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# Management Presentation

March, 2015

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### Forward Looking Statements

During the course of this presentation, we will provide projections and other forward looking statements regarding future events or the future financial performance of Harmonic, including expectations concerning our 2015 business strategy and our Q1 2015 financial outlook. Such statements are only current expectations and actual events or results may differ materially. We refer you to Harmonic's filings with the SEC, particularly our most recent Reports on Form 8-K, 10-Q and 10-K. These documents identify important risk factors that could cause actual results to differ materially from our projections or other forward looking statements.

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#### The Worldwide Leader

in video delivery infrastructure



**Enabling** amazing video experiences

through integrated solutions with unrivaled simplicity, flexibility and efficiency 3



CA Silicon Valley \$434M

2014 Annual Revenue 1028

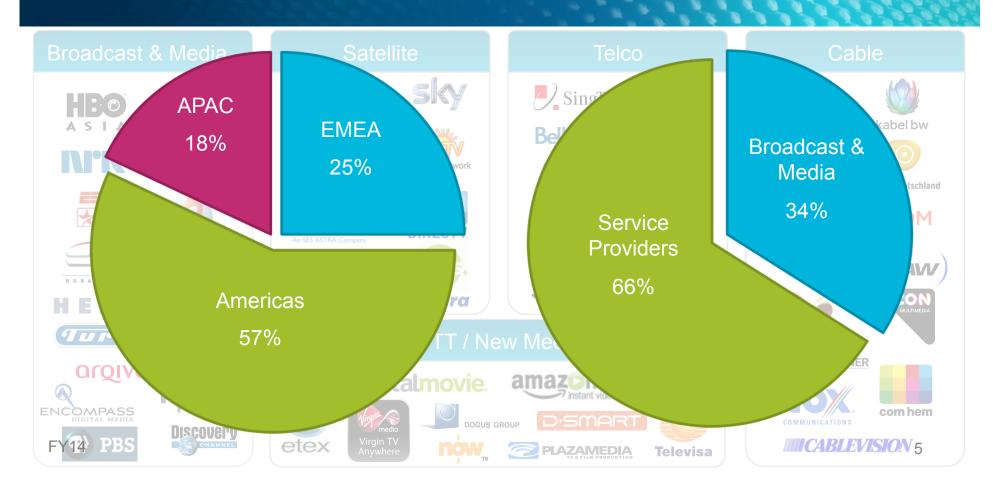
**Employees** 

8

Major Sites Worldwide 3850

Customers Globally

Customers



#### Video

- Media Co's and Service Providers
- \$2.0B-\$2.5B 2018 TAM
- \$327M 2014 revenue
- Unified software-based platform; playout through multiscreen delivery
- Innovation: first in video compression / quality, function collapse, content customization, virtualization
- Service / TCO: capex, opex, SaaS and managed service; top support talent

#### Cable Edge

- Cable and Broadband Service Providers
- \$1.5B \$2.0B 2018 TAM
- \$107M 2014 revenue
- Virtualized CCAP platform that enables flexible migration to all-IP
- Innovation: first in unified distributed & centralized architecture, video & data, virtualization
- Service / TCO: flexible capacity licensing, reliability, pro-services

#### Harmonic is the leader

Production & Playout

#1 in Broadcast Playout Servers

FROST & SULLIVAN

March 2014

Primary Distribution

#1 in Pay TV Encoders

FROST & SULLIVAN

May 2014

Content & Service Delivery

#1 in IPTV Headends



December 2013

Multiscreen

#1 in Multiscreen



Oct. 2013

multimedia research group, inc.

**ABI**research

technology market intelligence

**April 2014** 

13 Dec. 2013

Cable Edge

#1 in Cable EdgeQAMs



February 2015



Video Products

# Marco Market Dynamics

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#### Consumer Video Trends

- Linear viewing not in significant decline; shifting to delayed consumption
- International PayTV households growing
- The OTT opportunity continues to grow

#### **Technology Trends**

- Cloud and virtualization
- HEVC
- 4K / UHD

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#### Linear PayTV Data

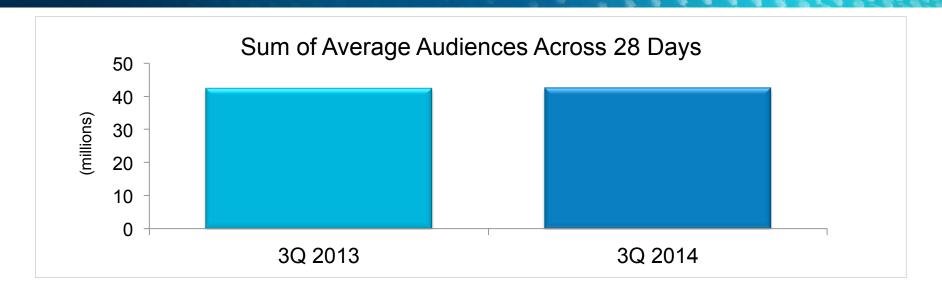


# College Football Championship On ESPN Sets Cable TV Viewership Record With First 30+ Million Audience

ESPN has been on a ratings roll of late. Less than two weeks into 2015 and already the Walt Disney Company-owned cable network has had four telecasts average over 20 million viewers. ESPN also reached a cable first when the inaugural College Football Playoff Championship game (Ohio State over Oregon), garnered 33.4 million viewers, the first cablecast with an average of over 30 million viewers.

