

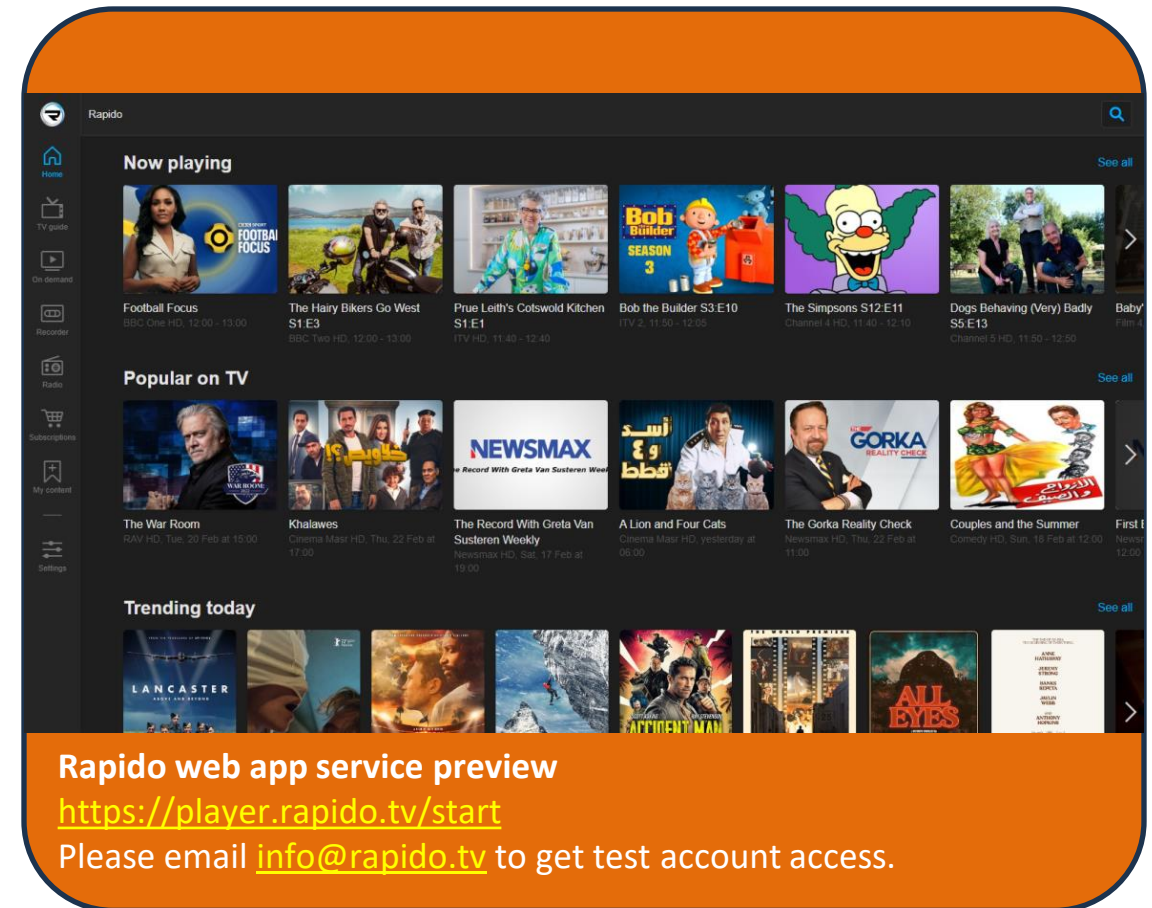
RAPID

A NEW **FREE** INTERNET TV
SERVICE FOR BROADBAND AND
MOBILE **TELCO OPERATORS**

PERCEPTION™
the TVCDN

OVERVIEW

- Rapido is a new internet TV service tailored for telco broadband and mobile data customers seeking high quality affordable TV on their smart phones and connected TVs, including free to view and low cost subscription models.*
- Unrivalled user experience for linear TV with automatic catch-up TV, curated FAST channels, fully interactive EPG, video on demand and cloud PVR built in.
- Designed ground-up for MNO integration with private CDN delivery and API integration to operator OSS/BSS platform for subscriber management, billing and bundling.
- Well proven unified delivery stack technology offering the fastest stream start, channel change and trick-play experience around.
- Agile solution ready for deployment in less than 3 months.



