

Web on TV, our vision

— What we can expect on “TeleVision” —

Hiroyuki Aizu
Shunichi Gondo
Daisuke Ajitomi

<hiroyuki.aizu@toshiba.co.jp>
<shunichi.gondo@toshiba.co.jp>
<daisuke.ajitomi@toshiba.co.jp>

TOSHIBA Corporation. Corporate Research & Development Center,
September 3, 2010

Web & Networking Features on TOSHIBA's Digital TV Products

Now in Japan,

80% of TOSHIBA's Digital TV Products support Broadband & Home Networking
(Also, All of Digital TV sets shipped as BML compliant)

- **BML Data Broadcasting Compliant**

Released Before Service Launch

- Sep 2000 for **Broadcasting Satellite** (BS) digital broadcasting service
- Oct 2003 for **Terrestrial** digital broadcasting service

- **Broadband & Home Networking Support**

No External Box Required

- Feb 2004 Internet **Web Browser**
- Oct 2004 **DLNA** Home Networking
- Oct 2005 NTT Plala's "**4th-MEDIA**" IPTV service
- Oct 2006 **DTCP-IP** for DLNA Home Networking
- Oct 2007 "**AcTVila**" TV Portal & VOD service
- Apr 2008 NTT Plala's "**Hikari-TV**" IPTV service
- Aug 2009 "**Yahoo! Japan for TV**" Portal & VOD service
- April 2010 "**YouTube**" VOD service
- Aug 2010 "**TSUTAYA TV**" and "**T's TV**" VOD service

The World's 1st !



* TOSHIBA's Digital TV "REGZA" Features List : http://www.toshiba.co.jp/regza/function/10a/index_j.htm

Q: What is the “Web”, What is the “TV” ?

“Web” is a “Media of Contents”

Hypertext links
several Monomedia
to Multimedia

Web on TV →

Provide I/F to link
Users, Media Services
and Other Devices

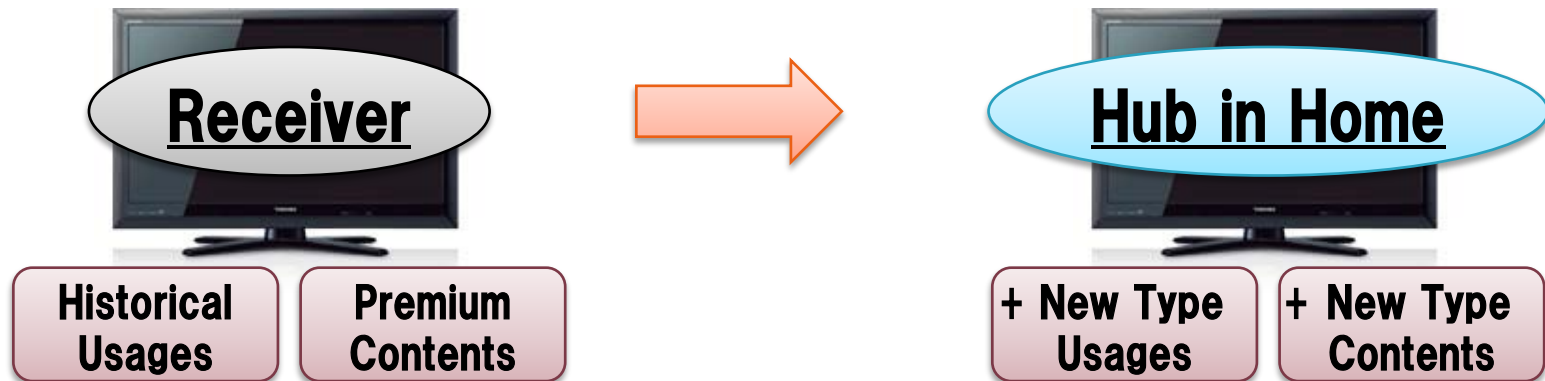
“TV” is a “Media Device”

Hub

Provide “TeleVision” for users by super easy way

Our Interest and Point of View in the Workshop

- “TV” is a ...
 - (Historically) Receiver of Broadcasting Services
 - (Now&Future) Hub in the Home for Information Exchange
 - Has a number of Device Inputs/Outputs & User Interfaces
 - Located in the Center of Living room and/or Everyday life