# U.S. Linear PayTV Data

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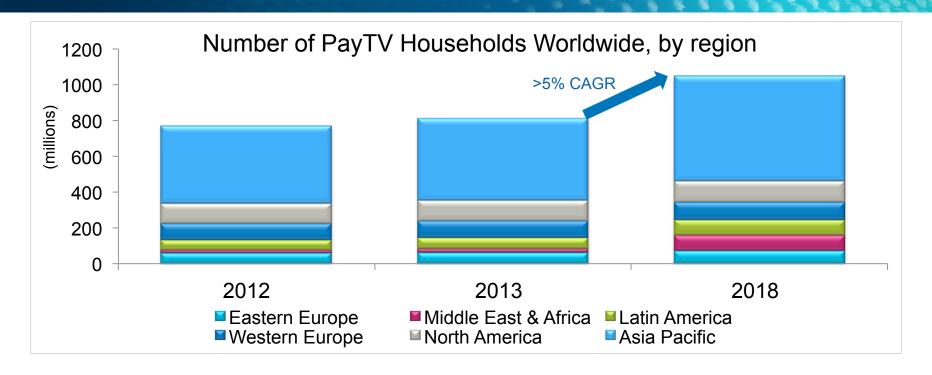


Conclusions:

- The amount of viewing has not changed from 2013 to 2014
- >20% Increase in delayed viewing
- Delayed viewing scales by subscriber, not channel count

# Global PayTV Expansion

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Conclusion:

Significant PayTV growth outside U.S.

# **OTT and Linear Function Collapse**

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Vodafone heads funding for Joyn developer, aims to gain OTT traction

- \$8.3 M investment in Jibe Mobile
- Gaining traction in OTT services

Vodafone Spain launched Joyne service to counter OTT messaging players & maintain value with customers



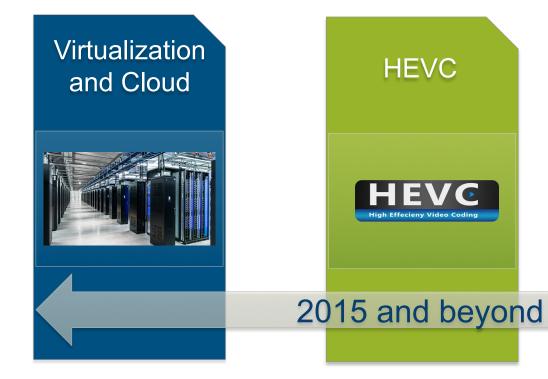


#### THE WALL STREET JOURNAL.

Dish Network Unveils Streaming Service That Includes ESPN Sling TV to Cost \$20 a Month; Won't Carry NBC or CBS









- 4 times the resolution of HD
- Brighter colors & higher contract ratios
- Big push from consumer electronics manufactures
- The standards are still being discussed (HDR)



#### 4K / UHD Momentum

- Some TV production already starting to shoot in 4K
- OTT will be the first wave, followed by VOD, then live



- Expect service providers to deploy test channels in 2015
- Large scale deployments as early as 2016-2018
- Recompression of existing SD & HD channels to make room



#### 4K / UHD Momentum

 Harmonic is in the process of launching a full suite of products now to support this wave!



# Upgrading to UHD / HEVC

Content

Creation

Cameras Editing suites

Storage

**Graphics** 

Playout

Ad insertion

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#### Service Provider Distribution

Primary
Distribution to
Service
Provider

Service Provider Headend Processing

Encoders
Security/Watermarking
Satellite/fiber capacity
Decode

Transcode Local ad insertion

Content Provider Distribution to Consumer

#### **Direct Distribution**

Encoder
Origin servers/CDN
IP bandwidth

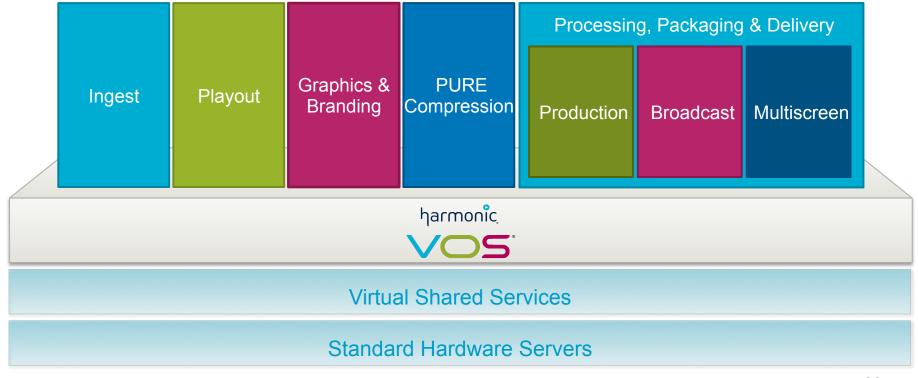
Origin servers/CDN
Bandwidth in network
UHD set-top box or
UHD capable device

