

Monetizing Media in the Age of Any Content, Any Where, Any Time

The content explosion is well underway and shows no signs of slowing down. IDC predicts that digital content will grow 40x between now and 2020. This is being fueled not only by the digitization of film, print and video, but also by the general population who are now video producers too, using today's camera enabled mobile devices. This convergence of broadcast, film, production, Internet, telecom and the consumer electronics industries presents enormous opportunities for Media and Entertainment organizations. They can apply innovative thinking to traditional business models in a way that creates new revenue streams

Convergence creates Opportunities



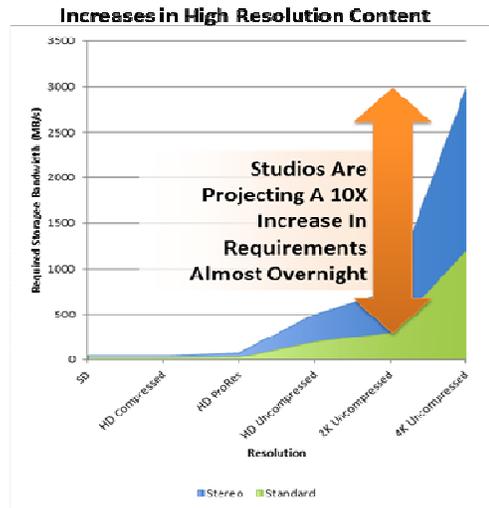
However, significant operational challenges still need to be resolved before these organizations can devise workable business and monetization models. These include the proliferation of devices and the requirement to migrate from analog's limitations to align with the capabilities available across all dimensions of the digital supply chain. From content acquisition and archiving, to production, to packaging and distribution, this requires a fully automated process orchestration. DataDirect Networks (DDN) has worked with over 600 leading media organizations (including Microsoft, CATA, Speed Channel, Photobox, Mediaset, and CCTV) to create solutions to solve these operational challenges and capitalize on new streams of revenue.

The Cost of Fragmented Media Workflows

In many organizations content acquisition, content production and content distribution are separate operations, but all rely heavily on storage and have unique storage-related challenges. There is a tremendous cost that organizations absorb by having this fragmented approach, including:

1. Multiple copies of data that need to be managed throughout the production pipeline.
2. Artists that need access to a common pool of storage must spend time navigating IT tools, data sets and file systems rather than concentrating on producing creative work.
3. Delay in production workflows because they have not kept up with rapidly expanding needs for storage and bandwidth.
4. Keeping media assets readily available and globally distributed must be balanced with cost. Rapidly encoding and widely distributing content is the path to monetization. However, traditional storage technologies are limiting the ability of organizations to repurpose and monetize their digital assets.

Understanding and overcoming these challenges can present an enormous opportunity for media organizations gain a competitive edge in this highly converged and rapidly changing landscape.

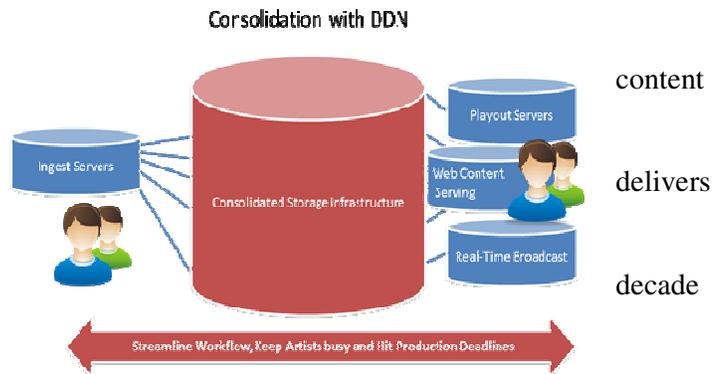
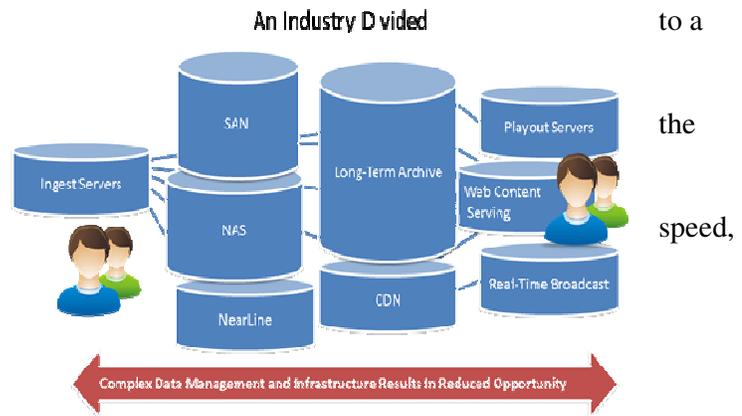