*Rapido offers telco partners two deployment models: Rapido branded B2C app service, allowing telcos to resell it out-of-the-box to their user base; or a co-branded or white-label platform without preloaded content, requiring telcos to secure direct content licensing deals, in which case Rapido team can assist with introductions to content licensors. This dual approach enables telcos to either quickly launch a comprehensive service under the Rapido brand or tailor the platform to their specific branding and content strategy needs.

ADVANCED USER EXPERIENCE



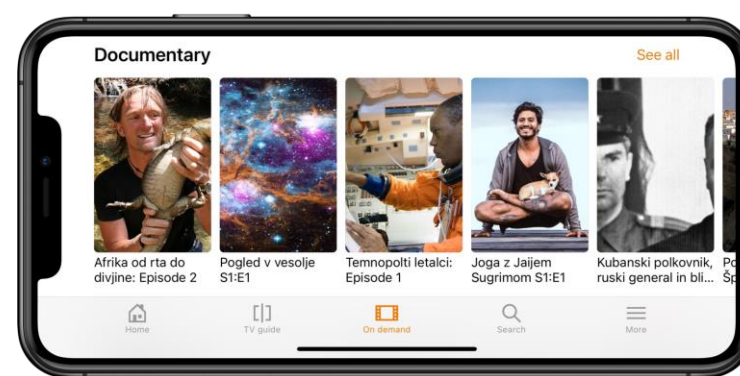
