

bada: the next wave

Samsung bada Developer Day at MWC2011
Feb 15, 2011

The beginning of the new wave, the smartphone “Wave”

1GHz Processor

Super AMOLED (3.3” WVGA)

5.0 Megapixel camera

HD video playback & recording

Bluetooth 3.0

Wi-Fi (802.11b/g/n)

Various sensors





bada, Smartphone platform

An execution environment for
feature-rich apps and services

bada 1.0



Various controls for apps

Common UI controls
Flash/web/map control
Application controls



Advanced user interaction

Various sensors
Motion detection
Face recognition
Multi-touch and vibration control

bada 1.0



Graphics

- OpenGL® ES 2.0
- Direct buffer access
- Vector fonts
- Various drawing primitives



Multimedia

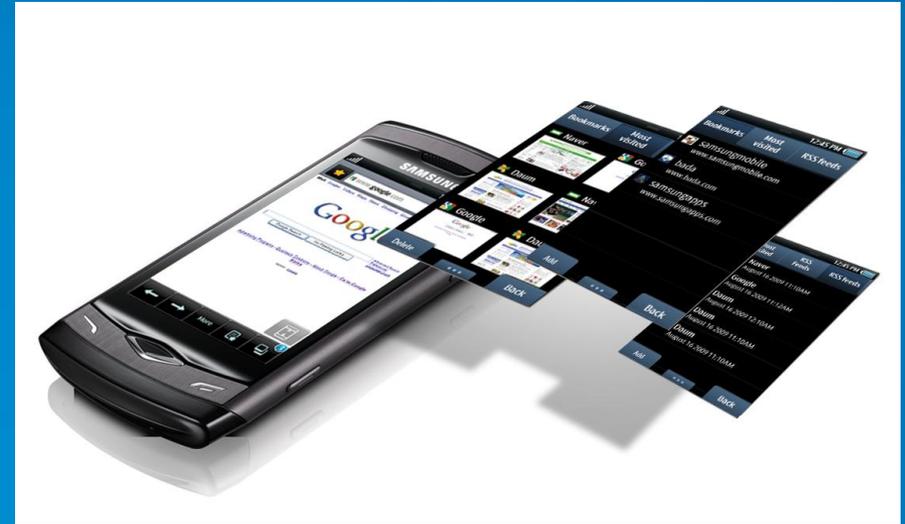
- Media playback/recording
- Camera control
- PCM audio input/output
- Image decoding/encoding

bada 1.0



Data networking

Socket
HTTP 1.1
Bluetooth 3.0
Wi-Fi 802.11n



Web browsing

WebKit-based
Multi-touch zoom
OMA Download

bada 1.0



Location based services

GPS and wireless positioning
Map display and navigation
Landmark management
Location sharing



Social networking

Easy mash-up with external SNS
Simple user profile and buddy
management

bada 1.0



Commerce service

In-app purchase



Content management

Remote and local content storing
Content browsing and searching

Value-added services



Samsung Apps

Services for more than
100 countries
Paid stores in more than
30 countries



Samsung SocialHub

Integrates all information from
SNS, IM, and e-mail accounts

Value-added services



Samsung Dive

Remote Lock & Wipe:
Secures bada phone remotely with
Samsung Dive



Samsung LBS

Hybrid navigation: Integrates
dynamic POI from server and map
data in the device

Content

Content share Content search

Social

SNS Mash-up Lifelog Buddy

Commerce

In-app purchasing

Uix

Sensors Motion Weather service Face detection

Web

Browser

Locations

Route Geo-coding Map Landmark POI

Graphics

Open GL® ES 2D Graphics

Ui

Animation Flash UI Controls Multi-touch

Media

Video Image Camera Audio Player

bada 1.0

App

App Control App model

Security

Certificate Cryptographic key

Base

Utility

Io

Collection Registry Directory

Telephony

SIM Call

System

Device Control System Information

Text

Encoding

Locales

Internalization Localization

Net

File Sockets Http Wifi Bluetooth

SDK

UI Builder Simulator

Messaging

Email SMS MMS

IDE

Eclipse CDT-based

Remote Test Lab

bada

The current Wave family, even more bada devices



Wave525



Wave533



Wave575



Wave723

500MHz Processor
TFT LCD (3.2" WQVGA)
3.2~5.0 Megapixel camera
Bluetooth 3.0
Wi-Fi (802.11b/g/n)

bada 1.1



Auto-scaling UI

Automatic
UI scale up/down



Test environment for bada app

Remote test lab,
test framework



HTTP streaming

Wave II, 2nd bada 'hero'

