



You can watch VoD on any screen, but eventually the Big Screen is where you'd prefer

NETFLIX



*TV = The Big Screen

Source: <https://www.vox.com/2018/3/7/17094610/netflix-70-percent-tv-viewing-statistics>

Designing for the BiG Screen

User Experience Department

Leon Mun, PhD. Head of Department

10th Oct 2019



SONY EMCS (Malaysia) SDN. BHD.

SONY

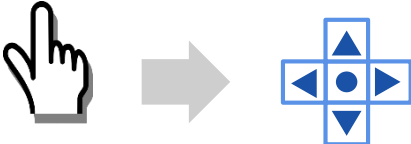




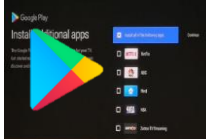

SONY @ Bangi

R&D and Manufacturing

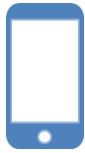

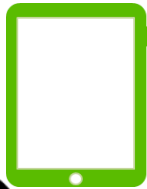

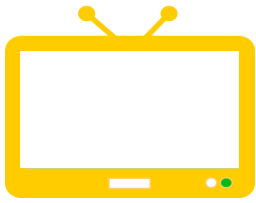



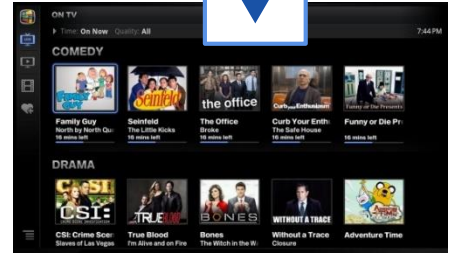


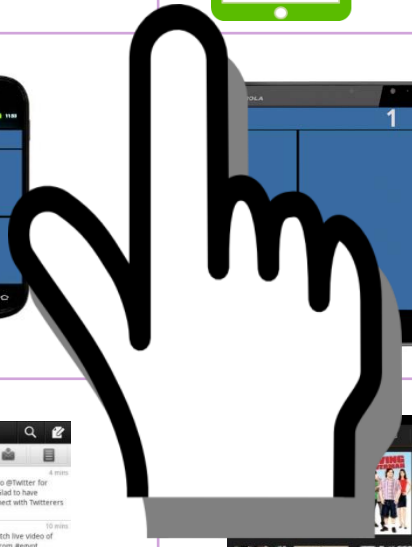
- ❖ **Completed Dec 2017**
- ❖ **5 Storeys + Roof Top**
- ❖ **1,200 members**
- ❖ **Total floor area : 19,068m²**

Roof Top	: Café & utility
4 th Floor	: MD office, Corporate, Procurement Biz. Control & SCM, conference rooms
3 rd Floor	: Software & SQA
2 nd Floor	: Electrical & Product Planning
1 st Floor	: Panel, Mechanical, QA & Service
Ground Floor	: Lobby, canteen, interview/meeting rooms & QA chamber

	Basic User Design	Advanced porting
App Designer	From existing Android mobile Apps change navigation for Android TV	Utilize Android-TV only features
Examples	<p>mobile to TV</p> <ol style="list-style-type: none"> 1. Touch to Dpad  2. Vertical to horizontal layout  3. Google TV Play Store  	<p>share by Chromecast </p> <p>voice Search, launch, like, rate, fav by Voice </p> <p>promo P.A.I Sony Select </p> <p>color keys Shortcut keypress to category, like, rate etc. </p>
Benefits/Challenges	<ul style="list-style-type: none"> ✓ Quick porting. ✗ But poor UX due to as-is from Mobile. 	<ul style="list-style-type: none"> ✓ Greatly improves the BIG screen experience. ✓ P.A.I promo is strong encouragement for bizcase. ✗ Need dedicated dev effort – not useful for mobile app

Current application on Android TV platform is ported from the touch screen experience into the D-Pad

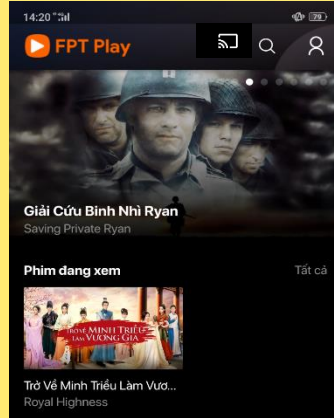
	Mobile	Tablet	TV
Reference UI Patterns	 	 	 
Samples			



