SAMSUNG

Samsung's Position on eBook

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Overview

- Problems in ebook area
- Various Devices
- DRM
- Performance Issues in eBook
- Conclusion

Problems in eBook area

- **Market fragmentation is continuing in various senses**
  - Various device types: e-Ink devices, smart devices
  - Contents formats: PDF, EPUB, proprietary format ..
  - DRM technologies: plentiful
  - Different viewers: Native Apps, Browsers
  - Non-conformant viewer/contents

- **Viewer performance is also a big Issue**
  - **It may deteriorate UX.**

- **Worry about fragmentation & Performance**
  - Causes interoperability problems
  - A Barrier to expand digital publication market
  - Standardization and conformance is also very critical !!

Various Devices

- **Various Devices**
  - Dedicated Device : e-Ink Devices
  - General purpose devices : Tablet, Smart phone, laptop PC, desktop PC, TV, digital whiteboard with large screen, etc

- **They have different capabilities**
  - Various resolutions, screen sizes and different I/O peripherals.

- **Not easy to deliver common UX**
  - User owns various types of devices with different capability.
  - Current works like fallback functions and adaptive layout functions in IDPF is a good start.

- **Hard for ebook viewers to render publisher's intention accurately.**
  - Understanding about standards of publisher and distributor doesn't coincide precisely.
  - Some devices may suffer from performance issues due to limited capability.

DRM

- Contents format standardization case:
  - Already being covered by IDPF, W3C etc.

- DRM standardization ?
  - Still in open area

- One of the most biggest problem fragments eBook market

Performance Issues in eBook

- EPUB3 viewer is not a Browser
  - Many people expect EPUB3 viewer to be like a real book.
  - EPUB3 viewer is not a browser, BUT depends mainly on web specification.
    - W3C & IDPF need to collaborate.
- EPUB3 Viewer Performance is critical
  - Page swipe performance
  - Multiple font loading performance (CJK font)
  - Chapter navigation performance
  - Dynamic layout performance
- EPUB3 viewer may spend huge memory
  - Encyclopedia , Magazine
  - Cache handling
  - Multiple windows
- Power consumption
  - Infinite CSS animation
  - 3D

Conclusion

- Lots of effort and trial in standardization field to improve eBook services.

- There still remains inconvenience in ebook consumers as described previous.

- Technical alignment between IDPF and W3C side in the long term could be beneficial for ebook market.

- It would be good if Web spec. is extended more adaptive for ebook services.

Thank you !

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