

# Video Streaming Solution For Rich Media User Experience



Creation of on demand live video streaming solution ,configuration and granular administrative content management

## Company:Valuable Group,Mumbai

Valuable Group, with turnover of over 500 Cr is engaged in providing media and entertainment services has a wide range of offerings such as UFO Digital Cinema, In House media entertainment services, products and solutions.

**Website:** <http://www.valuablegroup.com>

**Country or Region:** India, United States.

**Industry:** Media & Entertainment

**Partner: SpadeWorx Software Services**

## Partner Websites:

<http://www.spadeworx.com/>

## Company Profile

SpadeWorx Software Services head quartered in Pune with its offices in Mumbai, California-USA London-UK and Singapore has successfully built and deployed Rich Internet/ intranets, leveraging its "User Centered Software Engineering™ (UCSE™) methodology for its customers based in India, Australia, Netherlands, Singapore and USA.

## Software and Services

Microsoft SharePoint Server 2010

MS SQL Server 2008R2

.Net framework 3.5

Windows Enterprise 2008

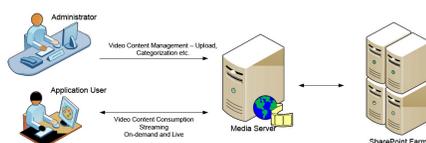
## Business Needs

Realizing that Video content has become the effective way of communicating to end users. Valuable group wanted to provide their end users choice of viewing on demand video prorammes, channels, and preference to schedule watch and save videos with hassle free user experience .Valuable wanted to implement best end-to-end video content strategy and application.

## Solution:

SpadeWorx , leveraging its "User Centered Software Engineering™ (UCSE™) methodology developed a Streaming solution called ORMUX (framework for Powered Rich Media User Experience) which enabled Valuable Group to:

1. Configure cinematic video viewing experience for the application users.
2. Provide on-demand and live video streaming capabilities
3. Provide granular administrative functionality for content management



## Solution HighLights:

### On Demand Live Video Streaming

Our solution provided on-demand and Live video streaming and watching experience. Solution brings this experience to the end user using a framework that integrates following three browser based components:

Video player supports video playback functionality and additionally provides rich user experience that includes dynamic skin changes, animated controls and behaviors.

### Granular Administration Functionality

Administrative console provided administrating system functions including video meta-data management, playlist management, channel management and video player template management

### SharePoint integration:

This application also integrated with Microsoft Office SharePoint Server to enable search of video-on-demand with the web-based application.

Valuable Group had very stringent criteria while selecting the vendor for this application development. SpadeWorx was selected because of:

1. SpadeWorx's record in successfully delivering Silverlight based rich user interface application and video player solutions for media and entertainment in Industry
2. Very strong experience in building SharePoint integrated applications for cloud or on premise based applications
3. Expertise in creating highly intuitive UI and scalable applications on SharePoint platform
4. Matured processes for application development and delivery on Akamai Content Delivery Network (CDN)

Using Microsoft Silverlight as technology component groups were formed to identify content as knowledge and categorize appropriately.

Development platform: Microsoft .NET 3.0,  
 End user environment: Windows and Macintosh operating systems, supported browsers – IE, Firefox and Safari.  
 Server Operating System: Microsoft Windows  
 Database platform: Microsoft SQL Server

The business challenges were achieved by incorporating following **Features**

- **Administrative Consoles**
- ORMUX is a client-server framework that enabled web publisher to offer out-of-box video watching experience to the end user. All applications in this framework offered browser based interactivity.
- Web based Administrative console, provided all administrative functionalities. Excluding video content all application data was stored in a relational database. End user browser based application leveraged AJAX, XML and Web services technologies to provide responsive and dynamic rich experience. The solution was cross-browser which offered consistent experiences between Windows-based and Macintosh computers with Firefox, Safari and Internet Explorer browser.
- Scalable architecture supported large number of templates and a template configurator engine was provided that dynamically delivers user configured options on the fly.
- **Video Player:**

- a. Playlist to navigate through multiple videos.
- b. Video player would consist of functionality like play, pause, stop, and seek, volume slider and full screen.
- c. User can rate the video clip and see the rating of specific clip.
- d. User would be able to share the comments about the videos with their colleague by sending email

- **Content Management :**

- a. Video Metadata Management
- b. Category Management
- c. Content tagging
- d. Content Expiry Management

- **Video Streaming**

- a. on Demand
- b. Live Broadcast (Additional WMS configuration required)

- **Reports**

- a. Video Popularity
- b. User Hits for Videos

- **Integration with SharePoint Search**

Most importantly SharePoint Advanced search, customized for ORMUX application was implemented to access data from repository sites. This provided users to search for video content or specific programmes and channels broadcasted in the past.

- **Configuring Windows Media Server for Video-on-Demand**

- **LDAP based Authentication**

## Benefits

### Increased User Base:

With on demand live video, programme scheduling options, and categories search with the users it saw an upsurge in registration for this service.

### Reduced GO to Market Time :

With feature rich solution, viewers programme selection and schedule and administrative console , company could reduce the go to time to market prioritizing on what their audience wanted to see.

### Optimal Utilization:

With subscribers preferences, programmes on the tray optimal utilization of resources were possible. Which led to significant cost saving.