Chromecast support



share
by Chromecast



Full remote functionality

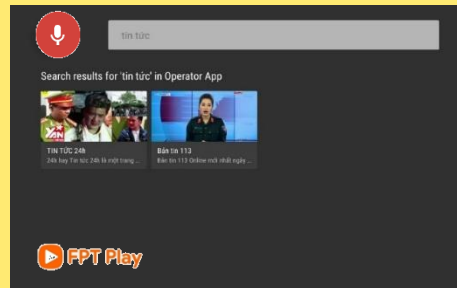


color keys
Shortcut keypress to
category, like, rate etc.

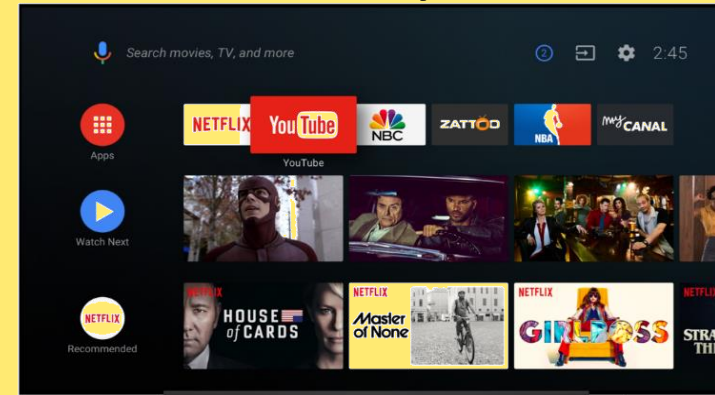
Voice Search support



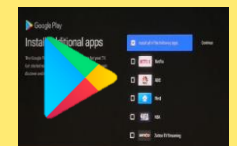
voice
Search,
launch, like,
rate, fav by
Voice



Easy Access

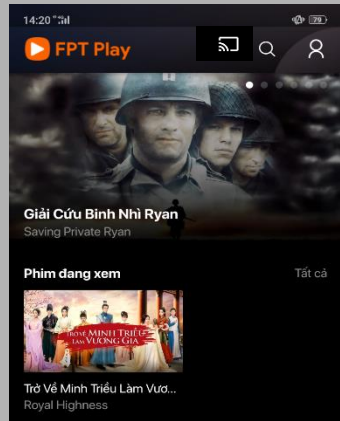


promo
P.A.I



Benefit to customer: Full Remote Functionality

Chromecast support



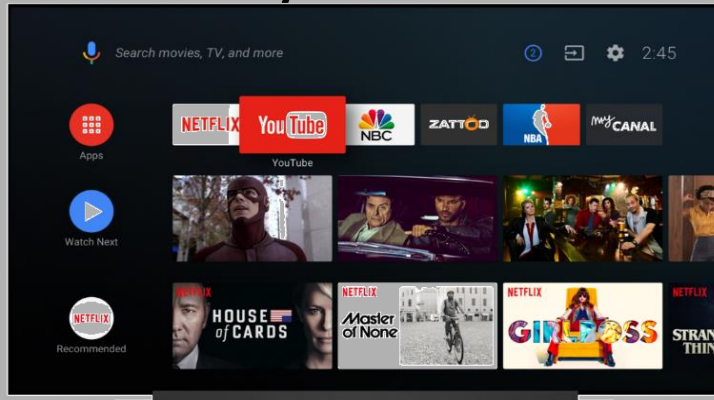
Full remote functionality



Voice Search support

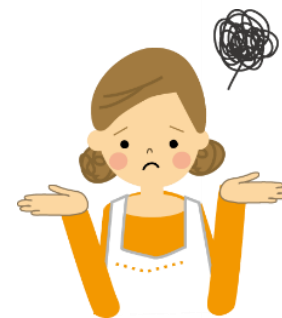


Easy Access



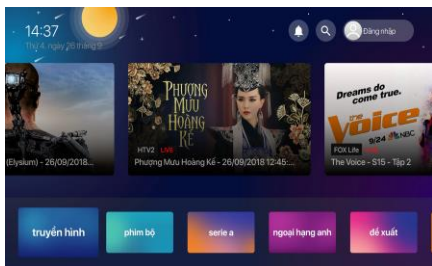
Typical OTT app port to Android TV only utilize 47% of remote controller buttons

