

SMPTE HPA Update

Thomas Bause Mason (SMPTE)
Director of Standards Development
dir.standards@smpte.org

STANDARDS TEAM AT SMPTE



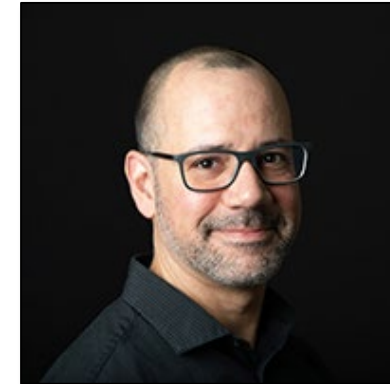
BRUCE DEVLIN
Standards Vice President
2020-2021



THOMAS BAUSE MASON
Director of Standards
Development



KARISSA RUPNARAIN
Digital Content Specialist



MAURICIO ROLDAN
Manager of Engineering
Services

THE NEXT CENTURY

SMPTE AROUND THE WORLD



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USA SECTIONS:

NEW ENGLAND
NEW YORK
ROCHESTER
PHILADELPHIA
WASHINGTON DC
ATLANTA
FLORIDA
DETROIT
PITTSBURGH
OHIO
CHICAGO
NASHVILLE
CENTRAL TEXAS
DALLAS
ROCKY MOUNTAIN
HOLLYWOOD
PACIFIC NORTHWEST
SUB-SECTIONS (SS):
CONNECTICUT
LONG ISLAND
VANCOUVER (USA SS)



STUDENT CHAPTERS:

BAYLOR UNIVERSITY
BIRMINGHAM CITY UNIVERSITY
MANHATTAN COMMUNITY COLLEGE
BRONX COMMUNITY COLLEGE
DE ANZA COLLEGE
FULL SAIL UNIVERSITY
FITCHBURG STATE UNIVERSITY
GEORGE MASON UNIVERSITY
HONG KONG DESIGN INSTITUTE (HKDI)
HONG KONG INSTITUTE OF VOCATIONAL EDUC.
KINGSBOROUGH COMMUNITY COLLEGE
LOS ANGELES CITY COLLEGE
LOYOLA UNIVERSITY MARYLAND
MEDIA ARTS COLLABORATIVE CHARTER SCHOOL
MILLERSVILLE UNIVERSITY
MONTGOMERY COLLEGE
NEW YORK CITY COLLEGE OF TECHNOLOGY
PASADENA CITY COLLEGE
RAVENSBORNE
ROCHESTER INSTITUTE OF TECHNOLOGY
SOUTHAMPTON SOLENT UNIVERSITY
STONEHILL COLLEGE
SYDNEY STUDENT CHAPTER
JMC ACADEMY
SYDNEY INSTITUTE
UNIVERSITY OF SOUTHERN CALIFORNIA
WESRAC USC
UNIVERSITY OF SALFORD - UK
UNIVERSITY OF SURREY - UK
WILLIAM PATERSON UNIVERSITY

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TRADITIONAL SMPTE STANDARDS BUSINESS



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TRADITIONAL SMPTE STANDARDS BUSINESS



SMPTE published 35 Engineering Docs (new or revised), 5 RDD's were sold and published, 4 TC Meetings conducted (1x Japan, 1x Germany, 2x US), 1 ISO TC 36 Plenary hosted, 2 Microservice Summits were conducted

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<https://www.smpte.org/outcome-report>