Full 14-day interactive EPG



Rewind live TV with visual scrubbing



Watch live or from any point in the show using timeshift 7 day rewind

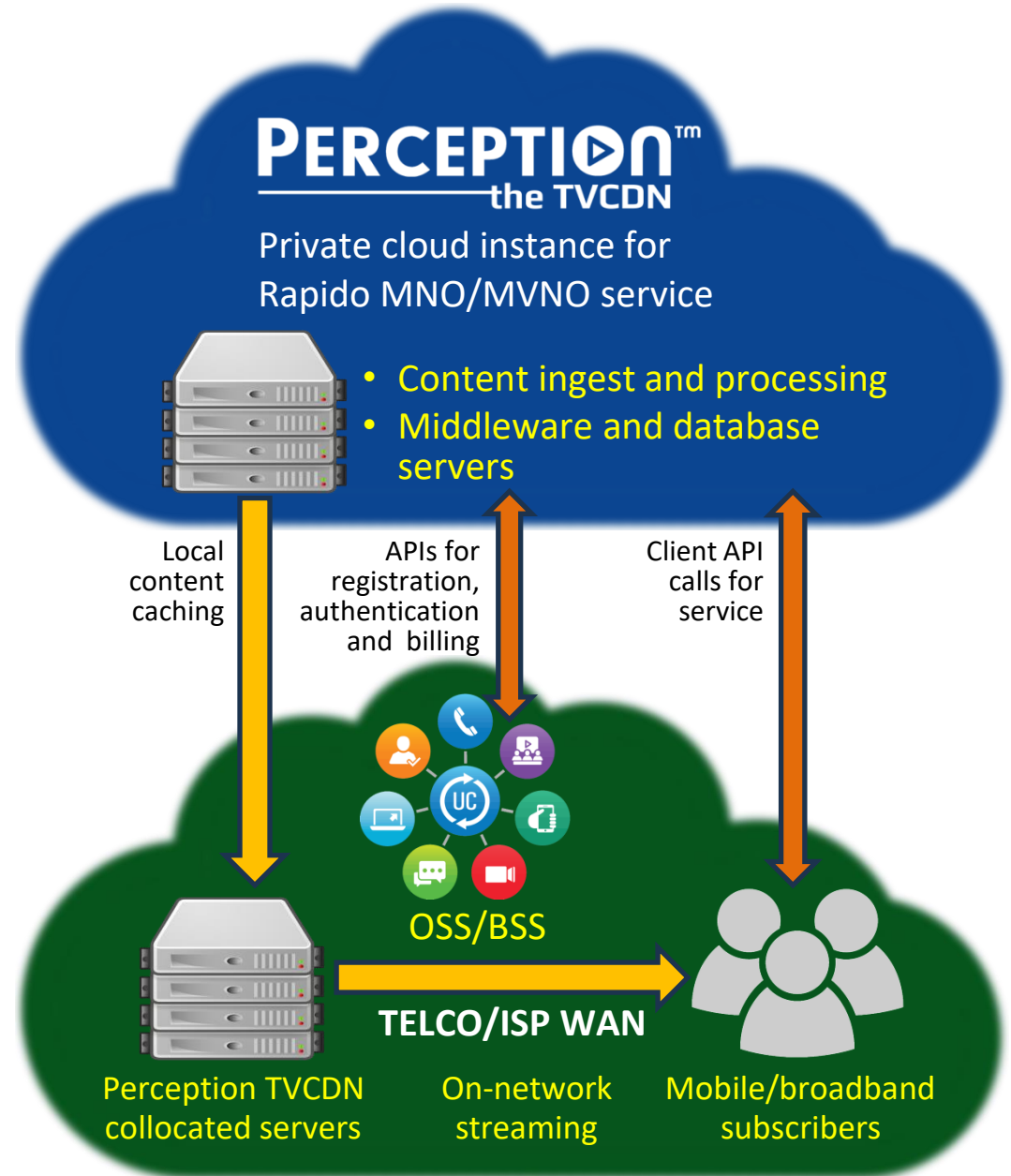


Video on demand and podcast

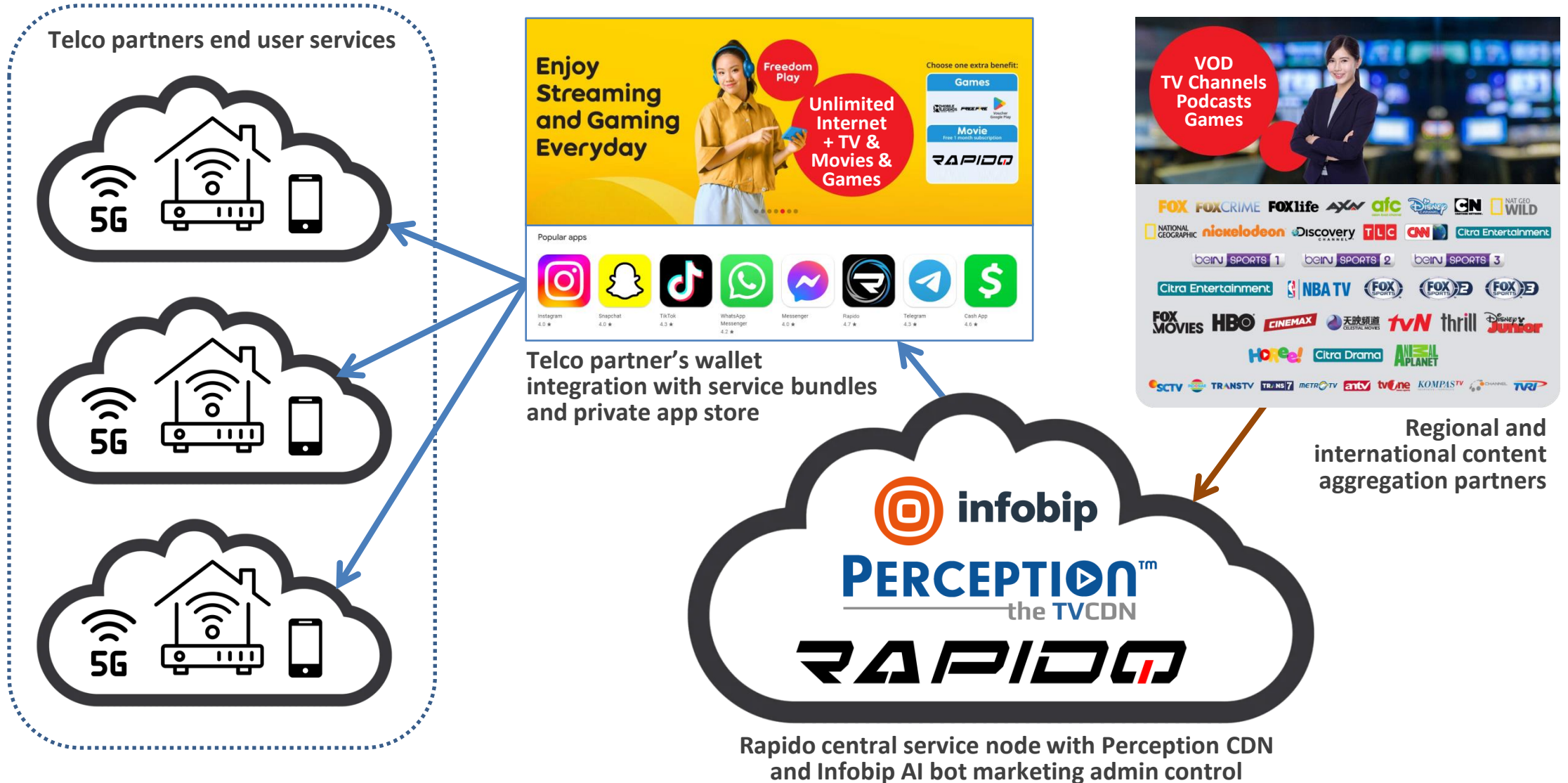
Rapido has 15 native multiscreen apps available for all key mobile and connected smart TV ecosystems: Web browser; Android, iOS, Huawei and Xiaomi mobile with Chromecast support; Fire TV, Apple TV, Samsung TV, LG TV, Android TV, Google TV, Hisense TV and HbbTV (Freeview); plus Linux and Android custom STB with support for most of popular IPTV set-top-box vendor models.