Distribution to Viewers



Video Delivery Workflow

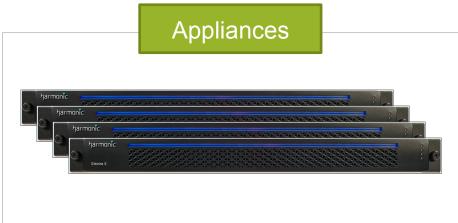
# Our Winning Video Strategy



# Our Winning Video Solutions

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Services

TCO

Summary

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Positive trends in the market

· Opportunity is growing

Market dynamics

Consumer pull and the needed technology to deliver is maturing

Multiple refresh cycles beginning

- Efficiency gains
  - Cloud & virtualization
  - HEVC
  - Function collapse, compression
- UHD
  - Video work flow

Harmonic leading the industry with solutions to capture growth



#### Cable is Exciting Again

- Subscriber value increasing
- Premium services increasing
- Data service speed demand
- OTT rights revenues
- Cool factor of new STBs, user interfaces
- 10+ years of bandwidth capacity
- Healthy CAPEX trends



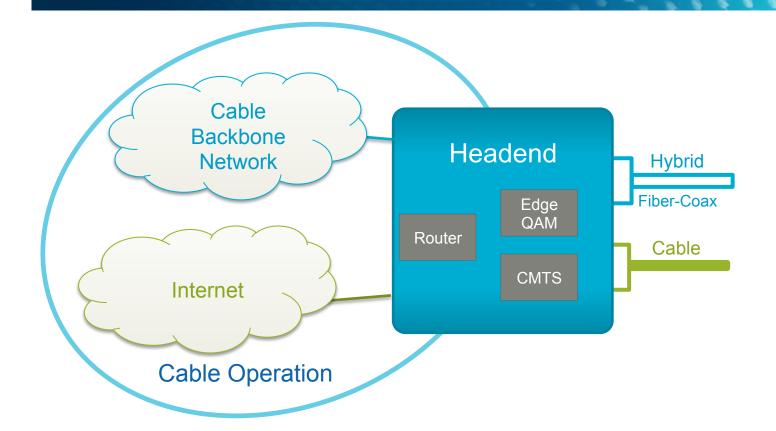
### Cable is Exciting Again

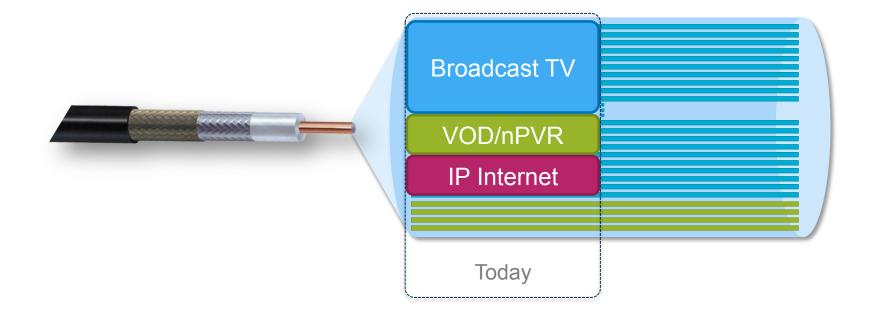
#### **Network-based Services**

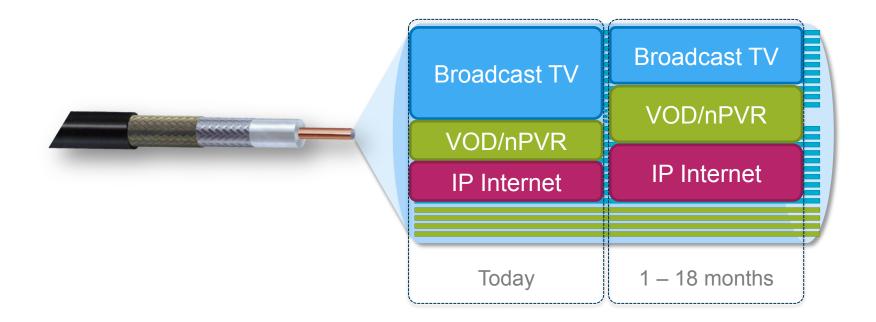
- Cloud UI PPV/VOD
- nPVR
- TV Everywhere/Multiscreen
- Gaming