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DDN Consolidates Fragmented Workflows

Today's digital supply chain consists of multiple types of storage systems in order to satisfy the differing workloads. Content acquisition typically requires the ingest servers to be connected real time, high performance Storage Area Network (SAN) to ensure an uninterrupted ingest of video streams. At content production stage, steps like color grading and correction are generally bandwidth intensive and demand high file-based access; while steps like animation, visual effects (VFX) and rendering are I/O intensive, requiring random access to lots of small files. The delivery of completed content needs a geographically distributed, Cloud based Content Distribution Network (CDN), with the ability to stream content in real time and handle spikes in demand for popular content. Various solutions exist in the market to handle these individual workloads. However, storage administrators are burdened with managing the systems individually, creating duplicate copies of and dealing with these tasks throughout the production pipeline.

DDN is the one company that storage platforms to consolidate this workflow, from content creation to distribution and archive. With more than a of experience architecting information solutions for the world's most content and performance intensive media environments, enables media organizations to build a more collaborative workflow, delivering the ability to distribute content to multiple functional areas across the organization and to the wider ecosystem of external production companies, outsourcers, and business partners.



Create, Produce and Distribute Any Content, Anywhere, Anytime

Whether designing an integrated post production system, broadcasting a live sporting event, rendering a 3D animated feature film or distributing content for end user consumption, consolidating fragmented storage can both shatter technical barriers and create new opportunities to accelerate digital workflows. By consolidating and optimizing storage, all aspects media creation and distribution benefit:

Post Production

- **Reduce production timetables and hit tight deadlines by producing high quality content faster**
- **Prepare studio infrastructure for next-generation resolution and revenue enabling content**
- **Maximize ROI by increasing the utilization of digital workstations and eliminate lengthy file transfers keeping your creative professionals more productive**
- **Simplify and reduce the numbers of systems and management**

Broadcast

- **Scale your services and drive new revenue growth by streamlining the production and delivery of content**
- **Broadcast in next-generation resolutions and to any device to maximize revenue and reach**
- **Reduce turnaround time for live events and win incremental business**
- **Reduce Total Cost of Ownership by minimizing system and data management resources**

Animation

- **Maximize ROI by ensuring that workstations and render farm hardware is not lying idle.**
- **Keep animators busy and hit project deadlines by simply removing the storage bottleneck**
- **Create breathtaking 3D animation characters in tight production deadlines and gain the ability to take on any advanced project in the future.**
- **Reduce Total Cost of Ownership by minimizing system and data management resources**

Web and Content Distribution

- **Increase the monetization of digital content** by delivering it to new global audiences
- **Reduce storage costs** by keeping all media assets in one centralized repository and only pay for additional capacity as your library grows.
- **Hit tight production deadlines** by building a collaborative workflow to simply and easily share content across the globe.
- **Simplify management** by adding custom tags and metadata to encoded content.
- **Improve end user satisfaction** by pushing content to the edge and creating multiple copies on the fly to handle spikes in demand for popular content.

Conclusion

The explosion in the amount of content being generated, combined with the convergence of broadcast, production and consumer electronics is changing the Media and Entertainment industry in dramatic ways. Enormous opportunities are open to create innovative business models, reaching new customers and driving new revenue streams. In contrast, organizations that do not adapt to the explosion in quantity and types of data will struggle with both productivity and costs, and may not be agile enough to exploit new business models. By leveraging DDN's innovative technology and its experience in resolving the challenges of the world's most content-intensive environments, content creators and providers can gain a competitive edge in this rapidly changing, highly competitive market space.