



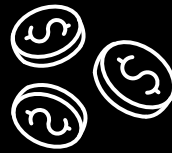
The three pillars of next-gen distribution

Jeremy Morrison

Amdocs/Vubiquity at a Glance



29,000
employees



\$4.5B
FY21 Revenues,
7% YoY¹



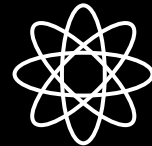
85
countries



~75%
recurring revenue



350+
customers
industry in society's
backbone



\$1B+
investment
in our next-gen
cloud platform



850+
Media companies
relationships



200+
Partner innovation
ecosystem



Media Expertise

Content Licensing
Post Production, Editing, Storage
Localization, Packaging & Distribution



Industry's best technologies

Emmy Award Winning Tech
AI based high throughput workflows
Certified cloud integrator (AWS, Azure, GCP...)



Committed to sustainability

Dow Jones Sustainability index
Top workplace for women in India for 2021²

1. On a pro forma & constant currency basis. Excludes the financial impact of OpenMarket (which was divested on December 31, 2020) from the current fiscal year and comparable fiscal year and assumes exchange rates in the current period were unchanged from the prior period

2. Indian Economic Times

Vubiquity Overview & Capabilities

About Vubiquity

- ▶ **600+ M&E staff**
across 5 locations
- ▶ **~400 unique 'Live' streaming channels**
- ▶ **2000+ onboarded end points**
(Post houses, localization shops, broadcasters, MSOs, MVPDs, OTT & Mobile)
- ▶ **99.99% Availability**
- ▶ **99.9% On Time delivery**
- ▶ **700k+ packages a year**
- ▶ **2M minutes a month distributed**
- ▶ **Secure & Audited partner**

Managed Services



Post & Mastering

Full editorial, color, DFX, & audio services on a global scale



Packaging

Ad hoc content adaptation, transcode & delivery



Localization

Subtitling & Dubbing Project Management and Origination



Linear Video

Video aggregation, transcode and delivery via private networks



Library Mgmt & Fulfillment

Content Curation, Storage, Remastering and Delivery



VU Creative

Full Creative Marketing & Services

Tech Solutions



Asset VU

Content Mgmt solution with On Demand Transcode and Delivery



MetaVU

Metadata aggregation, creation and adaption via a cloud native service



Content Cloud

Curated and hosted MBR content ready for global consumption



OTT Storefront & M1

E2E creation of consumer facing SVOD & AVOD app experiences

The three pillars of next-gen distribution

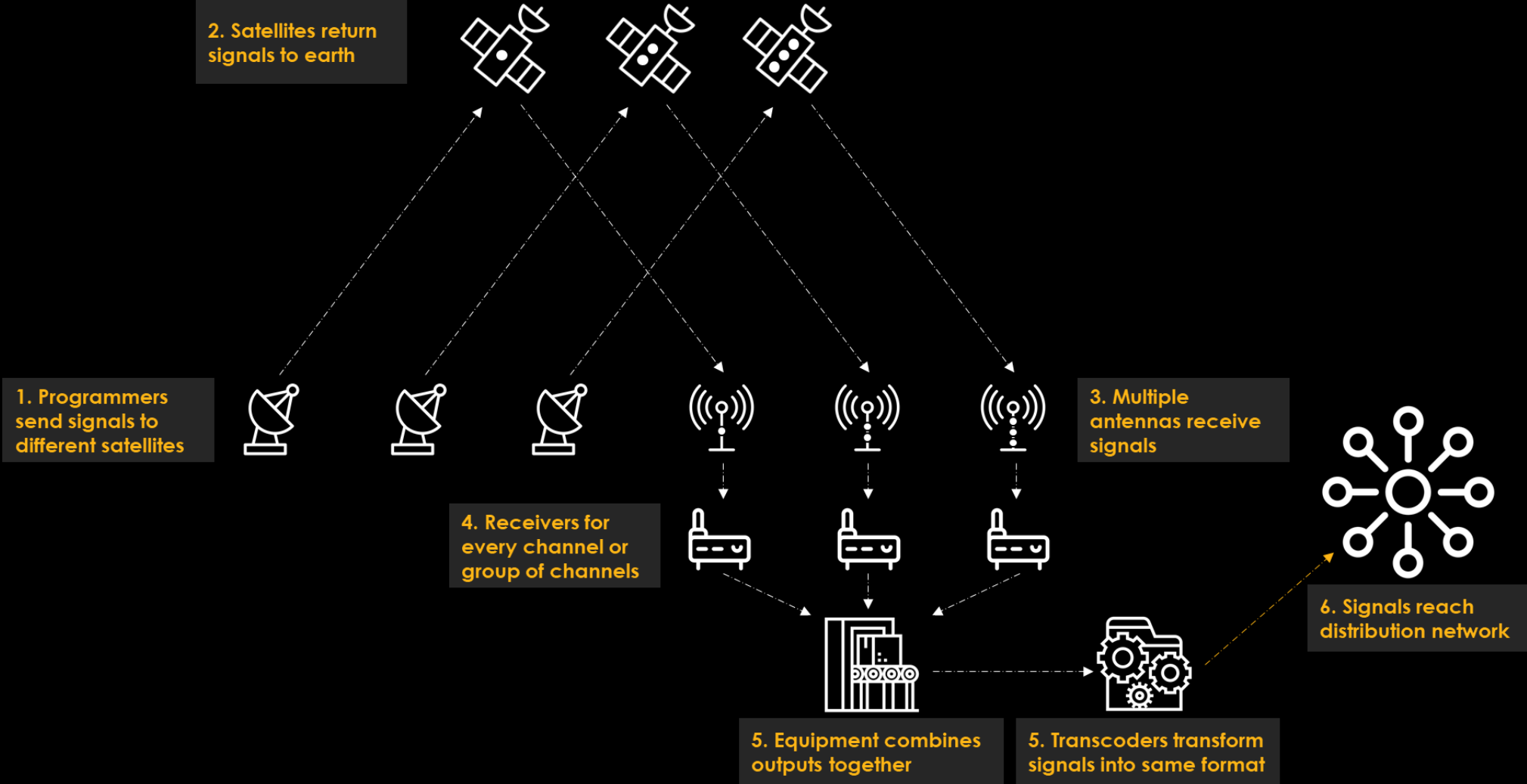
- 1 Channel Aggregation
- 2 Migration to IP Streaming
- 3 OTT Bundling




