CLOUDIFICATION IN MEDIA SUPPLY CHAIN

How a hybrid cloud is enabling supply chain management in media and entertainment?

BUSINESS DRIVERS FOR CLOUD ADOPTION

The supply chain has the most dominant role to play in every organization. It directly impacts the business revenues and growth of a company. If the supply chain is not meeting the current needs of a dynamic business along with the advances in technology, the organization is bound to fail. To ensure that the supply chain is future-ready and meeting the rapidly changing business requirements, the industry is re-imagining its supply chain management. This rings true for media organizations as well, especially now that there are multiple ways of content distribution. One such technology, which is currently ruling the supply chain management business, is CLOUD – Cloud-based supply chain.

We will be focusing on the hybrid cloud i.e. a perfect combination of on-prem and cloud to benefit the companies. Let us see why and how this affects the M&E industry.

Media and entertainment industry is going through a rapid change with the advent of new technologies and ever-increasing consumer engagement. The following key points will highlight the factors that led the companies to rethink their supply chain strategy:

Dynamic business

The rising requirements of the customers along with competitive market dynamics have led the entire industry to disrupt, reinvent and discover intelligent platforms while keeping the customers engaged with personalized experiences. The ever-changing requirements of the industry places utmost importance on a dynamic supply chain.

Need to move to OpEx model

Although the industry revenues are shooting high due to the increased volume of business on OTT enabled by the easy access to mobile phones and affordable data subscriptions, profitability is still a challenge. The growth in content consumption has led to increase in content production from both existing studios and new players such as OTTs and individual creators.

As expenditures are increasing, the companies only have two options to stay profitable– either increase the customer subscription fee or decrease expenditure in some way. Since hiking the fee becomes impossible in a competitive environment, the need of the hour for organizations is to rethink the way they manage their content supply chain, reduce their CapEx and move to an OpEx model for reduction in expenditure.

Effects of OTT

The advent of OTT and the need to deliver content globally has led to a growing supply chain. OTT has brought new aspects of localization on multiple platforms like Roku, AppleTV, android, iOS, FireTV, WebOS, STB and connected TV etc. and delivery formats based out of different regions, which have made the supply chain very complex. There was an acute need to have a one-stop platform that will take care of all the operations thus overcoming geographical boundaries.

The above reasons resulted in the implementation of the Cloud. Unlike a few years back, the industry has now started to welcome the idea of exploring and building ways to envisage their content supply chain on the cloud.

CLOUDIFICATION ACROSS CONTENT SUPPLY CHAIN

Media organizations are reluctant to move completely on cloud due to various reasons. Hence, the practical approach is to look at a hybrid cloud model and see how different functions can be used effectively by a combination of cloud and on-prem model.

Content acquisition and storage on Cloud

Acquisition of content is the process of capturing, aggregating and storing content to make it available for download, archival or further process. A hybrid cloud-based content acquisition can help automate this process and keep a proper track of each file. Cloud enables the creation of automated proxy files that are ideal for download and rough cuts. It also enables collaboration through shared files, which not only provides central access to content from different geographies, but also ensures easy content tracking. Based on the requirements, one can manage their content between on-prem and cloud based on frequency of usage and importance.

Content Management on Cloud

Content Management typically involves collecting, storing, managing, processing, retrieving, delivering and governing all the assets in a media organization. Over time, many companies end up using multiple MAMs across geographies with no standard formats and limited automation or workflows. This brings a lot of dependency on manual work. With the help of Cloud, a unified SaaS-based MAM can be provided to organizations that are ready to deploy, pre-integrated with industry standards and enable workflow orchestration. Cloud will help to have greater transparency across geographies and remove the physical boundaries to help reduce operating costs as the people required to manage this will now be reduced.

Organizations have to work on pay-as-you-go basis or per-site basis. Utilizing readily available AI models on the cloud for metadata tagging and AI classification will further reduce time and money and enhance scalability. Organizations can carefully assess and build on their on-prem model with the help of cloud to build customizable workflows.

According to IABM, 50% of broadcasters and 35% of the production/post-production companies use Cloud-based content management.

Content Operations on Cloud

A number of operations are performed on the content to make it deliverable. Workflows are defined to automate this process. An on-prem model will become too complex with growing original content, global delivery, and provide limited automation. However, a hybrid cloud model linking on-premise with the cloud will support customized workflow management as per business need. Operations become easier due to serverless architecture and quick scalability. It will provide advanced real-time analytics and a unified dashboard to have a greater picture of the movement of content and thus faster delivery.