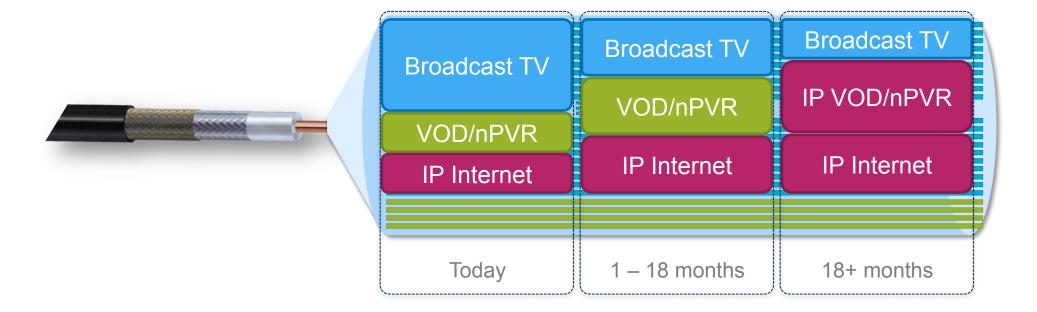


#### The Traditional Cable Network

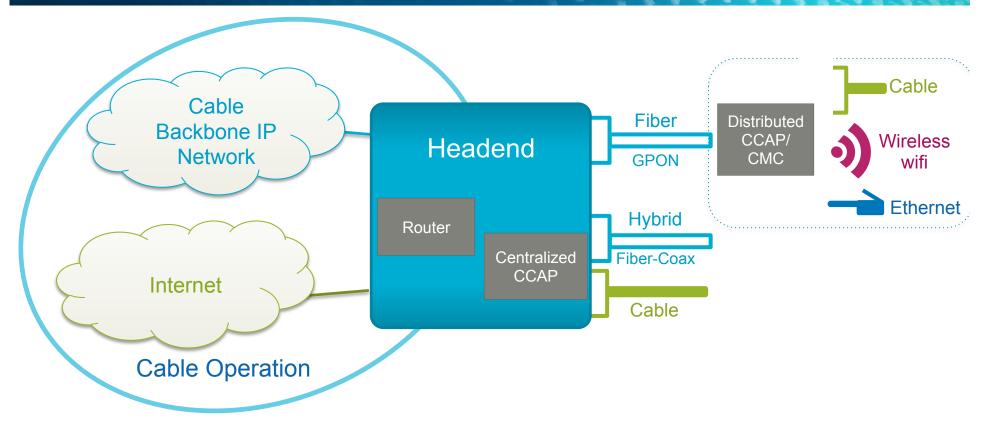




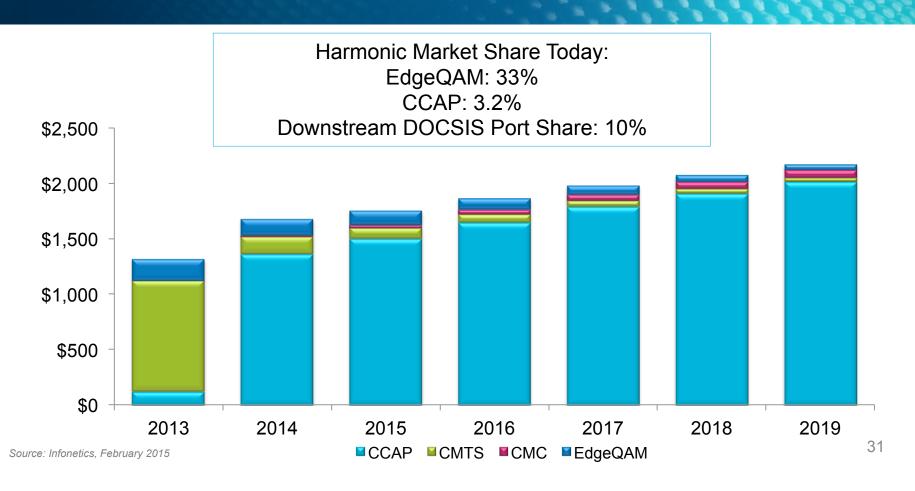




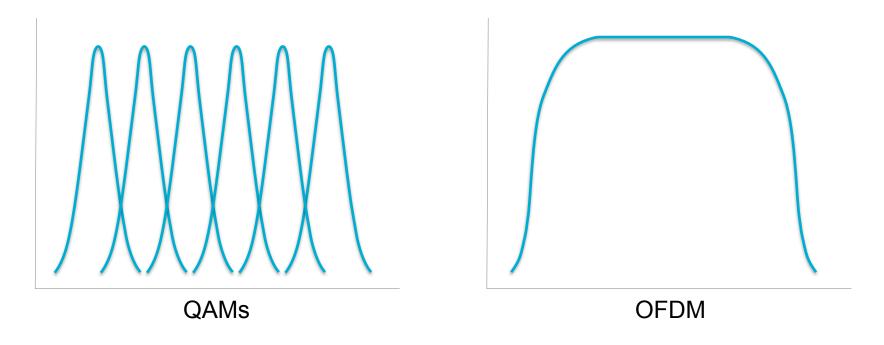
#### The New Cable Network



#### Cable Edge Market Outlook



DOCSIS 3.1 harmonic

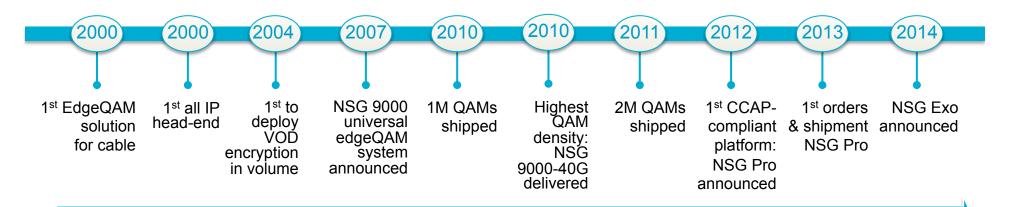


DOCSIS 3.1 fundamentally increases throughput

# Harmonic's Cable Edge Leadership

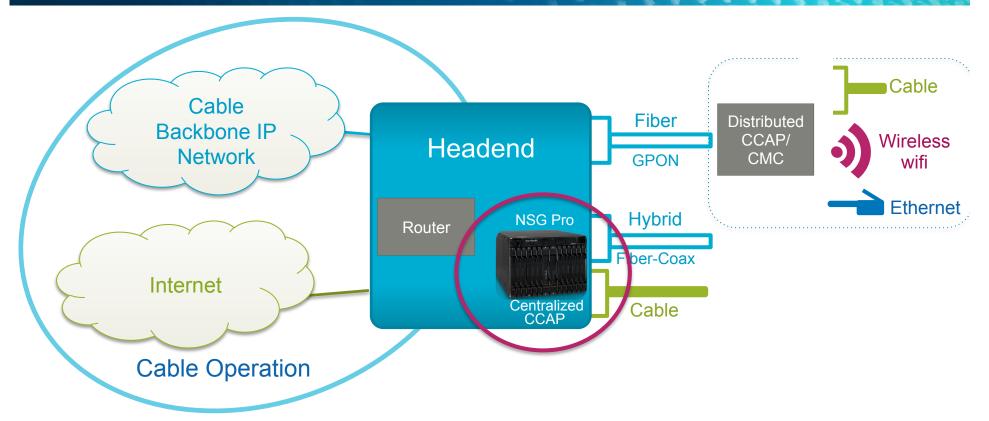
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- Marketshare leadership, more than 3 million QAMs deployed
- 12 out of 15 top cable operators
- Pioneered QAM licensing model enabling gross margin expansion



Viewed in industry as clear innovator