TRADITIONAL SMPTE STANDARDS BUSINESS

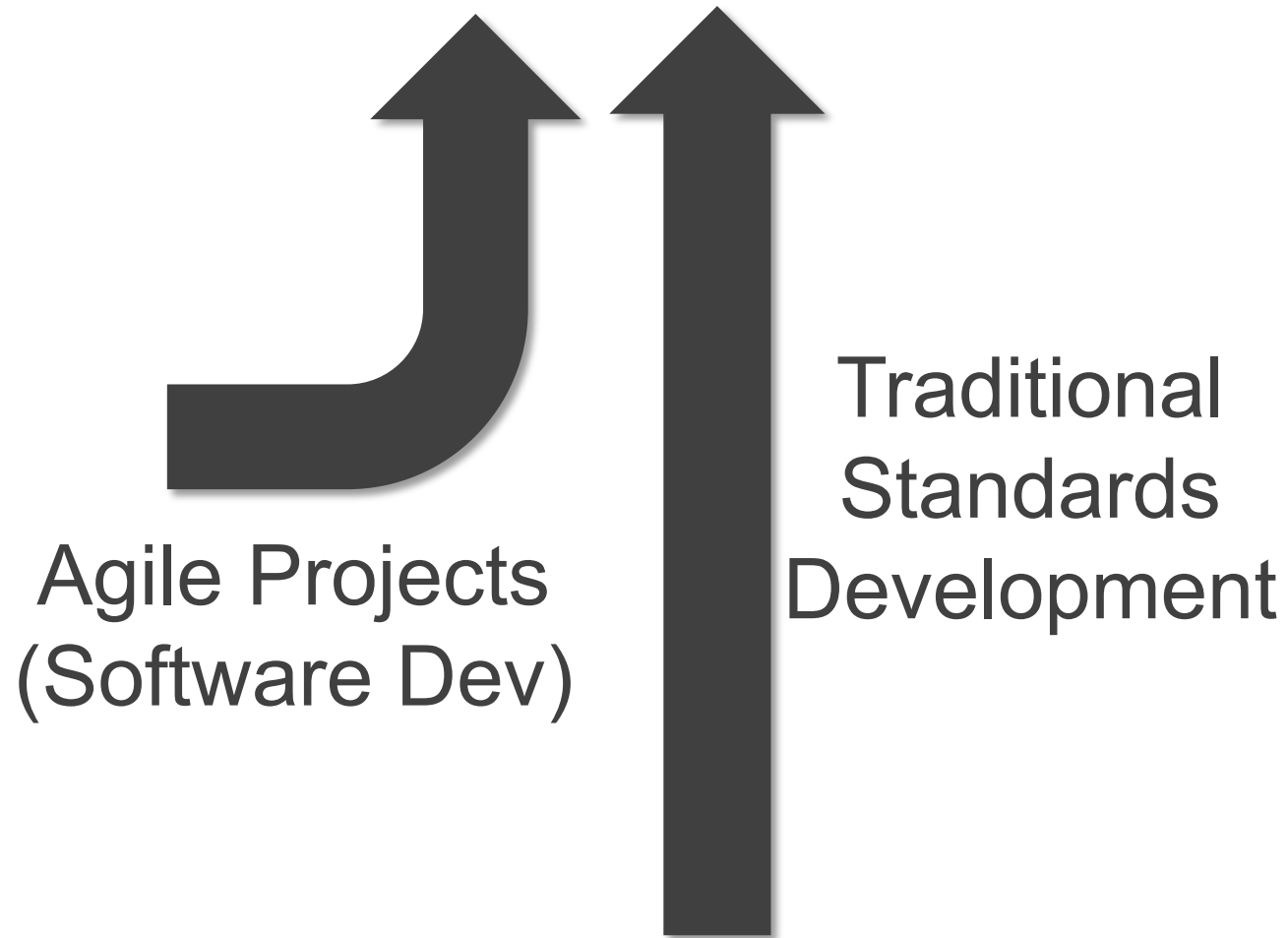


SMPTE standards will continue to exist we need to address a fundamental change in the media industry so SMPTE can stay relevant



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TRADITIONAL SMPTE STANDARDS BUSINESS



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GLOBAL SHIFT IN THE MEDIA INDUSTRY



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SHARING ECONOMY WHAT IS IT?



“Sharing economy: focus on the sharing of underutilized assets, monetized or not, in ways that improve efficiency, sustainability and community.”

World Economic Forum (WEF), 2017

SHARING ECONOMY WHY CARE?



“One of the key benefits of this new business model for an organization is the **effective utilization of unused resources.**”

