platform strategies. This research deepens understanding of how small-to-medium creators adapt their content production and operational approaches when navigating multiple platform rules. It not only enriches theoretical insights into labor practices in the platform economy but also provides valuable references for platform design and policy formulation aimed at supporting creators' survival and development.

Keywords: digital labor, creator economy, cross-platform strategy, small and medium-sized creators, algorithm culture, polymedia

1. Introduction

In recent years, the creator economy has undergone rapid growth, with media platforms like TikTok, YouTube, and Instagram emerging as central hubs for the global dissemination of digital content. While these platforms offer opportunities for visibility and income, they also present evolving demands shaped by opaque algorithms and diverse monetization systems. Unlike top-tier influencers, small-to-medium creators (with follower counts ranging from 10,000 to 500,000) face greater instability: their livelihoods are more vulnerable to algorithmic shifts, income fluctuations, and intensifying competition. Even as small-to-medium creators have become a vital component of the online economy, platforms like TikTok, YouTube, and Instagram offer them opportunities to build audiences and generate revenue. Yet these platforms operate under numerous, rapidly changing rules, often trapping creators who lack insight into algorithmic mechanisms [1]. They also face the risk of sudden income drops, highlighting the vulnerabilities inherent in platform capitalism [2]. While large creators can manage these risks more effectively, SMEs bear disproportionate pressure [3].

Most existing research either focuses on celebrity influencers or examines dynamics within a single platform [2, 3]. Few examine how ordinary creators navigate multiple platforms simultaneously. This study seeks to address this gap by investigating cross-platform labor practices, focusing on how small-to-medium creators adapt their labor strategies to algorithmic uncertainty, manage emotional labor and financial pressures, and maintain sustainability throughout their platform careers.

Specifically, this research explores how small-to-medium creators perceive differences in platforms' algorithmic mechanisms, content requirements, and monetization structures. It explores the strategies they adopt to adapt to algorithmic uncertainty and how these strategies are shaped by factors such as income volatility, trust in algorithms, and emotional labor.

The study employed semi-structured interviews with creators active on multiple platforms, focusing on how they adapt to differing algorithmic rules and platform demands. The interviews explored domains including creators' awareness of platform policies, labor adjustment strategies, trust in algorithms, and future planning. This design highlights how creators navigate cross-platform choices while underscoring the dominance and unpredictability of algorithms in shaping their practices.

By amplifying the voices of small-to-medium creators, this research contributes to debates on digital labor, algorithmic culture, and multimedia. It illuminates structural inequalities within the creator economy, offers insights for platform policy design, and provides survival strategies for small-to-medium creators operating under unstable conditions.

2. Literature review

The "algorithmic culture" emphasizes the dominant role of algorithms on digital platforms, shaping content visibility and creators' production choices [1, 4]. For example, TikTok's recommendation system forces creators to constantly adjust titles, tags, and times to match the platform's "preferences". This dependence contributes to "algorithmic instability", and income and career prospects remain uncertain [5].

Madianou and Miller's [6] concept of "Polymedia" suggests that individuals make strategic choices on platforms rather than random ones. For small and medium-sized creators, these decisions are driven more by survival needs than personal preferences—for instance, using TikTok or Instagram to drive traffic or serve as backup platforms, YouTube is usually given priority. These strategies reflect the necessary adaptation to commercialization and algorithm driven environments, not just media diversity. Xuan also put forward a similar view on the research of Chinese international students, conceptualizing social media as a multimedia environment involving platform allocation and cultural adaptation. This highlights how users' cross platform choices are embedded in broader cultural and structural backgrounds, resonating with the survival driven strategies of small and medium-sized creators [7].

