Will RDK save the operator business?

A must read for anyone in the content delivery



by Jill Mulder – EKT October 2021

In this article I will share my view on where the set-top box middleware is going In particular, why I believe that RDK is a worthwhile consideration for every operator.

NOTE: This article is the personal opinion of the author and does not necessarily reflect the opinion of the company.



RDK is a fully modular, portable, and customizable open-source software solution that standardizes core functions used in video, broadband, and IoT devices.

RDK is the software that helps run video, broadband, and IoT devices more efficiently by standardizing the software stacks that run on most TV set-top boxes, internet gateways, and IoT devices in the home.

RDK-V is the Video component of RDK.

RDK-V IP provides a common method to manage video playback functions. The IP client device interface that receives video content from an in-home media gateway device or from an external media server. RDK accelerates the deployment of next-gen video products and services and simplifies the customization of the application and user interface.

RDK is at the core of delivering a complete solution that integrates and connects global platforms, operators, solution partners and hardware providers.

Pre-integrates with global platforms	Products	RDK global platform
Provides scale & direction	Operators	Operators
Provides customization & integration	Solutions partners	Services & solutions
Provides pre-integrated hardware	Hardware partners	Hardware
Provides common software platform	<u>RDK</u>	

The market will be split between Android, RDK and possibly a 3rd OS.

Faultline (Set Top Box, Smart TV, and Connected TV Device Operating System Forecast – 2020-2026) recently predicted that the market for Set-tops will slowly decline due to theincrease of Smart TVs and connected devices. These OTT solutions will be served by direct OTT providers and aggregators using OTT as their delivery vehicle of content.

For the Set Top OS the market will be split between two OS types. and a number of other key market players. The core players are Android (by Google), and RDK (open source). Harmony (by Huawei) is suggested to be the 3rd OS. We actually believe that Roku and AWS are also possible future contenders. Linux and AOSP, currently having the lion share of the OS market, is about to lose its market share.

androidtv ERDK HarmonyOs Roku

Because they can turn their customers into a Super Aggregator

Superideo HBO Aggregator

Top of the list of universal syndicators are Netflix, Amazon and Disney+ which <u>Digital TV Research</u> estimates will comprise 67% of global SVOD subs, outside of China, by 2025.

There are also device-led content aggregators like Apple and advertising supported aggregators like Roku. Into the mix come more studio-led SVODs like HBO+ and new ViacomCBS streamer due in 2021 and labelled a 'house of brands' and a 'super service' by CEO Bob Bakish.

"SVODs recognise the benefit of collaboration with pay-tv providers," underlines Bisson. "The importance is clear for studio-led direct to consumer launches."

"The last decade was the decade of the app but video services have grown to such an extent that consumer choice and confusion has grown," agrees Gideon Gilboa, EVP product, solutions & marketing at Kaltura. "The phenomenon of super aggregators will be to re-engineer those different OTT services into new types of TV bundles." PAY-TV OPERATORS LOOK TO AGGREGATION TO SOLVE THE SVOD THREAT – IBC.org

It is expected that all OS solutions will be able to play the role of Super aggregator. AndroidTV already allows for app launches of the top tier OTT services whilst Harmony might play a more prevalent role in the Asian market with local aggregator solutions. Roku already delivers the aggregator role for their own device and TV.

RDK is well on its way to have a full range App offer "out of the box". With the introduction of the Video Accelerator program, selected chipsets and STB manufacturers offer access to premium apps without re-certification.

Then why RDK?

The questions every operator needs to ask themselves is, what value can I give my customers, how can I differentiate myself, how do I retain my customers and how can I be profitable.

The answers are around BIG DATA and DIRECT CUSTOMER CONTACT



Value to customer

	RDK	Android
Super aggregator role for operator	GOOD	GREAT
Range of working TV APPS	GOOD*	GREAT
Speed to market with new devices	GREAT	GOOD

*In collaboration with Metrological or another app store

AndroidTV (being it Operator Tier or not) delivers great value. This is why it has gained much in popularity over the last few years.

RDK has played a catch-up role, but with the purchase of Metrological by Comcast, the further development of the Lightning app store, the growing number of (Tier I) operators and the pre-certification of major OTT apps on the Thunder layer make RDK a strong contender in the Value proposition.