ISO TC 324 Chair, Dr Masaaki Mochimaru

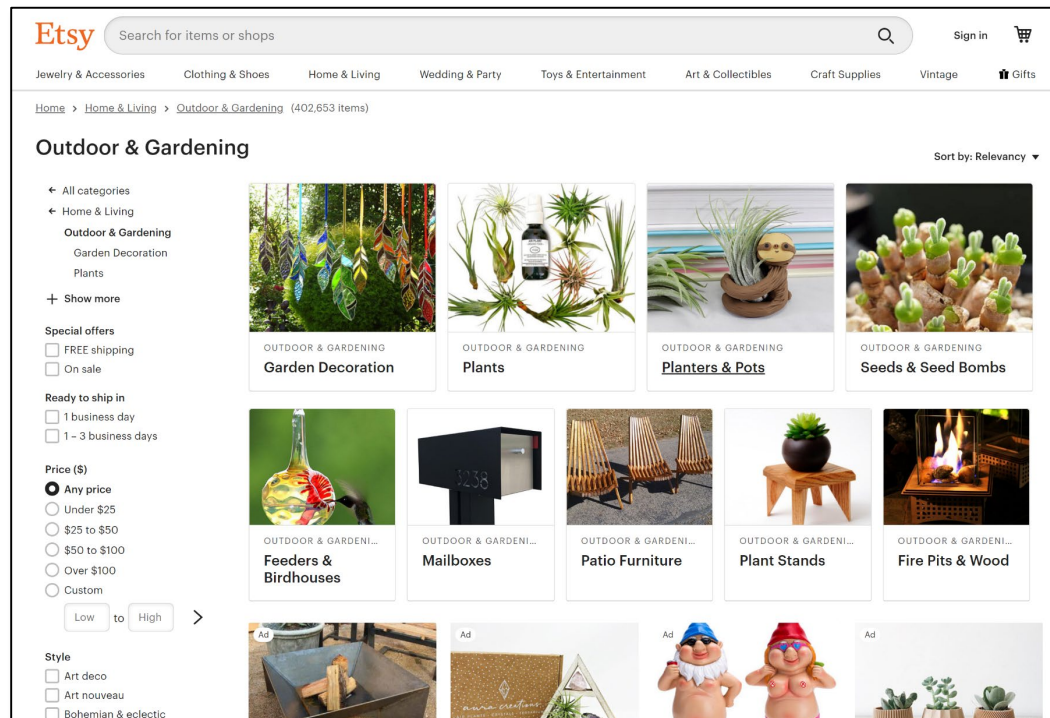


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SHARING ECONOMY EXAMPLE

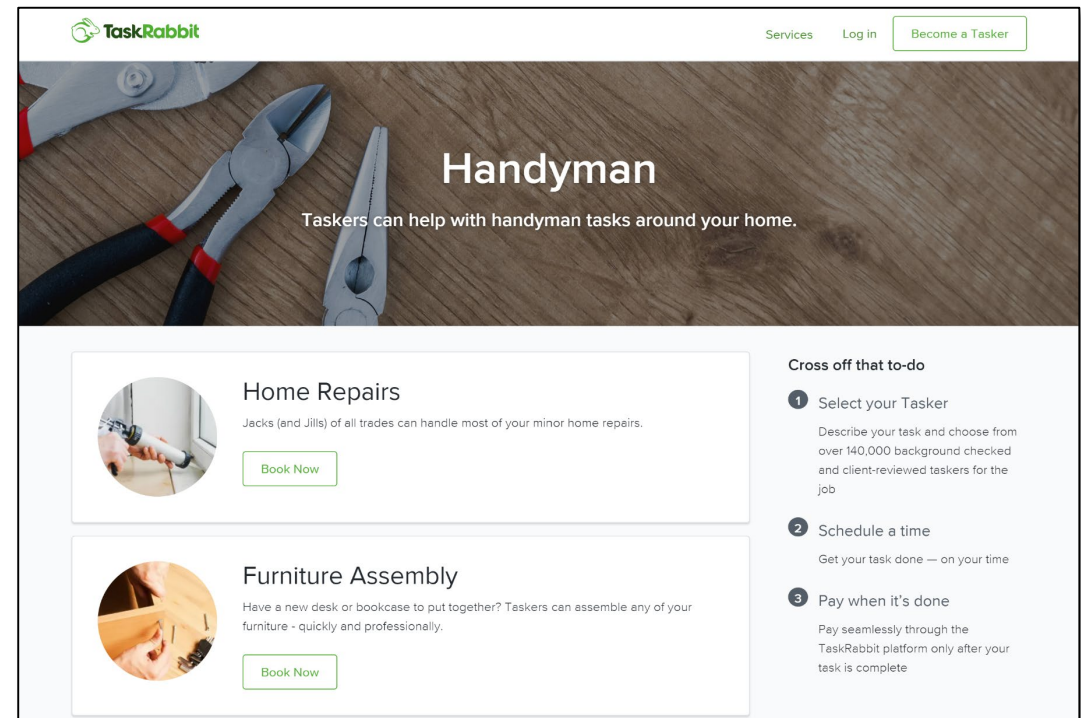


Etsy




TaskRabbit

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Have you
seen the
mouse?

...

How does
this impact
the media
industry?

MEDIA INDUSTRY UNUSED CAPACITY



500,000 control rooms worldwide are **unused 70% of the time**

NECF, Joseph Maar

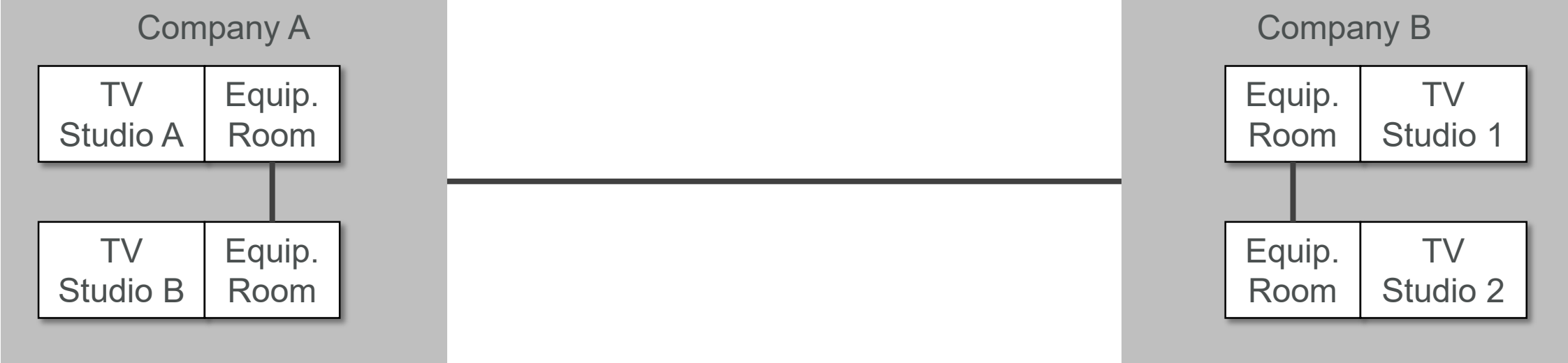
The worldwide public cloud services market is forecast to grow 17% in 2020 to **total \$266.4 billion**, up from \$227.8 billion in 2019

Gartner, Inc.



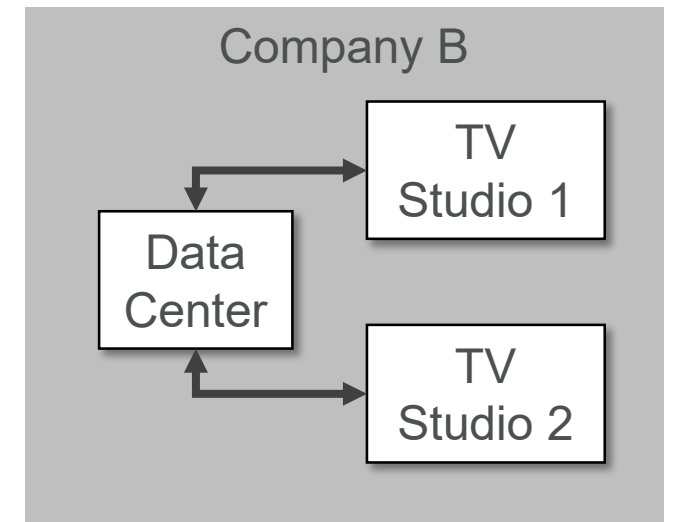
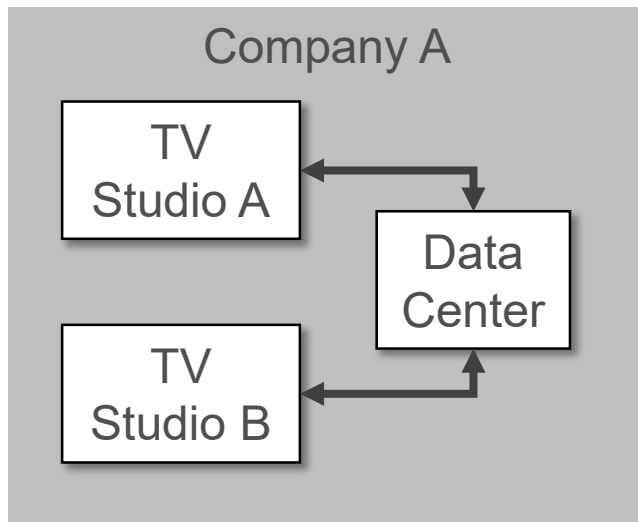
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MEDIA INDUSTRY TRANSFORMATION



