



DEVONCROFT

PARTNERS LLC



Update on IP Transition in M&E Industry

July 28, 2021



Joe Zaller
Founder and President



Joshua Stinehour
Principal Analyst



Devoncroft Partners Introduction

- Premier research firm in the media technology sector
- Conduct largest annual demand-side study of global media industry
- Author the definitive market sizing and segment reference on media tech sector
- Frequent speakers at industry trade events
- Widely referenced blog, podcast, market analysis, etc.

Media Companies



Institutional Investors



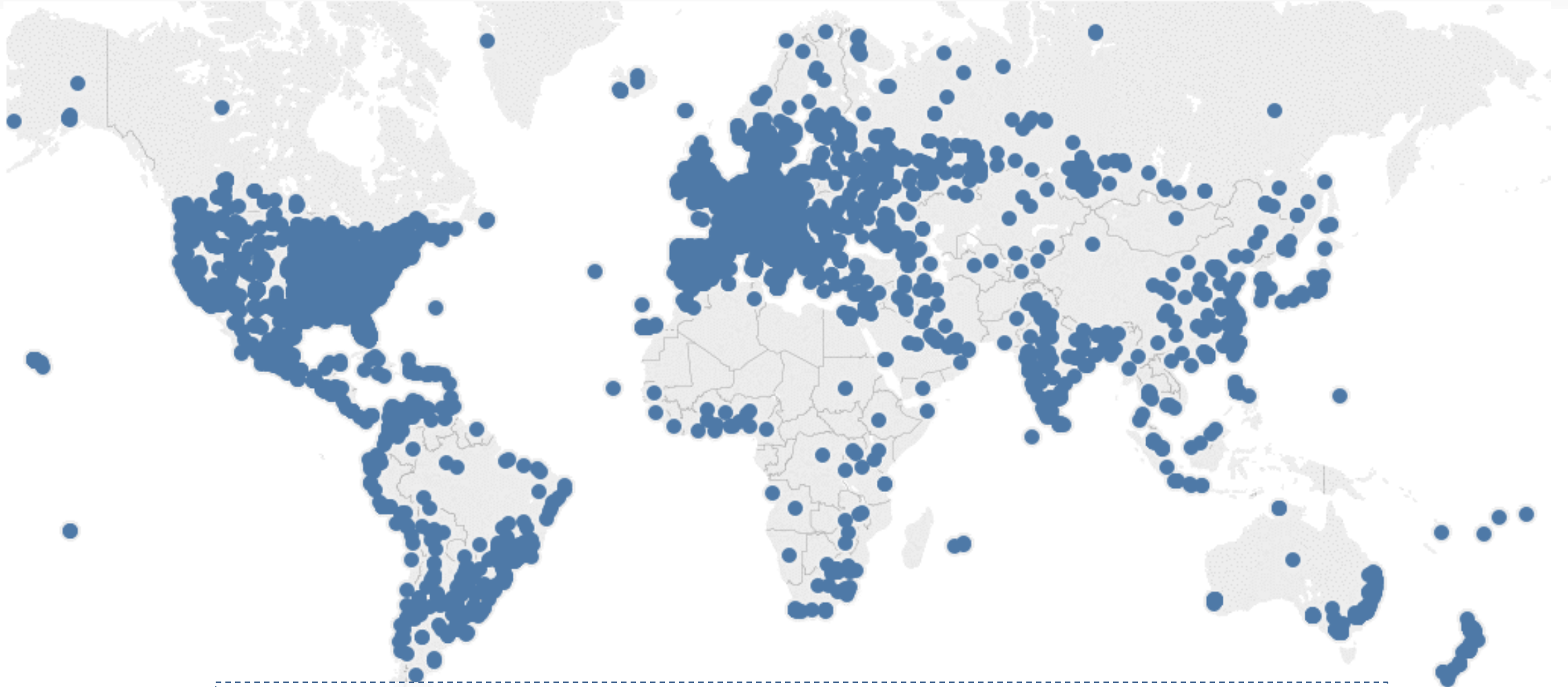
Service Providers



Technology Suppliers



Devoncroft's Big Broadcast Survey 2009 – 2021

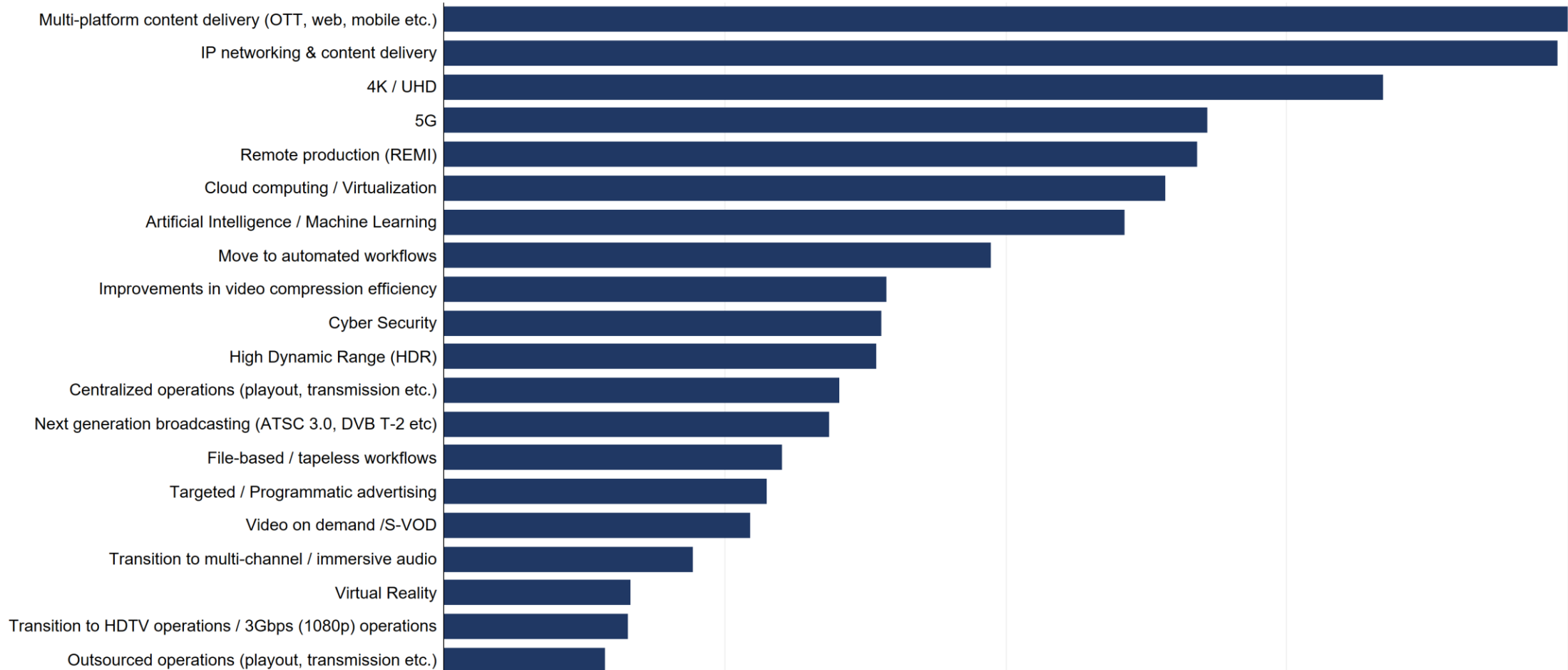


Devoncroft's Big Broadcast Survey has been conducted annually since 2009 and has benefited from substantial support from the global media industry.

2020 Big Broadcast Survey Trend Index



Source: Devoncroft 2020 Big Broadcast Survey



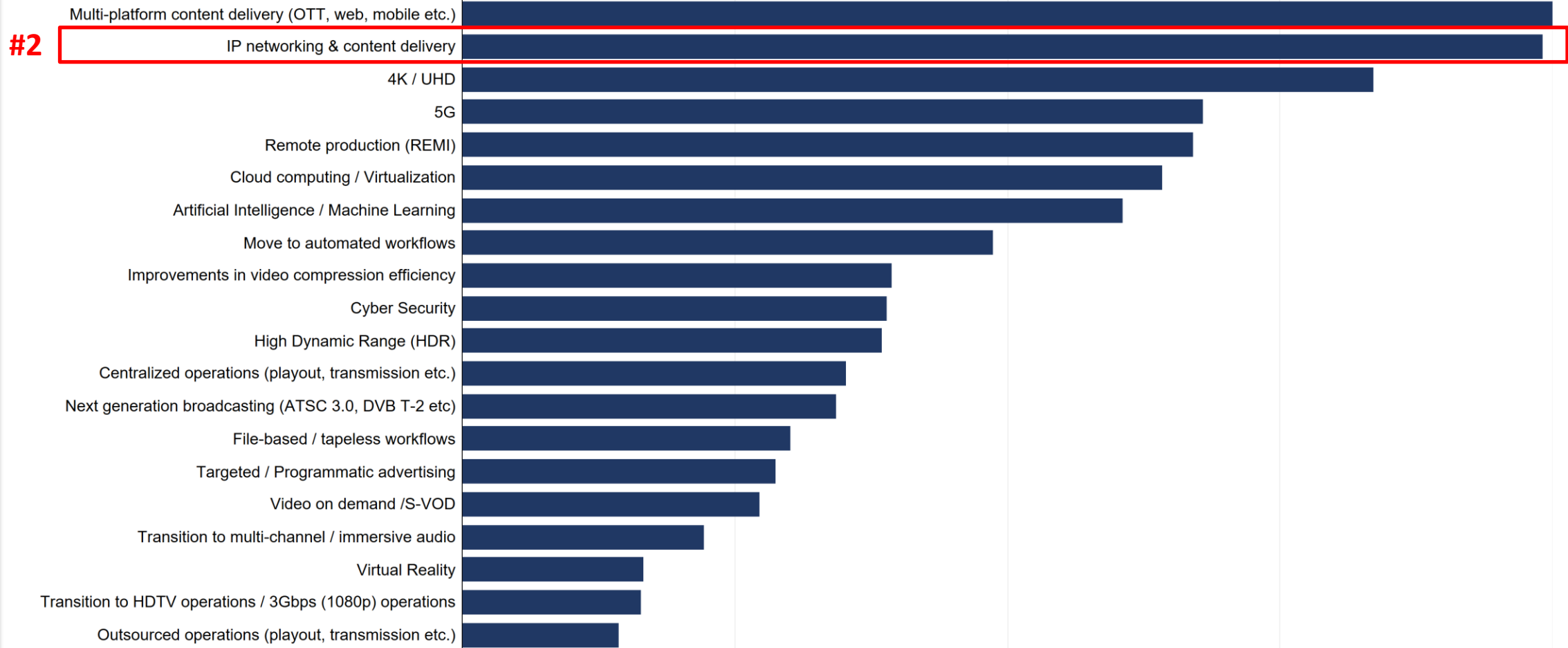
2020 Big Broadcast Survey Global Trend Index





