

Why Dynamic Media Facilities Matter

Seven paradoxes shaping the next era of media production, Article 1
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In this series, we explore the technologies, architectures and operational realities shaping modern media operations. Along the way, we'll examine how these individual pieces contribute to a larger operational picture and ultimately help organizations build a Unified Media Operation.

In this article, we explore Dynamic Media Facilities (DMF) and Software-Defined Production (SDP).

The first paradox: The world became dynamic. Operations remained static.

For years the media industry has been told that audience behavior is changing.

That's true. But, it's also one of the least interesting observations we can make.

Audience behavior has always changed. New formats emerge. New platforms rise. New generations consume content differently than those before them. The media industry has successfully navigated these shifts for decades.

What makes today's environment different is that change has become the operating environment itself.

A decade ago, a successful content strategy could remain relevant for years. Today, entire viewing habits

can emerge, peak and decline before a major infrastructure investment has completed its depreciation cycle.

The competition for attention is no longer between broadcasters, streamers or content providers. It is between every story, each competing for a moment of attention. That shift creates a challenge many media organizations were never designed to solve.

Historically, facilities were built around predictability. Capacity was planned, infrastructure was deployed and workflows were engineered for stability, repeatability and efficiency. Those characteristics remain incredibly valuable today. But audiences now reward adaptability just as much as they reward quality.

At the same time, another shift has quietly reshaped the industry. Capabilities that were once reserved for the largest media organizations are increasingly becoming accessible at many different scales. A regional sports organization can launch direct-to-consumer services. A niche content owner can operate channels that would previously have required significant dedicated infrastructure.

The distinction is increasingly no longer what an organization can do, but at what scale it needs to do it.

The market has become dynamic, while many operations remain largely static.

The Real Challenge Isn't Technology

When media organizations discuss modernization, the conversation often gravitates toward cloud, software, artificial intelligence, automation and infrastructure. These topics dominate conference agendas, vendor presentations and industry discussions.

Yet very few executives lose sleep because they lack access to technology. They lose sleep because they need to adapt faster without increasing complexity.

- ? *How do you launch a new service without redesigning your operation?*
- ? *How do you support new audiences without duplicating workflows?*
- ? *How do you experiment without creating technical debt that eventually becomes its own problem?*
- ? *How do you remain competitive while continuing to operate the systems that generate today's revenue?*

Those are not technology questions. They are operational questions. And increasingly, they are questions of business relevance.

Enter the Dynamic Media Facility

A Dynamic Media Facility (DMF) is not a product, deployment model or vendor architecture. DMF provides a framework for designing media operations around software-defined workflows, shared resources and interoperable services. It is developed through industry collaboration led by organizations such as the EBU and NABA.

Rather than prescribing specific technologies, DMF describes the operational principles required to create more adaptable, scalable and resilient media facilities capable of evolving alongside changing business and production requirements.

Software-Defined Production (SDP) is one of the key enablers of that vision. By expressing production capabilities as software-defined services rather than permanently tying them to dedicated infrastructure, SDP provides the flexibility, scalability and operational agility needed to turn the principles of a Dynamic Media Facility into a practical reality. Together, DMF defines the destination, while SDP provides one of the primary mechanisms for getting there.

In practice, this means production capabilities are no longer constrained by where they happen to reside. A production team may deploy additional replay resources for a major event, launch temporary

channels for a special occasion, add processing capacity during peak demand or introduce entirely new workflows without redesigning the underlying operation. The facility becomes increasingly adaptable because capabilities can evolve alongside business requirements rather than being permanently defined by infrastructure decisions made years earlier.

At its core, Dynamic Media Facility allows organizations to assemble, deploy, scale and evolve production capabilities more dynamically than traditional facility architectures were designed to support.

Rather than permanently tying workflows to dedicated infrastructure, capabilities increasingly become software-defined services that can be deployed where they create the most operational value.

Production switchers, replay systems, processing engines, multiviewers, playout systems and many other functions that historically required dedicated infrastructure can increasingly be expressed as software-defined capabilities. Those capabilities may run on-premises, in the cloud or across both environments depending on the operational requirements of the organization and the capabilities of the chosen solution.

The goal is not to eliminate hardware or to replace facilities. The

goal is to create an operation that can adapt more easily as business requirements, audience behavior and production demands evolve.

This shift has shaped much of Grass Valley's software-defined strategy. Through AMPP OS, the Agile Media Processing Platform, production capabilities that were once inseparable from dedicated infrastructure can now be deployed more flexibly while preserving the operational expectations media organizations depend upon every day. Achieving that requires more than simply virtualizing applications. It requires orchestration, lifecycle management, observability and security to ensure those capabilities can be deployed, operated and evolved with confidence.

