Reengineering the Broadcasting Value Chain

The Media and Broadcasting industry is undergoing rapid changes due to various technology advancements along with the growing demand for more personalized services. Broadcasters who have traditionally enjoyed a stronghold in the market have to now compete with players emerging from unexpected corners, including new media companies and internet service providers. These developments require broadcasters to not only innovate within their service portfolios and customer engagement models, but also to increase internal capability to match the speed at which the marketplace changes.

In this article, we identify key internal components of the broadcasting value chain that can be transformed so that broadcasters remain competitive and agile in this fast paced industry.
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1 Introduction

Media and broadcasting organizations would typically be the first ones to agree that being part of a predominantly technology driven industry can be both, a boon and a bane. On one hand, advancements in devices, standards and protocols open up new avenues for established broadcasters to widen their service portfolio, launch new products and enhance viewer experiences. On the other, they drive customers to demand more personalized services on an ever increasing array of devices. Moreover, with the advent and rapid adoption of on-demand, HD and 3D services, boundaries separating ‘standard’ and ‘augmented’ services are fast disappearing.

So while a vast majority of any broadcaster’s customers are still happy to turn on the television and wait for the 9 pm movie to begin, many others instead prefer to watch it at a time which suits them using specific technological devices such as cell phones, notebooks or tablets. This presents both, a challenge to stay connected with your existing customers beyond regular viewing hours, and an opportunity to reach out to a new and predominantly younger customer segment that is almost constantly connected.

2 Understanding Factors that Shape the Market

Consumer research shows that although the usage of personal devices to view internet based content remains high, the consumption of content primarily targeted towards television audiences (on-demand as well as live programming) on such devices is on the rise.

![Percentage of devices owners consuming video](image)

Source: Broadcast Reloads for Mobile TV Growth: Market outlook and technology implications for mobile broadcast TV - Ovum, February 2010, Tim Renowden and Adrian Drury
Key developments which are shaping the broadcasting landscape include:

- The centre of power and influence is moving away from content distributors towards content owners and content producers who can now reach consumers directly, over channels such as the internet and cellular networks.
- The rapid proliferation of personal devices is driving consumers to demand more customized services.
- The ‘context’ or ‘relevance’ of content is set to become as important a sales proposition as the quality of its delivery.
- Social media is emerging as a powerful platform to engage with target audiences.
- As established broadcasters look to consolidate their position, there is increasing competition from broadband internet and mobile service providers looking to gain market share.

While the market has to deal with a constant flux in consumer preferences, there is a growing segment of niche, personalized service providers who are rapidly increasing their share of the average consumer’s viewing time. The burgeoning demand and adoption of smartphones has led to strong growth for the mobile TV market in the recent past. This is revealed by the increase in popularity and number of subscribers of MobiTV, a leading provider of live and on-demand TV content to mobile users in the USA, as represented in the figure below. Coupled with the increasing ability of cellular networks to transfer large amounts of data, the role of mobile services providers’ in the broadcast value chain has gained significance over time.

![MobiTV Subscriber Growth](image)

Source: Broadcast Reloads for Mobile TV Growth: Market outlook and technology implications for mobile broadcast TV - Ovum, February 2010, Tim Renowden and Adrian Drury
Similar growth patterns are predicted for a majority of the other personal device categories, indicating that the pace of change in consumer preferences is likely to continue. Nevertheless, the resultant opportunities this scenario offers, far outweigh the risks provided broadcasters take steps to capitalize on the former and mitigate the latter.

3 How Broadcasters Need to Respond

Conventional television broadcasting, owing to its maturity, breadth of choices and wide reach, is, and will likely remain the primary revenue earner. The need of the hour for broadcasters therefore is to strengthen its existing offerings, and at the same time develop greater agility in operations to respond to fluctuating market dynamics.

The onus now on broadcasters is to focus on:

- Continuing to grow and protect revenues of the core broadcast business by enhancing operational capability and improving internal efficiency
- Leveraging the existing position in the broadcast value chain to build stronger multi-platform content delivery capabilities, especially in online and mobile channels
- Innovating to capitalize on emerging opportunities in previously untapped customer segments
- Reorganizing towards a more integrated and service oriented operating structure in order to achieve and deliver long term objectives effectively

A significant step in reorganization will be establishing a service based infrastructure with individual departments and functions acting as service providers to both, internal and external customers.
Traditionally, the performance of broadcast operations are viewed and measured as a single entity from content acquisition to archive/storage. This view blurs the boundaries between internal processes and services rendered by individual departments. Broadcasters can then structure internal functions as potential service lines, such as scheduling, ingesting, transcoding, and editing, among others. Such a structure will, however, need to be well supported by robust business processes and greater transparency in capabilities and responsibilities. This will enable teams to collaborate better and improve performance in key operational areas. The result will therefore be an integrated and continuously evolving organization, which is more responsive to changing business requirements and more efficient in delivering the desired business results.