2020 Big Broadcast Survey Trend Index

Source: Devoncroft 2020 Big Broadcast Survey



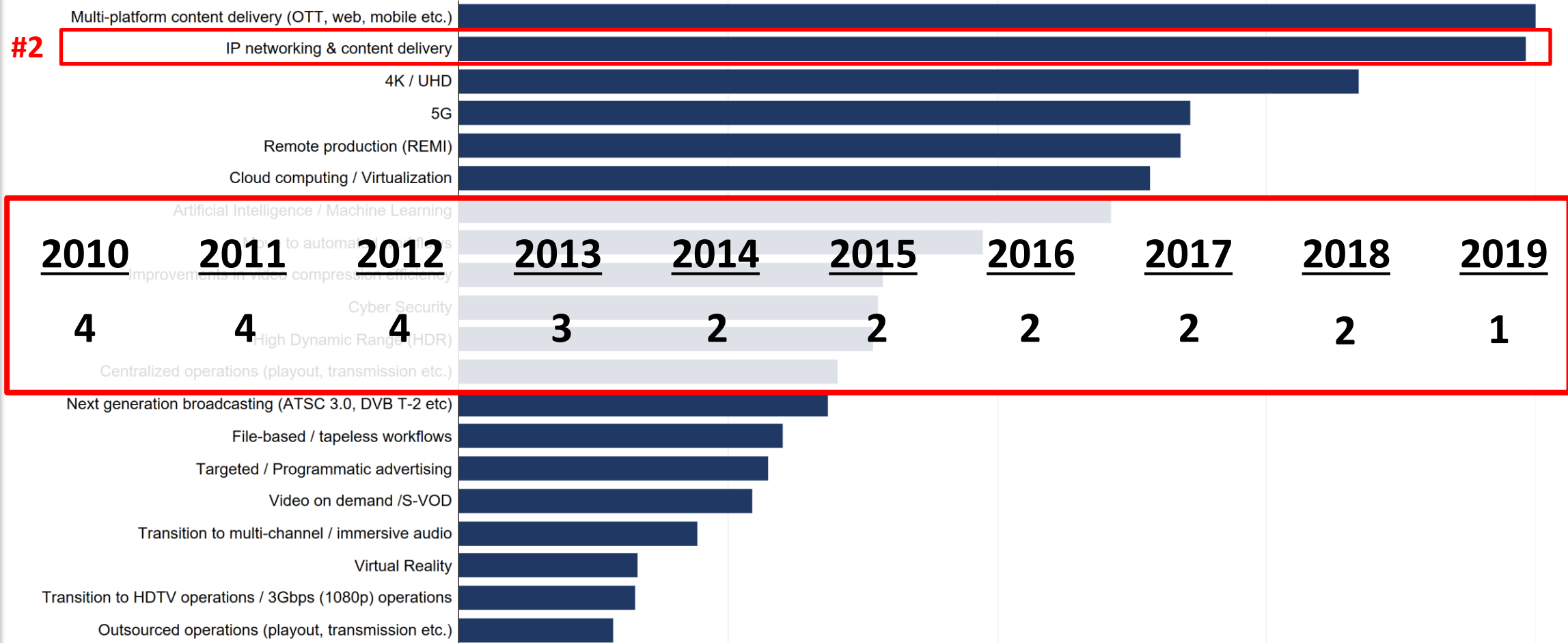
2020 Big Broadcast Survey Global Trend Index





2020 Big Broadcast Survey Trend Index (End-Users)

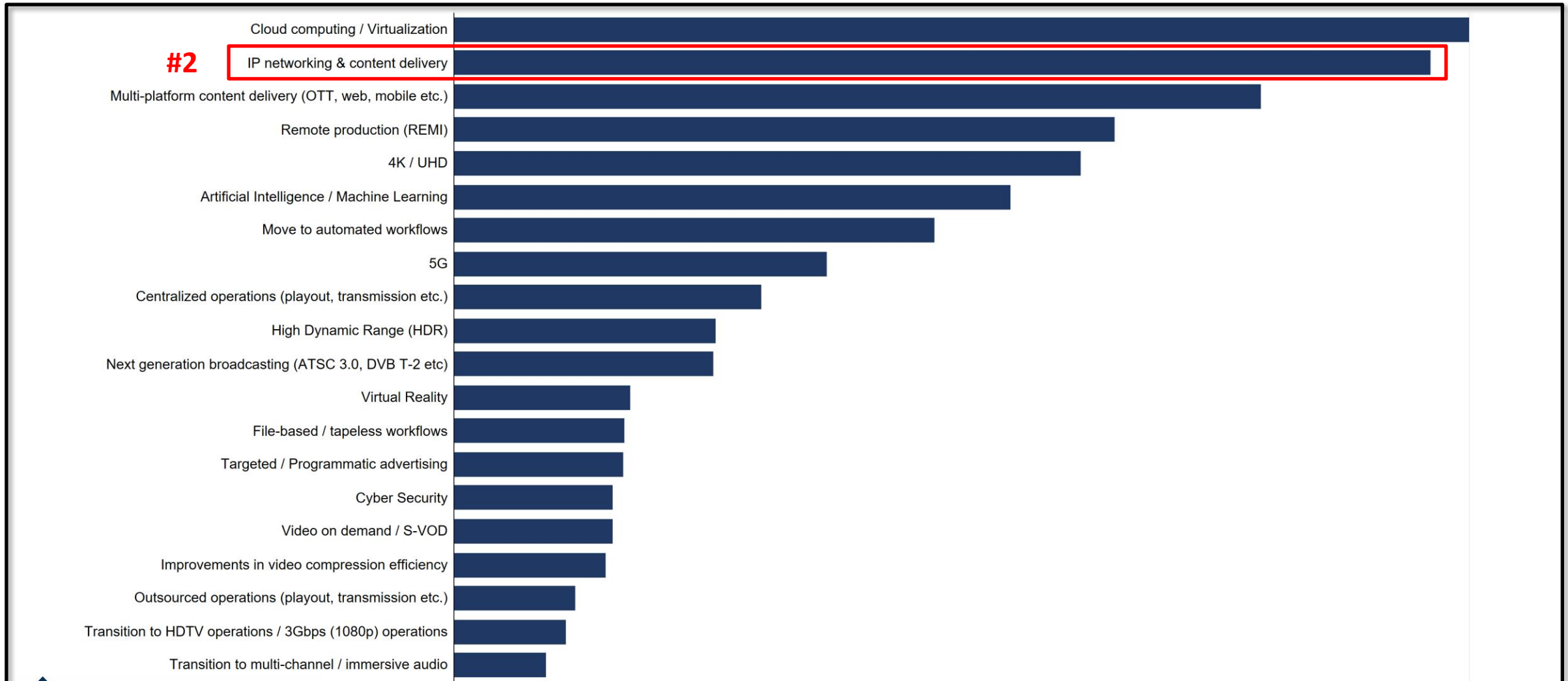
Source: Devoncroft 2020 Big Broadcast Survey