Only support basic operation in App



Example of customer pain points:

Switching category



Need to return back to **main screen** to change category

Switching content



Difficult to navigate to **prev/next** contents

Switching channel



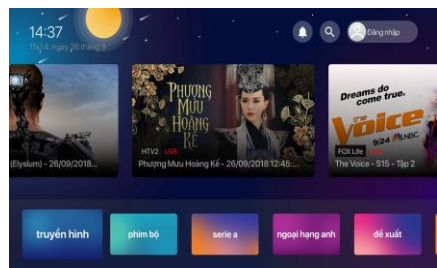
Switching channel while in live streaming is **not smooth / buggy**

Stress free experience for customer

by supporting more remote buttons



Switching category



Easy to switch between categories with **shortcut keys**

Switching content



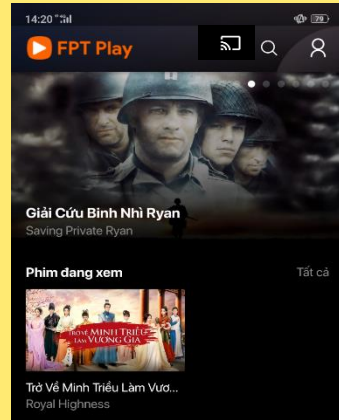
Easy to go to next contents with **NEXT / PREV key**

Switching channel



Smooth channel switching in live streaming

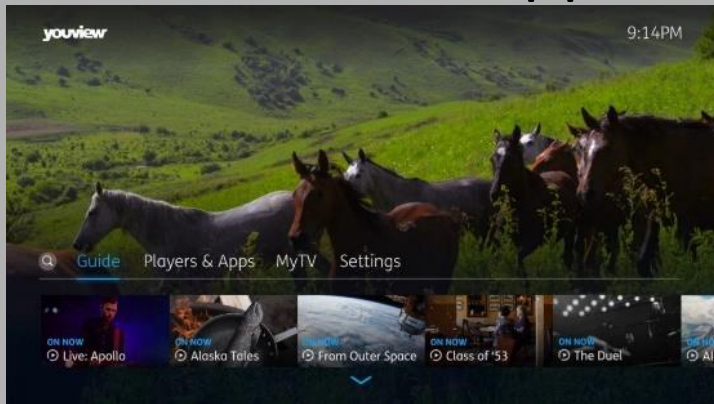
Chromecast support



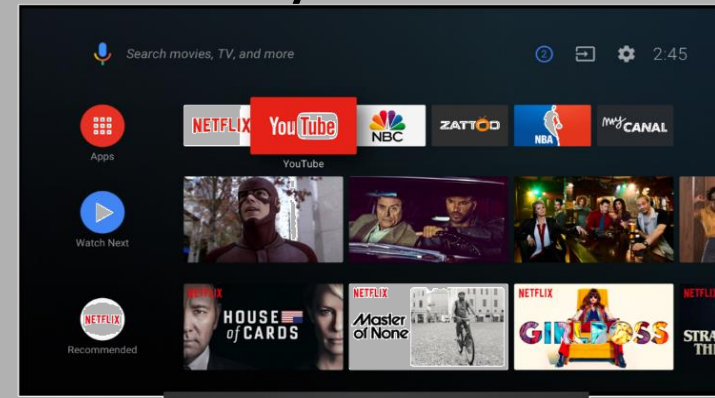
Full remote functionality



Voice Search support



Easy Access





Discover on Mobile, Watch on TV...



... shared playlist queue, shared control.



Second screen experience is already **well established** with Chrome Cast.

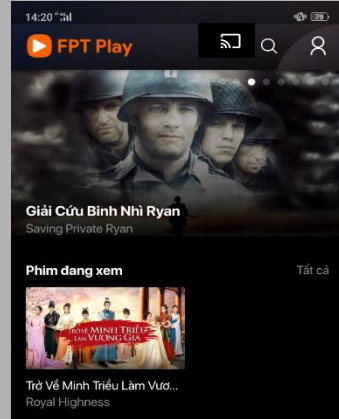
Refer to **YouTube App** for what can be done.

