Over-the-Top Showdown
The Next Generation of Content Devices

Dan Rayburn Presentation
From Streaming Media East Conference
May 10th, 2011

Note: All figures and information can be used by anyone, but please credit the source.

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Apple TV
Retail price: $99 (2nd generation, one model only)
Number sold as of December 2010: 1M (source: Apple)
Released Sept. 2010

Hardware Specs
- HDMI, optical audio, ethernet, WiFi (802.11a/b/g/n)
- supports video up to 720p only
- no hard drive, no support for 1080p, no support for older TVs, no support for side loaded content via USB
- supports .m4v, .mp4, and .mov file formats
- remote only takes watch batteries

Software and Content
- setup is very simple, interface is smooth, clean and polished
- Netflix, YouTube, MLB.TV and $0.99 rentals from ABC, Disney, Fox, and the BBC
- 24 hours to watch movie rentals and 48 hours to watch TV shows once you begin viewing
- no open SDK, no app store, closed iTunes system
- airplay does not work well for video, requires developers to support it, does not support video shot with the iPhone

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Roku

Retail price: $59 (HD model), $69 (XD model), $99 (XDS model)
Netgear OEM Model: $89 (XD model – DISCONTINUED)
Number sold as of December 2010: 1M (source: Roku)
Released May 2008

Hardware Specs
- HDMI, optical audio, ethernet, component, composite, USB, WiFi (802.11b/g/n)
- supports video up to 1080p
- no hard drive, supports playback of local media via USB
- supports .mp4, .mov, .mkv, .wmv file formats

Software and Content
- setup is very simple, user interface could be more polished
- Netflix, MLB.TV, NHL, UFC,NBA, EPIXHD, Hulu Plus, Amazon Prime Streaming, Amazon VOD
- open SDK, more than 1000 content channels by year’s end
- company moving to OEM and platform licensing model

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Microsoft Xbox 360

Retail price: $199 (4GB model), $299 (250GB model), $149 Kinect
All other models (Core, Pro, Arcade and Elite discontinued)
Number sold as of Q1 2011 – 24M in NA, 50M worldwide (source: NPD)
Released Nov. 2005

Hardware Specs
- HDMI, composite, USB, optical audio, ethernet, WiFi (802.11n)
- supports video up to 1080p
- 4GB flash memory or 250GB hard drive
- DVD drive, no Blu-ray

Software and Content
- Zune Video, Netflix, ESPN, Hulu Plus
- 65,000 movies and TV shows via Microsoft’s Zune Video channel
- average movie costs $5 to rent for 24 hours
- uses a points system for purchasing content. 80 points = $1
- Xbox LIVE subscription required for some content ($59 for one account or $99 yearly for four accounts via a family package)
- can stream videos and content from a local PC

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Sony PlayStation 3

Retail price: $299 (160GB model), $349 (320GB model)
Has other special edition models and bundles more expensive
Number sold as of Dec. 2010: 20M in NA, 47.9M worldwide (source: Sony)
Released Nov. 2006

Hardware Specs
- HDMI, composite, USB, optical audio, ethernet, WiFi (802.11b/g)
- supports video up to 1080p
- 120GB, 160GB, or 250GB hard drive
- Blu-ray drive

Software and Content
- PlayStation Network, Netflix, MLB, Hulu Plus, NHL, VUDU, MLB.TV
- 50,000 movies and TV shows via PlayStation Network
- 24 hours to watch movie rentals streamed or can store for 14 days and watch later if downloaded
- movies start at $2.99, average movie costs $4.99
- PlayStation Plus subscription required for some content ($49 yearly)
- can stream videos and content from a local PC

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
TiVo

Retail price: $150 (HD), $99 (Premiere), $249 (Premiere XL)
Requires monthly service fee or one-time lifetime fee
Number of HD and Premiere models sold to date: About 750K (source: estimate based on TiVo saying they have a total of 1.4M stand alone subscribers)

Hardware Specs
- HDMI, optical audio, ethernet, E-SATA, component, composite, USB
- no built in WiFi, requires adapter for (802.11b/g/n)
- supports video up to 1080p, hard drive variations up to 1TB
- supports .wmv, .mov, .mp4, .m4v, .mp4v, .mpg, .mpeg, .mpe, .mp2, mp2v, DivX, Xvid file formats

Software and Content
- DVR first, streaming device second
- nice interface, but still a bit buggy on the Premiere model
- Netflix, YouTube Amazon Video On Demand, Blockbuster, Hulu Plus
- requires software purchase of TiVo Desktop or Roxio Toast to stream videos from PC