2020 Big Broadcast Survey Global Trend Index



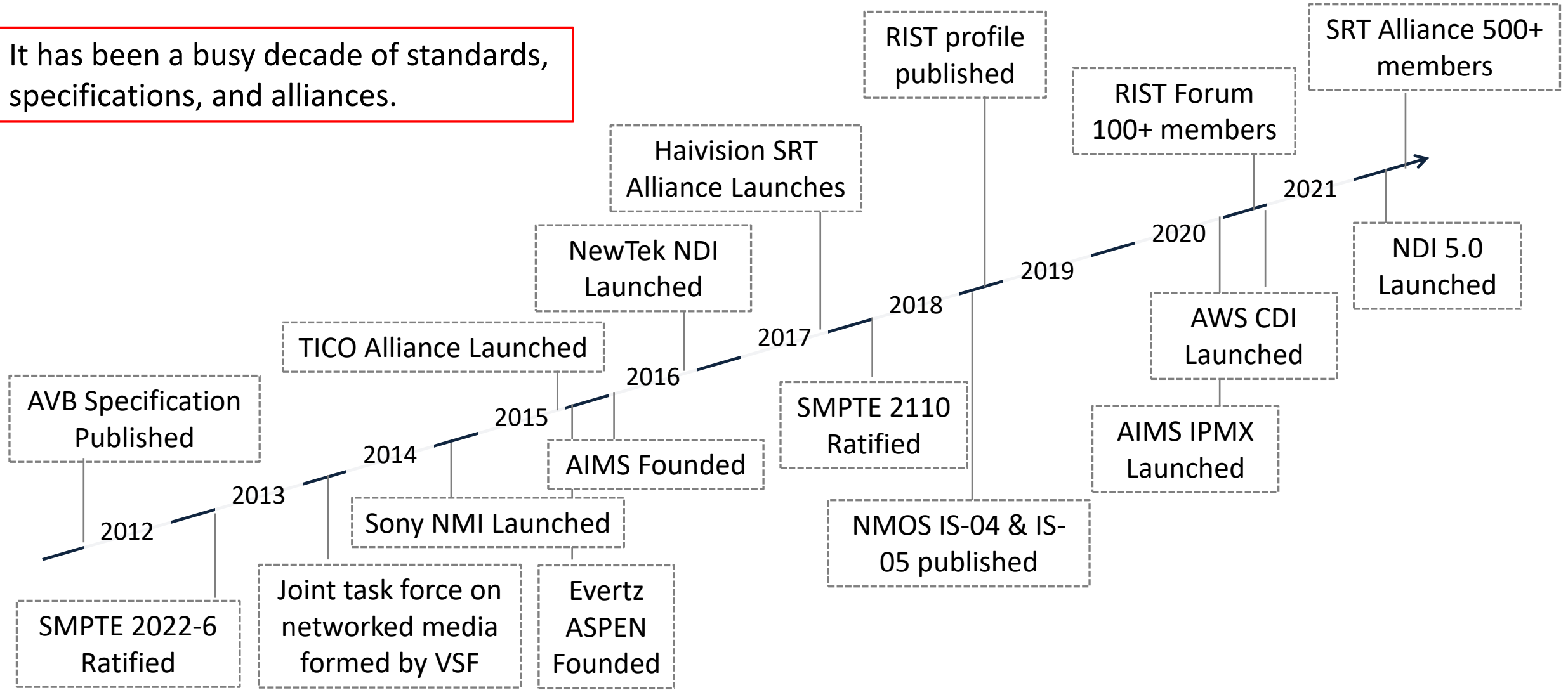
2020 Big Broadcast Survey SUPPLIER Trend Index





Evolution of the IP Ecosystem in M&E

It has been a busy decade of standards, specifications, and alliances.





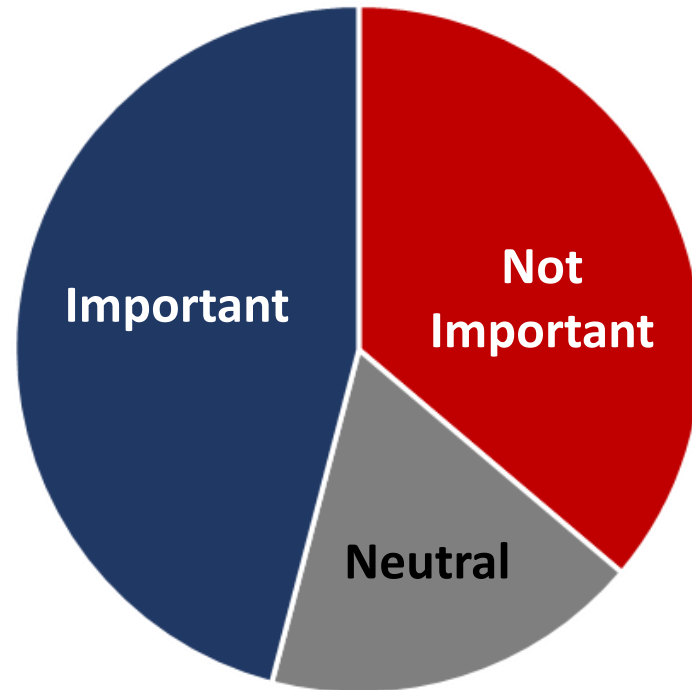
Industry Has Made Significant Progression

Selected Responses on Why Important?

- “It is the future”
- “Reduce cost”
- “So easy to use and cost effective”
- “Preparing for 4K / UHD Broadcasting”
- “Virtualization of infrastructure”
- “No benefits from the move to IP if not used”
- “Improve efficiency and flexibility to adapt to changing business and technology needs”
- “vendor-neutral network architecture, rapid services introduction, streamlining operations”

2015

Is Software Defined Networking (SDN) important to your business?

