Seung Yun Lee ‹syl@etri.re.kr›
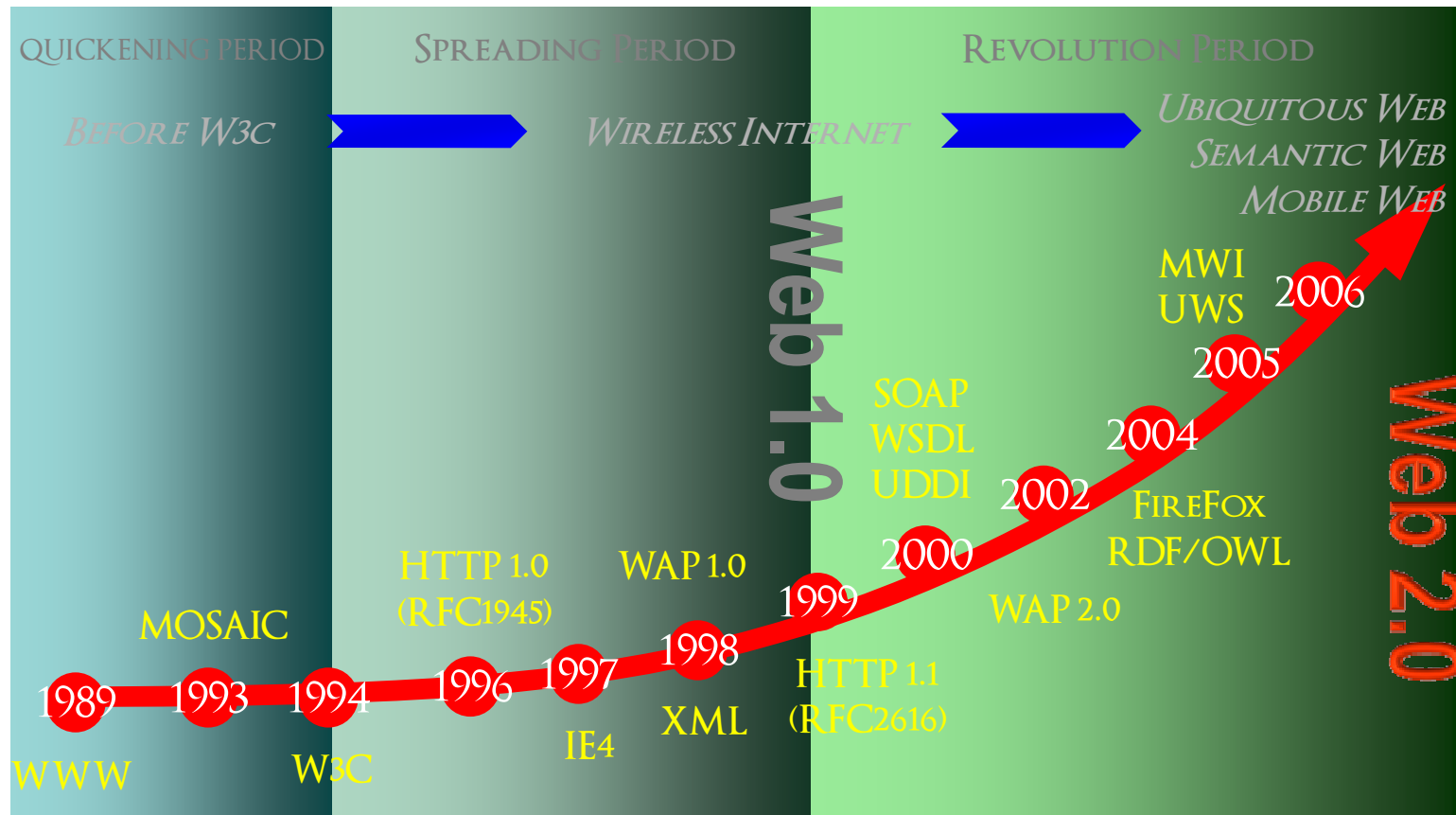
ETRI Protocol Engineering Center

Mobile Web 2.0

WEB EVOLUTION

- Web, short history but massive pervasive effect

- Now, the essential nature of Web is referred as a Web 2.0

REAL THINGS ON WEB 2.0

- **7 principles of Web2.0**
  - ① Web a Platform
  - ② Data is the Intel inside
  - ③ End of the Software Release Cycle
  - ④ Lightweight Programming Models
  - ⑤ Software above a Single devices
  - ⑥ Rich User experience

- **Web2.0 brings,**
  - New Perception & Direction for future life rather than new technology
  - Disruption is buzzword !!!