Post-production on Cloud

On an on-prem model for post-production, the hardware undergoes change with technological advancements. Instead of transitioning to new generations of hardware, companies can use a hybrid model to enhance the current capabilities by using cloud. They can move the process and storage as per requirement on cloud, which is a cost-saving approach. Rendering frames for visual effects requires an extraordinary amount of compute power for which VFX studios have historically assigned whole rooms full of servers to act as their render farm. As visual quality has escalated, most vendors have to either limit the scope of their projects or buy or rent new machines on-premises to cope with the extra rendering needed. To overcome this industry problem, Cloud environment has enabled VFX shops to relieve internal bottlenecks to scale, and render the frame to achieve required quality without thinking about any hardware limitation.

According to IABM, 39% of broadcasters and 70% of the production/post-production companies use Cloud-based post-production.

Content Distribution on Cloud

Cloud-based playouts are the new trends that are making content distribution much more efficient. A cloud-based playout can be used to deliver content to both linear TV broadcaster and OTT providers. Ever-increasing content and the need to reach multiple geographies through different platforms makes the task complex and expensive. A cloud playout enables automated workflow and makes multiple deliveries easy. It can also be used to air linear TV worldwide, which reduces the need for expensive satellite bandwidth for delivery. Similarly, content can be made available directly to OTT consumers. All this promotes the aim of the media organization to move to an OPEX model and reduce operating costs as well with automated tasks. Distribution through cloud CDNs provides lower latency, reduced costs, and greater usage analytics.

According to IABM, 55% of broadcasters and 30% of the production/post-production companies use Cloud-based distribution..

VALUE ADDITION DUE TO CLOUD SUPPLY CHAIN

Enhanced Scalability

The quick scalability feature is the most attractive feature of the cloud. Cloud enables companies to scale up and contract in just a few minutes. It gives them the ability to use the resources as per workload.

Faster time to market

In a general scenario if you plan to grow your business you need to start right from strategizing on your infrastructure cost. With the help of cloud and thus, an OpEx model, you can focus on your core business and deliver better.

Enables Analytics

Analytics is an important bet that every company is making to grow their business. An on-prem analytics solution set up will need a great infra, maintenance and dedicated skill set which increases your spend. Cloud analytics can become a better option as the cloud gives the benefits of faster data analytics in real-time, reduced cost, easy data discovery and scalability.

Reduced Cost

As cloud facilitates quick ramp up and ramp down of resources as per one's need it will result in cost savings. Moving to an OpEx model itself results in reduced costs. Cloud and automated processes in the supply chain will help reduce overall operating costs due to reduction in human efforts. However, it is easier said than done. The cost reduction will be highly dependent on how smartly the companies use cloud. Since it is pay-as-you-go, companies need to ensure that the rights are judiciously used and there is a proper governance followed.

Failure to do so can sometimes result in a negative impact, the operating cost can go up and the whole idea of reduction in expenditure will be lost. Hence, companies need to carefully design its usage.

Unifies business norms on a global level

For larger organizations, a cloud-based supply chain can help media companies to consolidate and optimize their supply chain. It will help eradicate geographical boundaries and centralize their content, making it available to people from different locations easily.

Integration capabilities

The ease of integration that cloud provides help organizations save a huge amount of time. Flexible APIs is a reason leading to the boost of cloud apps. The integration of multiple applications, systems, and databases using these APIs is helping media companies to move to the cloud efficiently.

Security and Compliance

Cloud companies take the ownership of all the security measures for different company's data. But, still the main reason for the slow adoption of cloud is the security threat as their data is at stake. Thus, security has become a shared risk. Both the cloud provider and the media company needs to take all the required steps to protect the data. Use of Identity Management and access control, strong encryption, intrusion detection and firewalls on cloud instance are some of the measures that companies adopt apart from the cloud provider to protect their data. As part of compliance, companies ensure regular scrutiny of data and all types of technical issues. A detailed report is given to the organization to ensure the safety of their data and thus, help them focus on their business without worrying about compliance and security.

CONCLUSION

The right way to view Cloud is as an enabler of limitless innovation along with its truly amazing feature of scalability and cost control. Cloudification of the media supply chain can help organizations to not only smoothen their process, but also enhance the way their supply chain functions. Even though organizations have now started implementing cloud in their supply chain, it mostly covers one or few parts of it i.e. in the form of hybrid model.

According to IABM, the media industry is relatively slow to adopt cloud-based technology compared to other verticals.

The most practical model as of now is the hybrid model, which combines the goodness of both cloud benefits and security of their on-prem content. The industry is still away from a complete cloud-only model but we are slowly moving towards it.

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