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MEDIA INDUSTRY TRANSFORMATION

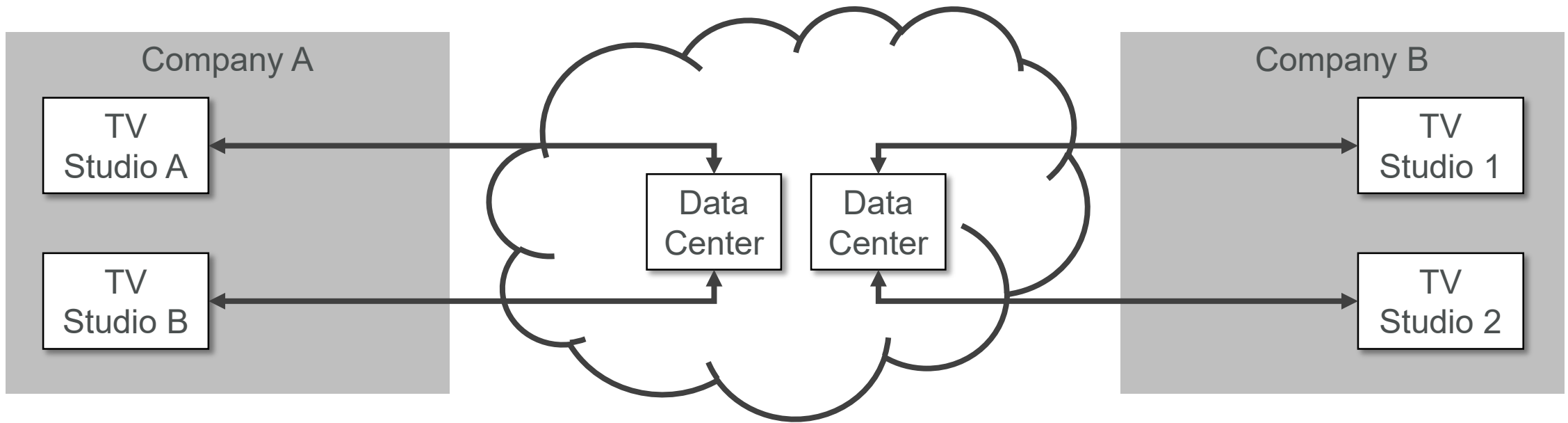


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MEDIA INDUSTRY TRANSFORMATION