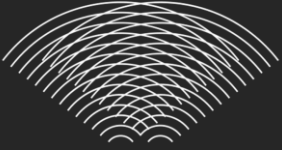

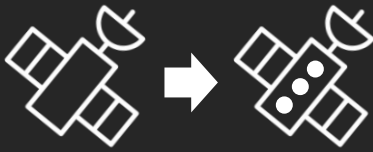


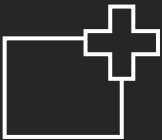







Channel Aggregation



The current headend for most operators



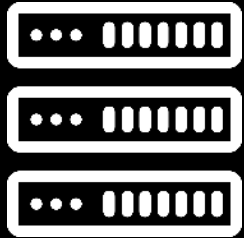
The costs of running a headend add up

| | | | | |
|--|---|--|---|--|
| Antenna damage  | Managing interference  | Satellite failure  | Satellite changes  | Receiver failure  |
| Support and monitoring  | New channel additions  | Terrestrial distribution  | Electricity costs  | Software licensing  |
| Blackout management  | Maintenance costs  | Cooling Costs  | Operational costs  | |

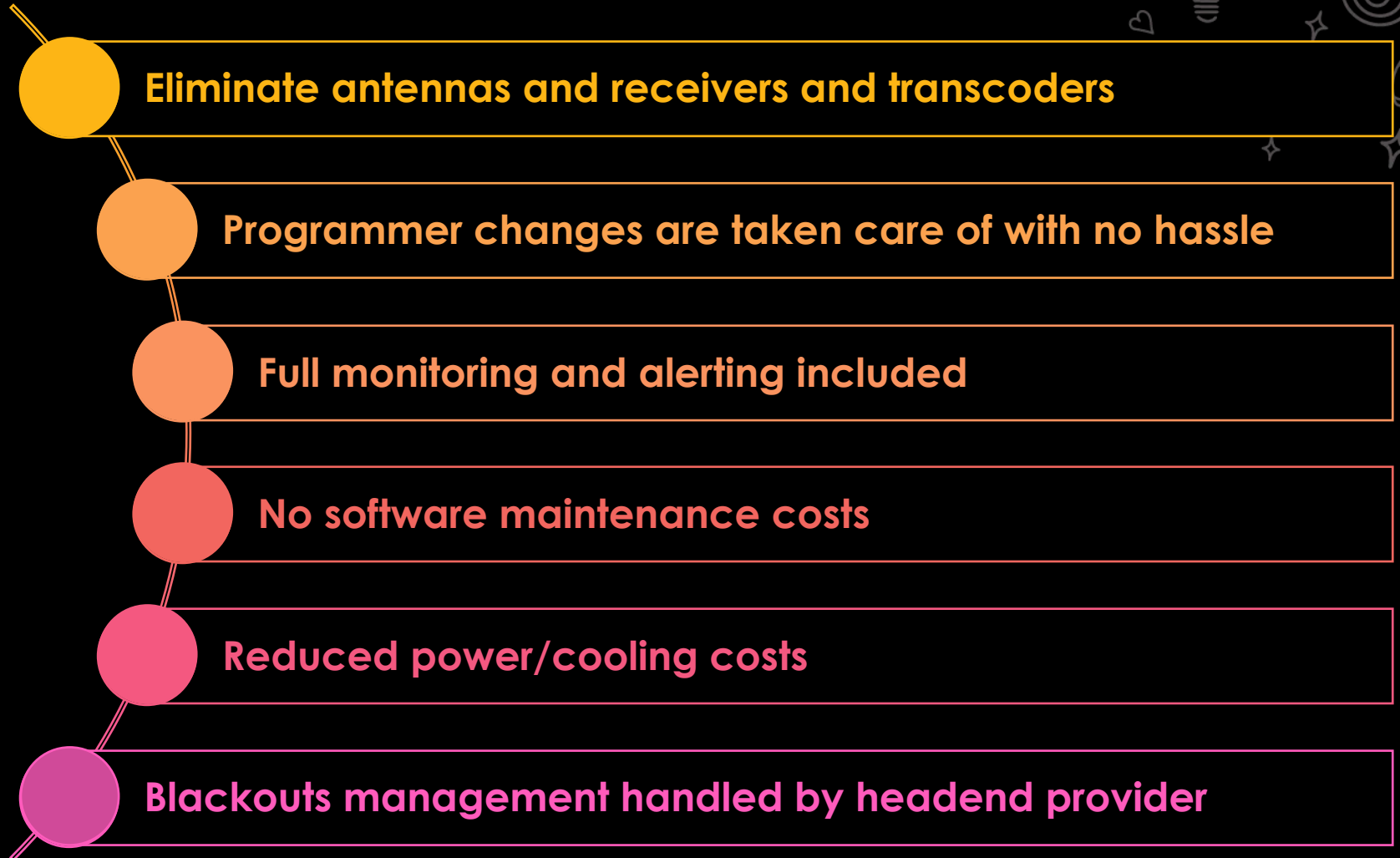
Operators are moving to outsource aggregation



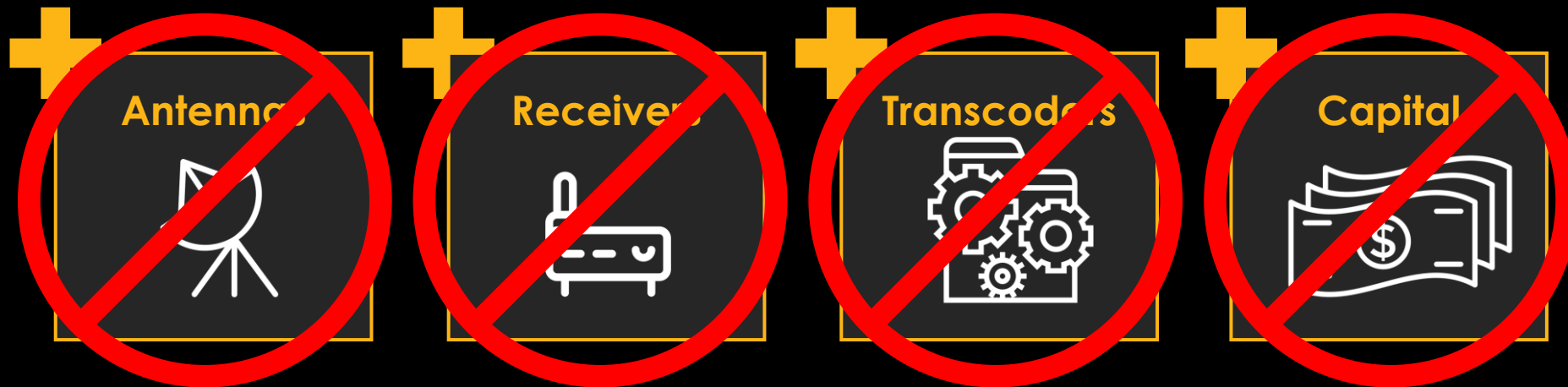
Recap: Why Move to Outsourced Headend



Outsourced Headend Benefits



Added Benefit – Expanded Lineups with Tiers



Migration to IP Streaming



Current CSP Distribution Network

Traditional Cable Network

- Live channels are broadcast on the network
- Live channels allocated valuable bandwidth on the network
- Proprietary STBs are required to view content
- STBs with HDDs support DVR services – storage in STB
- VOD requires standalone VOD architecture with dedicated capacity on the network

