



# CASE STUDY

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## Hybrid Cloud & Drass

August 21 2013

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Hybrid Cloud & DaaS

## Dishtv Chooses Netmagic's Hybrid Cloud and DraaS Solutions to expand their IT Infrastructure, Enable Higher Growth and Manage IT Better

The direct-to-home (DTH) industry has come on strongly across the globe with plethora of changes – maturing them from a mere delivery mechanism to mainstream content-led, digital business.

Government has done its bit to open up this industry, regularizing it with its digitization strategy. This has put the local cablewala out of business, helping key DTH players to emerge strongly with grandiose plans, and clear spread strategies.

The Indian DTH industry is estimated to have clocked revenue of about \$1.5 billion in 2012, expected to reach \$3.9 billion by 2017 and \$5.3 billion by 2020, according to Media Partners Asia (MPA), an independent provider of information services focusing on media, communications and entertainment industries. MPA further predicts that the active DTH subscriber base is estimated to grow from 32.4 million in 2012 to 63.8 million by 2017 and 76.6 million by 2020.

### 3 key challenges facing the DTH industry

Today, a DTH player has to deal with key strategic choices to sustain its existence in the market – build and sustain a winning delivery offer, engage with providers to leverage relevant content, and offer best-in-class service to its subscribers.

One of the challenges faced by DTH players is the cascading effect of the value of transponders used to transmit content to subscribers. As compression allows for more content to go through the same satellite, the value of transponders will fall. As bandwidth explodes, demand for content will increase exponentially. Thus the need for niche content providers will increase, and there will be a downward pricing trend for the current type of content.

Media Partners Asia (MPA) claims that the Indian DTH players will face several cost challenges. With conflicting growth forecasts between content aggregators and DTH operators over the active subscriber base, most of the content renewals from now on will likely be based on a cost per subscriber (CPS) basis, rather than on a fixed rate. This will reduce the benefits from operating leverage that the industry previously enjoyed. Marketing and staff expenses will remain high as the larger phases of DAS (digitisation of cable signals) rollout get underway.

According to the MPA report, Dishtv leads in India with a market share of 27% in terms of gross additions, while Videocon d2h led in terms of incremental adds in 2012. Tata Sky and Airtel Digital TV have 19% and 18% market share, respectively. These four players together accounted for 88 percent of total gross additions in 2012.

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## CHALLENGES facing Dishtv

Digitization has changed how Indian operators function today . It has put DTH players in the hands of technology to provide superior services and best-in-class content to subscribers. Within Dishtv digitization brought about a dramatic change in the business model, and the technology managers played a key role in ensuring the success of newer business models

VK Gupta, Chief Operating officer, Dishtv

The newer set-top boxes, as a result of digitization, came with new-age technologies such as interactive TV and movie-on-demand, thus making the paradigm shift a reality. Subscribers now had more options and services on par with those provided in the western countries.

Most of the **technology challenges faced by Dishtv were related to hardware and infrastructure.**

Dishtv's IT setup was hosted with another Indian service provider where they faced 3 key challenges:

- Lack of support from the provider: Based on the business that Dishtv was running – their most important need from the setup was **uptime of the hosted infrastructure** – which was provided much below the committed levels by the service provider
- Expansion: With digitisation in the pipeline, their **IT setup was impending expansion** which the provider was unable to give adequate support on. They were looking at an **agile service provider that could manage their growth or expansion** of their infrastructure, as well as supplement their future growth.
- Besides hardware related challenges faced by Dishtv, they had growing **concerns about monitoring and management of IT infrastructure** – their technical team was based at New Delhi in North India whereas their IT setup was hosted at Mumbai in West India. So IT monitoring & management and disaster recovery were also some key technology challenges and impending actionables for them.

At that time, they were also planning their Disaster Recovery (DR) strategies and wanted their setup to have a DR site as well. For the DR setup, they were looking at a flexible and robust solution so that the challenge of managing their DR site would be mitigated as well as **evaluate any cost advantage they can derive.**

Given the state of affairs at Dishtv, IT deployment and investments in IT was a concern – but **Deputy Vice President of IT, Manpreet Singh Sabharwal at Dishtv** deliberates, “the challenge was not IT investments or costs primarily it was about meeting our growing needs, monitoring and management of IT infra as well as technical know-how and people issue.”

Technical expertise that goes into managing a growing business was daunting Dishtv. Newer strategies required extensive focus on Information Technology as the backbone to the business. As Manpreet puts it, “**the technology know-how and expertise** that comes with outsourcing to a technology provider is certainly an important consideration since we lacked the same.”

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## What did Dishtv do to address these challenges?

Mandate came from the top management, **VK Gupta, Chief Operating Officer of Dishtv** to look at outsourcing their IT setup on a pay-per-use model and go the cloud way, as they did not want to invest on the infrastructure piece and manage the same.