Duffy [3] highlights that digital labor is often creative yet inherently uncertain. While creators derive satisfaction from "doing what they love", they simultaneously face pressures like algorithmic volatility, stagnant audience growth, and unstable income. Srnicek's [2] concept of "platform capitalism" further argues that such instability is not accidental but structurally determined by the logic of the platform economy. When operating across platforms, small and medium-sized creators must not only demonstrate personal initiative, such as experimenting with different content formats but also contend with constraints imposed by platform rules, including advertising revenue-sharing policies, recommendation algorithms, and content moderation mechanisms. This means creators must simultaneously make proactive choices to leverage their creativity while adapting to platform regulations and limitations when formulating their work strategies.

3. Methodology

The participants in this study comprised fifteen small-to-medium-sized creators with follower counts ranging from 10,000 to 500,000. They maintained active presence on at least two platforms, such as TikTok and YouTube or Instagram and TikTok. This group was selected because they possess a significant audience base, representing the realities of the creator economy, while being more susceptible to algorithmic fluctuations than top-tier creators. This makes them better indicators of the instability inherent in cross-platform labor. Participants' content covered diverse domains including lifestyle, education, gaming, and beauty. This diversity ensures a varied sample while facilitating cross-comparisons of differences among content creators.

Data were collected through semi-structured interviews, each lasting 45–60 minutes and primarily conducted through online video conferencing tools. Interviews began with basic demographic information before exploring four key areas. First, discussions focused on platform differences and how creators adapt content formats to align with platform-specific preferences, such as video duration, title conventions, and hashtag strategies. Second, challenges encountered during content creation and coping strategies, including time allocation, emotional management, and content planning. Third, trust in platform algorithms and fairness, alongside perspectives on future career development. Fourth, interviews explored their rationale for platform selection, such as how they prioritize primary and secondary platforms and the circumstances under which they would consider discontinuing use of a platform. This study employed thematic analysis, identifying themes including algorithmic distrust, emotional fatigue, content repackaging, and diversification strategies. These themes were subsequently mapped to three theoretical frameworks: algorithmic culture, multimedia theory, and digital labor precariousness.

4. Research findings and analysis

4.1. Platform differences

Creators widely recognize that platforms exhibit substantial differences, and these differences directly impact their content production and investment strategies. They first discuss algorithms: TikTok's recommendations are often described as unpredictable, yet occasionally offer opportunities for viral success. YouTube tends to reward consistent, long-term output, while Instagram is widely perceived as saturated and heavily focused on aesthetics. Next, they address content preference variations: TikTok favors short, fast-paced, high-energy entertainment clips; YouTube supports more complete narratives and knowledge-based or story-driven long-form videos; Instagram leans toward high-quality images and short videos, emphasizing visual consistency. They then compared monetization pathways: YouTube offers more stable ad revenue sharing, TikTok's creator funds fluctuate significantly, while Instagram often relies on brand collaborations for income. Consequently, creators base their decisions on these perceptions to determine where to focus their primary efforts and experiment differently across platforms.

4.2. Content strategy

Confronted with these platform-specific differences, creators do not simply repost identical content across platforms without modification. Instead, they repackage it. They'll edit a 10-minute YouTube video into 3–5 high-energy TikTok clips lasting 20–40 seconds each, then adapt one of those clips into an Instagram Reel. They also rewrite titles and the opening 3 seconds to accelerate pacing, strengthen content hooks, and better align with each platform's recommendation algorithms. Many establish a "primary + secondary" strategy: using YouTube or TikTok as the main platform to build a loyal audience and generate revenue, while leveraging Instagram, another short-form video platform, or podcasts as secondary channels for traffic diversion or risk mitigation during fluctuations on the primary platform. To foster better engagement, they respond more frequently and casually on TikTok, prioritize visual consistency and curation on Instagram, and build community through extended comments or livestreams on YouTube. This approach requires constant calibration: they track posting times, hashtags, video length, completion rates, and click-through rates, making real-time adjustments for subsequent posts.