A useful way to think about DMF is this: Traditional facilities were designed around infrastructure. Dynamic Media Facilities are designed around outcomes.

That distinction may sound subtle. In practice, it changes almost everything.

So, while the growing interest in Dynamic Media Facilities is often described as a technology trend, in reality it is better understood as an operational response to a changing world.



“Many broadcasters have read the overview, but might have not understood it fully. They need to see the practical approach.”

Geir Børdalen
Head of Technology Portfolio, NRK

The Industry Perspective

Grass Valley established the GVx Council to create an ongoing dialogue with leaders from across the media industry and ensure our long-term strategy remains grounded in operational reality. Comprised of senior technology, operations and business leaders from media organizations around the world, the GVx Council provides independent perspectives on the challenges, opportunities and industry shifts shaping the future of media production.

On a regular basis, we review our strategy, product direction and industry assumptions with Council members, not to seek agreement, but to challenge our thinking and ensure our vision remains aligned with the realities our customers face every day.

For this series, we asked GVx Council members to share their perspectives on the topics explored throughout the campaign. Throughout the series, you'll encounter selected insights and quotes from these industry leaders, helping connect the concepts discussed here to the real-world experiences of organizations actively navigating these transitions.

The industry's challenge is increasingly not awareness, but understanding how to translate the concept into practical operational change. As Geir Børdalen, Head of Technology Portfolio at NRK, observed: “Many broadcasters have read the overview, but might have not understood it fully. They need to see the practical approach.”

That practical path is becoming more clearly defined. The latest Dynamic Media Facility Reference Architecture describes a complete media workload lifecycle, from design, planning, provisioning and configuration through to operation, review and continuous monitoring. This matters because it moves DMF beyond a high-level ambition. It frames production as a workload that can be prepared, instantiated, adapted, monitored and improved throughout its lifecycle.

Over the past decade, Grass Valley has invested heavily in many of the principles that would later be formalized within the Dynamic Media Facility framework. Not because software is inherently better than hardware, but because software-defined deployment models create new opportunities to align resources around outcomes rather than infrastructure constraints.

That forward-looking vision has shaped the development of AMPP OS, a platform designed to help organizations deploy, scale and evolve production capabilities as operational requirements change. Just as importantly, it provides the orchestration, observability, lifecycle management and security needed to manage those capabilities throughout their lifecycle.

Through the AMPP OS Marketplace, organizations can combine Grass Valley applications with partner solutions and third-party services, creating workflows that evolve alongside

their operational requirements. New capabilities can be introduced without redesigning the entire facility, while orchestration and automation simplify the process of spinning up new services, adapting workflows and scaling production environments. The result is not simply a more flexible technology stack. It is a more adaptable operating model, where infrastructure increasingly fades into the background and production teams gain the freedom to focus on creating value for audiences.

Ultimately, the value of a Dynamic Media Facility is not measured by how software-defined it is. It is measured by how effectively it enables organizations to respond to changing operational, creative and business requirements.

That growing focus on outcomes rather than technology is reflected across the industry. As Emili Planas, Chief Technology & Operations Officer — Media & Broadcast, and former CTO and Operations Manager at Mediapro, observed: “DMF is starting to become a well-known concept with many expectations that it will quickly become universal in a Software-Defined world.” The interesting part of that observation is not the technology. It is the expectations. Expectations only emerge when the underlying pressures become difficult to ignore.

The Shift Is Already Underway

The shift toward Dynamic Media Facilities is not limited to a single deployment model, market segment or geography. Across the industry, organizations are already applying these principles to solve very different business and operational challenges.

One of the clearest examples is **DMC Production**. As a media production company serving a broad range of customers and productions, DMC set out to build a fully software-defined production facility capable of supporting live production, editing and content delivery from a shared pool of resources rather than dedicated hardware islands. The result became the world's first full software production facility and one of the industry's most mature examples of a Dynamic Media Facility operating at commercial scale.

Go to [DMC Production Case Study](#).



Broadcast Management Group approached the challenge from a different perspective. Supporting live productions across multiple locations, BMG sought to centralize production resources and reduce dependence on dedicated on-site infrastructure. By adopting a more software-defined operating model, the company improved resource utilization and enabled production teams to support more events from a shared operational environment.

Go to [BMG Case Study](#).

For **Warner Bros. Discovery**, the objective was broader still. The organization focused on connecting live production, content management and playout workflows into a more unified operational environment. In doing so, it demonstrated how software-defined approaches can reduce friction between traditionally separate domains and allow content, people and resources to move more freely across the organization.

Go to [Warner Bros. Discovery Case Study](#).



