

M+E

JOURNAL

It's Showtime!

Innovation explodes across every workflow as technology emerges from the pandemic.



Where are you in this accelerated evolution?

DIVERSITY & INCLUSION

In the office, behind the camera, and on the screen, diversity is crucial

SECURITY

Remote productions create new security concerns, with assets under siege

SMART CONTENT

Artificial intelligence and machine learning are being applied in new, exciting ways

NEW WORKFLOWS

The cloud is delivering on its promise, powering the future of productions

21.01

[illegible]

**By Paige Barnett,
VP, Client Services, 5th Kind**

Seemingly every industry is seeking solutions to similar questions about how to support new ways of working. We're testing new products, fine-tuning solutions, and sharing ideas more than ever before. Media studios, in essence, are becoming technology companies, as they move their operations to the cloud without sacrificing security. Combine this with the rise of remote and distributed work alongside a return to the office, and it's clear that the next phase of innovation is the connected technology (r)evolution.

THE RISE OF ORCHESTRATION or hub platforms helps link pipelines end-to-end. They reduce siloed teams and increase digital collaboration productivity by reducing the number of tools for a job, and by creating an access point to a curated tool set.

This (r)evolution is a byproduct of several convergent trends that are leading to the adoption of more comprehensive orchestration platforms which can operate as the heart of entertainment company workflows. These integrated tools and connected storage across tool sets will eventually be commonplace. What's more, we find ourselves in the midst of this (r)evolution now. We're seeing immediate industry demands and use cases for it with remote production, post production, and marketing workflows.

Orchestration platforms are systems that act as an organizational hub through which many other tools connect as spokes, to help automate events and streamline repeatable processes. They centralize content and file access, making it easy and secure to store, find, and reuse media. Through open APIs and integrations, orchestration platforms easily pass content back and forth between familiar tools, enabling teams to access or make changes to files and return them to the central system, which improves visibility across the end to end workflow. They facilitate communication within the centralized hub and integrate communications for external tools when required. True to their name, they help to orchestrate most, if not all, aspects of one or multiple workflows. Examples of such tools include CORE by 5th Kind, Workable, Oracle, Kofax, and Blue Prism.

TRENDS LEADING TO THE ADOPTION OF ORCHESTRATION PLATFORMS

Tools overload

Collaboration tools have become more ubiquitous due to most people working from home. However, the presence of more tools doesn't necessarily streamline nor improve collaboration. Where processes are not clearly defined, numerous tools can actually cause more confusion about how, when and where to communicate. Distributed teams end up paying for it in produc-

tivity loss, information loss, and frustration.

The rise of orchestration or hub platforms helps link pipelines end-to-end. They reduce siloed teams and increase digital collaboration productivity by reducing the number of tools for a job or by creating an access point to a curated tool set. Orchestration platforms also recognize that different teams communicate differently, and provide the opportunity for multiple tools to be integrated into their product.

The primary goal of the orchestration hub is to streamline tools across teams and workflows, integrating best-practice tools to complete workflows as determined by the client. Secondly, it must capture the data and content passed between these tools.

Media companies are the technology companies

As mentioned, media companies are becoming technology companies. Starting with studios operating at global enterprise scale, IT departments now play a major role in both business operations and productions finding, providing, and supporting the best tools for the task at hand. Successes become best practices, which are set for vendors and partner production companies, who may also use such tools for deliverables and communications. Thus, vendor tools are required to have open APIs and the ability to integrate with other tools in order to avoid bouncing teams between applications for communications, content, data, etc.

The rise of cloud security

Due to the sensitive nature of the entertainment industry, security requirements are on par with such industries as health, finance, and government. Cloud technologies are more secure than ever, and while on-prem/cloud combos are in use for security and expedited upload and download processes, cloud-only technology is now just as secure and competitively priced. This is leading to the widespread movement of studios and



Paige Barnett is VP of client services at 5th Kind, where she helps organizations improve their workflows, communications, asset management, and security needs. She has worked in the entertainment industry for more than a decade focusing on OTT and independent production, digital services, and technology management. paige.barnett@5thkind.com @5thKind

media companies to work and secure content directly in the cloud.