MOBILE GOES WEB 2.0, MOBILE WEB 2.0

- Now, Mobile environment is on revolution age with Web2.0.
    - Convergence Service, Open Garden service
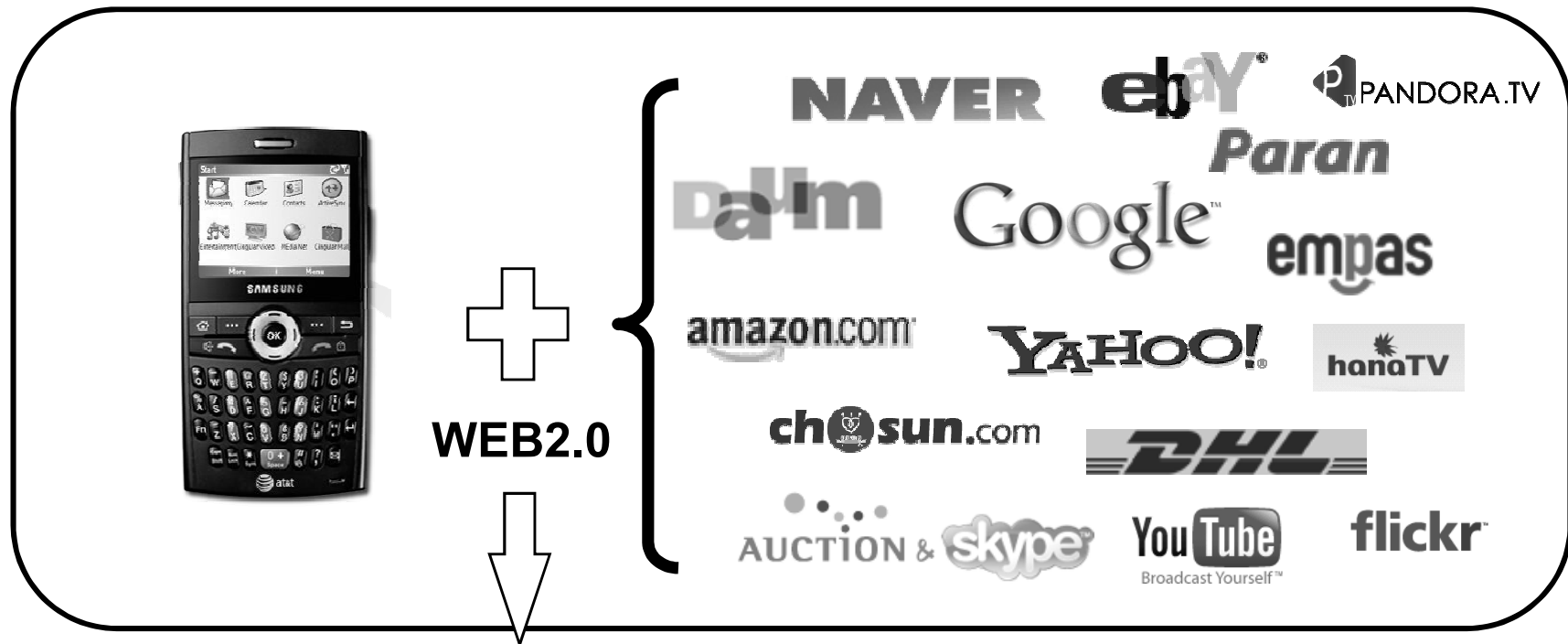
WEB2.0