1GHz Processor
Super Clear LCD (3.7" WVGA)
5.0 Megapixel camera
HD video playback & recording
Bluetooth 3.0
Wi-Fi (802.11b/g/n)
Various sensors



bada 1.2



Web/Flash application model

Web apps with HTML, JavaScript, and CSS
Flash apps



Conditional app launch

Apps launch based on specific conditions



WiFi-EAP

More secure enterprise apps on bada

bada 2.0

New features in bada 2.0

Application framework

Communication

User interaction

Web-centric application



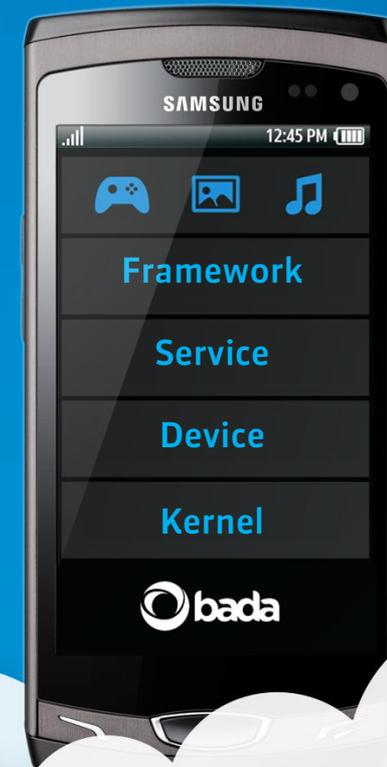
New features in bada 2.0

Application framework

Communication

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Web-centric application



bada Server

Application framework



Multitasking

Concurrent tasking for specific categories of applications

Application framework

Demonstration:
Enhanced application control

Application framework

Registration



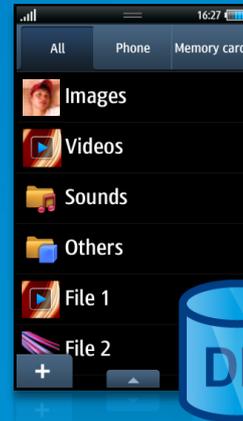
“video/mpeg”



“image/jpeg”



Association



“video/mpeg”

“image/jpeg”