PRIVATE CDN

- Rapido runs on a private cloud instance powered by Perception TVCDN next generation unified tech stack which covers transcoding, middleware, CDN and TV apps for all popular player devices, phones and smart TVs.
- Our CDN servers will be free-issued for installation inside your core network.
- All video streaming to Rapido users happens inside your network.
- Zero international bandwidth costs.
- Highest quality streaming experience for your customers.
- Provides an automated TV platform solution for all local TV channels seeking IP delivery option.



CENTRALISED SERVICE ARCHITECTURE



CONTENT PROPOSITION



PHASE 1

- License 50+ of the existing popular free-to-air linear news and entertainment channels – we turn them automatically into catch-up TV.
- Existing high quality family-orientated VOD content from leading broadcasters – over 2,000 hours of movies and serials – localised and utilized to produce thematic FAST channels.

PHASE 2

- Create partnerships with local content producers and influencers to create new interactive FAST channels for vertical markets.
- Add radio channels, podcast, games and extra VOD libraries and increase TV channels to over 100.
- Launch user P2P content upload feature, VOD, live and FAST to create viral next generation social media excitement.

USER ENGAGEMENT

- Integrating Rapido apps with telco's customer engagement solutions will be critical to driving maximum uptake and usage.
- **Extensive campaigns using Infobip programmable channels (SMS, WhatsApp, email..) to drive download of the app and usage.**
- Full marketing campaign integrated with MNO/MVNO market activity online, social media, agent point of sale kiosks and offline.
- Automated customer engagement platform to drive push notifications to app users and non-users based on defined marketing criteria | promoting new content, new episodes of previously watched shows | interesting highlights etc.
- Future use of AI to drive enhanced content recommendation based on user viewing history and also external factors.



RAPIDO TV PLAYER STICK

- To enhance the service ecosystem and overall user experience, Rapido has also available affordable 4K 16GB HDMI TV Stick with TV remote and private app store.
- This latest generation chipset device, with 4K 10 bit HDR and 2.4G+5G Wi-Fi support, provides higher technical specification than the competing products from Roku and Amazon.
- Rapido TV stick is powered by a customized version of operator tier certified Android TV OS.

We make TV entertainment easy
WATCH + CHAT + PLAY GAMES



HDMI TV Stick & Bluetooth Keyboard Gamepad bundle provides an extra retail revenue stream to telco partners

COMMERCIAL MODELS

AD FUNDED FREE SERVICE

- VAST 4.3 compliant advanced ad serving with ad skip, no-skip and CTA capabilities **on mobile and TV screen**
- Pre-roll, mid-roll and post-roll VoD targeted ad insertion
- Live TV ad replacement with support for SCTE-35 triggers for dynamic targeted ad serving
- User friendly ad break countdown screen counter
- Header-binder solution enabling us to expose inventory to multiple global ad exchange platforms to maximise sell through and CPM

SUBSCRIPTION

- In-built payment gateway for subscription and pay-per view
- Easy API integration to accommodate flexible operator billing
- Micro payment models like day or week viewing passes
- Free TV bundling with data
- Reduced ads low cost subscription and premium no ads subscription bundles
- Additional tech bundles like PVR storage and extra concurrent streams