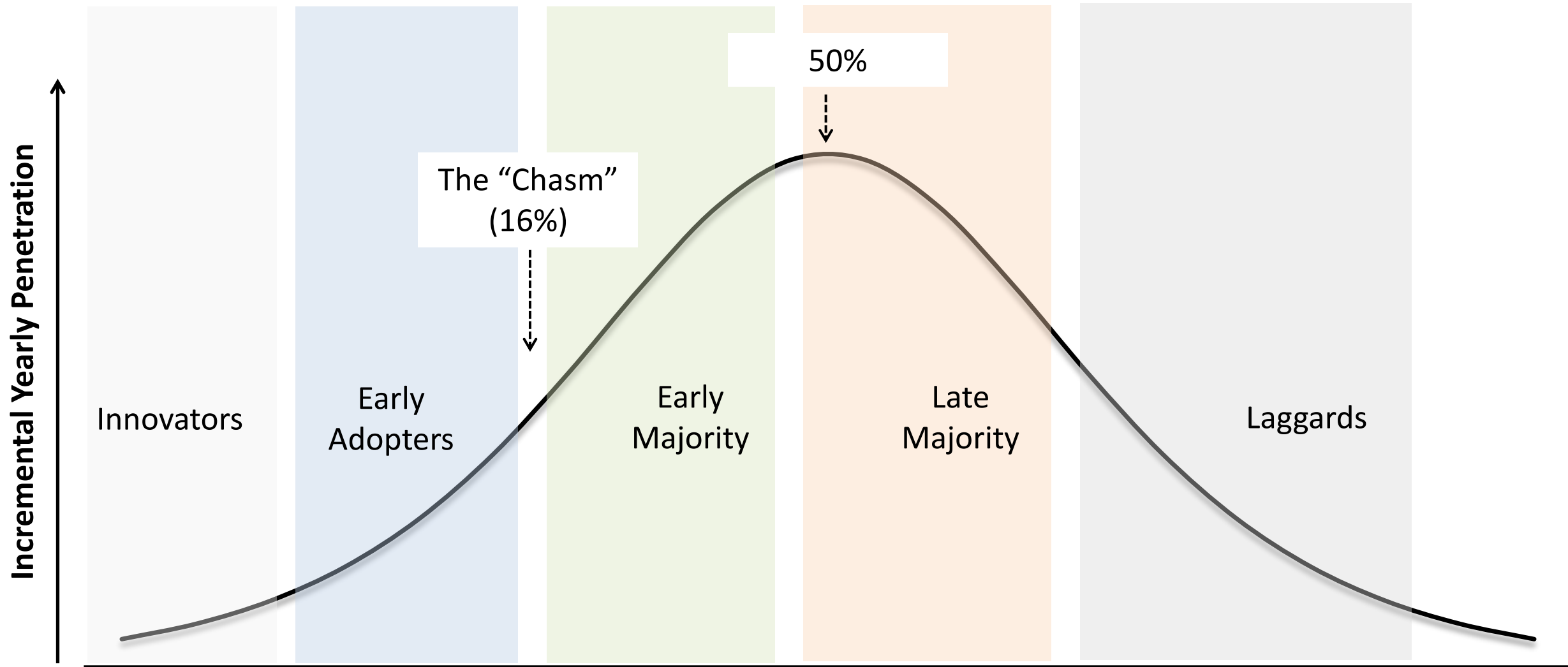


Source: 2015 DevonCROFT Big Broadcast Survey

Selected Responses on Why Not Important?

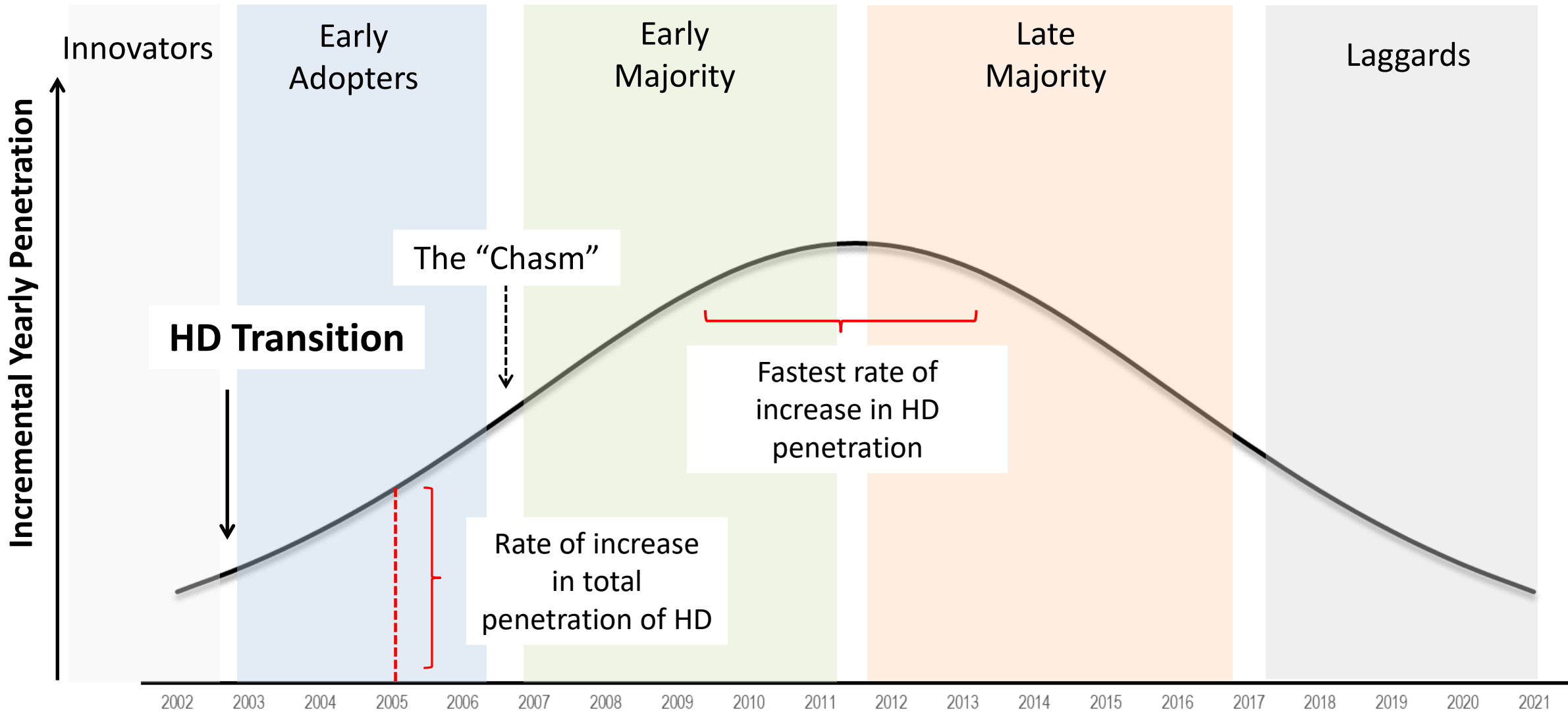
- “Never even heard of it”
- “Don’t Know what SDN is”
- “Not needed”
- “Not enough scale yet”
- “Hardware is inherently more reliable”
- “Too much spent in our current infrastructure to warrant a change.”
- “We don’t reconfigure enough to care”
- “scalable, flexible datacenters are a dream, but very poorly defined, difficult to manage, and require a lot of in-house engineering to support.”

