HbbTV OpApp Webinar, March 2021
The manufacturer perspective

Presented by martin.faehnrich@eu.panasonic.com
OpApp – Why?

Should an operator do OpApp

OpApp benefits

- Branding
- Visibility
- Resident application (in FLASH mem.)
- Launch on start-up
- Instant service launches
- Easy upgrades
- Flexibility (no hardware)
- No hardware business required
- Feels like part of the TV software
- Access to more keys on RCU
- Can substitute some TV UIs (e.g. EPG)
OpApp – Why?

One of the favorite features

Branded EPG
- Operator style
- Operator behavior

Original Panasonic Guide (EPG)
Guide (EPG) from HD+ OpApp
Guide (EPG) from Zattoo OpApp
And why is HbbTV OpApp attractive for manufacturers?

- Easily enables new business fields (IPTV) for SmartTVs
- Hybrid solution, serves broadcast and broadband
- Pay-TV / Subscription services without additional hardware
- OpApp enabled TVs are more attractive (marketing argument)

Manufacturers are user focused

Attractive for the end-user:
- **Single remote control (!)**
- Clean looking living room
- Easy installation (No confusion by wiring extra hardware)
- Perfectly integrated access to IPTV services
- Hybrid: Seamless integration of DVB channels, linear and non-linear IP content (Mediathek, Catch-up, ...)
- Easy feature-up possible (just install OpApp)
OpApp in practice

Some words from practice...

... also based on received questions
HbbTV OpApp & “ordinary” HbbTV

How about “ordinary” HbbTV, if an OpApp is installed – Does this work?

- HbbTV OpApp is running in parallel in the background
- “Ordinary” HbbTV is not affected, and will function as normal!
IPTV only? – Yes!

OpApp can be purely IPTV

• Fully broadcast independent
• Not even a tuner needed
• Perfect solution for IPTV:
  • Get easily on the “big screen”
  • Low effort, no extra hardware
  • Standardized

Zattoo is a perfect example for a pure IPTV OpApp solution

No CableTV, DVB-T2 antenna, or satellite dish required!

New usage scenarios: Enjoy IPTV in the garden if your WIFI is strong enough
OpApps – Virtual Set-Top-Boxes

- Operator Applications behave like virtual Set-Top-Boxes
- The standard allows switching as if they were “real” STBs connected to a TV

**Physical STBs**

- IPTV-STB
- Cable-STB
- SAT-STB

**Virtual STBs (OpApp’s)**

- OpApp1
- OpApp2
- OpApp3
OpApps – Virtual Set-Top-Boxes

The Panasonic way of switching Operator Applications

Physical Inputs

Operator Applications (examples)

Terr/Cable
Satellite
IPTV

Terr/Cable
Satellite
IPTV

Martin Faehnrich | Panasonic Business Europe Support GmbH
How does the OpApp come into the TV?

End user
How does the OpApp come into the TV?

Select your OpApp and install it.

OpApps can be already selected at the set-up.

OpApp successfully installed. Some hints might be shown.

You are done! Enjoy the new services!
How does the OpApp come into the TV?

Somehow later...

You may also install an OpApp at any time later...
Select your OpApp and install it.
OpApp successfully installed. Some hints might be shown
You are done! Enjoy the new services!
Operator Applications – Increasing popularity

World first OpApp market-deployment in spring 2019 (HD+ / Panasonic)

OpApp is meanwhile gaining increasing popularity
Has been proven as reliable, robust, and flexible

Examples of popular OpApps
OpApp vendor / device manufacturer partnership

Operators and manufacturers are moving closer together:

Resident application
- Start at device power-on
- Always active, like device software
- Advanced control over a device
- Access to more buttons on the RCU
- Substitute parts of device’s UI (re-branding)

Operator

Manufacturer

Partnership!
Operator / TV manufacturer partnership benefits

Martin Faehnrich | Panasonic Business Europe Support GmbH

Panasonic PLDC

Commercial partnership:
• Joint marketing
• Cross promotion
• Enhanced marketing reach
• New cooperation models

Technical partnership:
• Close technical cooperation
  • Optimal OpApp development
  • Discuss eventual special requirements
• Technical support later / afterwards
• By PBSEU-PLDC, in Langen / Germany

Partnership - Example Panasonic

Main partnership advantages:
• It really works as intended
• Strong together

Panasonic
Win-Win for all

<table>
<thead>
<tr>
<th>Consumer</th>
<th>Operator</th>
<th>TV Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Single remote control</td>
<td>• Service visibility</td>
<td>• OpApp enabled TVs are more attractive (marketing argument)</td>
</tr>
<tr>
<td>• Easy installation</td>
<td>• Easy market enabler</td>
<td>• OpApp is a service enabler</td>
</tr>
<tr>
<td>• No extra hardware</td>
<td>• Easy test of new services</td>
<td>• Enables TV set for new business segments (IPTV)</td>
</tr>
<tr>
<td>• Clean looking living room</td>
<td>• No extra hardware require</td>
<td>• New marketing and collaboration opportunities</td>
</tr>
<tr>
<td>• No confusion with wiring</td>
<td>• No HW maintenance costs</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Seamless integration in existing device (SmartTV)</td>
<td>• Faster service deployment</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Easy feature-up possible</td>
<td>• More flexibility (all SW)</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Universal solution thanks to ETSI standard</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Brand experience to customer, consistent customer support</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Single remote control</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Easy installation</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• No extra hardware</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Clean looking living room</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• No confusion with wiring</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Seamless integration in existing device (SmartTV)</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• Easy feature-up possible</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
Thank you for your attention!

martin.faehnrich@eu.panasonic.com