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ADAPTIVE GOVERNANCE BY DIGITAL PLATFORMS: HOW TWITCH CHANGED ITS PLATFORM OVER TIME

Kevin Garvey
Rikkyo University

Daniëlle Flonk
Hitotsubashi University

Introduction

Since its launch in 2011, the live streaming platform Twitch has continually expanded its mechanisms for monetizing interactions between content creators and their viewers. While numerous studies document the motivation of viewers (Sjöblom, et. al. 2017; Wulf, et. al. 2020), experiences of live streamers (Taylor, 2018; Sjöblom, et. al., 2019; Woodcock & Johnson, 2019), and platform policy (Partin, 2020; Poell, et. al., 2022), an explanatory framework and a clear timeline of functional changes on Twitch is still missing. Tracking Twitch changes can shed light on what motivates them, and what is likely to influence the platform going forward.

The literature on Twitch platform policy focuses mainly on how the platform mimics features that were first introduced by users, a process Partin (2020) called “envelopment”. However, we argue that there are two important parallel mechanisms that motivate change. First, via *competition*, Twitch copies features from other platforms. Second, via *realignment*, Twitch meets user demands for changes on the platform. This process of strategic cooptation of features via envelopment, competition, and realignment, is what we call *adaptive governance*. It is this holistic approach of adaptive governance that remains a blind spot in the literature and which this article aims to give a first description of.

Hence, our contribution is not only theoretical, but also empirical. Histories of Twitch tend to focus on its origins (Taylor, 2018; Johnson, 2021) or case studies of policy (Ruberg, et. al. 2019) . We present the first historical overview of changes that Twitch

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made to its platform. We adopt the empirical approach of netnography (Kozinets, 2020) that collects and triangulates a variety of data, namely interviews with streamers, Twitch’s official blog, journalistic reports of major changes, TwitchCon announcements, a “digital oral history” of YouTube videos, and finally digital autoethnography. The variety of data helps us see the full context of platform change: when and where Twitch

implemented key function changes, and the language it uses to promote them. We define key function changes as critical junctures, which are “events and developments in the distant past, generally concentrated in a relatively short period, that have a crucial impact on outcomes later in time.” (Capoccia, 2016, p. 89) During these critical junctures, more dramatic change is possible (Capoccia & Kelemen, 2007).

In short, our project has two goals: (1) to reconstruct a timeline of official changes made by Twitch to its platform, and (2) to categorize these changes by the source of their motivation, either (a) *enveloping* user practice, (b) *competing* with other platforms, or (c) *realigning* to respond to user demand.

Project and Findings

We argue that Twitch applies a strategy of *adaptive governance*: the strategic cooptation of features developed outside of the platform, originating from users (enveloping), from other platforms (competing), or based on popular demand (realigning). For an overview of critical junctures along these dimensions, see Table 1-3.

Enveloping user practice refers to Twitch’s practice of introducing features that imitate functions produced by others. By monitoring their user base and third party applications, Twitch gains knowledge about which products have a high demand. After introducing these features as Twitch features, Twitch can take a part of the revenue made from them. For instance, Twitch introduced “Twitch Fundraising”, a function that integrates with live streaming broadcasts and allows viewers to direct their monetary donations towards a charity of the streamer’s choice. Prior to its introduction, third-party apps such as Tiltify were used by live streamers to arrange fundraising on their channel.

Type of adaptive governance	Envelopment		
Meaning	<i>Introducing functions that imitate or otherwise make redundant functions that were produced by others</i>		
Year: Feature name	2016: Clips	2021: Bits	2023: Twitch Charity
Feature explanation	The ability of users to record up to 60 seconds of a live stream	The ability of viewers to donate custom amounts of money	A multipart feature that directs donations to specific causes, often with accompanying banner and tracker

Table 1: critical junctures related to the envelopment process

However, features are not only adopted from users or the Twitch community. Twitch constantly *competes* with other platforms by imitating or iterating on proven popular functions. For instance, Twitch introduced “Twitch shorts” (clips of channels, similar to TikTok’s short-video format), and “super chats” (similar to a YouTube function of the same name), which allows viewers to donate money to highlight or pin their messages to the top of streamers’ chat.

Type of adaptive governance	Competition		
Meaning	<i>Imitating or iterating on proven popular functions from other platforms</i>		
Year: Feature name (competing with)	2023: Super chats (YouTube)	2023: Discovery Feed (TikTok)	2023: Revenue split 70/30 (Kick)
Feature explanation	Viewers can donate money to have their message highlighted	Select clips of streamers are placed on the front page to increase the visibility of their channel	Another update to Twitch’s standard revenue splitting agreement with live streamers

Table 2: critical junctures related to the competition process

Finally, *realigning* refers to the implementation of features because users demand it. This fit to user demand can be seen in the example of Twitch’s added moderation tools to decrease practices such as “hate-raiding” (i.e. directing a large number of viewers to a specific channel with the intent of overwhelming the channel with negative messages). This process is notably slower than either enveloping or competing, because it is not motivated by revenue. Instead, it is a quality of life improvement pushed for via a bottom-up process. Resulting in fewer and slower changes, realigning is the weakest of three motivations for Twitch’s adaptive governance.

Type of adaptive governance	Realignment		
Meaning	<i>Implementation of features because users demand it</i>		
Year: Feature name	2021: Automod	2021: Shield mode	2023: Shared mod comments
Feature explanation	An AI-assisted text identifier that automatically censors viewer messages deemed offensive	A single button that restricts chat functionality for viewers	Streamers can share lists of previously banned users with their network

Table 3: critical junctures related to the realignment process

Discussion

The preliminary findings show that there are different motivations for adaptive governance. Twitch's logic for adopting features is different depending on the source. When enveloping user practice or competing with other platforms, Twitch makes rapid changes. Realignment, on the other hand, is both a slower process and results in fewer substantial changes. For instance, when streamers were developing tools to tackle hate raids in 2021 and protested on a large scale via a "Twitch blackout", or widespread non-use of the platform, Twitch was compelled to incorporate features that gave streamers more tools to moderate their channels in order to keep them safe. However, the motivation to change was different when Twitch introduced clips on the frontpage in 2023, (imitating TikTok and YouTube shorts). Here, Twitch was proactively competing with these platforms.

The proliferation and variety of digital platforms presents a challenge to scholarly work seeking to understand the nature of these services. The constant adjustments made by digital platforms obscure the fact of persistent underlying motivations driving platforms to invite and capture ideas from elsewhere. By tracking platform change chronologically and in detail, we reveal consistent motivations of envelopment, competition, and realignment. This 'chronological' approach can direct future studies of platforms by looking beneath the waves of updates and small function changes to see the nature of adaptive governance shaping platforms.

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