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Boxee Box by D-Link

Retail price: $199 (one model only)
Number sold to date: TBD
Released Nov. 2010

Hardware Specs
- HDMI, optical audio, ethernet, composite, USB, SD card slot, WiFi (802.11n)
- supports video up to 1080p
- no hard drive, comes with 1GB flash memory on-board
- supports tons of video formats including Flash, H.264 AVC, VC-1, MPEG-1, MPEG-2, MPEG-4, DivX, Xvid, WMV9

Software and Content
- setup is fairly easy, but still more for the hardcore techie
- still working out software bugs, but doing so quickly
- no payment system yet, coming shortly
- MLB.TV, NHL, Netflix, VUDU, Hulu Plus (sometime in 2011)
- open source SDK, full webkit browser, hundreds of apps
- third party hardware with the Boxee announced

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Western Digital WD TV Live

Retail price: $99 (WD TV Live Plus), $199 (WD TV Live Hub)
Number sold to date: No data released, estimate less than 2M combined
Released Nov. 2008 (WD TV Live), May 2010 (WD TV Live Plus HD), Oct. 2010 (WD TV Live Hub)

Hardware Specs (varies greatly between Live and Live Hub)
- HDMI, optical audio, ethernet, (Hub has composite and GigE)
- none have built in WiFi, requires adapter
- Live Plus and Live Hub support video up to 1080p
- Live and Live Plus no hard drive, Live Hub has 1TB drive
- all models support playback of local media via USB
- Live Hub supports AVI, WMV9, MPG/MPEG, VOB, MKV, Xvid, TS/TP/M2T, MP4/MOV, M2TS and many more formats/containers

Software and Content
- setup is very simple, Live Hub very customizable
- Netflix, Blockbuster, YouTube, Hulu Plus (sometime in 2011)
- open SDK, apps built in Adobe Flash Lite
- the ultimate media center hub

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Sony Netbox (SMP-N100)

Retail price $119
Number sold to date: No data available
Released Aug. 2010

Hardware Specs
- HDMI, optical audio, ethernet, component, composite, USB, WiFi (802.11n)
- supports video up to 1080p
- no hard drive, supports playback of local media via USB
- supports many formats including .avc, .mkv, .DivX, .mpeg, .wmv, .wma
- DNLA support

Software and Content
- interface is the Bravia Internet platform, needs work
- Netflix, Amazon Video On Demand, Hulu Plus (sometime in 2011)

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Google TV

Logitech Revue: Retail price $229
Sony Internet TV: Retail price $599-$1399 (24”, 32”, 40”, 46” models)
Sony Internet TV Blu-ray Disc Player: Retail price $399
Number sold to date: TBD. Products release Oct. 2010

Hardware Specs (vary based on hardware device)
- HDMI, optical audio connection, ethernet, USB, WiFi (802.11a/b/g/n)
- supports video up to 1080p
- Revue and Blu-ray player have no hard drive

Software and Content
- all major broadcasters have blocked their content
- lots of bugs and user issues, product feels like beta
- Android app store coming sometime in 2011
- Netflix, Chrome Browser, NBA
- ad overlays on YouTube don’t work very well
- Google announced purchase of Widevine, expect content owners to be more willing to work with Google in the future

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com
Number Of Devices Sold To Date In North America

- Xbox 360: number sold as of Q1 2011: 24M in NA, 50M worldwide (source: NPD)
- PS3: number sold as of Dec. 2010: 20M in NA, 47.9M worldwide (source: Sony)
- Roku: number sold as of Dec. 2010: 1M (projected to sell 1.75M by end of 2011, source: Roku)
- WD TV Live/Live Hub: number sold to date: no data released, estimate less than 2M combined
- Boxee: number sold to date: too early to know
- Logitech Revue Box, Sony Internet TV: number sold to date: too early to know
- Apple TV: number sold as of Dec. 2010: 1M (source: Apple)
- Sony Netbox: number sold to date: No data available
- TiVo: number sold to date: estimate 750K TiVo HD units (source: estimate based on TiVo’s subscriber #s of 1.4M)

- Broadband enabled TVs
  - iSuppli predicts almost 23 million by 2013
  - TDG predicts 43 million by 2014
  - DisplaySearch predicts 31 million by 2013
- Averages out to 33 million sets. If 50% of them are connected, that’s only 16 million units by 2013-2014

Dan Rayburn, StreamingMedia.com, 5/10/2011, mail@danrayburn.com