How are New Technologies Deployed? (Textbook Answer)





HD Transition was an Approximately 20-year Process

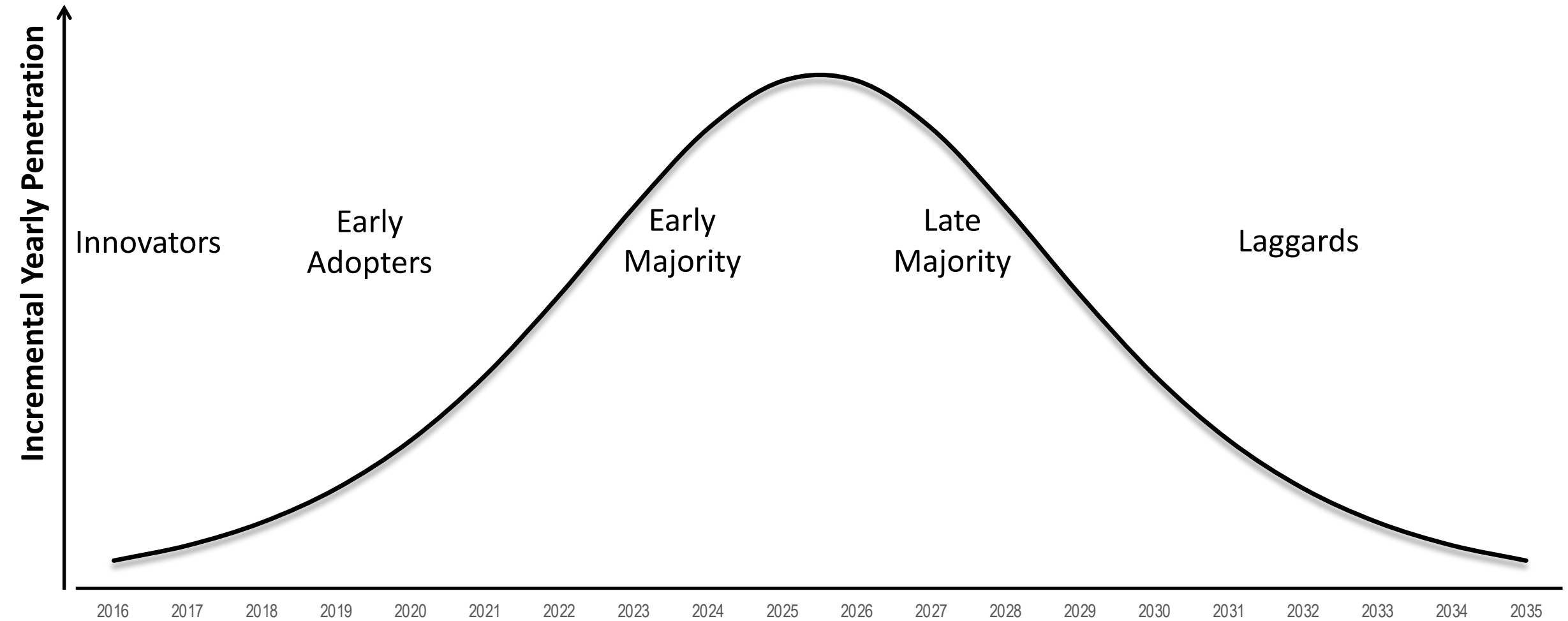


Source: Devoncroft Partners Big Broadcast Survey 2009 – 2020, Devoncroft Analysis