#### Harmonic and The New Cable Network

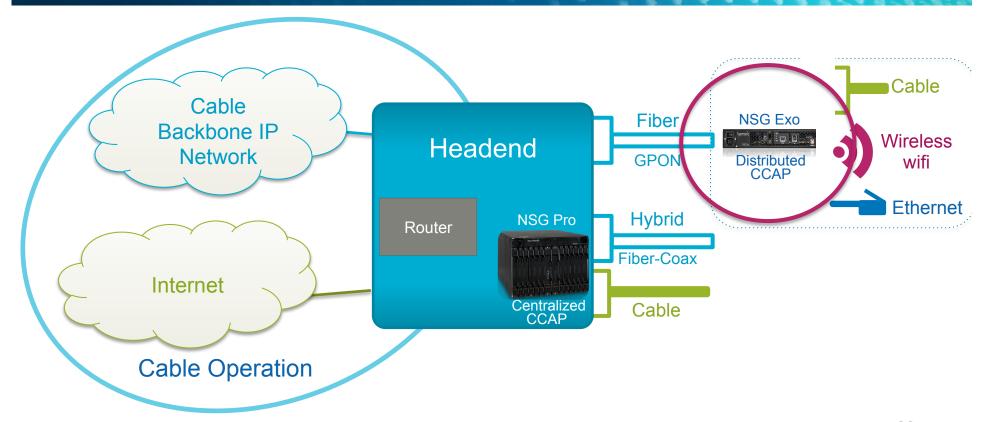


- October 2012 NSG Pro announced
- Q2 2013
  - NSG Pro first customer approval
  - First order
- Q3 2013 First production shipment
- Q4 2013
  - First revenue recognized
  - First multi-million dollar order
- Q2 2014 Deployed to 1 million subscribers
- Q4 2014 First lab demos of 2-way



NSGPro Centralized CCAP

#### Harmonic and The New Cable Network



**NSG** Exo Capabilities

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Distributed CCAP Solution CMTS today

High throughput 960 Mbps downstream 160 Mbps upstream

QOS for Data, IP Video, Voice Applications Flexible Gigabit throughput GPON • EPON • GigE