Security best practices adoption

While there are still vulnerabilities when accessing data in the cloud, studios have set out to follow best practices set by governance frameworks like ISO, ISIL, and SOC. The industry, via MESA's Content Delivery & Security Association (CDSA) Tech Committee and the Trusted Partner Network (TPN), continues to pioneer a "best-of" combination of standards which encourages adoption at all levels of the media supply chain. Orchestration-tool vendors that meet both TPN and security testing standards will be more widely adopted.

Remote production demands

Production sets become more connected every day. Because they create the content, they are held to more stringent security standards than their business counterparts. Moreover, because of the speed at which productions work across hours, remote locations, and broadcast schedules, they require the best-in-class technology. While open APIs allow many one-off tools to be cobbled together in the production pipeline, this approach tends to service just one aspect of production and misses assets for different workflows, such as marketing and distribution.

Orchestration platforms feed data, content, and livestreams to wherever the remote crew and above-the-line staff may be. They assist with expediting pipelines, and enable smaller on-location footprints, which reduces known risks. The hub allows omni-directional communication, content and data flow between the teams and business divisions that serve a production at every stage of the process, and can support one, multiple, or all stages of the production pipeline.

Media production pipelines: pre is the new post

Whether it's for commercials, film, or television, virtual content, such as virtual sets, are now being created as early as pre-production. What was once a linear set of steps from pre-production through post is more multilateral than ever. Virtual content can inform the production process and enables creators to reorder some stages of production. As these practices and technologies, like LED walls, become more cost effective, we'll see them used more widely. But these processes necessitate a central asset management system to be the frontend access point for content. Digital asset management is a key component of solid orchestration platforms, which enable cost effective storage, easy access to content, and supporting collaborative communication features.

Cloud storage advancements

Cost-friendly cloud storage is becoming more accessible. And backend tools like AWS Media Exchange and Media2Cloud ease the movement of content through the pipeline, especially large files such as RAW OCNs and TIF images intended for billboards and building-sized designs. Using orchestration tools for a frontend interface and user-friendly accessibility, the use of cloud storage and such tools will become a regular practice.

Orchestrating workflows: a real-world use case

A film production example in CORE by 5th Kind begins in pre-production. Here departments such as casting, wardrobe, art department, the production office, and VFX upload, tag, share, collaborate on, and approve casting decisions, costume design concepts, set and prop builds, script notes, legal contracts, and CG-heavy scene set ups.

In production and post, the live camera streams are captured from Teradek which producers, crew, and stakeholders can view on the platform, and all live camera feeds are recorded and auto-tagged in five-minute intervals. ScriptE and ALE data feeds into the system from the script supervisor and DIT station. Dailies tagged in the system kick off forensic watermarking for distribution. The director's Circle Take status auto triggers an event, like making the dailies selects available to the editor. Editorial sends proxies to Adobe for edits before passing it back into CORE. Sound, color, and music pass their assets through the system via AWS MediaExchange for editorial's final compilation into CORE.

In marketing and distribution, a marketing director receives production stills, character assets, and other materials they need for theatrical distribution and licensing. Compiling these into a deck, they present it live to hundreds of global clients and stakeholders, each of whom have individually watermarked assets. On the distribution side, the final mastered and localized assets are pushed from CORE to OWNZONES for downstream distribution.

Orchestration hubs: the future of media enterprise management

The orchestration hubs of tomorrow must be extensible as well as flexibly designed to accommodate a multitude of workflows. They provide real-time visibility into status, events, and key checkpoints throughout the production lifecycle. With capabilities such as tagging to improve timely access to assets, fine-grained access controls, and comprehensive logging, a reliable platform, like CORE by 5th Kind, will meet the needs of the most demanding media and entertainment companies. ■