All Android TVs has Chrome cast **Built-in**

The image shows a grid of various streaming service logos overlaid on a background of a scene from 'The Lord of the Rings: The Fellowship of the Ring'. The logos include YouTube, SHO, pandora, MLB.com, Google Play, HBO NOW, JUST DANCE NOW, COMEDY CENTRAL, hulu, NETFLIX, nick, iHeart RADIO, CBS, Spotify, and twitch. At the bottom, there is a video player interface for 'The Lord of the Rings: The Fellowship of the Ring' (2001 / Fantasy/Action / 3h 48m) with a progress bar and controls for 'CURRENT TIME' and 'MAIN MENU'.

Benefit to customer: Voice Search

Chromecast support



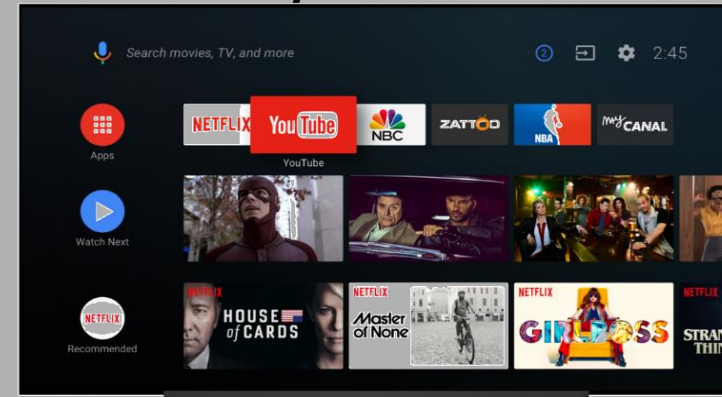