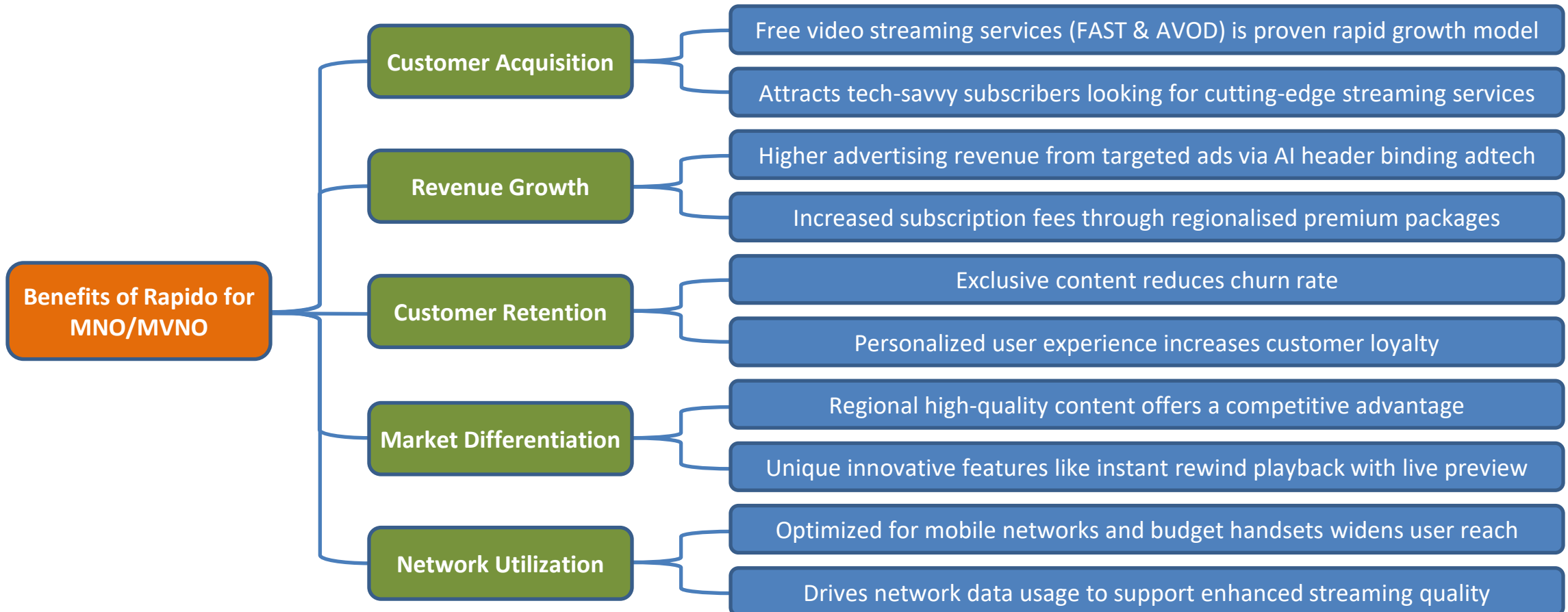
CTV AD GROWTH OPPORTUNITY

- Most of telco operators are behind the curve in adoption of advertising sales.
- Industry stats show that ad revenues, especially in developing markets, can easily outperform the subscription sales.
- The Connected TV advertising rates are now higher than linear television impressions. The DVB TV median Cost-Per-Thousand (CPM) for broadcast/cable linear television ads is \$10 to \$15 CPM. The CPM for YouTube videos is \$20 to \$25. The CPM for OTT CTV ads is \$25 to \$65 (in developing countries \$8 to \$30).
- CTV CPM rates are increasing year on year while DVB linear TV rates are pro rata decreasing.
- The justification for the much higher CTV ad cost is the value of the targeting that produces better cost performance, which results in a less-expensive Cost-Per-Completed-View (CPCV). Consumer engagement is up to 95% of the CTV ads served.