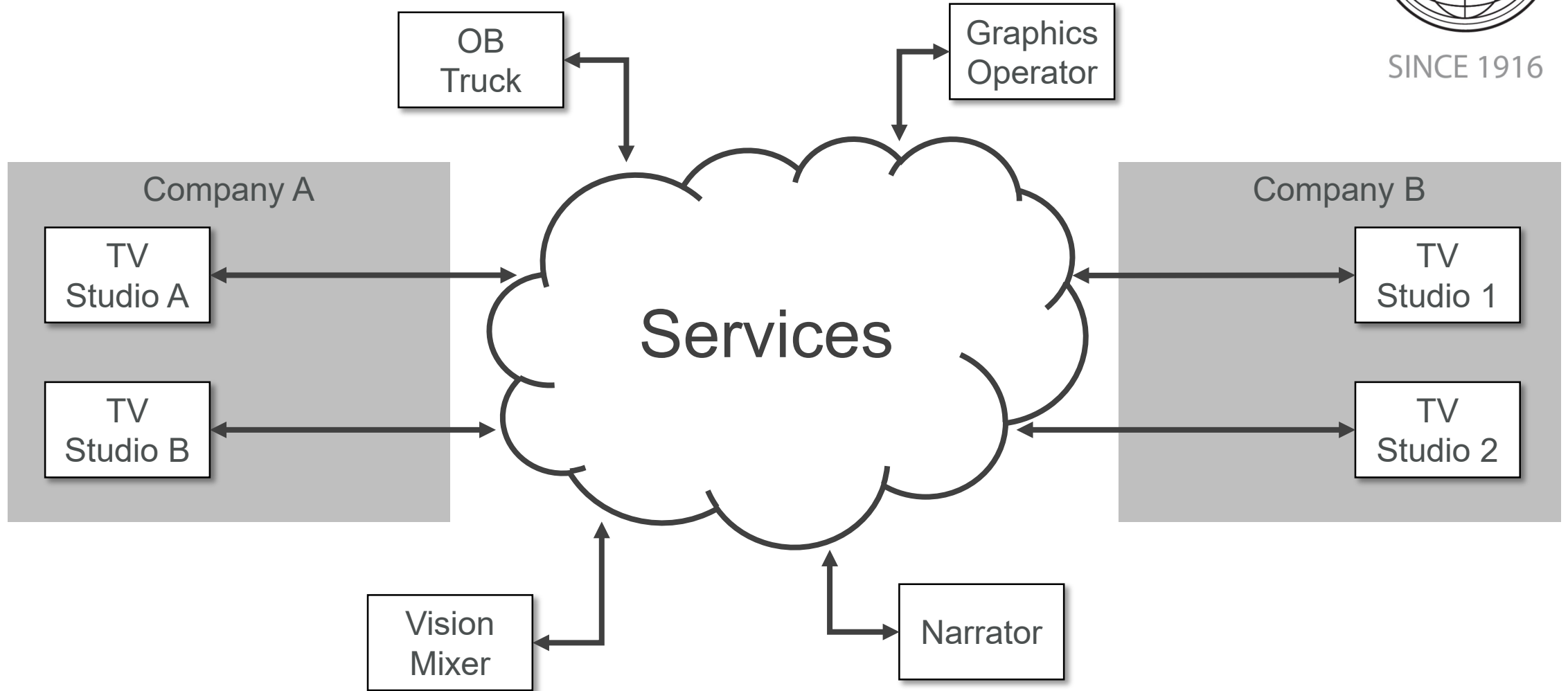


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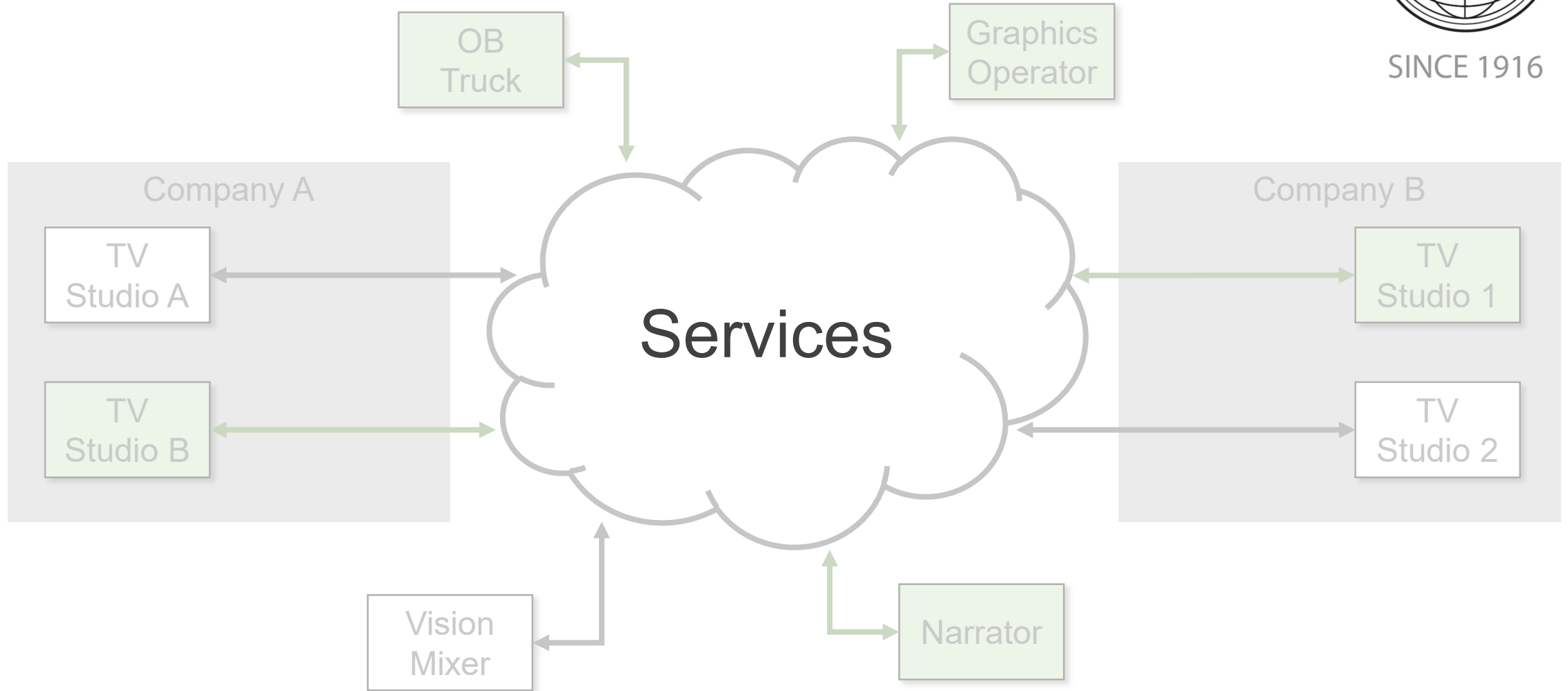
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MEDIA INDUSTRY DISTRIBUTED PRODUCTION



