



the **future**
of **digital media services**

Headend of the Future

Leveraging FTTH

JANUARY 2011

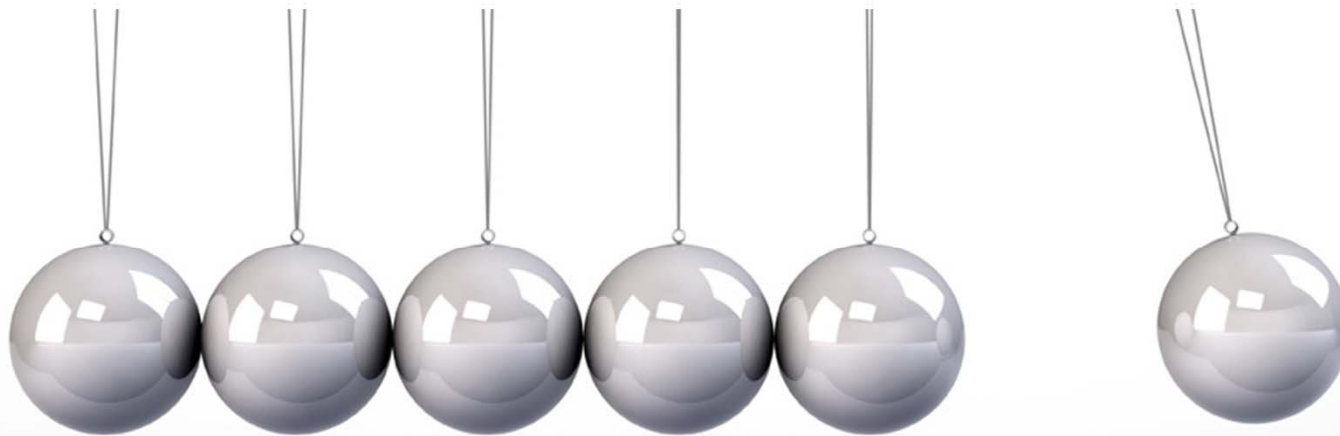
The Pendulum Swings

Standard Definition is becoming High Definition

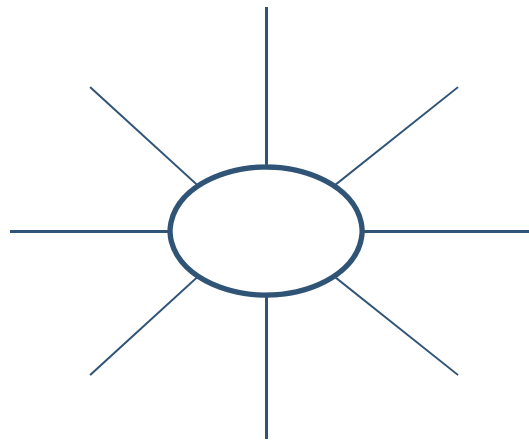
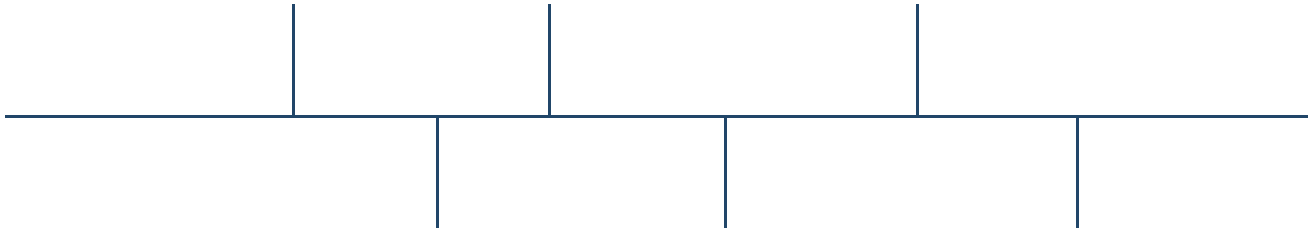
Broadcast is becoming Unicast

Appointment Viewing is becoming Anytime Viewing

Time Shifting is becoming Place Shifting



Look Familiar?



Quality of Experience, Where's the Bottleneck?



“Over The Top” vs. “TV Everywhere”

Over The Top

Over the Top



Service Provider
Network

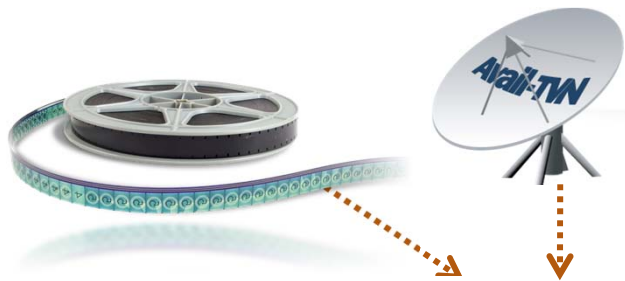
Higher Quality
Of Experience



TV Everywhere



TV Everywhere
“Under the Bottom”



What does adaptive streaming look like?

Live and On Demand Assets Encoded into 12 Variants

320 x 240	320 x 240	320 x 240	320 x 240	528 x 480	528 x 480	528 x 480	528 x 480	1280 x 720	1280 x 720	1280 x 720	1280 x 720
450k	500k	550k	600k	700k	900k	1.1M	1.3M	1.9M	2.3M	2.7M	3.1M