Rich User Experiences
New Bisuness Opportunity

WHY MOBILE WEB2.0

- What has been changed,
  - Technology Innovation
    - Wireless Communication, Mobile Device, Contents
  - Service Paradigm Shift
    - Open Service, Convergence, User-centric, New Biz Model
  - Huge User Requirement
    - Desktop to Mobile, etc.
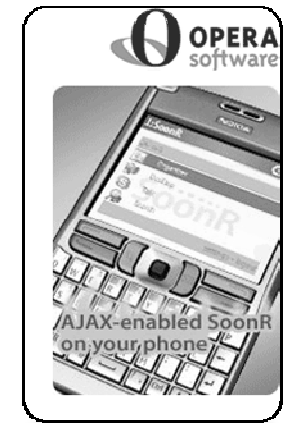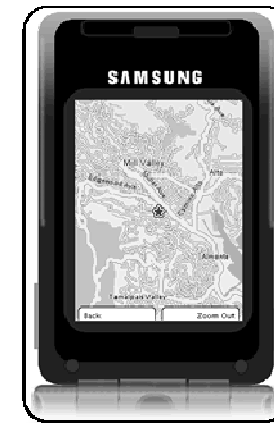
MOBILE WEB2.0 TECHNOLOGIES

- Style Sheet (CSS), XHTML, URL
- REST, XML WS APIs (SOAP)
- Syndication & Aggregation (RSS/ATOM)
- Web Publishing (Blogging, etc.)
- Rich Internet Application (AJAX)
- Open API/Mash-Up
- Web Services

→ Standards basis !!!

MOBILE WEB2.0 SERVICES

- Full Web Browsing
- Mobile Widget
- Mobile SNS(Social network Service)
- Mobile Mashup/OpenAPI
- Mobile Lifelog

  → Innovative Mobile Service Technologies
  → Toward Converged Mobile Service

MOBILE BROWSING STANDARD

- WAP (Wireless Application Protocol)
  - By WAP Forum, 1997 (OMA since 2002)
  - WAP 1.0 : WML(Wireless Markup Language)
    - Not support existing HTML contents
  - WAP 2.0 : XHTML MP (Mobile Profile), CSS, JavaScript
    - Toward the Full Web Browsing (or Full Browsing)

- Mobile Web Best Practice (MobileOK)
  - By W3C, 2005
  - Now under developing
  - Toward the One WEB !!!

STANDARDS IN W3C

- HISTORY

  – *W3C announced the launch of a new Mobile Web Initiative (MWI), designed to make Web access from a mobile device as simple, easy, and convenient as Web access from a desktop device (May 2005)*

- Currently, 3 working groups are working

  – Best Practice WG

  – Device Description WG

  – Test Suit WG

UNDERSTANDING OF MOBILEOK

Mobile Web Best Practices

W3C Mobile Web Initiative

10 ways to mobilize

- **Design** for One Web
- **Rely** on Web standards
- **Stay away** from known hazards
- **Be cautious** of device limitations
- **Optimize** navigation
- **Check** graphics & colors
- **Keep** it small
- **Use** the network sparingly
- **Help & guide** user input
- **Think** of users on the go

Source: http://www.w3.org/2007/02/mwbp_flip_cards

W3C STANDARDS ADDRESS CHALLENGES

User Requirements	W3C Solutions
User-friendly content	**Mobile Web Best Practices***
Effective adaptation	**Device Description*** **Ubiquitous Web***
Child protection, labeling	**Protocol for Web Description***
Ease of discovery, trust	**mobileOK***
Voice, stylus, keys	VoiceXML, Multimodal
Universality	WAI, I18N, **Developing World***
Security	Browser Security Context
Interoperability	Web standards: XHTML, CSS, Graphics, Forms, AJAX, Widgets, **Ubiquitous Web***, etc.