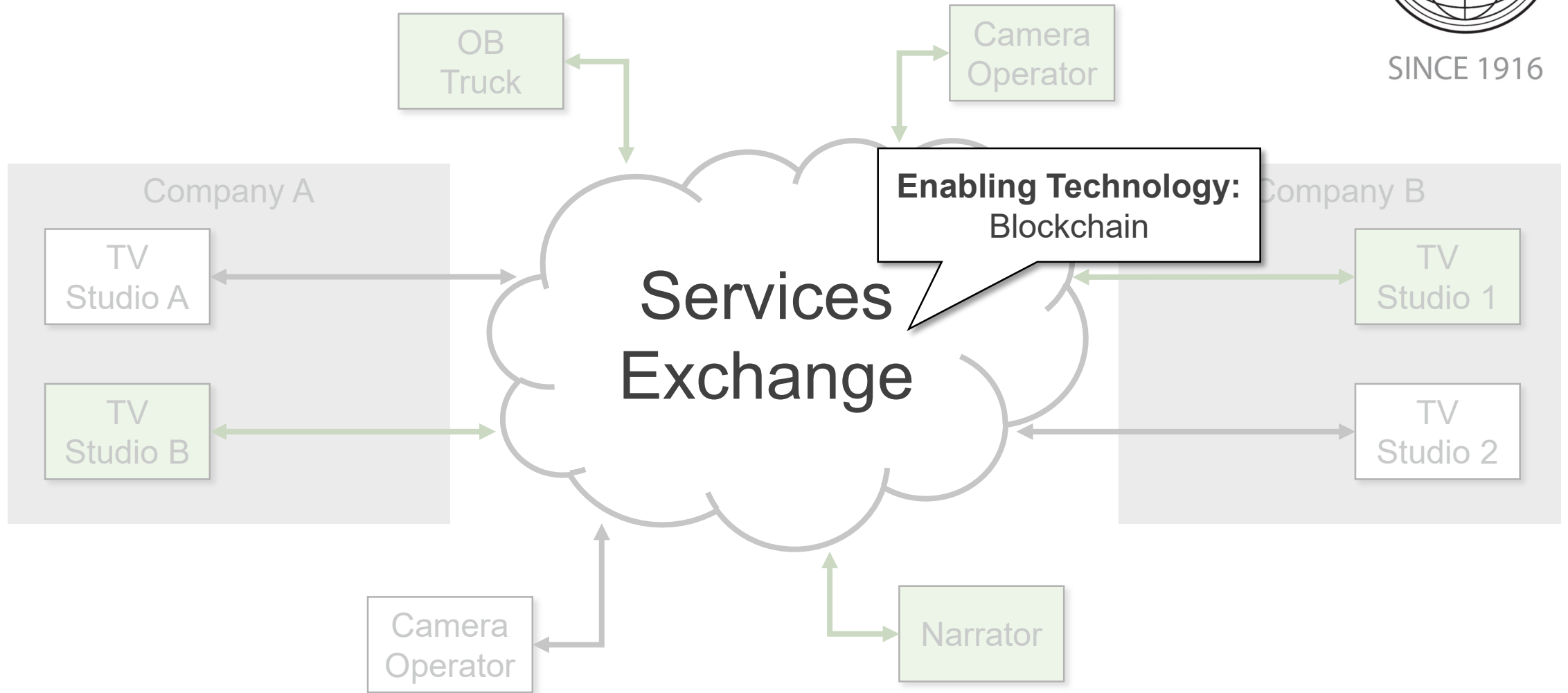
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SHARING ECONOMY DISTRIBUTED PRODUCTION



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SHARING ECONOMY DISTRIBUTED PRODUCTION



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Mice
anybody?

What's the
scale of
this?

CLOUD ARCHITECTURE WHY SHOULD SMPTE CARE?



Microsoft Azure

Overview Solutions **Products** Documentation Pricing Training Marketplace Partners Support Blog More

Contact Sales: 1-855-270-0615 Search My account Portal Thomas

Free account >

Select a category:

- AI + Machine Learning
- Developer Tools
- DevOps
- Hybrid
- Identity
- Integration
- Internet of Things
- Management and Governance
- Media
- Migration
- Mixed Reality
- Mobile
- Networking
- Security
- Storage
- Web
- Windows Virtual Desktop

600+ Services listed on AZURE

Possibilities for SMPTE:
Media Services Registry with Capabilities
Patterns of Services

AI + Machine Learning
Generation of applications using artificial intelligence

Bot Service
Intelligent, serverless bot service that scales on demand

Cognitive Search
AI-powered cloud search service for mobile and web app development

Bing Custom Search
An easy-to-use, ad-free, commercial-grade search tool that lets you deliver the results you want

Bing Image Search
Search for images and get comprehensive results

Bing Spell Check
Detect and correct spelling mistakes in your app

Bing Visual Search
Get rich insights to help build compelling image applications on the device of your choice.

Cognitive Services
Add smart API capabilities to enable contextual interactions

Bing Autosuggest
Give your app intelligent suggestions for searches

Bing Entity Search
Enrich your experiences by identifying and augmenting entity information from the web

Bing News Search
Search for news and get comprehensive results

Bing Video Search
Search for videos and get comprehensive results

Bing Web Search
Get enhanced search details from billions of web documents

Computer Vision
Distill actionable information from images

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<https://azure.microsoft.com/en-us/services/#hybrid>

CLOUD ARCHITECTURE WHY SHOULD SMPTE CARE?



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The screenshot shows the AWS website's 'Explore Our Products' section. At the top is the AWS logo and a navigation bar with links: Products, Solutions, Pricing, Documentation, Learn, Partner Network, AWS Marketplace, Customer Enablement, Events, Explore More, and a search icon. On the right of the navigation bar are links for 'Contact Sales', 'Support', 'English', 'My Account', and a 'Sign In to the Console' button. The main content area is titled 'Explore Our Products' and displays a grid of service categories, each with an icon and a label. A callout box on the left points to the 'End User Computing' and 'Tech' categories, stating: '175+ full featured services across 69 Availability Zones within 22 geographic regions around the world'. Another callout box on the right points to the 'Machine Learning' category, stating: 'Possibilities for SMPTE: Cross cloud interoperability'.

aws

Contact Sales Support English My Account Sign In to the Console

Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Customer Enablement Events Explore More

Explore Our Products

175+ full featured services across 69 Availability Zones within 22 geographic regions around the world

Possibilities for SMPTE: Cross cloud interoperability

AR & VR

Customer Engagement

Developer Tools

End User Computing

Tech

Internet of Things

Machine Learning

Management & Governance

Media Services

Migration & Transfer

Mobile

Networking & Content Delivery

Quantum Technologies

Robotics

Satellite

Security, Identity & Compliance

Storage

See All Products

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SHARING ECONOMY WHY CARE?