Full remote functionality



Voice Search support

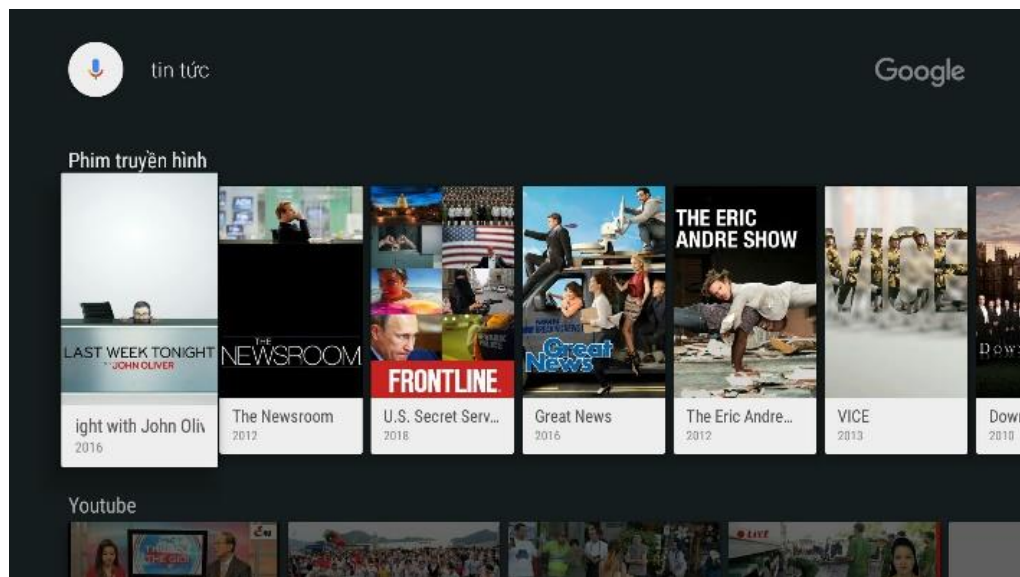


Easy Access

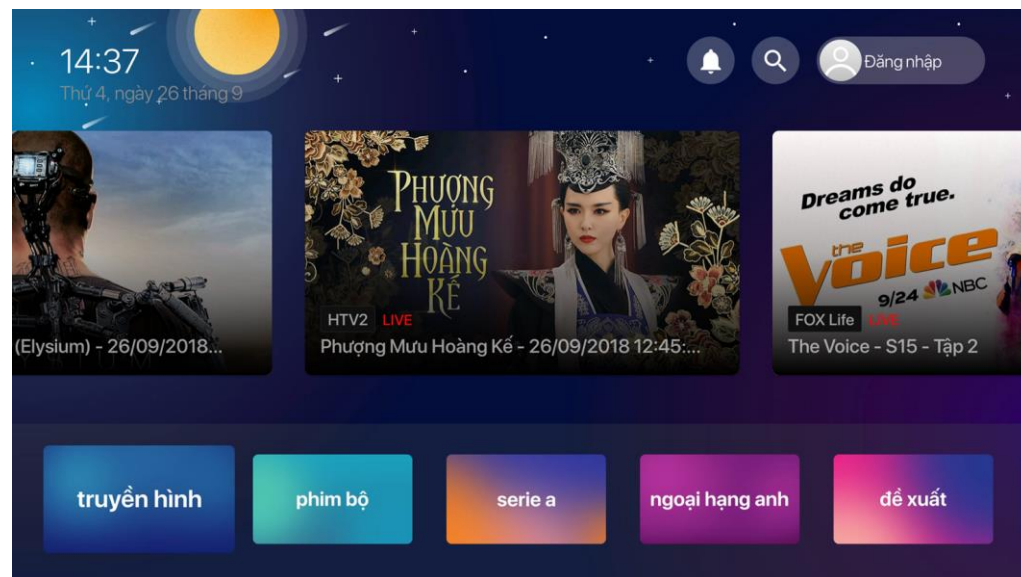


Easily Search for contents using Voice Search

Google Assistant



In-app Voice Search



Voice Search

Voice search uses the built-in voice recognition engine to **convert speech to text**.

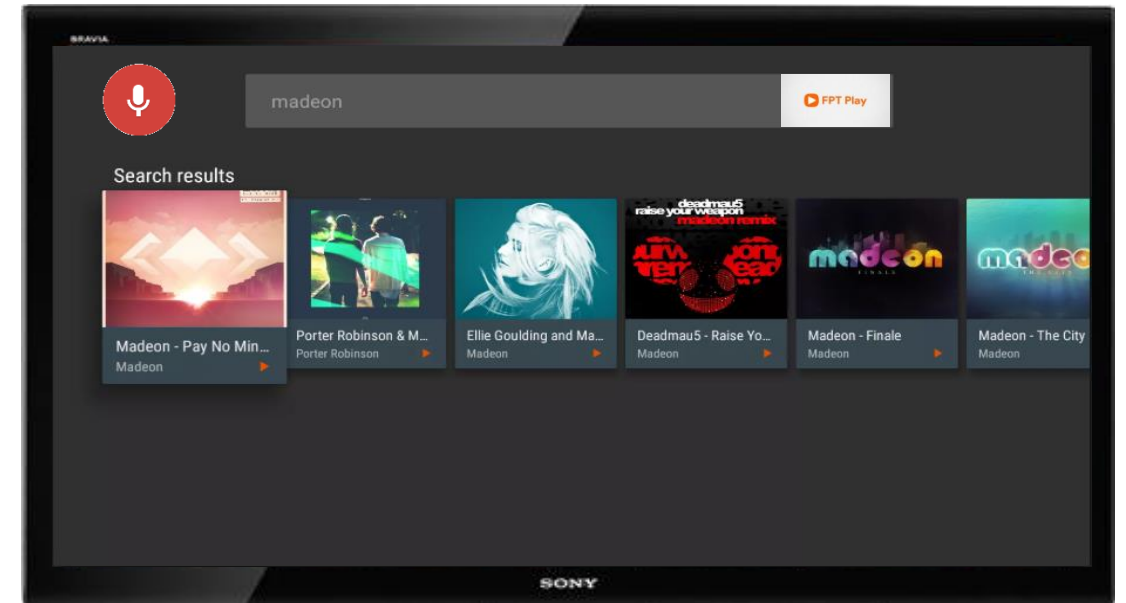


This is not your mic's on/off switch!

Google Assistant

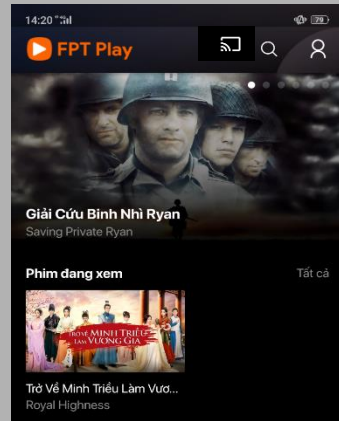
The Google Assistant is an **artificial intelligence-powered virtual assistant** developed by Google that is primarily available on mobile and smart home devices, such as Sony Android TVs.