Source: Steve Bratt (steve@w3.org)

KOREAN MOBILEOK STANDARDS

[For existing Web-sites]

[for PDA web-sites]

[for Mobile web-sites]

SKT用   KTF用   LGT用

Korean MobileOK Standard

MobileOK
Certification

Mobile OK Trusted sites
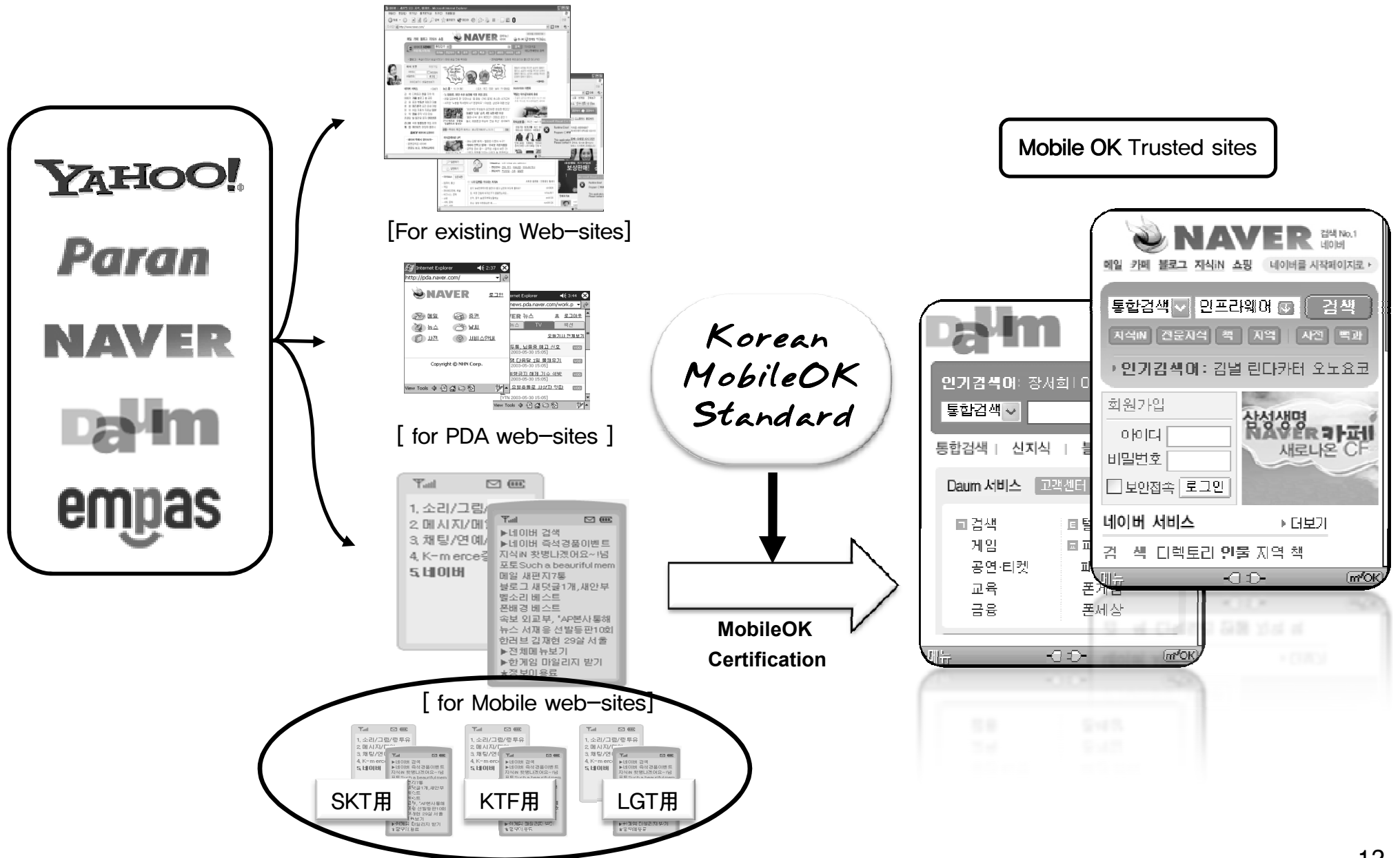
KOREAN MOBILEOK TRIAL SERVICES
(FROM DEC. 2007)

단말정보 DB

Vendor

Portal Solution

...or

...스 GW

웹 서버 (Mobile OK)

Browser

사용자 단말

Cert. org.