4.3. Algorithm distrust

Many interviewees reported distrust toward platform algorithms, and this sentiment is intertwined with their daily experiences. They often lament, "I clearly did better, yet my views suddenly plummeted", without receiving clear explanations. Some encounter content takedowns or "traffic throttling", leading them to self-censor by reducing topics or expressions deemed "risky". This creates an unstable relationship between effort and reward, leading to anxiety, frustration, and even self-doubt. To reduce uncertainty, creators repeatedly test titles and thumbnails, experiment with shorter videos or different layouts, or simplify content to secure a degree of stable reach. Yet these compromises may sacrifice creative satisfaction, generating fresh pressures [1, 4, 5]. Thus, algorithmic opacity and volatility impact not only visibility but also emotional well-being and professional judgment—this is the everyday manifestation of "algorithmic instability" [5].

4.4. Diversified response

To hedge against this instability, creators diversify their approach. On one hand, they spread their accounts across two to three platforms to avoid putting all their eggs in one basket. On the other hand, they diversify their revenue streams: using ad-sharing platforms as a foundation, taking brand collaborations on platforms suited for branded content, and experimenting with live-streaming commerce or affiliate links on platforms with strong e-commerce ecosystems. Some also explore membership programs, courses, or merchandise sales. Time-wise, they adopt a "stable + new" approach: using proven formats to guarantee steady traffic while testing new angles or series. When experiments fail, they quickly minimize losses and revert to stable formats. When successful, they scale the new content to their main platforms. This strategy serves both economic and psychological purposes, multiple entry points and channels provide a sense of "having backup plans", thereby reducing anxiety.

4.5. Proactively adapt

Although platform structures impose limitations, creators are not passive. They develop personal rules of thumb: such as scheduling posts during periods of peak audience engagement, prioritizing key information in titles; tailoring the first three seconds for different platforms, designing consistent naming conventions for series to improve discoverability, and using pinned questions in comment sections to drive interaction and increase dwell time. They also actively cultivate small, stable communities, using recurring segments, community topics, or livestreams to transform some viewers from "purely recommended traffic" into "returning relationships". Additionally, some creators develop "hybrid" content, integrating narrative elements into knowledge-based content or embedding actionable tips within entertainment, to satisfy the preferences of both platforms simultaneously. This way, they continuously negotiate within the algorithmic ecosystem: learning and adapting to platform rules while preserving their unique voice and positioning, refusing to stake their entire growth on a single metric.

5. Discussion

The Polymedia Theory, proposed by Madianou and Miller [6], primarily explains users' affective and social choices across multiple media platforms. This theory posits that individuals operate within a "polymedia environment" where different media are interconnected. Users do not engage with any single medium in isolation but instead strategically combine them. For instance, people might choose WhatsApp to maintain intimate relationships, Facebook to display social identity, and Skype or video calls for transnational communication. These choices are typically framed as being linked to emotional expression, social interaction, and personal preference. In other words, traditional polymedia theory frames media switching as a social practice, emphasizing "why users choose a particular platform to express a specific relationship". However, this study, examining the