Led by **Manpreet Singh Sabharwal (DVP of IT) from the IT team, Dishtv** decided to invite infrastructure and cloud providers into the picture. They decided to evaluate options of outsourcing their infrastructure to a service provider – specifically looking at a cloud solution.

They had active discussion with multiple vendors – Amazon, Microsoft, Wipro and Netmagic.

In all the interactions that Dishtv had with all vendors, the key was the vendor's technical know-how and how much of the DTH business that they understood. Cost or commercials weren't the key part of the initial discussion.

## What solution was provided to Dishtv and how has it affected the Dishtv business?

The solution was to look at a complete cloud solution so that they derive benefits of flexibility expansion on-demand, better manageability and cost advantage.

Netmagic realised that in providing a full cloud model for Dishtv, another challenge was that a few home-grown, legacy applications were not tuned due to their I/O requirement. They had storage with high I/O requirement, which made more sense to provide a dedicated storage infrastructure. This would work well for Dishtv since they had huge number of SQL servers running and a dedicated/Hybrid solution would help in reducing licencing cost – with SQL servers running only on dedicated hardware.

The architecture suggested was to have at least 2 servers running per application with a load balancer. Their earlier setup used to run 1 application on a dedicated server. The new architecture would ensure resilience at an application level.

The hybrid approach helped them meet their technical requirements as well as manage the cost aspects. So even after investing in a physical cluster to run their databases, they could save costs on the SQL licencing that they would incur.

Dishtv also wanted storage level replication where locally data gets replicated, creating storage level resiliency and redundancy, a prerequisite for the industry. Netmagic was able to provide this using the EMC RecoverPoint technology.

From a security stand point, Netmagic provided them with a dedicated Firewall with IDS and IPS solutions to meet their security requirements.

A completely managed DR solution was provided by Netmagic in DR-as-a-Service (DRaaS) model. The solution included a complete DR solution plus high availability at primary location – helping them complete their Business Continuity requirements.

Netmagic provided an extended Proof-of-Concept (PoC) for Dishtv which helped them solve a lot of smaller issues in managing and hosting all their legacy applications, their Websites and mission-critical applications as well as a dedicated server cluster running their databases. The PoC ran into almost 8 weeks.

During the PoC they figured out a few challenges such as some legacy applications that would not work with a load balancer, etc. Netmagic experts were able to advise and help Dishtv in managing / change the applications to suit the new model.

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Apart from the expertise on infrastructure, Netmagic also helped Dishtv with their replication strategies. Dishtv was running SQL 2005, a version that had inherent issues during replication – from a data transfer time and cost perspective. By opting for a higher version of SQL, they were able to reduce the bandwidth usage during replication, thus helping them reduce bandwidth costs.

Today, infrastructure that caters to all their business applications (5-6 home grown applications) as well as all the websites that Dishtv hosts, run on infrastructure provided by Netmagic. Close to 10 websites are hosted at the Netmagic datacenter. The main website Dishtv.in ([www.Dishtv.in](http://www.Dishtv.in)) is accessed by over 100,000 registered users each day.

Revenue-backed mission-critical applications such as the customer relationship management (CRM) are also hosted on a cloud server provided by Netmagic. All in-house and outsourced call center agents deployed by Dishtv, totalling to over 1200-1500 users, access the CRM application regularly.

Over 15 VMs (VirtualMachines) are hosted on Netmagic SimpliCloud and about the same number for the DR location.

All applications for SitiCable, part of the Essel Group, are also hosted at the Netmagic datacenter – which went live in February of 2013.

## Why did Dishtv close on Netmagic Solutions to become the technology partner to outsource their IT infrastructure?

Choosing the right provider is key, and here, the partner's clear understanding of the client needs is critical to providing the right solution, and delivering desired results and benefits.

Our key focus on choosing the vendor – I say vendors because the partnership hadn't been formed at that point – was about the **deep understanding of the DTH business and flexibility**. This is exactly what we appreciated when we had the discussion with the Netmagic management team.

Manpreet Singh Sabharwal, DVP of IT, Dishtv

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Another key reason which prompted Dishtv to choose Netmagic as their technology partner was the provider's ability to **respond to customer needs quickly**. The Proof-of-Concept (PoC) that Netmagic team were able to quickly put together was the game changer in being chosen as the preferred partner.

By the PoC, Netmagic was able to **prove agility and performance** that was required by Dishtv. Netmagic infrastructure was able to provide about 2500-3000 IOPS in the shared storage. Since their requirement was about 5000-6000 IOPS the option for dedicated storage was provided. The **ability of the partner to mould solution to the requirement** of Dishtv was a clear advantage in choosing them as the preferred partner.