IP Transition is passed a Milestone



Devoncroft M&E IP Technology Penetration Curve

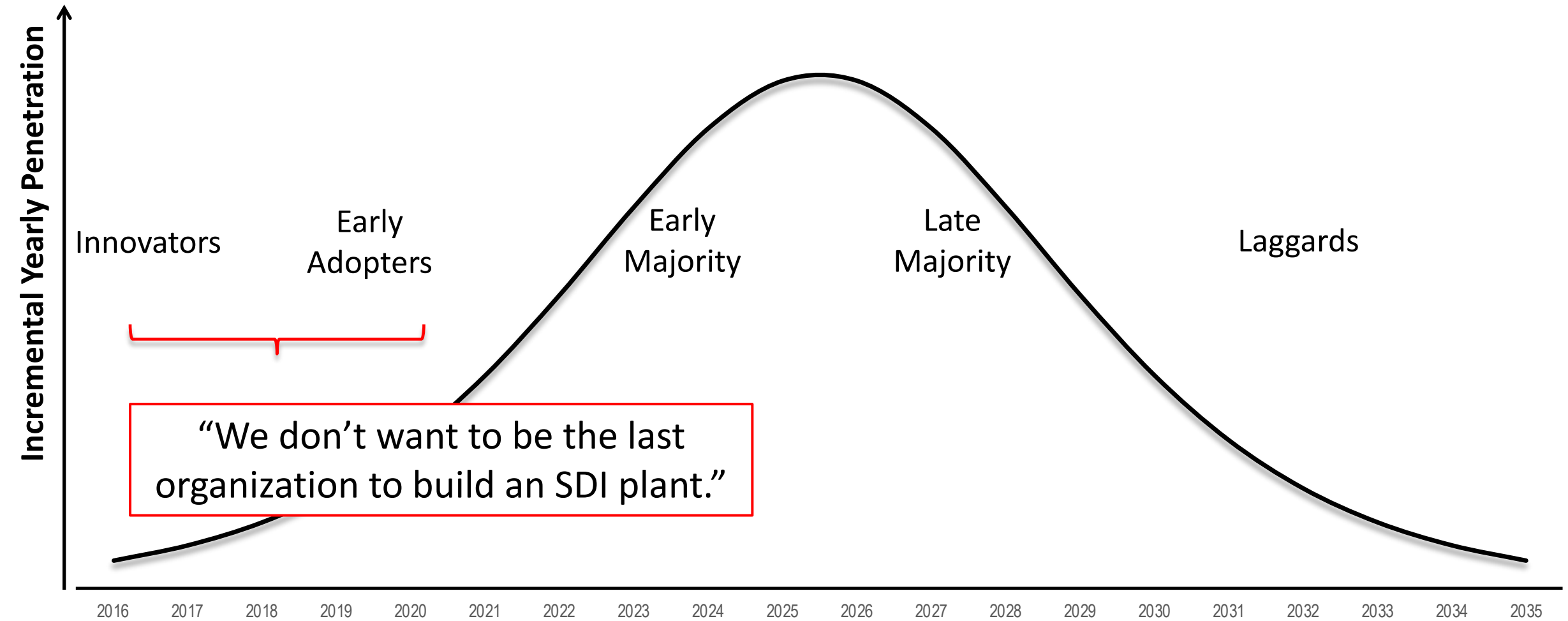


Source: Devoncroft Big Broadcast Survey 2014 - 2020



IP Transition is passed a Milestone

Devoncroft M&E IP Technology Penetration Curve



Source: Devoncroft Big Broadcast Survey 2014 - 2020



What are the Biggest Obstacles?

What is the Biggest Obstacle preventing you from achieving your goals with IP Networking & Delivery?





Jose Lopes
Director of Technology & Operations



“...when we were planning our IP build (2018) there were no use cases of interoperability of components we wanted to choose...that was the biggest challenge.

...the **benefit of moving to IP is the incredible flexibility we now enjoy** – like being able to completely change the set-up of the studios and the control rooms for on-air and election coverage... **it’s easy to share equipment across different facilities** (rooms) because of the scale and flexibility of our IP router”

Source: 2019 Devoncroft Executive Summit | Amsterdam

Early Adopters – Enjoying Benefits of IP-based Operations



“...we operate across so many facilities... we like to call it location-dependent production, so you can pool resources whenever you need them... **in the past, CNN built for worst case scenario scale** - the biggest story you could possibly imagine - **in this [2110] architecture our ability to pool resources between cities and between facilities** makes it much easier and much more transparent... and **for our operators it makes it feel like its all one big facility....** when you walk into a control room it feels like a traditional broadcast control room, but behind the scenes you have access to every source that's available anywhere in any CNN (or Turner) facility - everything you could possibly imagine is available”



