Fumitaka Watanabe Tomo-Digi

About us

- Fumitaka Watanabe, Yusuke Maehama, Shoko Okuma
- Tomo-Digi Corporation
- Develop applications for TV with web standards

Topic

Web Platform Test Runner for TV

Some Issues of developing apps for TV

- Debugging Device-specific Issues
- Testing on Actual Device
- Cost and Space
- Replacement

Debugging device-specific issues.



<audio id="audio" type="audio/mp4" preload="auto" src="sample.mp4"></audio>

```
<audio id="test" preload="auto">
 <source src="sample.mp4" type="audio/mp4"></source>
</audio>
```

Testing on actual devices

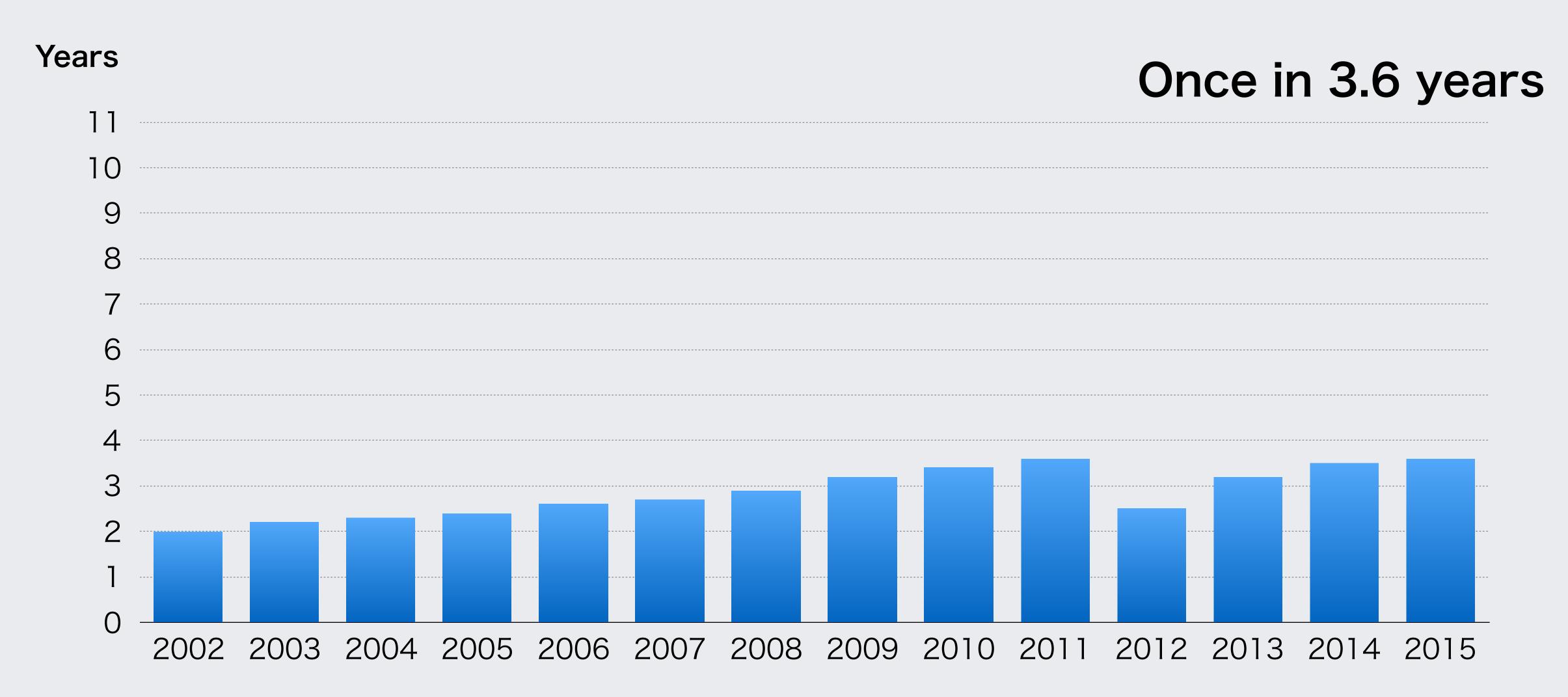
Difficult to establish testing environment to test with actual device for most developers