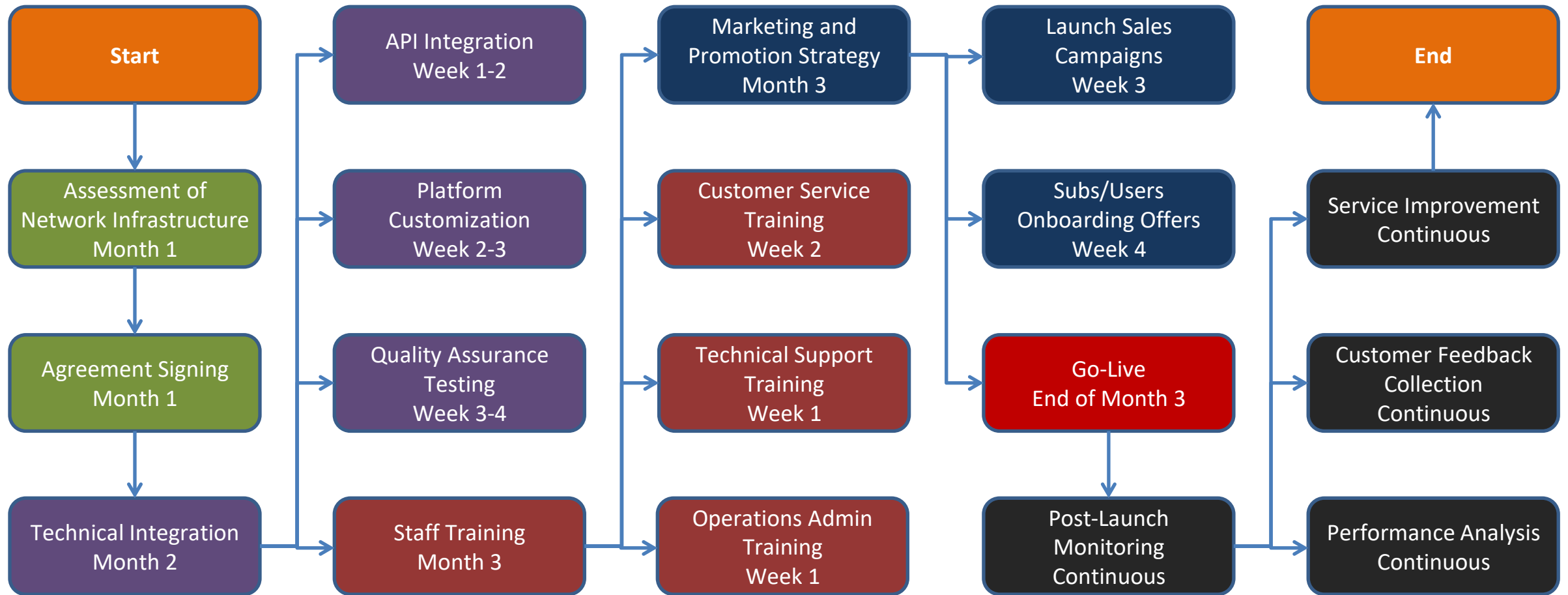


MNO/MVNO BENEFITS

Core benefit for telco partner is that he can add to his product portfolio an **extra TV service totally capex free**, and sweat out its existing internet user base to which he will promote this new service, utilising his existing marketing channels. Therefore the only internal extra cost would be allocation of 2x 10~100GE internet connectivity ports and rack space in one of his data centres.



AGILE IMPLEMENTATION



BUSINESS POTENTIAL



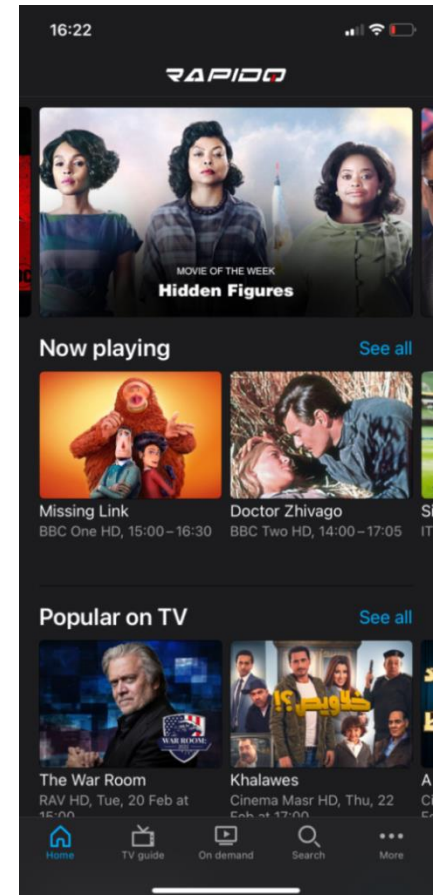
- Financial projection on the next page is an illustrative example based on X number of telco B2C services which in aggregate deliver 10M total users of which we estimate that 6.5M are internet data users, which are a direct ready target user base (TAM – Total Addressable Market).
- Given free and popular local content in a well-designed and well-promoted app, we expect widespread adoption of Rapido within the TAM, which should trigger internet user base to grow around 7% per annum.
- The model assumes growth to 10% TAM penetration at peak with 80% users on free ad-funded services and 20% on ad-free and premium subscription options.
- Ad funded revenue assumptions: 16 hours a month average viewing per user, 20 ad spots per hour, 75% sell through, average net CPM \$8.25 (combined mobile and TV screen CPM \$15 minus 45% combined adtech cost).
- Subscription revenue assumptions: average recurring revenue per user of \$4.50 per month.
- Cost of sale being combined adtech fees plus CDN cost of delivery – marketing cost are ignored because assumption is that telco will utilise its existing SG&A channels.
- Cost of content is averaging to 50% from net revenue share to content partners.
- Platform total earnings are shared on case per case basis between Rapido & Telco; typical split being 50% each.