For some, this would imply making significant changes to existing operating models, processes, policies and technologies, and finding new ways to leverage their brand identity and customer loyalty. However, an effective way to substantially reduce the risk associated with such major changes, and to increase the predictability of the desired outcomes, is to limit the change scope to areas that will yield the maximum return on the time, capital and resources that the organization invests in them.

4 Key Focus Areas

The achievement of these broad objectives would need a concerted focus on enhancing internal capabilities. Regardless of what is the greater priority - growth or profitability, service consolidation or expansion - the organization’s ability to continuously improve its core operations will always remain a key success factor in its achievement. This would entail assessing current operational capabilities, identifying gaps in the desired state and bridging these by embracing appropriate methods, technologies and tools.

The following sections describe key considerations from an operational standpoint.

4.1 Optimizing Operational Efficiency

A key step towards building future capabilities is to improve internal efficiencies, which will reduce operational expenditure and free precious working capital.

The typical broadcasting setup has the production department focusing on both, growing revenues and reducing costs (i.e. changing the business and running the business). More often than not, in such a scenario progress in one area is achieved at the expense of the other. For instance, each new product launch comes with an even shorter time-to-market requirement, and demands the alteration of existing systems and processes to support it. Over a period of time, this leads to the formation of an inflexible matrix of systems, policies and procedures, unable to undergo further changes.

Therefore the focus on innovation has to be separated from the drive to improve efficiency. The question is how this can be achieved in the typical broadcast setup. Let's consider the high level broadcast value chain, as shown in the figure below:
Content acquisition/creation and planning is what determines the evolution of the broadcaster’s business, and perhaps should not be overly constrained by efficiency concerns. The delivery or play-out of content, owing to its criticality and the near-zero tolerance for business disruption in broadcasting, is an area most organizations would be reluctant to reassess or alter purely for efficiency’s sake. Notwithstanding this challenge, relooking ingest and editing/post-production processes could throw up multiple opportunities for improvement, especially because a major proportion of operational costs and manual interventions are typically associated with these two areas.

The focus of broadcast operations has to thus expand beyond simply being on-air 24x7, and should consider the following:

- Is there an opportunity to reduce the cost base or realize financial value through improved performance in ingest and editing/post-production areas?
- How efficient is the ingest setup, i.e. are mechanisms such as “ingest-once, use multiple times” being leveraged?
- Is there scope for improvement in existing operations through task automation, superior organizational collaboration, and use of new tools and technologies?
- Are performance indicators and measurement mechanisms defined and utilized for major operational areas?
- Which set of operations does the organization currently have a strategic mandate to maintain and operate in-house and which could possibly be outsourced/co-sourced?

Answers to these questions could reveal hitherto unknown or unseen operational issues and identify areas with considerable scope for performance improvements. When applied to the entire broadcast value chain, this analysis could provide insights which would build a financial case for initiating a transformation program with the potential to unlock value across core and support operational areas.
4.2 Implementing File-based Workflows

Tape based broadcasting workflows and systems which have worked well for so many years are no longer capable of delivering the scale and breadth of services that today's competitive market environment demands. With content suppliers moving towards digitizing content storage and distribution and customers preferring digital devices and platforms - broadcasters simply cannot afford to catch up.

In addition, there are multiple issues associated with tape-based production and delivery environments, including:

- Inability to efficiently support and scale to handle the increasing demand for multiple channels and platform distribution
- High overhead costs in logistics, storage and manual interventions in the production/post-production process
- Leading content suppliers making digital delivery of content the preferred supply mechanism for the future and indicating a steep increase in delivery fees if content has to be delivered on tape
- Advancement in digital video formats outpacing advancements in tape storage capability

A key milestone in the transformation journey therefore is the adoption of file-based operations, which has until now been primarily limited to post-production areas and services. Increasingly however, it will play a key role in reducing operational expenditure and building capability to support products and services which will drive long-term organizational growth.

With the ability to leverage internet connectivity for content transfers, file-based operations have drastically lower content transfer and production costs. In addition, file-based content is available immediately for further editing and play-out, reducing the production time and enabling quicker on-air availability. File-based operations are also more conducive for establishing a Key Performance Indicator (KPI) framework, as data collation and monitoring mechanisms can be built right into systems which enable file-based workflows. Moreover, the staff used to run operations in a tape-based environment, and now in a file-based environment with a well defined set of semi-automated workflows, is available for developing new products and services. In effect, file-based operations are capable of providing not just short term remedies for cost, efficiency and quality related issues, but also laying the foundation of a more creative and productive organization.