Indoor or Outdoor Enclosures

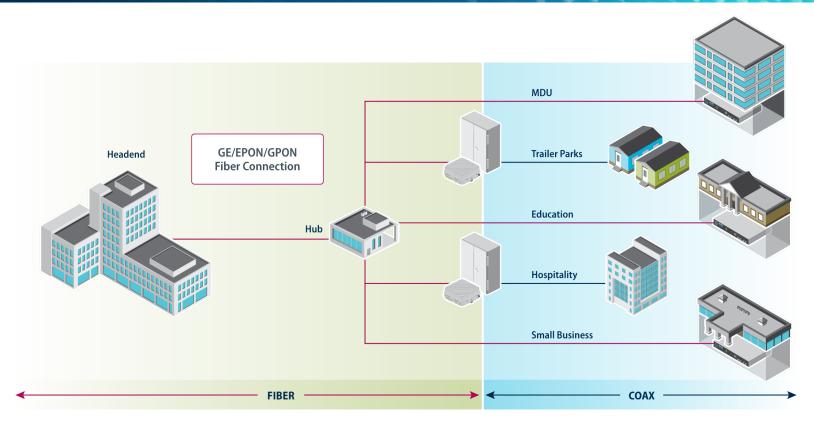
Supports up to 200 cable modems



**INDOOR** 



## NSG Exo - Deep Fiber Applications



## Harmonic Competitive Differentiation

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- Centralized CCAP
  - Industry's densest platform
  - Large and growing footprint
- Distributed CCAP
  - Early to market for deep-fiber applications
- Unified Cable Architecture
  - Common technology for centralized and distributed CCAP
  - Layer 2, router independent
  - CableOS software across all platforms

Business grew 38% in 2014



**Business Model** 

#### Video

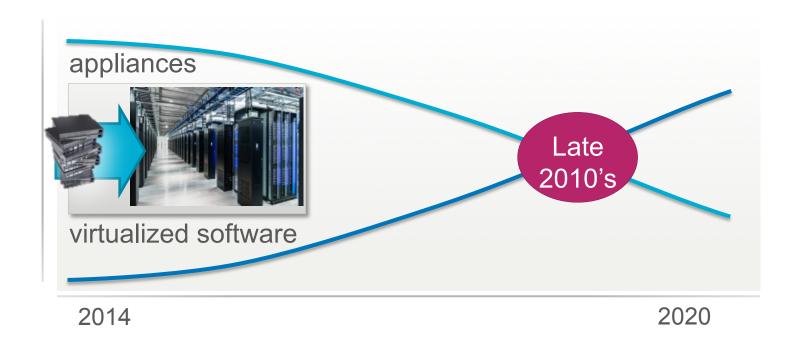
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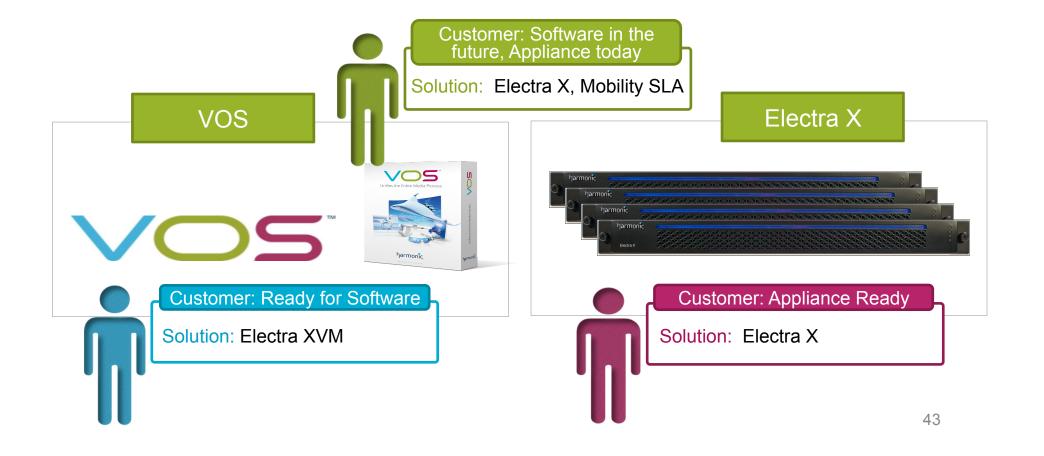
## Software, an Evolution... Not a Revolution...

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Harmonic will have leading products for both deployment methods

## One Platform – Multiple Pricing Models



## Video Business Target Model

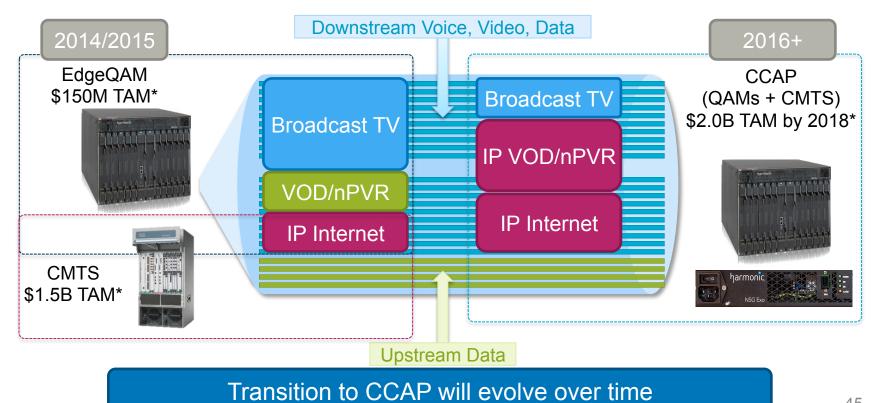
Video	2014	2014 2015					
Revenue	\$327M	Low single digit growth	Faster than market growth				
Operating Margin	6%	10 – 15%	15%+				

#### Cloud and Virtualization

- Accretive to gross margin dollars and as a % of sales
- Drives R&D efficiencies
- Opens the door to recurring revenue models (SaaS, IaaS, etc.)