“Enterprises will select the best service for the job.”

INTEROPERABILITY = **SMPTE**

“84% of enterprises run on a multi-cloud strategy.”

Source: Rightscale



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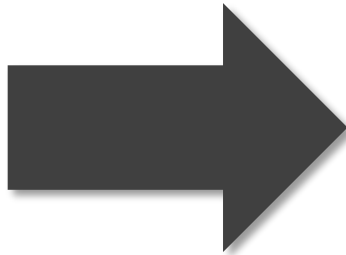
Any mice
around?

What is
SMPTE
doing about
it?

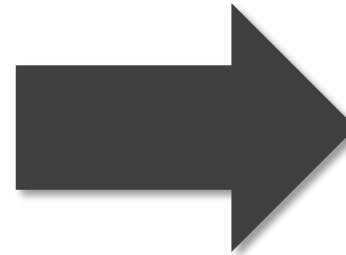
SMPTE THE INTERFACE EXPERT



SDI



IP

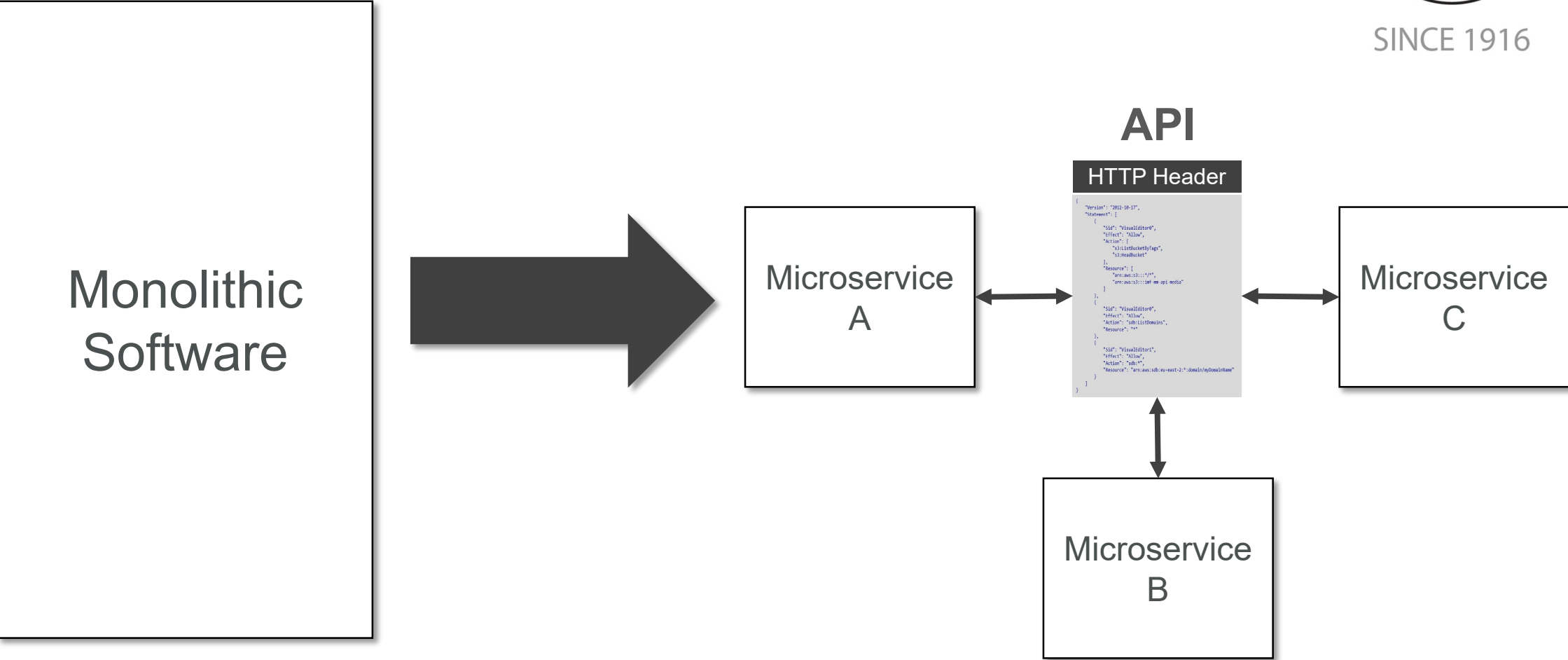


HTTP Header

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": [
        "s3:ListBucketByTags",
        "s3:HeadBucket"
      ],
      "Resource": [
        "arn:aws:s3:::/*",
        "arn:aws:s3:::imf-mm-api-media"
      ]
    },
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": "sdb:ListDomains",
      "Resource": "*"
    },
    {
      "Sid": "VisualEditor1",
      "Effect": "Allow",
      "Action": "sdb:*",
      "Resource": "arn:aws:sdb:eu-east-2:*:domain/myDomainName"
    }
  ]
}
```

API

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SMPTE SOFTWARE FOCUS



Established SMPTE GitHub

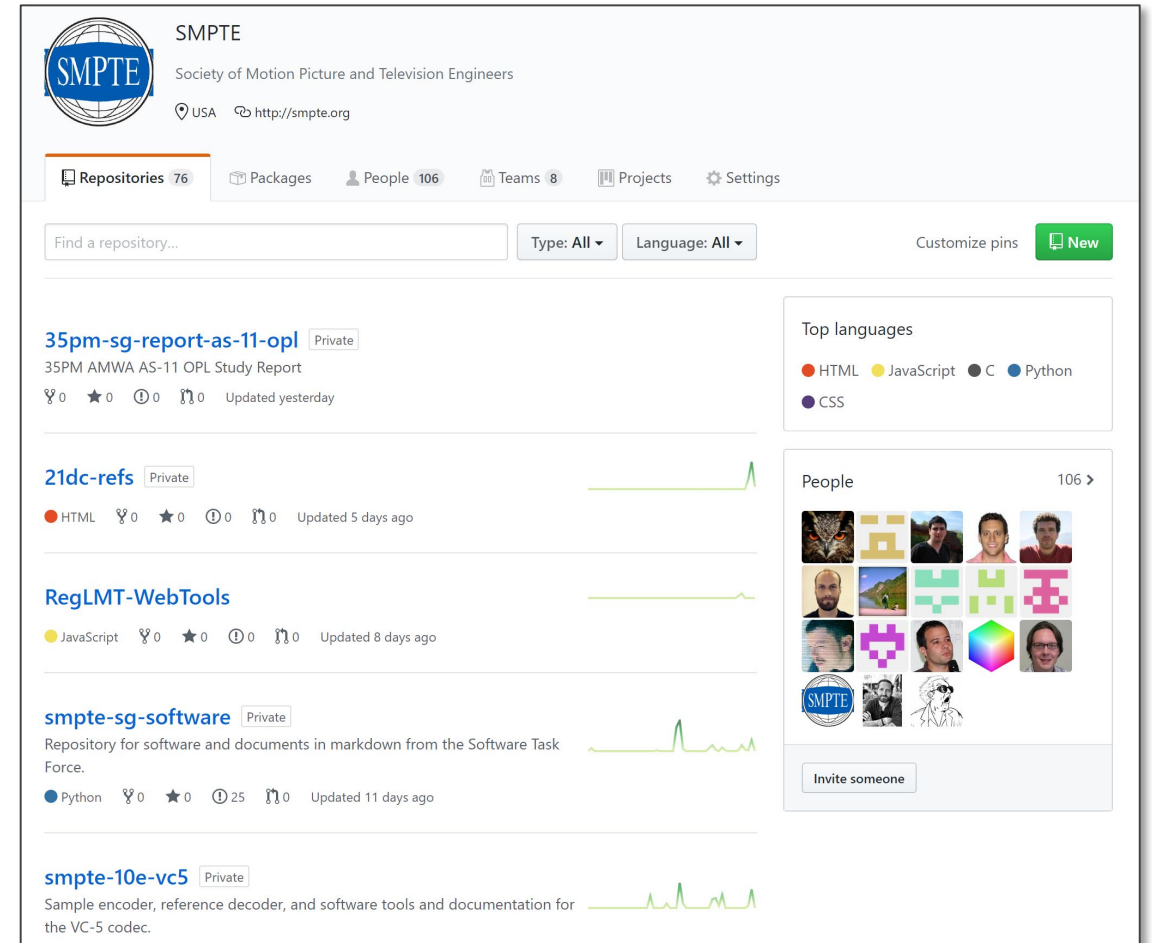
Established rules for SW in SMPTE

Figure out how to engage with
Opensource projects (ASWF)

What is SMPTE's legal framework

How to do CI/CD

How do we handle QA