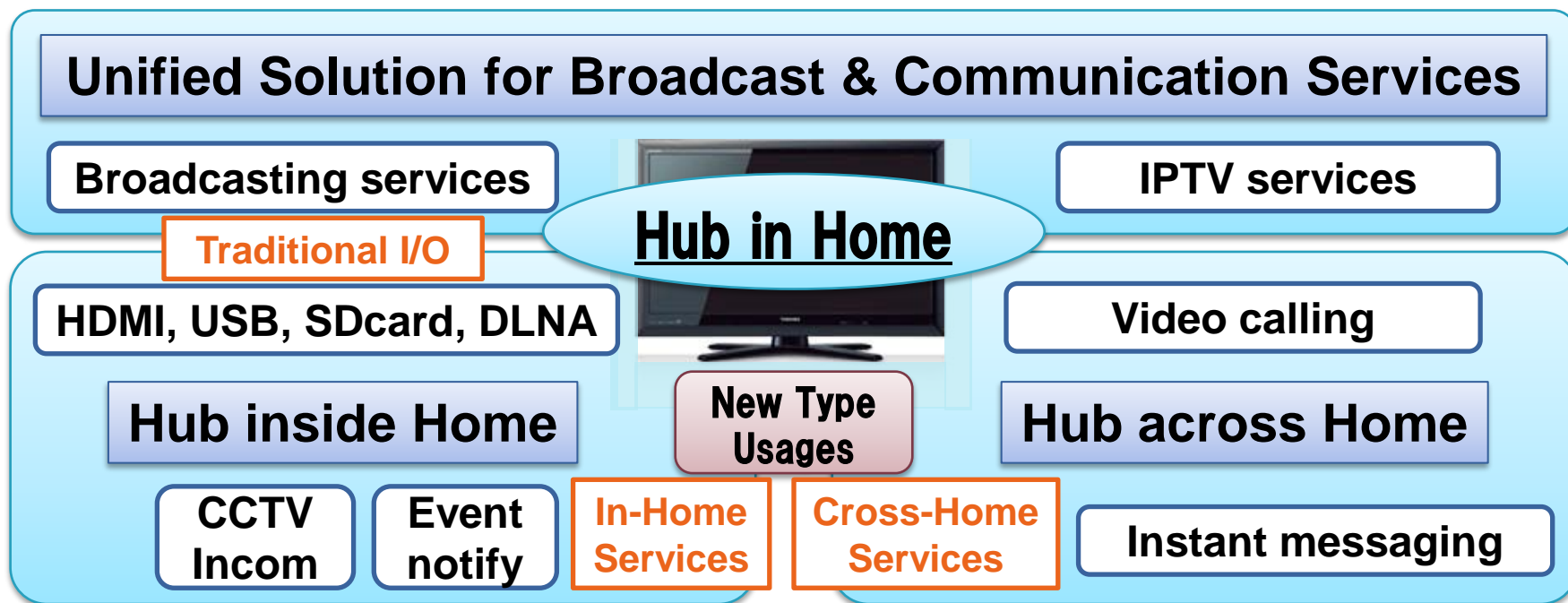
- **Extend the Potential of “TeleVision” by “Web on TV”**
 - New Type of Usages, to Ext. the Potential of “Media Device”
 - New Type of Contents, to Ext. the Potential of “Media Experience”

New Type of Usages: “Hub in the Home”

to Extend the Potential of “TeleVision” as “Media Device”

We expect ...

Web Technology enables New Type of Usages on “TeleVision”



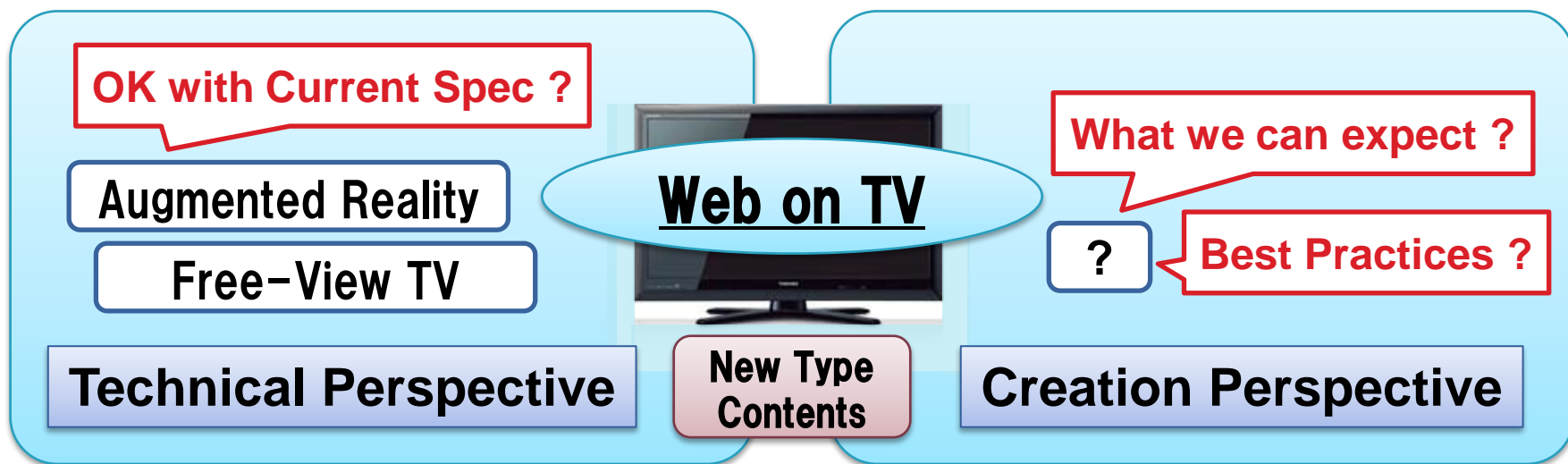
Is above use cases OK with Current Spec ? If not ... How to fill the Gap ?
How to archive aboves by web & progressively enhance to follow new usages.

New Type of Contents: “Web on TV”

to Extend the Potential of “Media Experience” on “TeleVision”

We expect ...

Web Technology enables New Type of Contents on “TeleVision”



We can find some examples on “DREAM2022, Japan’s Bid Book for World Cup”
http://www.dream-2022.jp/en/our_bid/bid_book/208Smiles_SUMMARY_en.pdf

Will W3C organize a Group/Community with Contents Creators to discuss ?
How to archive above by Web & progressively enhance to follow changes.

Our proposed use cases and requirements for Web on TV

- **Req: Discuss New Type of Usages on TV as “Media Device”**
 - *Unified Solution for Broadcast & Communication Services*
 - *Hub inside Home, Hub across Home*
 - TV is now the Hub in the Home for Information Exchange
 - We think Web Technology is enabler to Extend the Potential of TV
- **Req: Discuss New Type of Contents on TV for “Media Experience”**
 - *Technical Perspective, Creation Perspective*
 - Seems some ongoing work in W3C relates both of perspectives
 - Seems good place to organize community for Contents Creators

We think ... the role of HTML5 is not only the solution for TV, but also the bootstrap to start discussion for TV since it has a power and potential , and solution for progressive enhancement.

TOSHIBA

Leading Innovation >>>

Thank You !!