REVENUE FORECAST

For the simplicity of this example presentation, which is based on the proven market metrics, it is assumed that telco total subs, in evolved high-compete market, might flatline over the 3 year forecast period; in reality advanced video service always triggers overall user growth.

All numbers in '000s	Year 1	Year 2	Year 3
Telco total customer base (0% annual growth)	10,000	10,000	10,000
Mobile/broadband internet data users (7% annual growth)	6,500	6,955	7,442
Rapido user penetration	2%	5%	10%
Total Rapido users	130	348	744
Free FAST/AVOD users (80%)	104	278	595
Advertising revenue (annualized; @net CPM \$8.25)	\$2,471	\$6,610	\$14,145
Subscription users (20%)	26	70	149
Subscription revenue (annualized; @median price \$4.50 pm)	\$1,404	\$3,756	\$8,037
Total gross revenue	\$3,875	\$10,366	\$22,183
Tech cost of sale (10% - Ingest/CMS/DRM/CDN/Apps)*	\$388	\$1,037	\$2,218
Total net revenues	\$3,488	\$9,329	\$19,964
Content partner revenue share (50% from net revs)	\$1,744	\$4,665	\$9,982
Rapido & Telco combined total earnings	\$1,744	\$4,665	\$9,982

*Includes live TV SRT feeds, EPG, transcoding, VOD ingest, CDN transit and multiscreen Apps support/maintenance costs.



GLOSSARY

AVOD	Free to view ad supported video on demand streaming (e.g. YouTube, Tubi...)	OTT	Over the top (delivery of video across public internet rather than private managed networks)
Catch-up-TV	Facility to brows back in time and play live TV content which was already broadcast	OVP	Online video platform (e.g. Perception TVCDN)
CDN	Content Distribution Network (e.g. Akamai, Amazon CloudFront, Perception TVCDN...)	PaaS	Platform as a service (e.g. managed cloud service)
DAU	Daily Active Users	POP	Point of presence (A collection of servers connected to the core of the internet)
DLT	Distributed Ledger Technology (aka Blockchain)	PVOD	Premium PPV VOD - e.g. Amazon Prime latest cinema movie releases (streaming & download)
DTH	Direct to home TV via satellite	SaaS	Software as a service (e.g. on-premise installed software platform)
EPG	Electronic Programing Guide	SVOD	Subscription based video on demand (e.g. Netflix)
FAST	Free to view ad supported linear TV channel streaming (e.g. Pluto, Freevee...)	TVCDN	CDN optimized for low latency delivery of VOD and live TV with EPG and live rewind catch-up- TV (e.g. Perception TVCDN)
IPG	Internet Payment Gateway	TVOD	Transactional pay per view (PPV) video on demand
IPTV	Internet Protocol TV (delivery of video and TV across IP networks, e.g. telco, ISP, hotel, university campus...)	VASP	Virtual Asset Service Provider crypto operator license
MAU	Monthly Active Users	VMNO	Virtual Mobile Network Operator
MNO	Mobile Network Operator	WAN	Wide area network (telco or ISP walled garden private network)
MVPD	Multichannel Video Program Aggregator (e.g. Sky, DirecTV...)		