CSPs moving to IP Streaming Network

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IP Streaming Network

- ➔ • Live channels are ‘published’ to an origin server - content pulled
- ➔ • Video traffic is now IP traffic – shares capacity with all other IP traffic
- ➔ • Low-cost STBs AND consumer devices supported (Smart TVs, Phones, Tablets)
- ➔ • DVR is serviced from the Origin – not on devices. Lookback also enabled.
- ➔ • VOD content published to origin server – no standalone architecture or capacity required to support VOD

Requirements to Launch IP Streaming

Roadblocks to IP Streaming

- Multi-bitrate transcoding of all live and VOD content
- Streaming Headend including origin server and caching platforms
- Replacement STBs for some subscribers
- Middleware/Applications



Hosted IP Streaming Implementation

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Hosted Streaming

- Headend provider transcodes all channels into MBR format
- Hosted origin at headend provider – only cache server at operator
- Still need to replace many STBs

Hosted IP Streaming Options

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Hosted Streaming

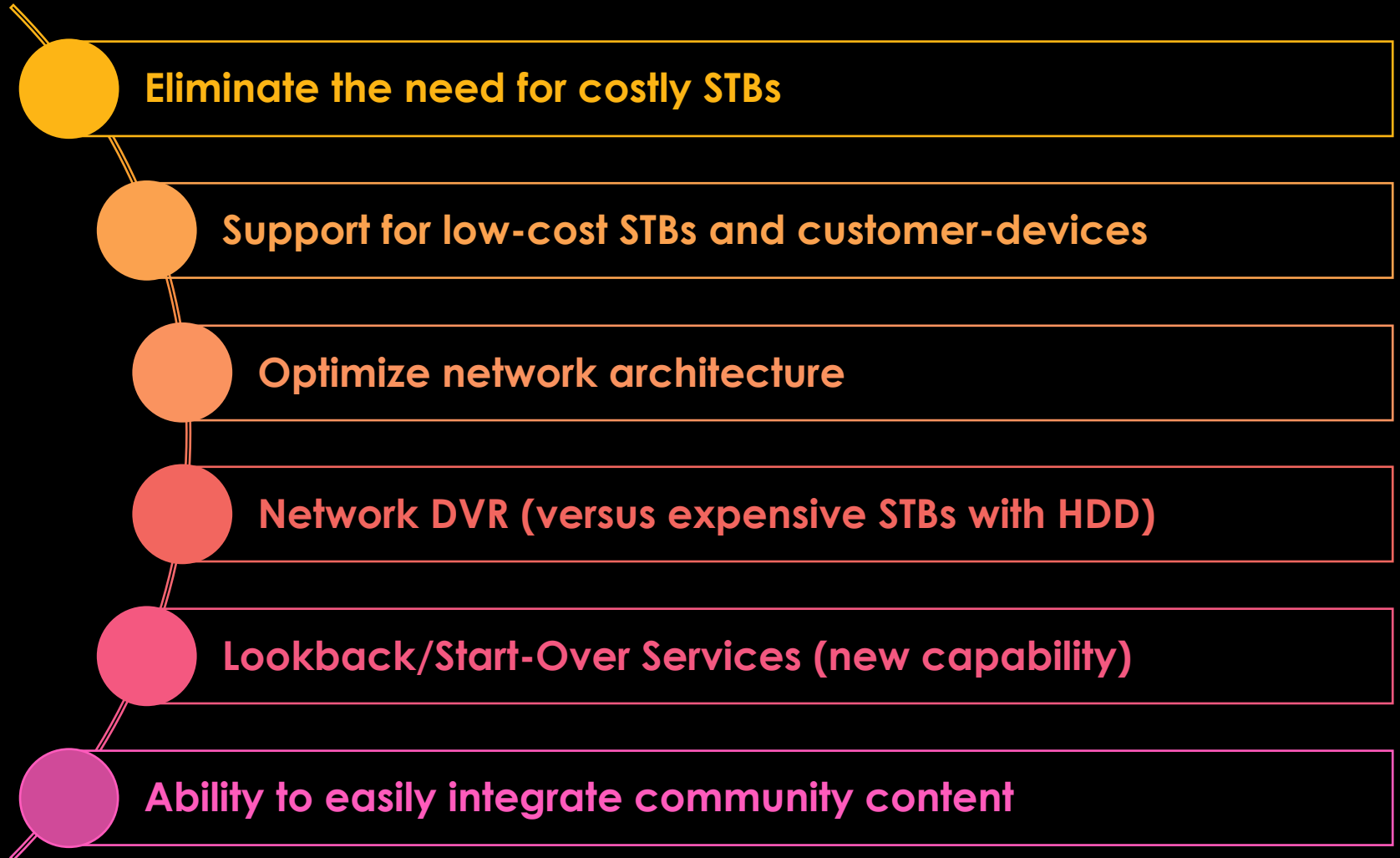
- Headend provider transcodes all channels into MBR format
- Hosted origin at headend provider – only cache server at operator
- Still need to replace some STBs
- Cloud-hosted middleware platforms with low barriers to entry



