

Advancing media asset value: From storage to operational decisions

Received (in revised form): 28th June, 2013



Blake White

is a director in PwC's Entertainment, Media & Communications advisory practice based in San Jose, where he leads the practice's digital transformation advisory services. He previously led PwC's national initiative in digital media risk management, and held principal positions in media industry engineering consulting firms advising clients on digital content management, content security & piracy prevention, metadata integrity, transition to HD, and IT integration. Blake is the author of: *The Technology Assessment Process: A Strategic Framework for Managing Technical Innovation*, published by Greenwood Press; the PwC publication — *A New Era for Content: Protection, Potential, and Profit in the Digital World*; and co-author of 'Digital asset management: process over product', published in *Broadcast Engineering*. He holds BSIE, MBA and MLA degrees from North Carolina State, Xavier and Stanford universities, respectively.

PwC, 488 Almaden Boulevard, Suite 1800, San Jose, CA 95110, USA

Abstract For entertainment and media (E&M) companies, digital photographs, videos, music and animations are among their more valuable and unique assets. Yet challenges related to media asset management (MAM) are keeping many studios and other E&M companies from harnessing the broader value of their digital assets. Today, MAM is about more than simply cataloguing, searching, storing and archiving. It is about balancing the portfolio of investments in strategic content across business units, channels and platforms, allowing MAM to become a key enabler of operational decision making.

KEYWORDS: digital rights management, digital asset management, monetising digital content, content value chain

THE DIGITAL REVOLUTION: EXPLOSIVE GROWTH LEADS TO NEW OPPORTUNITIES – AND CHALLENGES

Already, the E&M industry is experiencing a digital asset explosion that represents exciting opportunities According to PwC's Global Entertainment and Media Outlook 2013–2017:

- Global E&M spending on digitally distributed formats increased by 15.3 per cent in 2012, compared with a flat 0.5 per cent rise in non-digital spending.¹

- Digital's share of total asset spending will grow from 34.3 per cent in 2012 to 45.9 per cent in 2017 and account for 82.9 per cent of total E&M spending growth to 2017.¹

Market opportunities related to MAM extend far beyond the E&M industry, driven by growth in corporate marketing and communications, digital television and HD mandates, Web 2.0 and internet protocol television, mobile media and post-production work flows. Increasingly, analysts cite the importance of asset management to the overall enterprise.

As a result, software for the management of images and video is the fastest-growing segment of the content management market.

While the growth is impressive, traditional, physically distributed platforms and formats will still account for the bulk of E&M revenues in 2016 — 62.5 per cent of the expected \$2.1tr global E&M revenue. The challenge for content owners is to carefully balance their investments and efforts in the high-growth, digitally distributed business, while continuing to shore up the core physical business.

The dramatic growth in content in 1s and 0s will drive the need to store, manage and distribute this digital content.

MANAGING A CONTENT PORTFOLIO: AN UPHILL BATTLE

The difficulty in managing a content portfolio today is the top-down, vertical nature of divisional IT infrastructures. Typically, each data warehouse has been set up to meet the needs of entertainment divisions that have traditionally run autonomously.

Consider how difficult it would be to manage enterprise media assets if there are several dozen non-connected MAM systems. This situation makes it difficult for the company to know exactly what content it owns and where it is located. A company's games division might be spending funds to redevelop three-dimensional models that already exist in the visual effects systems. A company might dub a title in German, after having checked that no titles were found in its German business unit — only to later learn that a German language version existed in Austria.

In large media companies, it is not uncommon to find a dozen or more separate financial data warehouses, making it difficult to report a comprehensive profit and loss statement by title.

Although digital technology opens fresh opportunities for the business affairs organisation to strike new deals for all the new platforms, channels and territories, it can take weeks for legal departments to clear such deals. The inadvertent violation of contract terms can cost millions annually in penalties. Separate divisional rights repositories do not simplify this situation.

In addition, marketing departments receive insightful and timely data from websites, social media feeds and mobile apps that could inform more effective marketing spend on in-flight campaigns. But often they cannot take advantage of this information because the digital media systems are rarely integrated with the company's financial systems, enterprise resource programmes and customer relationship management.

PWC'S APPROACH TO MONETISING MEDIA ASSETS

Using MAM as part of a more holistic and effective decision process means that a company is better equipped to know:

- what content it has;
- the rights it has to monetise the content;
- the proper business model for these titles.

An approach called content value management (CVM) captures leading industry practices in a framework that addresses the overall enterprise by aggregating and correlating content, rights and associated financials more thoroughly to support a company's decisions.