## Changing the Profile of Cable Edge

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\*Source: Infonetics, February 2015, Harmonic estimates

Cable Edge	2014	2015	Target
Revenue	\$107M	Mid-to-high single Digit growth	Faster than market growth
Operating Margin	1%	Break even - 5%	10% – 15%

#### **CCAP**

- Enabling disruptive economics
- Large TAM expansion by a factor of 13x\*
- ASP and gross margin improvements to traditional Edge QAM sale

# Harmonic Target Model

	2015	Target
Long Term Growth Rate	Low single digit	Faster than market
Gross Margin	53% - 55%	56% - 60%
Operating Margin	8% - 10%	15%+

## Significant Share Repurchase

- Q4 2014, repurchased 1.0 million shares for \$6.7M
- Cumulative repurchases of 37.3 million shares for \$231M since
   2Q 2012
- Shares outstanding on Dec. 31, 2014 approximately 87.7 million
- \$69M authorized for future purchases as of Dec. 31, 2014

Returned over 140% of cash from operations to shareholders since 2Q'12

- Continued focus on growth opportunities
- Accelerate core market share leadership
- Enhance margin profile
- Optimize balance sheet
- Drive long-term earnings accretion





Thank You

### Use of Non-GAAP Financial Measures

In establishing operating budgets, managing its business performance, and setting internal measurement targets, the Company excludes a number of items required by GAAP. Management believes that these accounting charges and credits, most of which are non-cash or non-recurring in nature, are not useful in managing its operations and business. Historically, the Company has also publicly presented these supplemental non-GAAP measures in order to assist the investment community to see the Company "through the eyes of management," and thereby enhance understanding of its operating performance. The non-GAAP measures presented here are gross margin, operating expenses, income (loss) from operations and net income (loss) (including those amounts as a percentage of revenue), and net income (loss) per diluted share. The presentation of non-GAAP information is not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP, and is not necessarily comparable to non-GAAP results published by other companies. A reconciliation of the historical non-GAAP financial measures discussed in this presentation to the most directly comparable historical GAAP financial measures is included with the financial information contained in this presentation. The non-GAAP adjustments described below have historically been excluded from our GAAP financial measures. These adjustments are restructuring and related charges and non-cash items, such as stock-based compensation expense, amortization of intangibles, 2013 proxy contest-related expenses and adjustments that normalize the tax rate.

## Q4 2014 GAAP to Non-GAAP Reconciliations harmonic

	Three months ended								
	December 31, 2014								
		ss Profit		Total Operating Expense		Income (Loss) from Operations		et Income (Loss)	
GAAP from continuing operations	\$	56,791	\$	58,953	\$	(2,162)	\$	(4,854)	
Stock-based compensation in cost of revenue		608		-		608		608	
Stock-based compensation in research and development		-		(1,255)		1,255		1,255	
Stock-based compensation in selling, general and administrative		-		(2,704)		2,704		2,704	
Amortization of intangibles		696		(1,446)		2,142		2,142	
Restructuring and asset impairment charges		220		(1,941)		2,161		2,161	
Discrete tax items and tax effect of non-GAAP adjustments		-		-		-		1,251	
Non-GAAP from continuing operations	\$	58,315	\$	51,607	\$	6,708	\$	5,267	
As a % of revenue (GAAP)		52.6%		54.6%		-2.0%		-4.5%	
As a % of revenue (Non-GAAP)		54.1%		47.8%		6.2%		4.9%	
Diluted net income(loss) per share from continuing operations:									
Diluted net loss per share from continuing operations-GAAP							\$	(0.06)	
Diluted net income per share from continuing operations-Non-GAAP							\$	0.06	
Shares used to compute diluted net income (loss) per share from continuing operations:								_	
GAAP								88,012	
Non-GAAP								89,342	

