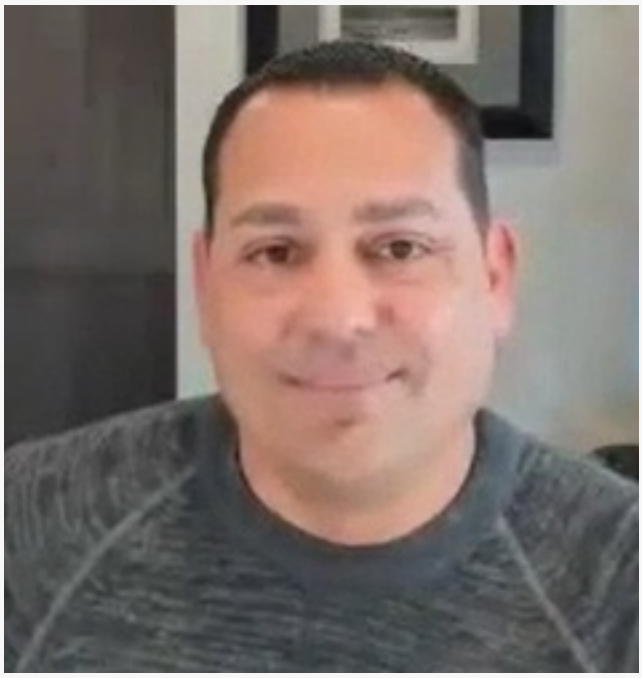
Economics of Video are Revisited as Next Generation of Codecs Emerge

BEAVERTON, OR, UNITED STATES, January 21, 2026 /EINPresswire.com/ -- The media and entertainment technology sector is wrestling with financial pressures against the backdrop of outsized demand for video content as streaming service providers engage in strategic consolidation and broadcasters race to modernize.
It is during this time of evolution that Versatile Video Coding (VVC) steps into view as an emerging codec engineered for the next phase of video.


Deacon Johnson, MainConcept

According to MainConcept CEO Deacon Johnson, the excitement building around VVC goes beyond the benefits of better compression to the new revenue generating opportunities the new standard can open to the market.

Beyond the Bitrate Story

Previous iterations of the codec narrative have produced predictable outcomes with incremental efficiency gains, gradual deployment, and long-tail coexistence with previous standards. The same is expected to occur as the benefits of VVC manifest themselves in the economy.

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> *Deacon Johnson, MainConcept*

“VVC certainly delivers on the efficiency promise, offering roughly 50% bitrate savings for the same visual quality as other codecs. But that is a single entry point,” Johnson said. “VVC is a codec engineered for where video is going. It is designed for 4K and 8K, for higher frame rates, for HDR and wide color gamut, and for emerging applications that have yet to reach the mainstream."

As a result, he observed, we will soon arrive at situations in which legacy codecs will be unable to adapt effectively to new modes of storytelling and consumption that are already on the horizon. VVC was developed

with those future-use cases in mind.

Breakthrough Potential for Improving Video Workflows

One of the more innovative elements that MainConcept has teased from VVC is multi-layer encoding.

“Rather than encoding separate versions for each resolution or device, VVC enables a single encode to deliver multiple resolutions and formats as well as serve many outputs. Workloads that were once running in parallel pipelines can be simplified into a unified approach. This capability saves processing time and infrastructure spend. The encoder’s reuse of information between layers is also more efficient, which reduces compute loads and minimizes energy consumption as well as hardware strain,” Johnson explained.

The value of multi-layer encoding, however, extends beyond simply streamlining technical operations.

“Multi-layer encoding enables broadcasters and streaming service providers to add real-time overlays such as statistics, commentary, alerts or other data layers directly into the stream without interrupting the viewing experience,” said Johnson. “Interactive video at this level improves the economic equation for broadcasters and streaming services at a critical time.”

The industry has been talking for years about dynamic, personalized, and enhanced video. VVC’s versatility, he says, will make it feasible.

The Economics Behind Codec Innovation

With enhanced viewing experiences moving from concept to feasibility, attention is now shifting to whether the underlying technology can also deliver measurable economic returns.

As streaming services and broadcasters look for ways to squeeze more efficiency from their operations, VVC offers immediate bottom-line impact.

“A decrease in bitrate requirements by nearly half translates directly to reduced delivery costs which is an urgent priority for platforms facing rising storage costs and thinning margins,” said Johnson. “What is more intriguing is the opportunity for new revenue models built around contextual ad experiences or real-time enhancements that could finally open video up to the flexible monetization that digital native platforms have enjoyed.”

Signs of Early Momentum

Whether those economic benefits translate into lasting impact, however, depends on how quickly and cohesively the broader industry begins to move from interest to implementation.

Any new technology standard has to go through stages as the industry evaluates market demand, engineering costs as well as risks and competitive advantage.

“There are three groups that must be in alignment in order for the ecosystem to begin adoption,” Johnson said. “Standards bodies approve and publish the standard, solution providers such as MainConcept start building out the ecosystem, and then broadcasters and technology platforms integrate the tools. Throughout these stages a foundational requirement is a shared commitment to scalable workflows and ensuring that content plays consistently across devices.”

Past codec transitions show that once these three forces synchronize, adoption accelerates.

“Early momentum is already emerging within broadcast standards frameworks. Countries like Brazil with DTV+ and the rollout of ATSC 3.0 in the United States are examples of the progress in broadcast standards,” said Johnson. “Investment in emerging standards is critical for innovation and new services to evolve and build the delivery foundations for the next decade. The ecosystem also requires time to test out new models and concepts to ensure the viewing experience is reliable.”

Experimentation Signals for VVC’s Adoption

Before those foundations are fully realized in broadcast and streaming, emerging standards are often stress-tested in markets with the highest tolerance for technical rigor and operational risk. New codecs rarely take hold in the media and entertainment sector first.

“Look to the tertiary markets for response to an emerging codec. Often early codec exploration occurs in mission-critical environments such as security, surveillance, military systems, medical imaging, and other domains where reliability and fidelity are paramount,” said Johnson. “These markets can provide a healthy indication about the adoption of an emerging codec. The broadcast and production world will follow suit.”

These use cases may appear peripheral for the media and entertainment technology sector today, but historically they have foreshadowed broader adoption in broadcast and streaming.

Technologies such as HEVC and JPEG 2000 gained early traction in markets that included surveillance systems and medical imaging. These were areas in which compression efficiency, fidelity, and reliability delivered immediate operational value. In many cases, those deployments served as proving grounds, helping validate workflows and performance characteristics before broader adoption followed in broadcast and managed streaming platforms.

A Future-Proofing Codec Built for the Moment

With VVC, early indicators of tertiary-market interest are beginning to take shape. Industry discussions have identified surveillance video compression as a promising application where VVC's efficiency with high-resolution video and storage optimization aligns with persistent operational demands. At the same time, exploration of VVC in virtual reality and augmented reality (VR/AR) as well as 360-degree video workflows underscores how the codec is already being evaluated for the new media frontier.

"After decades of building codecs that underpin the broadcast and video ecosystem, it is clear that VVC 'has legs,'" said Johnson. "VVC delivers meaningful cost savings at a moment when the industry sorely needs to streamline. It supports interactivity precisely when business models need reinvention, and it provides the technical agility required for next-generation formats that have yet to reach mass adoption."

If broadcasters and platforms treat VVC merely as a more efficient HEVC successor, they will miss the larger story. VVC isn't just about encoding video more effectively. It is about enabling an entirely new era of video experiences, business models, and applications, Johnson concluded.

Click here to read the Q&A based on this interview.

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