CVM goes beyond just integrating the financial data from various operational systems. Although this critical component helps executives know the profitability of a movie title across all platforms and business units, decision makers in the

digital content realm also require cross-divisional access to legal contract data, so their companies know whether they have the right to sell a title on that platform, in that geography, and how much they may owe in royalties and other payments to the content producers and owners. The CVM approach integrates the data in rights repositories across disperse rights management systems (RMS), converting abstract contractual terms into meaningful alerts, licensing utilisation reports and geographic opportunity maps.

Likewise, decision making requires integration of MAMs with global unique media identifiers (UMIDs), such as the evolving Entertainment Identifier Registry standard, and the upstream content metadata so that companies can be sure that they have available the title in question in the right version, format and language. UMIDs provide a consistent title descriptor across business units, channels, geographies and platforms. They are also important enablers of universal search and discovery, residuals tracking, rights management and consumption metrics.

Metadata initiatives can be complementary to UMIDs and often need to flow across the supply chain. For example, the American Society of Cinematographers' Metadata Subcommittee has been exploring upstream, on set, script-related 'metapaper' standards.

Conceptually, when UMIDs are combined with metadata standards, such as the Interoperable Master Format for non-theatrical business-to-business distribution masters, systems can search a flexible hierarchy for compositions, sequences, segments, resources, track files, features, episodes, trailers, ads and perhaps even the props in the scene. Because these UMIDs are integrated with a company's MAM system, executives may even be able to preview the content remotely on laptops or tablets.

CVM can be further extended with dynamic analytics to enhance business decisions. In the typical maturity model for analytic decision making, business intelligence is based solely on historical data. Decisions often need to evolve into forward-looking scenarios that take into account complex nonlinear areas of the business as well as interdependencies. Some of the more challenging paths for E&M companies require *ad hoc* macro strategic decisions — designing distribution strategies, creating the right mix in product portfolios and understanding market trends. These decisions require advanced analytical tools, such as simulation modelling, that capture the complex dynamics at play while allowing for scenario-based analysis.

Predictive analytics can be further extended with agent-based modelling, which uses artificial intelligence and behavioural economics to predict mass behaviour from the myriad individual actions and interactions, and system dynamics, which models the relationships, feedback loops and time delays (or diffusion rates), capturing complexities such as nonlinearity that other types of analytical models do not account for.

These advanced analytics techniques can be used to determine the proper film release window, platform and channel strategies — and how they can be adjusted over time based on feedback loops and changing consumer data. The combination of agent-based modelling and system dynamics can also be used to help broadcasters get a more holistic appreciation of programmes, beyond just the ratings and advertising rates. The television model considers the impact of a show on brand equity, reduced channel switching, lead-in from one show to another, the user experience with digital content across a range of devices, reduced churn and word of mouth.

Most importantly, now that the data

have been aggregated and organised, one can make sense of them and present reports (or even enable self-service reporting) to the right executives, at the right time, on the device of their choice, in a way that is understandable and actionable. CVM seeks to do that with customisable reports, secure data access based on authorised roles and users, automated alerts and drill-down data for deeper exploration by staff members. Basing analytics on the three-pronged foundation of MAM metadata, RMS contractual terms and cross-divisional transactional financial data, CVM offers a more holistic framework for balancing the portfolio of investments in strategic content across business units, channels and platforms.

USING CVM TO ADVANCE MEDIA ASSET VALUE

In today's technology-driven age, the volume and value of digital assets, as well as the number of platforms on which they are consumed, is only going to intensify. Managing the content portfolio according to CVM principles requires that companies view MAM as more than

simply a tool for cataloguing and referencing. It can also be a critical resource to help grow their business. By taking an enterprise-wide approach and using new analytic capabilities and reporting technologies, MAM can become a powerful and strategic element of key operational decisions.

Of course, as one looks across all the parameters of the systems needed to support greater consumer engagement in the digital era, each company may find itself in a different place along a series of systems capabilities. Each company will need to identify its current state of digital readiness, determine where it wants to be over a certain period and map out a technology roadmap to achieve its goals.

These steps can evolve MAM's importance beyond just storage, search and retrieval. MAM can become as important to CVM decision making as financial and rights data, serving as a crucial tool to effective content monetisation.

Reference

1. PwC (2013) 'PwC Global Entertainment and Media Outlook: 2013–2017', available at: <http://www.pwc.com/gx/en/global/entertainment-media-outlook/index.jhtml> (accessed 12th June, 2013).