Did you know? When it is used in your app, it returns search results within your app first and then other sources.



Benefit to customer: Easy Access

Chromecast support



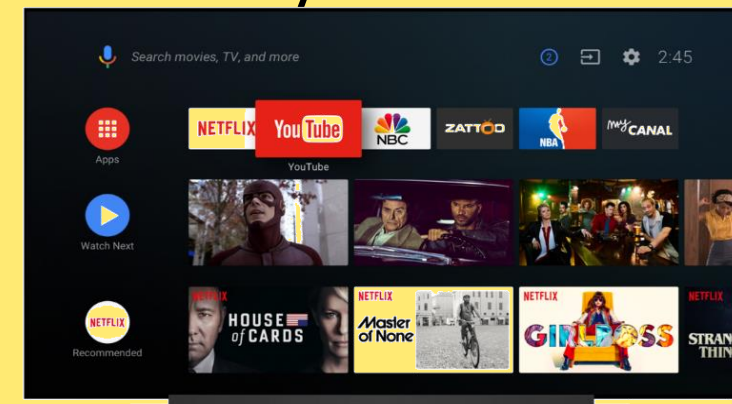
Full remote functionality

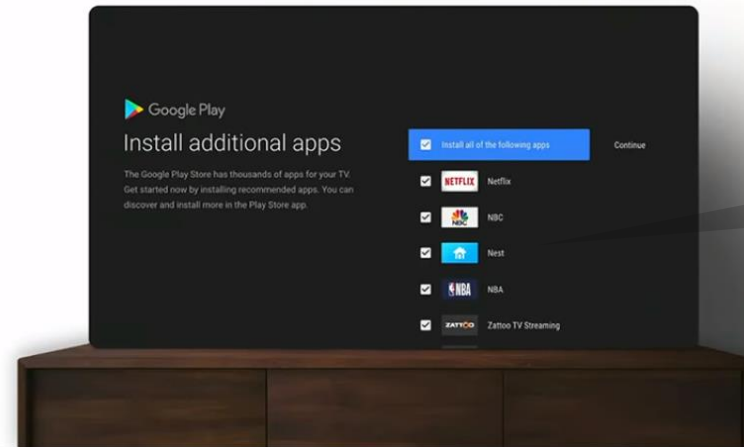
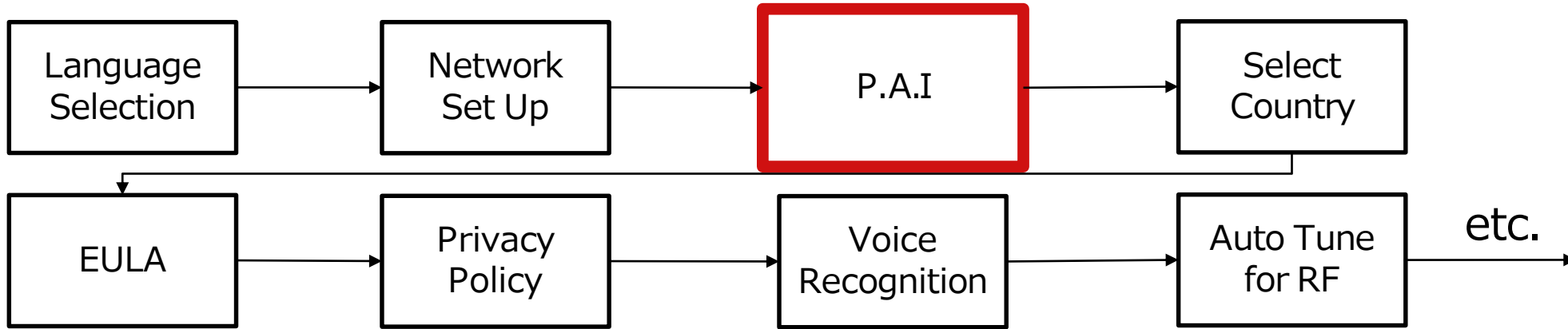


Voice Search support



Easy Access





This list is decided by Google and Sony

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