검사 도구

KOREA mobile
WEB2.0
FORUM

http://www.mw2.or.kr/
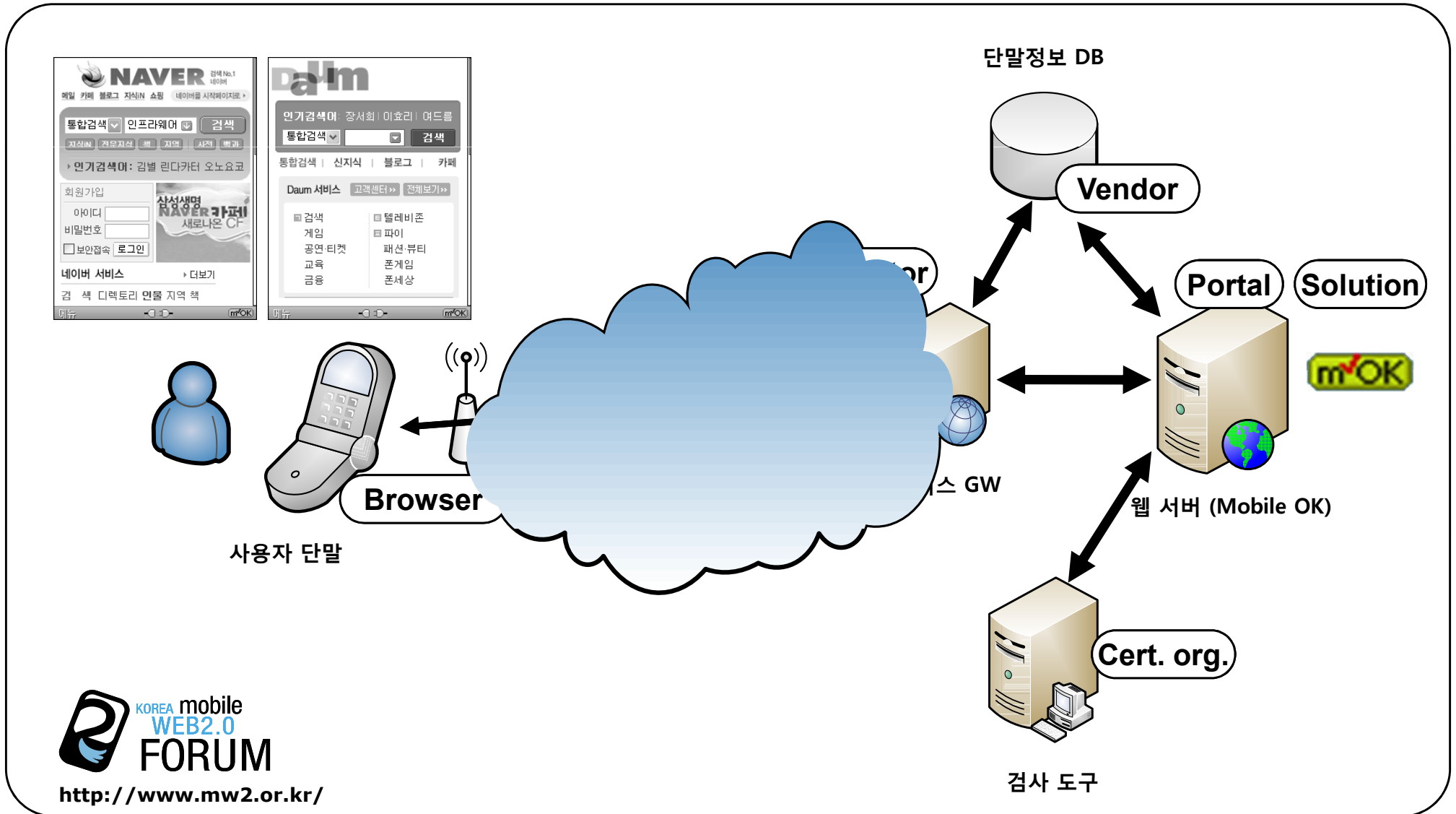
MOBILE WEB 2.0 FORUM

- ## _Mission_
  - Mobile Web 2.0 Forum has the mission of "mobile Web based industry revitalization", "leading both domestic and international technology and standards", "strengthening competitive power in mobile Web industry".
 - The forum is to develop standards and guidelines for obtaining interoperability of Web contents between various devices, and realize visions for constructing the next generation mobile Web environment.