- Broadcasting signal required to start browsers
- Test in-band resources

Cost and Space

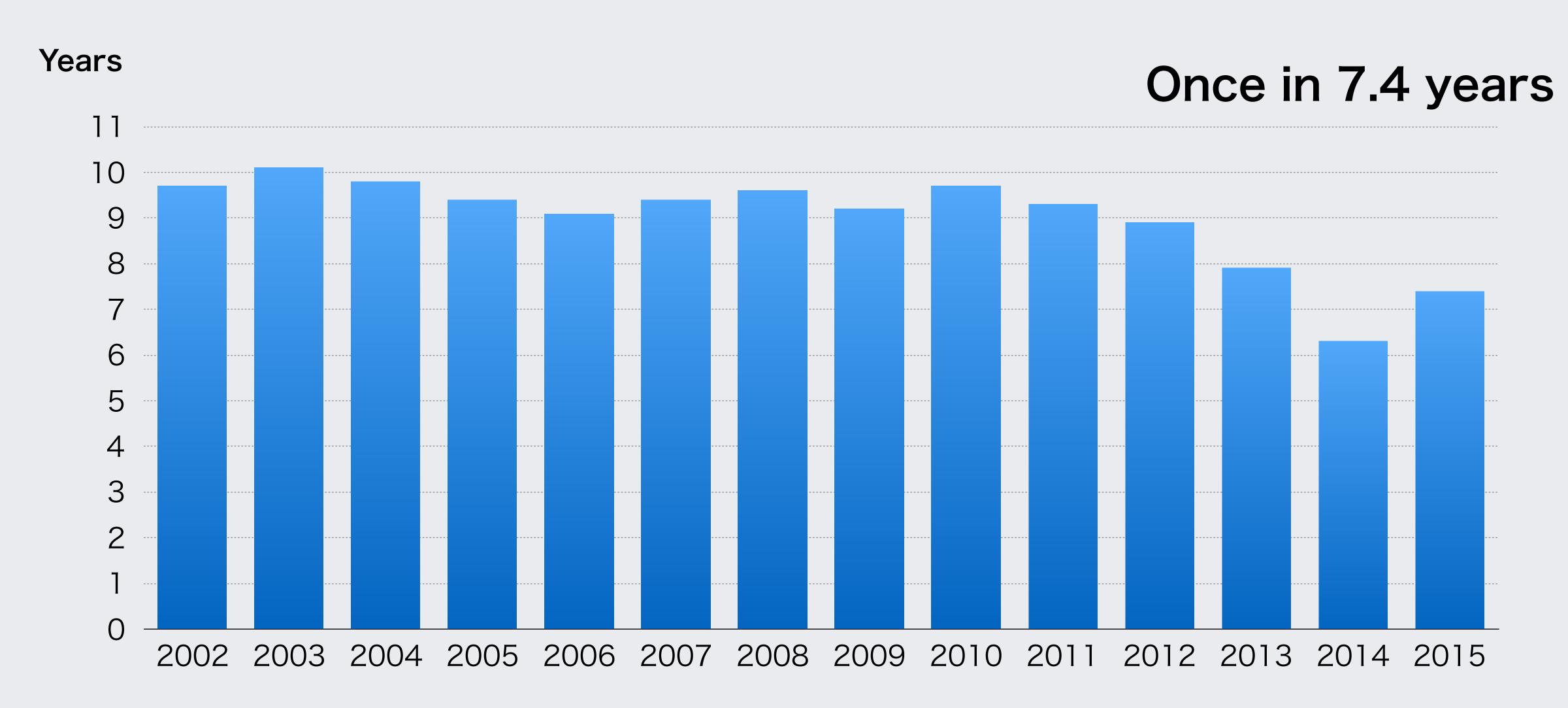
- 7 CE Manufacturers
- More than 60 kinds of TV / STB
- Most of them are larger than 40 inches

Mobile Phone Replacement



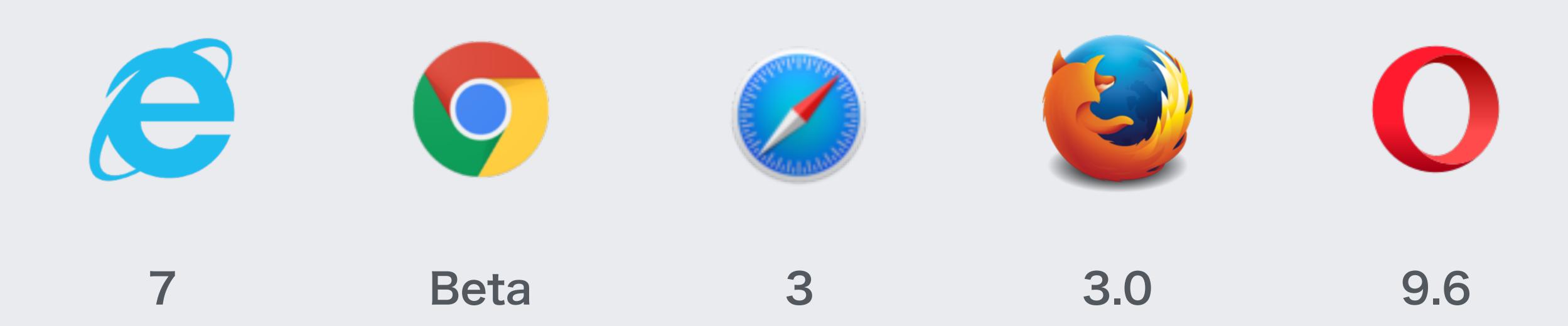
Source: http://www.esri.cao.go.jp/jp/stat/shouhi/menu_shouhi.html

TV Replacement



Source: http://www.esri.cao.go.jp/jp/stat/shouhi/menu_shouhi.html

Browsers released in 2008



Something like supporting those browsers now.

Embedded systems need to be tested before shipping.

Web Platform Test Runner

Test for browsers

• Designed to run on PC (Basically)

DEMO

- WPTRunner can support conformance test for TV
- Sharing test result will assist developers
- Increase productivity of developers

We have some ISSUES.

- Embedded system limitation (single window)
- Input device limitation (remote control)
- Hardware resource limitation (CPU, memory)
- Test which require user confirmation (e.g. geolocation test)
- Automated testing (not supporting Web Driver)
- Retrieve result data (no accessible storage)
- etc...

Web Platform Test Runner

 Should WPTRunner consider about embedded system adopting HTML5 browser?

Working on Git

Advice and cooperation are welcome

Thank you.