## Q3 2014 GAAP to Non-GAAP Reconciliations

	Three months ended								
	September 26, 2014								
		ss Profit	Total Operating Expense		Income (Loss) from Operations		Net	Income	
GAAP from continuing operations	\$	53,428	\$	56,966	\$	(3,538)	\$	1,078	
Stock-based compensation in cost of revenue		612		-		612		612	
Stock-based compensation in research and development		-		(1,219)		1,219		1,219	
Stock-based compensation in selling, general and administrative		-		(2,521)		2,521		2,521	
Amortization of intangibles		3,851		(1,661)		5,512		5,512	
Restructuring and related charges		15		(388)		403		403	
Discrete tax items and tax effect of non-GAAP adjustments		-		-		-		(6,198)	
Non-GAAP from continuing operations	\$	57,906	\$	51,177	\$	6,729	\$	5,147	
As a % of revenue (GAAP)		49.4%		52.7%		-3.3%		1.0%	
As a % of revenue (Non-GAAP)		53.6%		47.4%		6.2%		4.8%	
Diluted net income per share from continuing operations:									
Diluted net income per share from continuing operations-GAAP							\$	0.01	
Diluted net income per share from continuing operations-Non-GAAP						•	\$	0.06	
Shares used to compute diluted net income per share from continuing operations:						·			
GAAP								91,800	
Non-GAAP						•		91,800	

## Q4 2013 GAAP to Non-GAAP Reconciliations

	Three months ended									
	Gross Profit		Total Operating Expense		Income (Loss) from Operations			t Income (Loss)		
GAAP from continuing operations	\$	59,596	\$	60,594	\$	(998)	\$	(2,179)		
Stock-based compensation in cost of revenue		574		-		574		574		
Stock-based compensation in research and development		-		(1,031)		1,031		1,031		
Stock-based compensation in selling, general and administrative		-		(2,531)		2,531		2,531		
Amortization of intangibles		4,763		(1,997)		6,760		6,760		
Restructuring and related charges		293		(496)		789		789		
Discrete tax items and tax effect of non-GAAP adjustments		-		-		-		(1,220)		
Non-GAAP from continuing operations	\$	65,226	\$	54,539	\$	10,687	\$	8,286		
As a % of revenue (GAAP)		49.6%		50.4%		-0.8%		-1.8%		
As a % of revenue (Non-GAAP)		54.3%		45.4%		8.9%		6.9%		
Diluted net income (loss) per share from continuing operations:										
Diluted net loss per share from continuing operations-GAAP							\$	(0.02)		
Diluted net income per share from continuing operations-Non-GAAP							\$	0.08		
Shares used to compute diluted net income (loss) per share from continuing operations:										
GAAP								100,372		
Non-GAAP								101,937		
						:	-			

## 2014 GAAP to Non-GAAP Reconciliations

	Year ended									
	December 31, 2014									
		Gross Profit		Total Operating Expense		Income (Loss) from Operations		et Income (Loss)		
GAAP from continuing operations	\$	212,348	\$	233,919	\$	(21,571)	\$	(46,248)		
Stock-based compensation in cost of revenue		2,359		-		2,359		2,359		
Stock-based compensation in research and development		-		(4,844)		4,844		4,844		
Stock-based compensation in selling, general and administrative		-		(10,084)		10,084		10,084		
Amortization of intangibles		13,745		(6,775)		20,520		20,520		
Restructuring and asset impairment charges		314		(2,762)		3,076		3,076		
Discrete tax items and tax effect of non-GAAP adjustments		-		-		-		20,445		
Non-GAAP from continuing operations	\$	228,766	\$	209,454	\$	19,312	\$	15,080		
As a % of revenue (GAAP)		49.0%		54.0%		-5.0%		-10.7%		
As a % of revenue (Non-GAAP)		52.8%		48.3%		4.5%		3.5%		
Diluted net income(loss) per share from continuing operations:										
Diluted net loss per share from continuing operations-GAAP							\$	(0.50)		
Diluted net income per share from continuing operations-Non-GAAP							\$	0.16		
Shares used to compute diluted net income (loss) per share from continuing operations:										
GAAP								92,508		
Non-GAAP								93,802		

## 2013 GAAP to Non-GAAP Reconciliations

	Year ended								
	December 31, 2013								
		oss Profit	Total Operating Expense			ome (Loss) from perations	Ne	t Income	
GAAP from continuing operations	\$	220,445	\$	243,469	\$	(23,024)	\$	21,589	
Stock-based compensation in cost of revenue		2,412		-		2,412		2,412	
Stock-based compensation in research and development		-		(4,431)		4,431		4,431	
Stock-based compensation in selling, general and administrative		-		(9,159)		9,159		9,159	
Proxy contest consultant expenses in selling, general and administrative		-		(750)		750		750	
Amortization of intangibles		19,233		(8,096)		27,329		27,329	
Restructuring and related charges		823		(1,421)		2,244		2,244	
Discrete tax items and tax effect of non-GAAP adjustments		-		-		-		(49,607)	
Non-GAAP from continuing operations	\$	242,913	\$	219,612	\$	23,301	\$	18,307	
As a % of revenue (GAAP)		47.7%		52.7%		-5.0%		4.7%	
As a % of revenue (Non-GAAP)		52.6%		47.5%		5.0%		4.0%	
Diluted net income per share from continuing operations:									
Diluted net income per share from continuing operations-GAAP							\$	0.20	
Diluted net income per share from continuing operations-Non-GAAP							\$	0.17	
Shares used to compute diluted net income (loss) per share from continuing operations:									
GAAP								107,808	
Non-GAAP								107,808	