Recap: Why Move to Linear & VOD Streaming



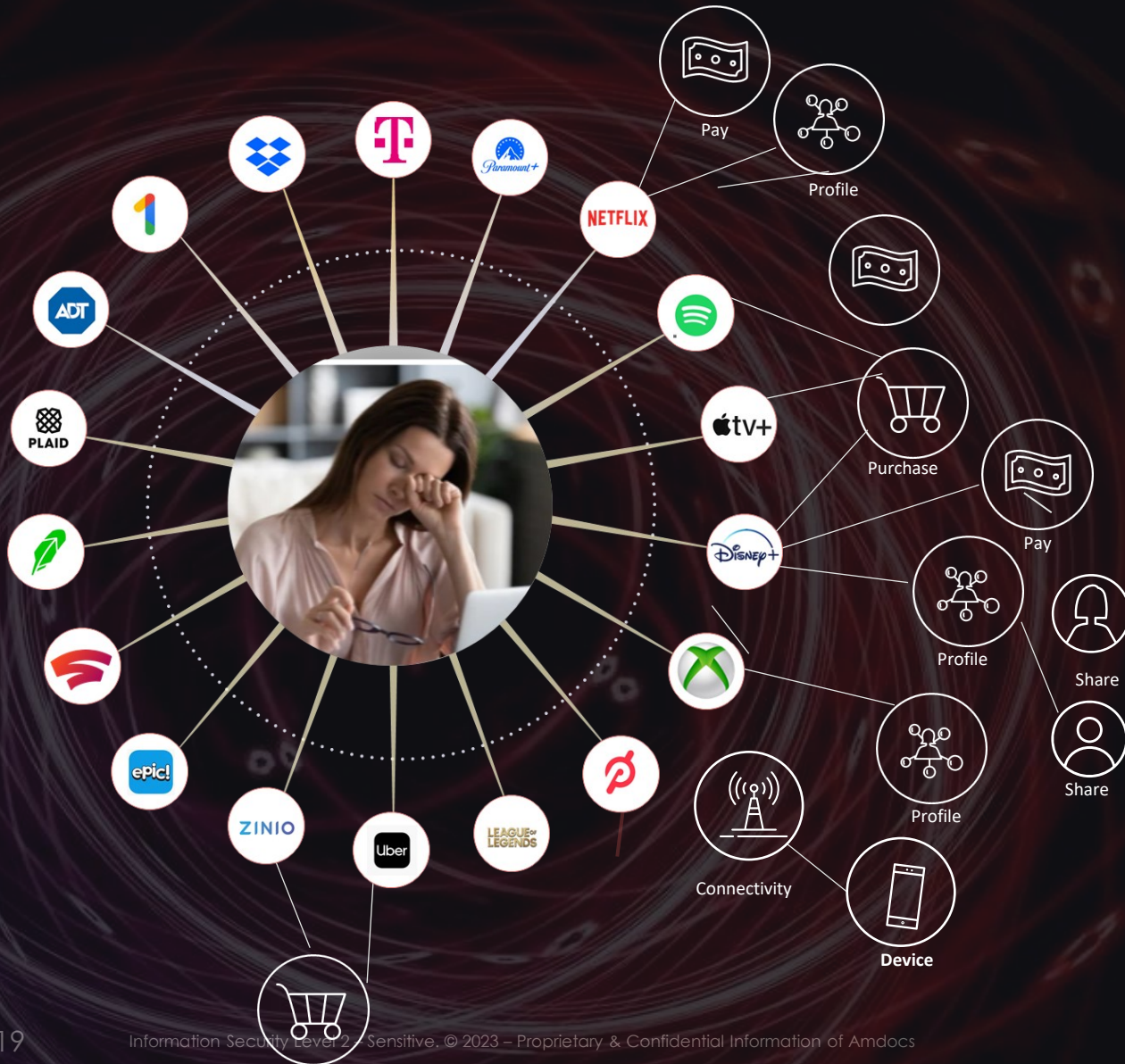
Linear & VOD Streaming Benefits



OTT Bundling

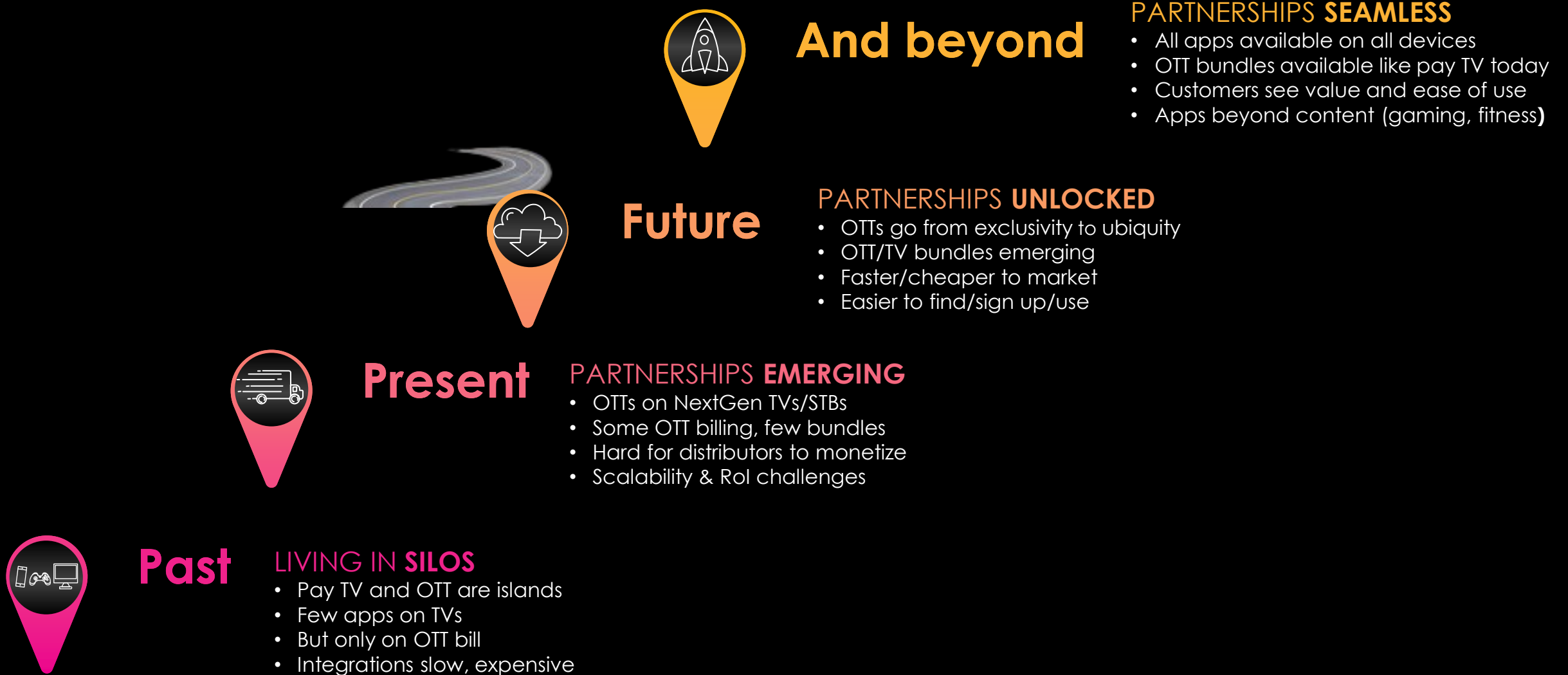


Customer pain points with current offering model



- 1 Could I have one place to buy and manage my apps?
- 2 Why is my wireless bill so high and what are all those prorated charges?
- 3 How can I trust this new app with my credit card?
- 4 How can I keep a tab on my overall spend on subscriptions?
- 5 Can I just buy a quarterly or a weekly subscription package?