- ## _Expectation Effects of Mobile Web Standards_
  - Improving mobile Web user experience
  - Increasing efficiency in content development and reducing its cost
  - Providing interoperable standard-based Web content services environment
  - Obtaining interoperable Web contents in fixed and wireless convergence environment
  - Promoting open mobile service infrastructure
  - Increasing service mash-ups and internet resources utilization
  - Achieving stability of mobile services
  - Facilitating development of new services, mobile Web contents, and convergence applications
  - Promoting and activation mobile life

MOBILE WEB 2.0 FORUM
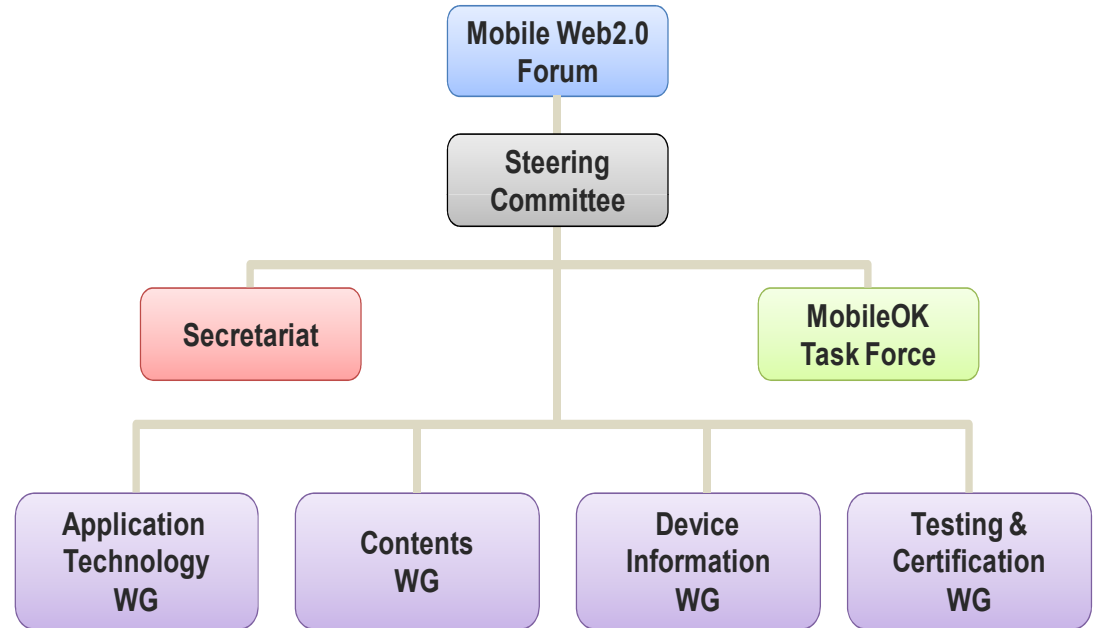
FUTURE PROSPECT

- Open & Converged Mobile Service
- High-quality Multimedia Mobile Service
- User centric Mobile Service
- Life & Business centric Mobile Service
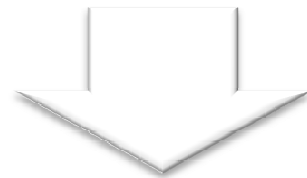
Mobile Life 2.0

CONCLUSION REMARKS

- A Web in Mobile would be a new Killer Apps for near future Internet environment

- Global Standardization activities of Mobile Web in W3C MWI activity

- With Web2.0, Mobile Service will bring new type of service and new business opportunity

- International Collaborations are required for more advanced global mobile services

Thanks for your attention

Q&A