Bob Hesskamp
SVP Global Broadcast Technology

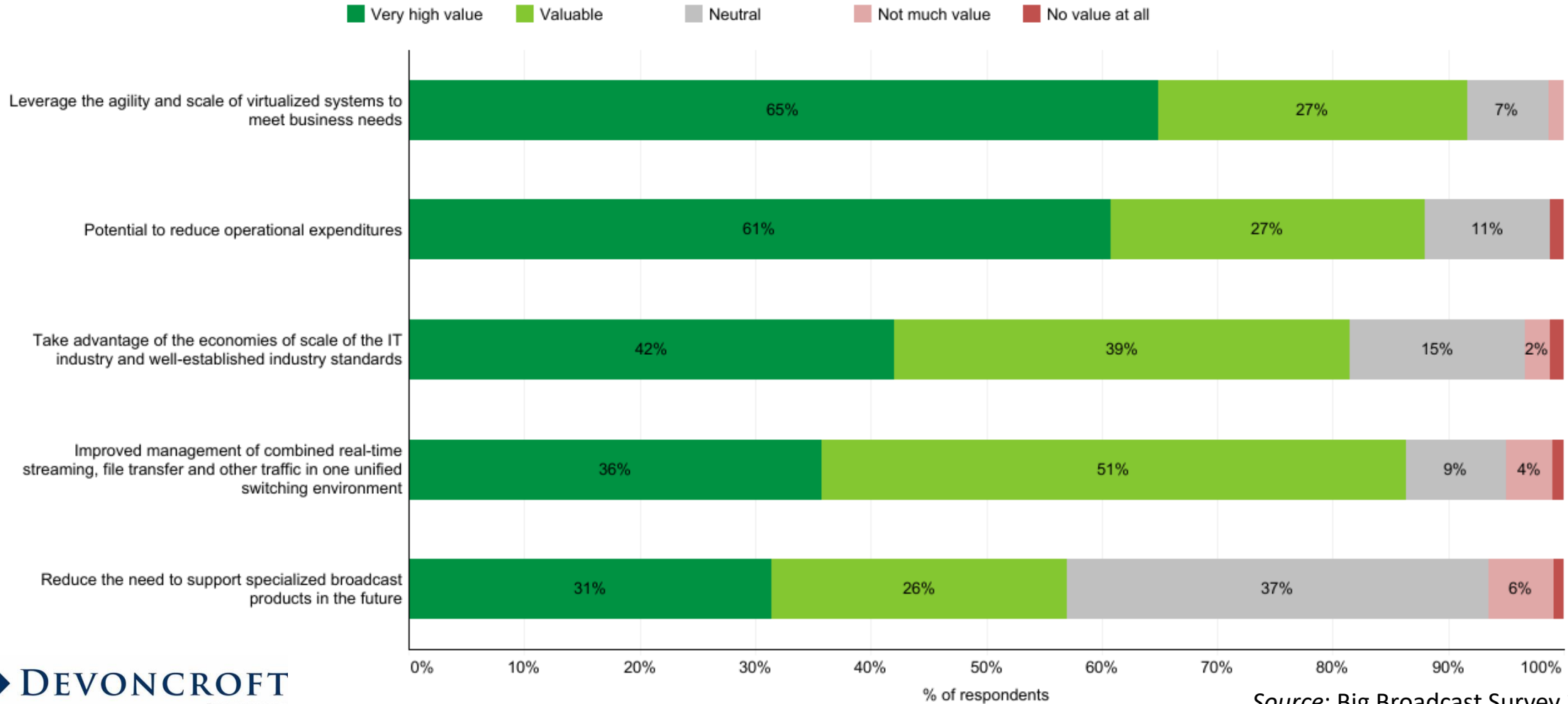
WarnerMedia

Source: 2019 DevonCROFT Executive Summit | Amsterdam



IP + Virtualization = Business Agility: #1 Benefit

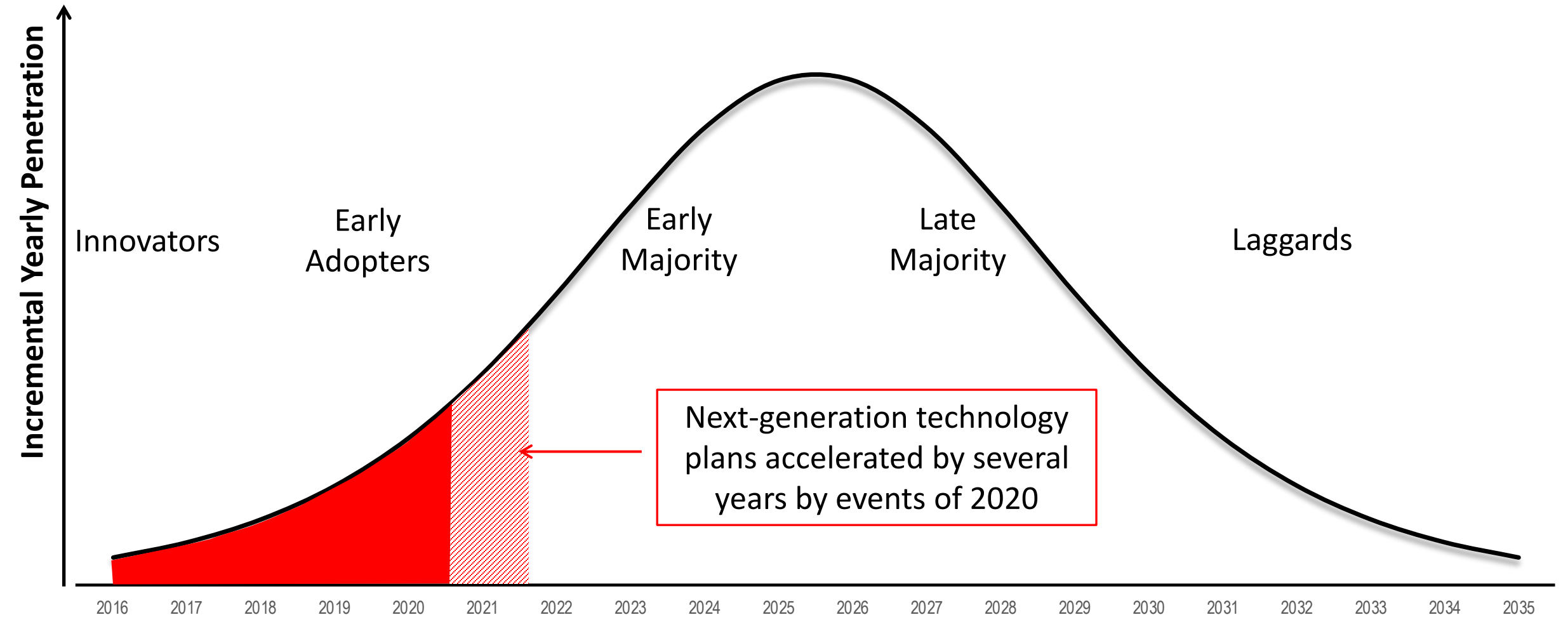
Software Defined Networking Decision Factors 2020





IP Transition (ST 2110) is Accelerating

Devoncroft M&E IP Technology Penetration Curve



Source: Devoncroft Big Broadcast Survey 2014 - 2020

The Next Challenge is Communicating Value



“The irony of the transition to IP is the benefits aren’t realized on day one because in the first instance we are just looking to replicate traditional operations.

“At the same time, IP costs more compared to a traditional SDI build when you sum the bill of materials, training, and ongoing support costs.

“Transitioning to IP is still the right decision and the benefits are tremendous, it’s just more challenging to describe the value to third parties.”



Roger Crothers
Head of Technology



Source: Devoncroft Interview, 2019



Framework for Explaining Value to Non-Engineers

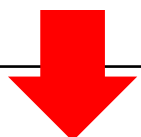
	Move to Software Layer	Interoperability, Best-of-Breed	Remote Production (“REMI”)	Cyber Security
Operational Metrics (KPIs)	<ul style="list-style-type: none"> • Number of hardware SKUs • Scalability (Incremental costs to add capacity) • Real-estate footprint of equipment 	<ul style="list-style-type: none"> • Time for New Deployments • Relative ‘pain’ of new deployments • Development team morale 	<ul style="list-style-type: none"> • Labor productivity (number of events worked per day or week) • Equipment utilization • Reliability (number of production hits) 	<ul style="list-style-type: none"> • Vulnerability data • Number of outages / incidents • Time-to-detection • Time-to-response / remediation
Quantified Business Benefits	<ul style="list-style-type: none"> • Simplification of budget process • Support costs • Real-estate (\$ / ft) • Future capital costs 	<ul style="list-style-type: none"> • Integration costs • Change costs • Lower team turnover 	<ul style="list-style-type: none"> • Travel and entertainment expenses • Consolidated operations • Capital equipment outlays 	<ul style="list-style-type: none"> • Outage avoidance • Reputation impact • Lost or stolen data • Total expenditure



Framework for Explaining Value to Non-Engineers

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What we measure and communicate today that directly relates to business benefits



Underlying financial justification

Visibility of Technical Operational



Nexus Dashboard Feedback Help admin

Insights IG_DEFAULT > ... Central Dashboard

Overview within the last 2 hours Last Updated: a few seconds ago

Dashboard Topology

Alerts Summary

Advisories (0)

Major

Critical	Major	Minor	Warning
0	605	447	0

Anomaly Score Summary

Leaf Nodes: 2 Total

Spine Nodes: 4 Total

Legend: Healthy, Critical, Major, Minor, Warning, Info

Alert Detection Timeline

09:30 09:45 10 AM 10:15 10:30 10:45 11 AM 11:15



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