The industry is moving towards bundling



Moving to a world of partnerships



Manage your subscriptions to entertainment + 12 months subscription to Netflix free



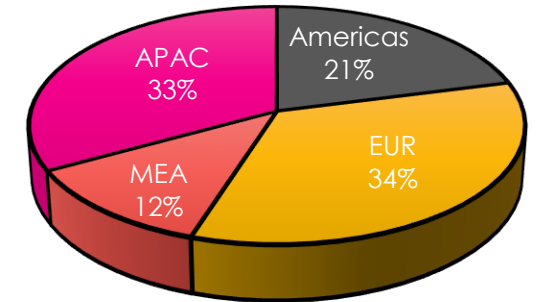
Mobile video content for millennials and partnership with Microsoft for gaming, Netflix for free with Magenta



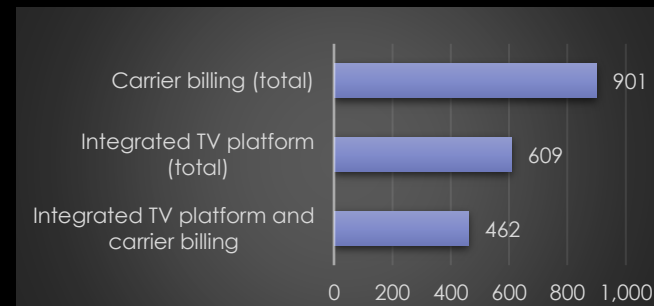
Premium **video, gaming wellness** subscription services offered bundles with discounts



Bundled 4K TV with Sports, Netflix, Disney+ and more

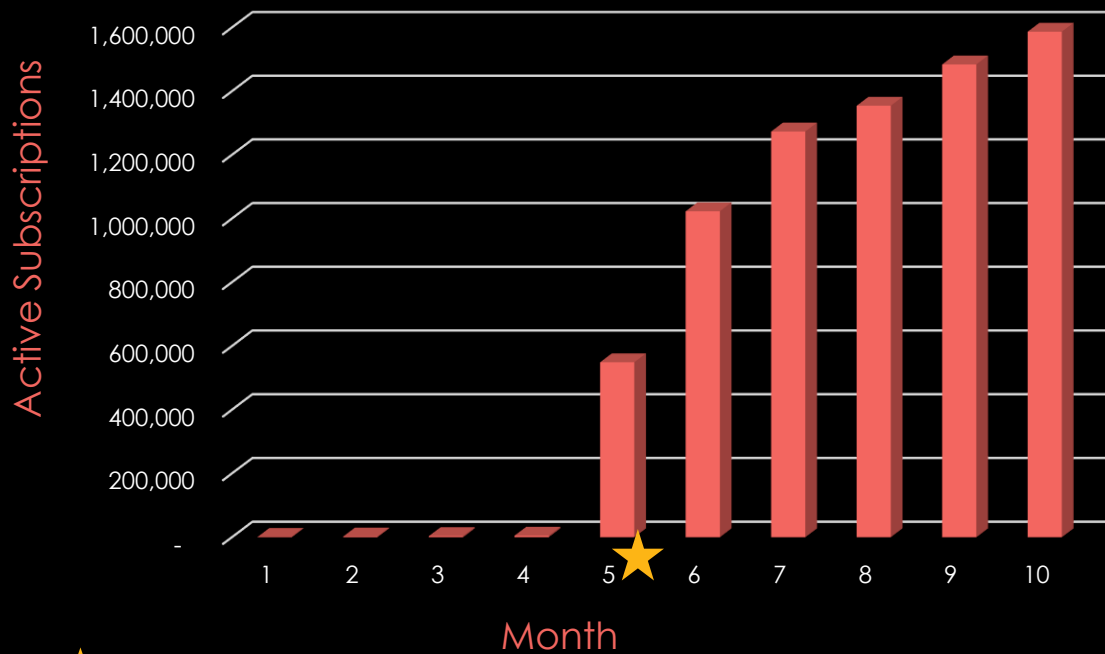


...but majority leaning to Direct Carrier Billing



CSPs who bundle offers can get 15% - 20% penetration vs selling passively get 2-3%

OTT adoption by CSPs' users growing exponentially and driving higher ARPU



★ Bundled OTT launch



Flawless OTT launch: **1.5 M users** – proven scalability



Increase ARPU - Monetize via promotions, freemium & appealing bundles



Increase customer retention and customer acquisition through bundling



Accelerate TTM for new services with launch **less than 2 months**

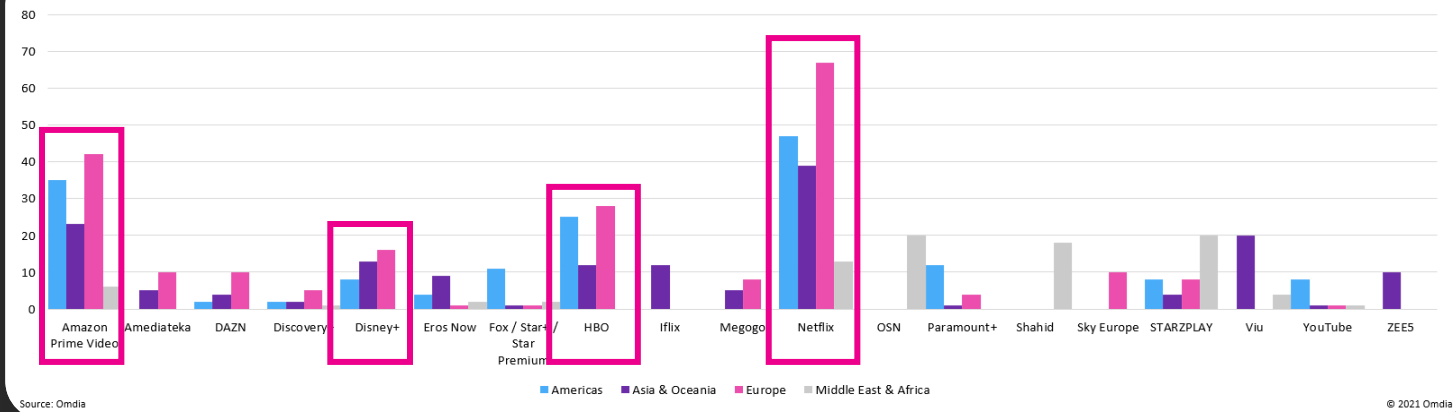
Partnerships hard to deliver beyond #1,2 in each market



Pure-play OTTs trailblazing

- Netflix and Prime leading the way
- HBO and Disney following
- Outside the big 4, most deals ex-NAM