Differentiation

	RDK	Android
Freedom to design the User Experience	GREAT	LIMITED
Data to get to know your customer	Yours 100%	Shared with google
Openness of platform	Free to choose and use any service	GMS allows to reject services

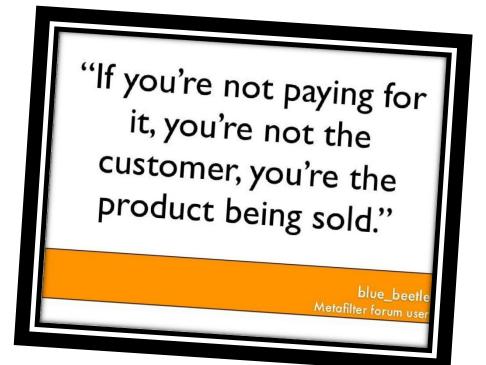
Customer Retention

Customer retention means delivering over and above the customer expectation. And more than they perceive the service to cost, plus with a service level that exceeds their expectation.

Today, that means data.

The nature of Android receiving a free OS whereby you share the revenue and data.

	RDK	Android
Customer data	100% operator	Shared
In-home delivery	Operator controlled STB	STB and SmartTV
Ability to guarantee QoS	GREAT	??
Access to pirated and competitive content	FULL CONTROL	NO CONTROL
Planned use of products	10 yrs or more	Agreement is for 3yrs



Direct customer contact

The question could be asked, who will have access to my customer in addition to me. And who is building a relation why my customer, using my network and customer relationship to their benefit.

	RDK	Android
Customer data	100% operator	Shared
Potential to engage with customer directly	Not in DNA	Possible
Personal Advertising	Yes, with free to choose partner	Yes, with google
Voice assistant	Yes, with free to choose partner	Yes, with google

Profitability

To be profitable, you need to earn more than you spend within a pre-set timeframe. As such we need to look at:

- Cost of goods / cost of service
- Ability to earn
- Ability to deploy quickly

	RDK	Android
Cost of goods (STB)	Good	Good - Great
Cost for upgrades	Choice of operator	Mandatory upgrades
Cost for OS	Free	Free
Ability to monetize ads	Good	Great
Time to deploy*	Fast	Fast

* Both parties claim a fast time to market with programs like RDK Video Accelerator or Firestorm. If a more tailored solution is required, the time to market can vary a lot (up to 2 years).



The decision to choose for Android or RDK is not only based on what you get from the platforms, but also one of principles.

Will you support a platform that potentially will compete with you or one that is there to support you?

The fact is, good middleware is expensive to develop and maintain. With the free middleware and DRM from Android, Google disrupted the market with a shakeout of several traditional players. Arguably something the business may have needed.

However, nothing is 'free' with you sharing access to your customers and their data. In line with Google mission: "To organize the world's information and make it universally accessible and useful" they will have a direct relationship with your customers with targeted advertisement, content, and data collection.

You have to ask yourself: "Is my business on the roadmap of Google?"

Every operator has a choice, do I get free rewards and in the meantime, subsidize Google whilst destroying creativity and diversity in the industry. Or do I embrace creativity and diversity and choose an open-source middleware such as RDK.

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Initiatives like AndroidTV Hailstorm make it easier to get premium apps certified like Netflix on your device, yet eachoperator will need to have an agreement.

RDK, with its Video Accelerator program, offers the same easy access to the premium apps. With several app store option (like Metrological), many more apps can be deployed.

Time to choose?

Your choice as an operator is not easy.. Android offers a great package with features consumers like all integrated and even add-on services that are just plug-in. RDK is catching up, it offers all the key components but does not (yet) offer the full access to all the premium apps and does not have the consumer awareness.

We as EKT have chosen to back the RDK initiative. We strongly believe that an industry driven initiative can guard our business from being taken over by Silicon Valley giants. RDK has the tools and means, driven by some of the worlds' biggest operators, to create a platform that benefits the operators first and foremost. With a feature set that will enable true super aggregator functionality and full data driven ad support, it is soon (if not already) the best choice.

As EKT, we can play a (small) role in providing a fantastic option for all operators looking for a platform, they can control and own. That is the building block for a future proof, data driven consumer engagement where they can make the most of their service, being it IPTV / Cable / Satellite, Terrestrial, ISDB-T or even OTT.