cross-platform labor practices of small-to-medium creators, finds their polymedia choices extend beyond emotional and social expression, they constitute labor strategies closely tied to survival. Creators must constantly switch and adapt between platforms like TikTok, YouTube, and Instagram not out of pure personal preference, but to maximize exposure, diversify risks, and secure income. They repackage a single video across platforms, establish "primary platform + secondary platform" combinations to manage resource allocation, and swiftly adjust strategies when platform rules change. The core drivers of this cross-platform engagement are algorithmic uncertainty and income instability, not purely social needs. Thus, this study expands polymedia theory in three key ways: First, it extends polymedia theory from "social choice" to "labor choice". While traditional theory emphasizes users switching between media for emotional, relational, or identity-expressive reasons, this research reveals that small-to-medium creators primarily switch platforms to navigate algorithmic uncertainty—a labor choice driven by survival. Second, this study highlights the role of platform structures and algorithmic power in polymedia practices. Traditional polymedia theory often portrays users as active choosers while overlooking the constraints of platform rules. However, creators' choices are highly dependent on platform recommendation systems and monetization mechanisms. For instance, they might prioritize YouTube as their primary platform due to its more stable ad revenue sharing, while using TikTok as a traffic engine for its potential to deliver short-term viral opportunities. This demonstrates that creators' choices are not merely freedoms afforded by "media diversity", but are shaped by the structures of "platform capitalism" [2]. Third, this study reveals the dual emotional and economic nature of polymedia strategies. Creators bear significant emotional labor during cross-platform operations, such as anxiety, fatigue, and distrust of algorithms, while simultaneously transforming these emotions into economic risk management. They develop strategies like synchronized multi-platform operations and diversified income streams. Compared to traditional theories focusing primarily on the "emotional dimension", this study highlights the "labor dimension" in multimedia practices, specifically how creators balance emotional and economic demands to sustain professional viability [3, 5]. This study expands polymedia theory by shifting focus from merely examining how media shapes social relationships to revealing how creators sustain survival and development through cross-platform labor within platform capitalism and algorithmic culture. This expansion transforms polymedia theory from a "theory of social choice" into a "theory of labor practices", aligning more closely with the actual realities of contemporary digital creators.

Research also reveals the central role of algorithmic instability in shaping labor conditions [5]. Unlike traditional cultural workers who rely on market forces or editorial gatekeepers, creators' exposure and income are directly governed by real-time calculations of platform algorithms. This dependency fosters a unique insecurity: a single algorithmic adjustment can cause their traffic to plummet, triggering income loss and emotional stress. To counter this structural risk, creators must maintain high flexibility, continually experimenting with content cadence, video length, and engagement methods while rationally allocating time and resources across platforms. This flexibility constitutes a "forced adaptation", reflecting algorithmic culture's profound impact on labor conditions [1, 4]. Furthermore, this study reveals how creators' express distrust in algorithms through strategic adjustments and subsequent diversified practices. They widely perceive algorithms as lacking transparency and favoring commercially safe content. This distrust, in turn, drives them toward cross-platform diversification strategies to mitigate risk. Some reduce dependence on single algorithms through multi-platform operations, while others mitigate income instability by diversifying revenue streams. Thus, distrust is not merely a psychological sensation but a key driver of structural adjustments among creators. This demonstrates that in digital labor, emotional labor and economic logic are not separate but intertwined, jointly shaping labor practices [2, 3].

These findings offer insights for platform governance. Creators' widespread distrust highlights deficiencies in algorithm transparency and creator support policies. If platforms could more clearly explain algorithmic adjustment mechanisms, helping creators understand the causes of traffic declines, the emotional strain from uncertainty might lessen. Simultaneously, establishing dispute resolution mechanisms for content takedowns could reduce frustration caused by traffic throttling or erroneous removals. Furthermore, offering diversified monetization channels, such as more flexible ad revenue sharing, improved creator funds, and membership features, can help creators better diversify risks. In essence, creators' arduous adjustments across platforms reflect the externalization of gaps in platform governance. By refining policies and rules, platforms can reduce creators' passivity in unstable environments, allowing them to focus more on their craft rather than exhausting themselves navigating opaque algorithms.

6. Conclusion

This study identifies several key characteristics of Small-to-medium Creators (SMCs) in their cross-platform labor. First, they are acutely aware of significant differences across platforms in terms of rules, content preferences, and monetization models, which inform their decisions regarding the allocation of time and effort. Second, they typically avoid simply duplicating content across platforms, instead repackaging it according to platform requirements. They allocate resources through a "primary platform + secondary platform" combination and adjust their interaction methods accordingly. Additionally, creators broadly express distrust toward algorithms. They perceive their efforts as not always yielding commensurate rewards due to the unpredictability of platform algorithms, which generates anxiety and emotional fatigue. To mitigate risks, they tend to operate across multiple

platforms simultaneously and diversify income streams, such as advertising, livestream commerce, affiliate marketing, and merchandise sales.

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