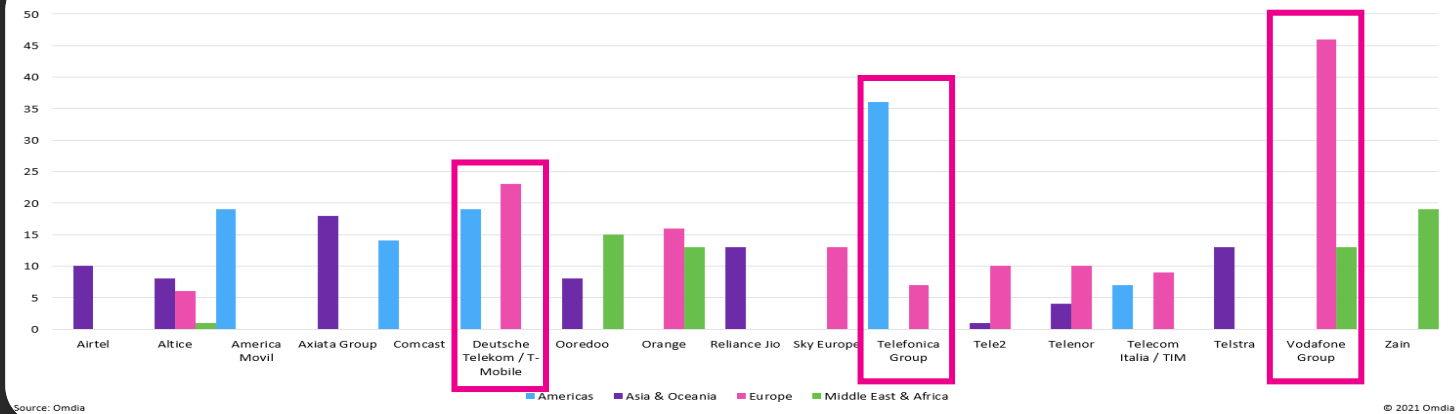
Spread of OTT video bundling deals & service partnerships by geographic region (OTT player view)



Tier 1 CSPs first to market

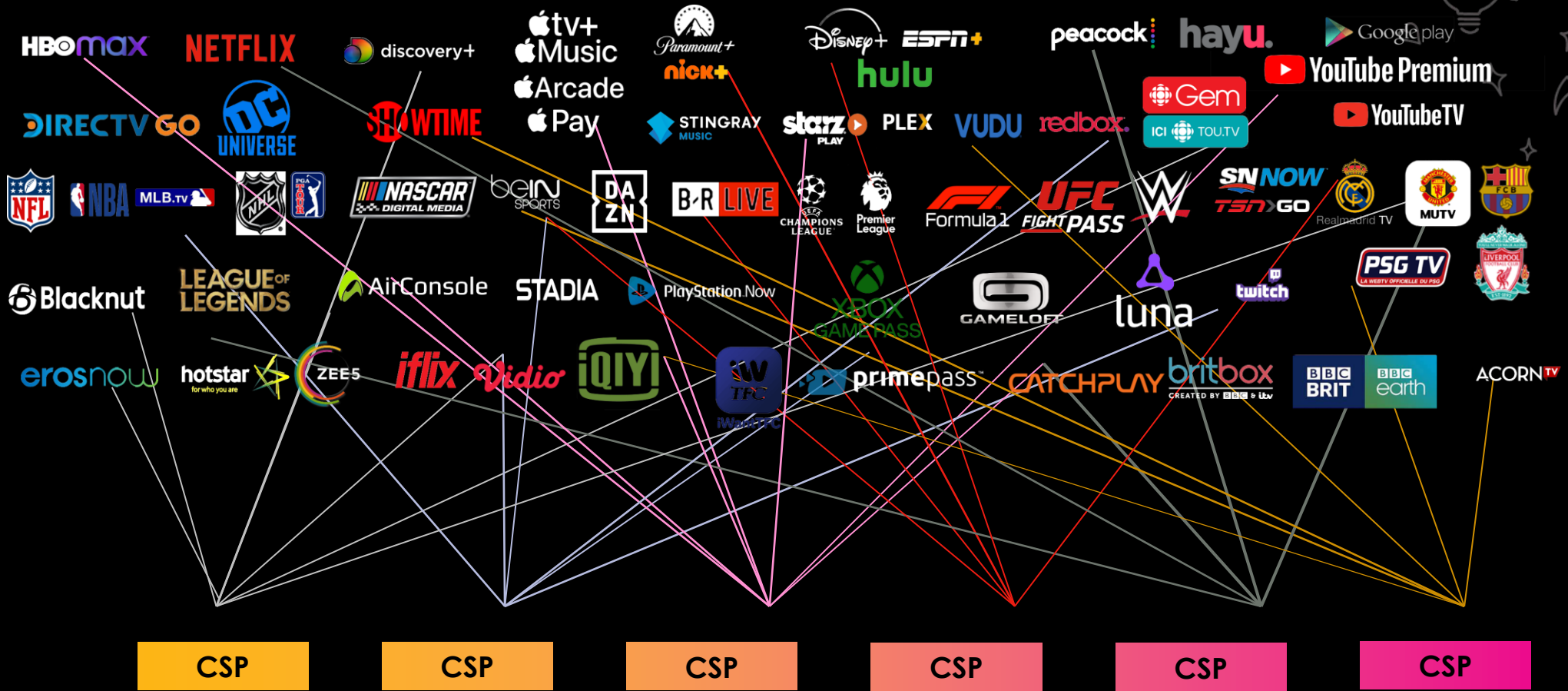
- Global CSPs are dominant - Voda, Comcast/Sky, Tmo/Deutsche, Orange
- Regional tiers 1s following
- Mid & Small tiers slower to launch

Spread of OTT video bundling deals & service partnerships by geographic region (operator view)