The move to file-based operation is not without significant challenges though. To begin with, the capital expenditure could be considerable, possibly running into millions of dollars of investment in software and hardware. Combined with the limited understanding of the precise return on this investment, it could force the finance department to refrain from giving approval. Content security, owing to the ease with which digital content can be copied, distributed and erased, is another big area of concern for both owners and distributors. Also, existing organizational hierarchy and infrastructure may appear too rigid to be aligned to new processes and technologies.

Making the change, however, is inevitable with many early adopters already reaping benefits including enhanced offerings portfolios, more efficient content management and delivery capabilities, and
improved operational performance and control, among others. The most appropriate implementation approach is incremental, which identifies and pre-empt risks and balances the pace of the change with the organization’s capability to adopt it with minimal business disruption.

4.3 Leveraging Advancements in Media Systems & IT

Over the years, the evolution of the IT environment within the broadcasting industry has not been able to keep pace with the changes in the service portfolio and delivery infrastructure. Broadcast equipment know-how is specialised and scarce, and interfacing such equipment with IT applications is often complicated. Due to security and reliability concerns, broadcasters have also not been too comfortable collaborating with large IT vendors to run mission critical elements in the broadcast chain. However, as new opportunities unfold it is imperative that they realign their IT strategies to build competitive advantages, boost efficiency and operational capacity, and enhance staff productivity for meeting increasing business demands.

Broadcasters have traditionally installed discrete systems and applications and integrated them separately. This patchwork approach of integrating new systems and applications, however, leads to multiple silos of vertically integrated systems which require manual intervention for data accuracy and communications. The IT landscape in most broadcast environments is typically extremely closed, heterogeneous and siloed, characterized by one major application providing most of the required functionality, supported by a set of smaller applications providing the remaining functionalities. Often this entails heavy reliance on proprietary or in-house architecture, technology and workflows with additional software being introduced to support new product lines. This leads to redundant functionality and overlapping responsibilities, while escalating costs of licenses and specialized staff make the IT landscape a very expensive one to support and maintain. There is, hence, a strong case for systems simplification and infrastructure enhancement enabling broadcasters to overcome the shortcomings of such a legacy system environment.

Tomorrow’s enterprise will have ‘content’ at its center, and will need to be efficient and effective in managing its lifecycle. And this is where developments in media systems and IT hold promise. Today, Media Asset Management (MAM) and Broadcast Management systems (BMS) are capable of end-to-end...
management of content, right from acquisition till delivery to the end customer. They also enable the creation of a homogeneous and largely standards based IT platform allowing the flexible implementation of processes and workflows. These processes can further be partly automated and driven by the majority of operations staff. It is no surprise then that the BMS and MAM are vital components in the modern day broadcast value chain. Of equal importance is the need to establish a centralized repository, enabled by a unified and consistent data model for media and metadata assets, and workflow and collaboration tools, which empower staff across the enterprise to deliver more.

Although multiple IT product suites with capabilities across these key areas exist in the market, they may not necessarily fully integrate within the existing enterprise infrastructure. This necessitates the selection and implementation of proven and mature technologies while at the same time extracting the maximum benefits from the existing investments. In order to achieve this, broadcasters should look to work with established IT vendors with the requisite broadcast domain experience and capabilities to develop and implement tailor-made solutions. As the relationship matures they could further explore the possibility of leveraging contemporary IT best practices and models such as Software-as-a-Service (SaaS), and perhaps even consider outsourcing or co-sourcing strategies to realize efficiency and cost benefits.

5 Conclusion

As the existing operating models, processes and systems struggle to keep pace with the varying needs of the broadcasting business, change is the order of the day. Broadcasting companies need to realign their business processes and business model to address this challenge so that when faced with new content delivery methods and technology, they are equipped to react quickly and effectively.

Central to this idea would be a target operating model that facilitates new ways of doing business without hampering current operations and existing lines of broadcast. Organizational inertia and internal resistance may need to be assessed and appropriately countered. For instance, segregating work based on ‘commoditized’ vs. ‘specialist’ and the further selection of candidates for outsourcing may create anxiety and fear among existing staff. Restructuring existing processes around a new operating model may also require reshuffling existing departments, possibly leading to loss of authority and changes to the reporting structures. Moreover, the implementation of new roles and responsibilities will need to be supported by a structured training approach and competency development program for the impacted staff. Appropriate transformation approaches will therefore not only include the definition and prioritization of key business outcomes, but also the identification and pre-emption of risks.

The challenges may seem numerous and multidimensional, but the time to act is now. Even though there may not exist a ‘one-size-fits-all’ solution, progress in the three key areas mentioned above will establish the operational capabilities and flexibility needed to realize growth and maintain operational excellence in the rapidly changing market conditions.

References

[1] “2011 Trends to Watch: Media and Broadcast Technology” - Ovum, November 2010, Adrian Drury
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