CABLE-TEC EXPO® 2017

SCTE · ISBE

THE NEXT BIG...

DEAL CONNECTION INNOVATION TECHNOLOGY LEADER NETWORK





DIGITAL IDENTITY MEETS DIGITAL DEVICES

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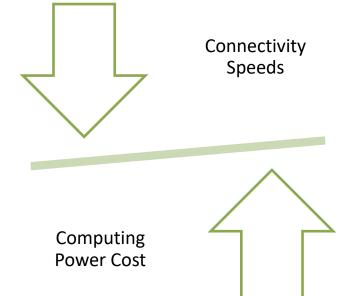
Smart Entertainment in the Smart Home

Arsham Hatambeiki Vice President, Corporate Product & Strategy Universal Electronics Inc.



Evolving Home

- Every new device is now capable and connected, offering an ecosystem of apps and services.
 - Which app on which device, which control interface, a constant context switching from one source to another, adding friction to daily activities such as TV viewing
- However, new does not always replace the old and quite often can be an addition
 - More than half of the TV installed base in USA are five years or older





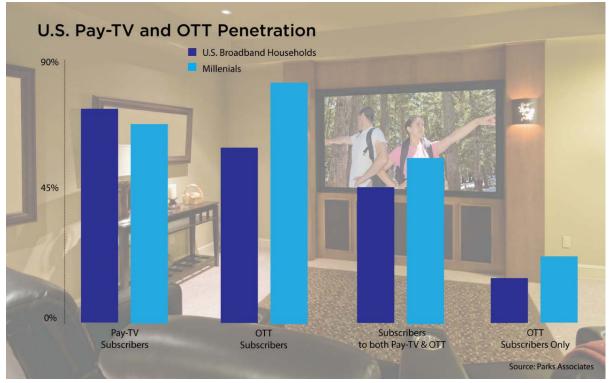




A Day In a Life - Prime Time TV Viewing

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More Content, More Apps, More Devices

 63% of U.S. broadband households subscribe to at least one OTT video service, 31% subscribe to two or more, Parks Associates

- Seven active IP devices in use daily, with 65% of the usage dedicated to video streaming, Sandvine
- 34% have difficulty getting the content they want onto their viewing screens, Trendbox



Reducing Friction in Content and Service, Discovery and Consumption, Across Devices at Home

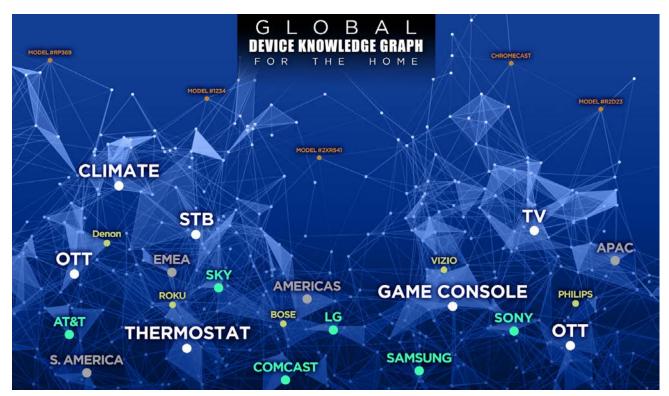
One Touch Control

All content and services accessible with a single touch (or spoken command)

A Unified Control Experience

Automatic discovery and control of nearby devices

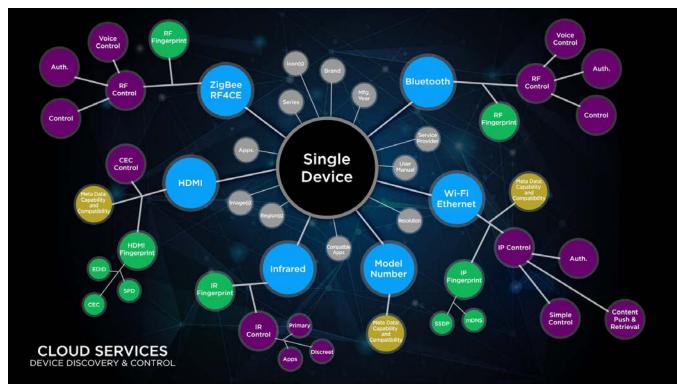




Global Device Knowledge Graph

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Device Model in Knowledge Graph

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Out-of-box Experience

- Automate the experience...
- A scalable architecture with cloud-based device discovery
- Designed for an evolving home
- Available throughout product lifecycle

Xfinity X1 Cloud Services for Device Discovery and Control





Competing for "Input 1"

- Which device, which input, ...!
- One Touch View, addressing increased friction in daily content consumption
- Increased competition in devices serving content, including the TV itself

One Touch Content Access





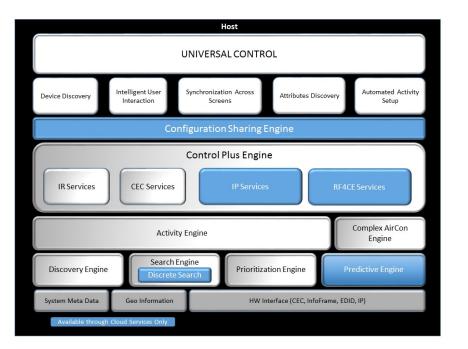
Unified Control Experience

- TV, the starting point in our daily content consumption journey
- Automatic discovery & control of connected devices, expanded with media recognition capabilities
- No inputs, only content, accessible with a single touch

Direct Tune Goes Straight to Content

Under The Hood





Device Discovery and Control Engines: Under the Hood

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Building Blocks

- A multi-protocol approach with a unique fingerprinting method
- Every device capable of discovering and interacting with nearby devices and services
- Hybrid online/offline capabilities to address common usage flows and environments
- Smarter Edge Devices with Built-in Privacy Controls





Nearby Device Discovery Services

Nearby Device Discovery & Contextual Awareness

Available nearby devices and services help in...

- Triggering personas and expanding personalized offerings
- Offering contextual awareness for more proactive services
- A new generation of Remote Technical Support

Experiences Powered by Device Knowledge Graphs





Live Dashboard of Nearby Devices, Services and Status

Voice Assistants

- A convenient flat interface to expose more services, reducing access layers
- Enabled by rise of AI in Home Control, limited by compatibility & understanding of context
- Nearby device status discovery expands the contextual understanding of AI systems
- A true knowledge graph of devices and capabilities provides context to user commands

Experiences Powered by Device Knowledge Graphs





Nearby Content And Status Discovery Services

Advancing Personalization & Monetization

- Content consumption across devices
 and services
- Better recommendations with user centric global history and content dashboards

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THANK YOU!

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