CSPs pain points with current model

Challenges around Partner onboarding, integrations, and user journeys



Point-to-point Integrations For Every Off-carrier Partnership

Clunky, Duplicative User Journeys To Onboard & Activate Services

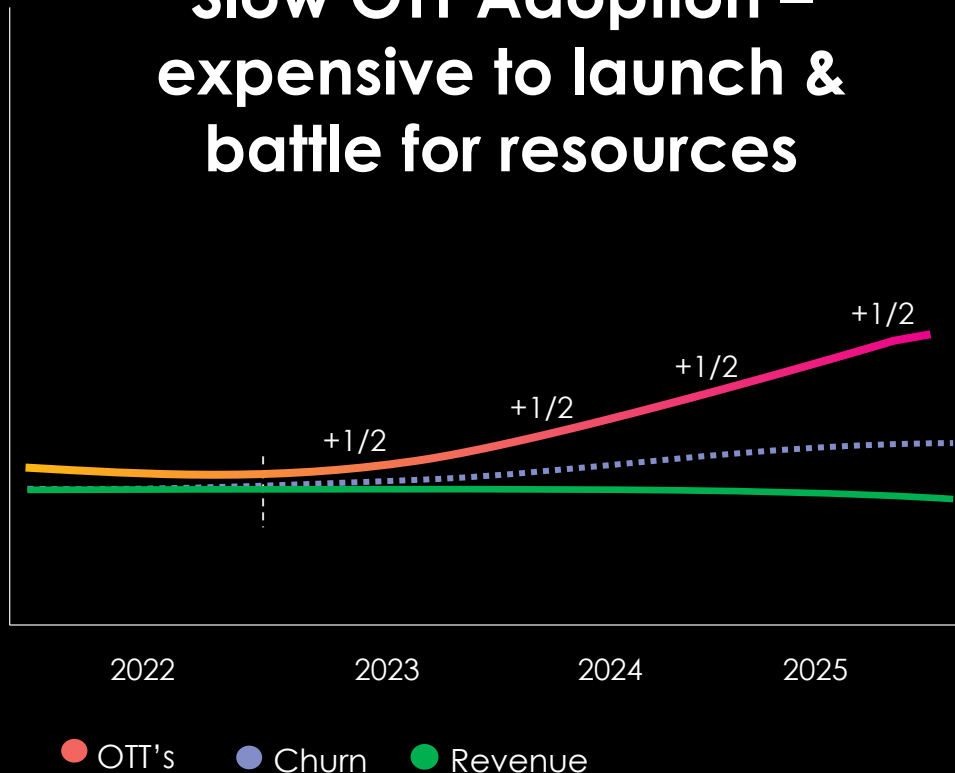
Long Time To Market And Expensive IT Projects

Lack Of Settlement & Reconciliation Tools For Payment






Typical CSP Internal-Built Experience

OTT monetization opportunities starting to be taken... but slowly

Slow OTT Adoption – expensive to launch & battle for resources



Still impact of churn + flatlining revenues

-  **Complex & time-consuming to onboard**
Max 1-2 OTTs a year
-  **\$ barrier to partnerships** - high cost only viable for largest OTTs – no scalability, and brittle
-  **Churn** – still accelerating, though now slower
-  **Revenue** – some monetization... but slow as few OTTs launched and not yet offering bundles
-  **Missed opportunity** – By 2024 OTT dominant, 35.4% households no longer use pay TV*