One of the key aspects which helped us choose Netmagic was the **knowledge bank that the technical and business teams at Netmagic possess** – as well as the **understanding of our business criticality**. To quote an example, we have a few in-house developed applications that had some issues porting onto the cloud model. Netmagic's timely advice and support to **smoothly manage this challenge and get optimum performance** was commendable.

Manpreet Singh Sabharwal,  
DVP of IT, Dishtv

## CONCLUSION

Advent of High Definition and Digitization has impacted the way DTH players have been perceiving and using IT. With SmartTVs, broadcast content on Mobile devices, there is expected to be another wave of technology change in this space. Dishtv is all set to meet the challenges of the market, grow and acquire more customers in India with the robust and scalable infrastructure that they have architected in partnership with Netmagic. Within Dishtv, the technology team now is all set to focus their efforts on enhancing their analytics engine and communications infrastructure to reach out to customers better, faster and more efficiently.

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## CLIENT



Dish tv is a division of Zee Network Enterprise (Essel Group Venture). EGV has national and global presence with business interests in media programming, broadcasting & distribution, speciality packaging and entertainment. Zee Network incorporated Dishtv to modernize TV viewing. Dishtv is India's first direct to home (DTH) entertainment service.

Dishtv imparts DVD quality picture and stereophonic sound effects to the customers. It promises to change the experience of TV viewing with its uninterrupted transmission service. The endeavour enters next level of entertainment with futuristic features, such as EPG (Electronic Programme Guide), parental lock, games, 400 channels, interactive TV and movie on demand. Dishtv also brings exclusive national and international channels for the first time in India.

In spite of intense competitive pressure, Dishtv managed to deliver top-line growth wherein total revenues grew from Rs 7.4 bn in FY'09 to Rs 10.9 bn in FY'10 representing a growth of 47%, but also growth in operating margins which grew from negative in FY'09 to 8.7% in FY'10.

Dishtv now has a network of over 2000 distributors and more than 40,000 retailers where the product is easily available to the consumers.

## SOLUTIONS SNAPSHOT



- ▶ Hybrid Cloud model with Applications and Websites hosted on a public cloud solution and a dedicated cluster for their databases
- ▶ Storage replication solution using EMC RecoveryPoint
- ▶ Security solution – Dedicated Firewall with IDS and IPS
- ▶ Complete tool-driven managed DR solution – DRaaS

## KEY BENEFITS



A key advantage received from the Cloud setup is the availability of immediate instance for all infrastructure needs - agility is key to the business at Dishtv and this is clearly a plus.

Dishtv is able to have a fully resilient IT setup with a robust and managed DR setup, redundancy and resiliency at application as well as storage level, and high availability at their primary location completing their Business Continuity strategy .

One of the key benefits that Dishtv derived was the ability to manage their technology obsolescence risk by being able to quickly upgrade their older infrastructure to newer, state-of-the-art infrastructure provided at Netmagic datacenter . They were able to quickly ramp up at a fraction of the costs, using the cloud-based model that they adopted – plus mitigating the challenge and cost considerations of hardware refresh cycles and avail benefits of better performing infrastructure.

A key benefit that Dishtv has been able to derive is to manage performance of their mission-critical revenue-generating areas on the cloud, that is managed and monitored with ease, and has flexibility to quickly ramp up and down services and computing on the fly, on-demand.



## About Netmagic Solutions (An NTT Communications Company)

Netmagic, an NTT Communications company, is India's only Datacenter Infrastructure Lifecycle Management (DILM) Service Provider. The company delivers services to Plan, Design, Manage, Support and Migrate IT Infrastructure running mission critical applications for over 1200 enterprises across the globe.

Netmagic has been a pioneer in the Indian IT Infrastructure-as-a-Service space and amongst the first to bring to market several services including Public Cloud (SimpliCloud), Hybrid Cloud, Managed Security ,DR-as-a-Service and Cloud Object Storage (SimpliDrive).

Netmagic delivers services from 8 carrier-neutral, state-of-the-art datacenters located in Mumbai, Bengaluru, Noida (Delhi-NCR) and Chennai.

Netmagic Solutions is ISO 27001, ISO 9001:2008, ISO 20000-1 and SAP (Data center and Cloud Hosting) certified and its processes are designed as per the ITIL framework.

As part of the NTT Communications group, it also has access to leading global tier-1 IP network, Arcstar Universal One™ VPN network reaching 196 countries/regions, and over 150 secure data centers.

For more information, log on to [www.netmagicsolutions.com](http://www.netmagicsolutions.com)

## About NTT Communications Corporation

NTT Communications provides consultancy, architecture, security and cloud services to optimize the information and communications technology (ICT) environments of enterprises. These offerings are backed by the company's worldwide infrastructure, including leading global tier-1 IP network, Arcstar Universal One™ VPN network reaching 196 countries/regions, and over 150 secure data centers. NTT Communications' solutions leverage the global resources of NTT Group companies including Dimension Data, NTT DOCOMO and NTT DATA