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Media Services Exchange

Media Microservices and API's

Agile Software Projects

Blockchain and Service Registry

Continue traditional SMPTE projects

SMPTE INDUSTRY COLLABORATION



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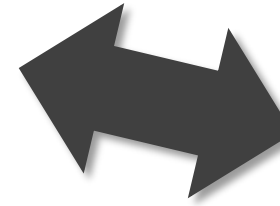
LEADERSHIP IN MEDIA SHARED ECONOMY



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Neutral Media Exchange for
Production and Distribution
(150 M&E suppliers,
distributors and platforms)



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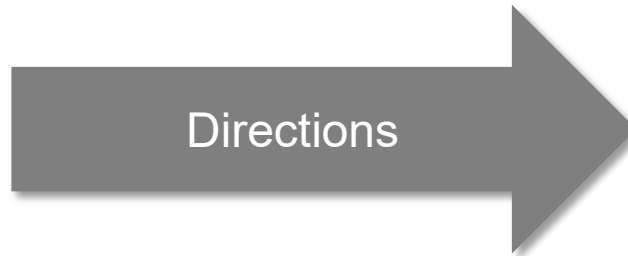
Global ISO Liaison
for Sharing
Economy TC and
Blockchain TC



Media Cloud & Microservices

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MEDIA MICROSERVICES INTEROPERABILITY



2 Summits Conducted

- Los Angeles
- New York


Founded as Discussion Forum

- Regular Online Meetings
- Last Face-to-Face at (ABC)

Currently discussing what to do and how to approach it
Bring results to SMPTE for Standardization in some form

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<http://openservicesalliance.com/>



Don't tell the
cats I am
here?

SMPTE is
not a
mouse?

THE END



Thank You

dir.standards@smpte.org