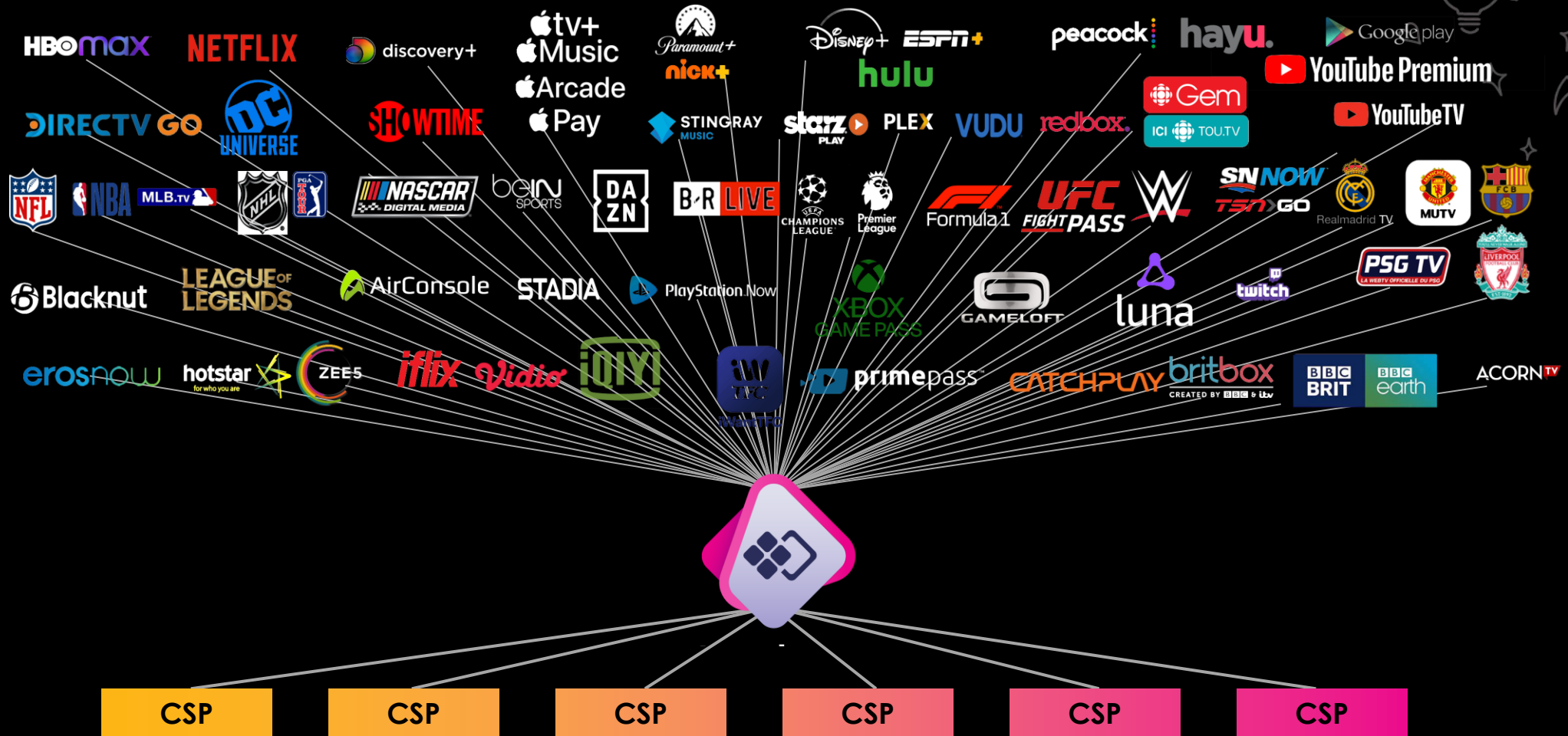
Negative
(though less so)
ARPU

+

Positive
(but lower)
Churn

*eMarketer

Aggregator marketplaces resolve complexity



No need for Point-to-Point integrations

Single User Journey

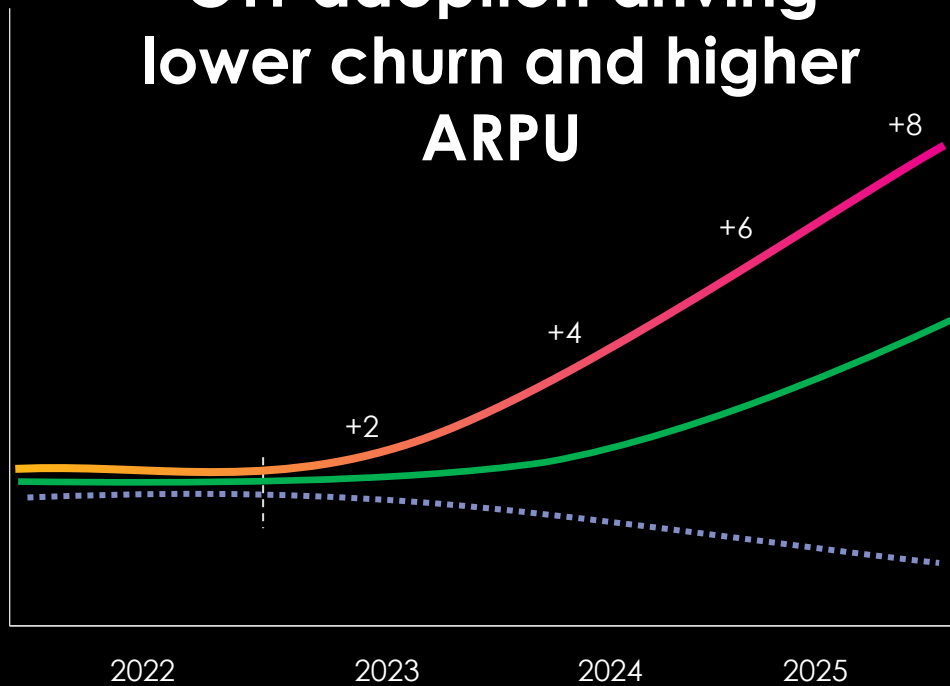
Quick Time to Market

Built in settlement & reconciliation

Achieve more, faster with Aggregator Marketplace

Growing revenues through OTT monetization and reduced churn

OTT adoption driving lower churn and higher ARPU



● OTT's ● Churn ● Revenue

Revenues growing, churn decreasing



Pre-integrated partners – piggy back off other telco's onboarding (quick/cheap to launch)



Partner/internal resource/costs mitigated – clearing the path for commercial agreement



Telco-Managed Subscriptions, supporting bundles, cross product discounts, promotions



Enhanced UX – improves L2R/QoE



Comprehensive OTT line up – increases stickiness

Positive
ARPU

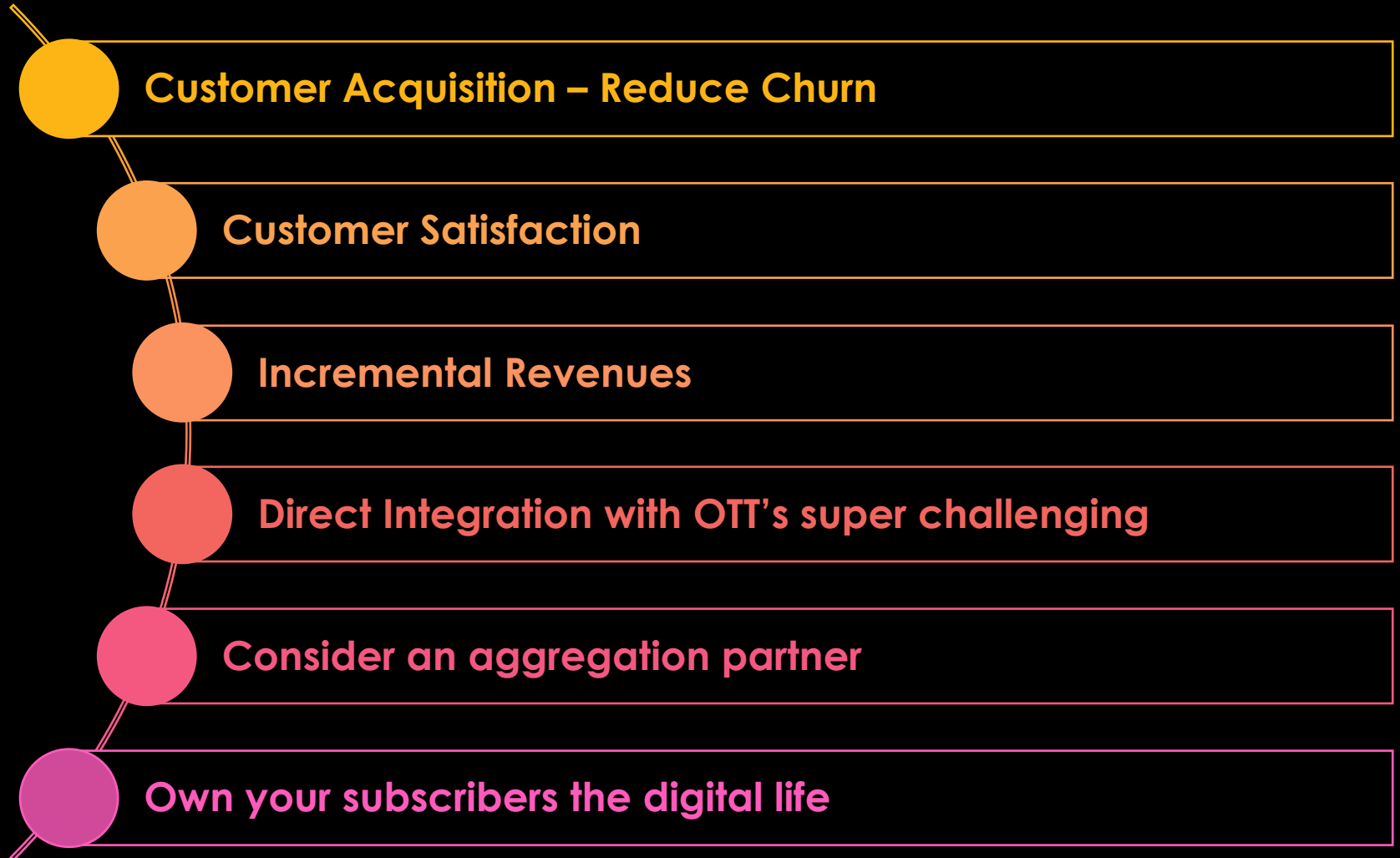
+

Negative
Churn

Recap: Why Bundle OTT Services



OTT Bundling Benefits





Thank You

Amdocs Subscription Marketplace Ecosystem

Onboarded Partners

Media

Onboarding next 6M

Partner engaged

Edutainment / Lifestyle / Work

Gaming

Sports & Wellness