The same principles are visible elsewhere in the industry. **NVP** uses centralized and shared resources to efficiently support large numbers of simultaneous football productions. **KBS** leveraged software-defined workflows to support large-scale international sports coverage while maintaining flexibility across multiple production locations. Service providers such as **Corrivium** have adopted workload-based operational models that allow production workflows to be created, modified and scaled according on the spot to customer demand.

Go to:

- [NVP Case Study](#)
- [KBS Case Study](#)
- [Corrivium Case Study](#)

While the objectives differ, the pattern is remarkably consistent. Organizations are using software-defined approaches not to replace production, but to make production resources more adaptable, more shareable and more closely aligned with operational demand. Whether the goal is supporting more live events, connecting previously separate workflows, increasing facility utilization or creating entirely new services, the underlying challenge remains the same: how to respond more quickly to changing business and audience requirements without continually rebuilding the operation itself.

These organizations differ significantly in size, geography and business model. Yet they all point toward the same conclusion: Dynamic Media Facilities are no longer theoretical concepts captured in industry frameworks. They are becoming operational realities, enabling organizations to

deploy capabilities more flexibly, respond to changing business needs more quickly and align resources more closely with audience demand.

They also show that adaptability and operational confidence are not competing objectives. As Dynamic Media Facilities mature, capabilities such as orchestration, monitoring, lifecycle management and security become foundational design requirements. The value is not only that production resources can be deployed more flexibly, but that they can be managed, observed and trusted throughout the full workload lifecycle.

The question is no longer whether this shift is possible. Increasingly, it is how organizations can adopt it in a way that creates meaningful value for their teams, their audiences and their business.

In the End, it's the People who Make it Successful

If there is one lesson emerging from the organizations already exploring this transition, it is that technology is rarely the hardest part. People are.

The GVx Council responses repeatedly pointed toward the same themes: culture, skills, confidence and organizational readiness.

For some organizations, the challenge is understanding where software-defined approaches create meaningful value and where traditional approaches continue to make sense. As Emili Planas noted, not everything belongs in the cloud. Hybrid operating models are increasingly becoming the preferred approach because they allow organizations to balance flexibility, economics, performance and operational confidence.

For others, the challenge is competence. NRK highlighted the reality that deploying new operating models often requires building new skills at the same time as new infrastructure.

Ralph Atlan, CTO Content & Production Services at Canal+, highlighted that while flexibility, cost efficiency and new workflows are powerful drivers, training and organizational readiness ultimately determine success. New operating models require teams to think differently about how production capabilities are deployed, managed and scaled. The challenge is not replacing existing expertise, but helping people apply that expertise in a different operational model.

Perhaps the most valuable lesson is that successful adoption rarely begins with technology. It begins with confidence.

People embrace change when they understand how it helps them succeed. They adopt new operating models when they feel in control of them. The organizations making the most progress are often investing just as heavily in people as they are in technology.



DMF is starting to become a well-known concept with many expectations that it will quickly become universal in a Software-Defined world.

Emili Planas, Chief Technology & Operations Officer at Media & Broadcast

What DMF Really Enables

So, zooming out, what is it that DMF really enables?

The ultimate value of a Dynamic Media Facility is not flexibility for its own sake. It is the ability to respond to audiences, opportunities, changing business priorities and moments that nobody could have predicted when the facility was originally designed.

For viewers, that can mean more personalized experiences, more relevant content and faster access to the stories that matter most.

For content owners, it creates the freedom to experiment with new formats, new distribution models and new audience engagement strategies without every initiative becoming an infrastructure project.

For creative teams, it means fewer barriers between an idea and execution.

For operations teams, it means aligning resources with actual demand rather than worst-case planning assumptions.

For business leaders, it means the ability to pursue opportunities as they emerge rather than waiting for the next technology refresh cycle.

The organizations that will benefit most from this shift are not necessarily those with the newest technology. They are the ones capable of adapting without disrupting the operational confidence that audiences and teams already depend on.

For decades, media organizations largely adapted their ambitions to the capabilities of their infrastructure. Dynamic Media Facilities begin to reverse that relationship. Infrastructure increasingly adapts to the needs of the business, the production and ultimately the audience. That shift may prove to be the most important outcome of all.

That is why DMF matters.

Not because it changes infrastructure.

Because it changes what organizations are capable of doing with it.

Closing Thought

The organizations that thrive will not be the ones that predict the future.

They will be the ones best prepared to seize it.

Yet adaptability introduces a new challenge.

Building a Dynamic Media Facility is one thing. Ensuring software, media and metadata can move through that environment efficiently is another. As media operations become increasingly software-defined, that challenge becomes impossible to ignore.

And that's what we'll focus on in our next article in this series.

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