Enhanced application control

3rd party app registered with MIME and URI scheme for later invocation

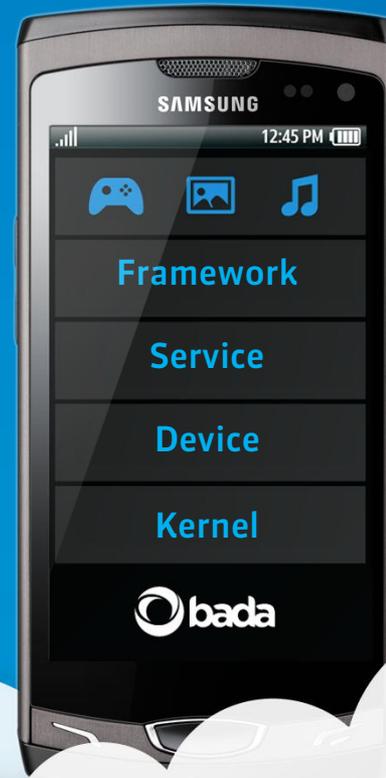
New features in bada 2.0

Application framework

Communication

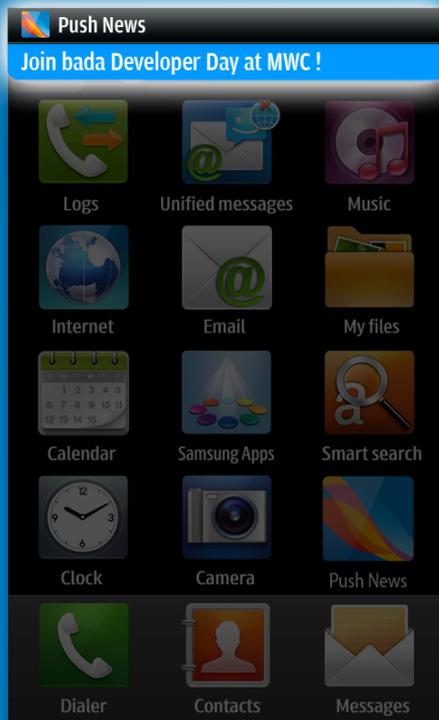
User interaction

Web-centric application

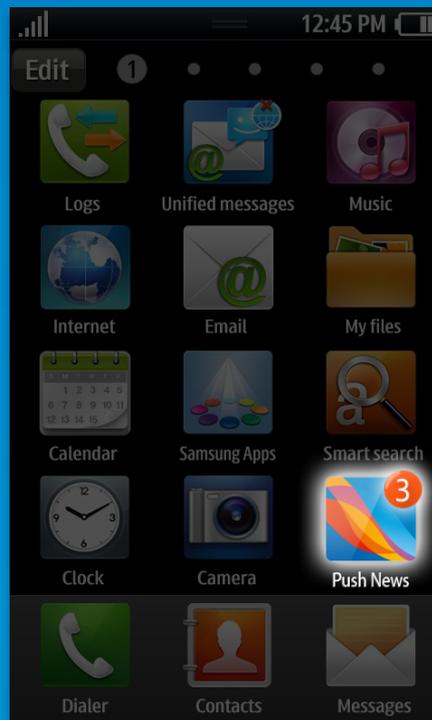


bada Server

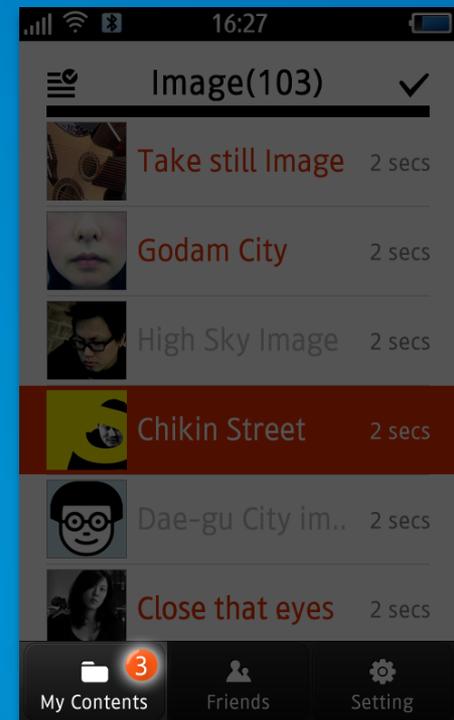
Communication



Push message on quick panel



Push message as number on icon



Push message while running

Communication



Reading
URL



Writing
"\$100"



NFC

(Near Field Communication)

Intuitive and fast read/write

Group Owner



Client 1



Client 2



Wi-Fi Direct

Easy and
fast P2P setup

Communication

Demonstration: Wi-Fi Direct

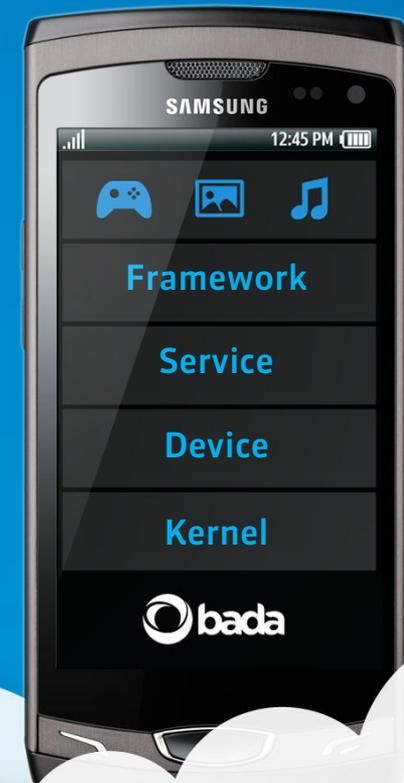
New features in bada 2.0

Application framework

Communication

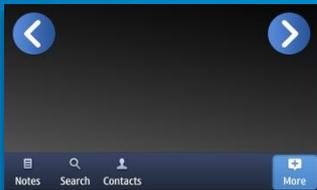
User interaction

Web-centric application



bada Server

User interaction



Layout management

Laying out UI controls
by relative positions



FlashLite 4 support

Maximizing compatibility with
Flash 10



Lock screen

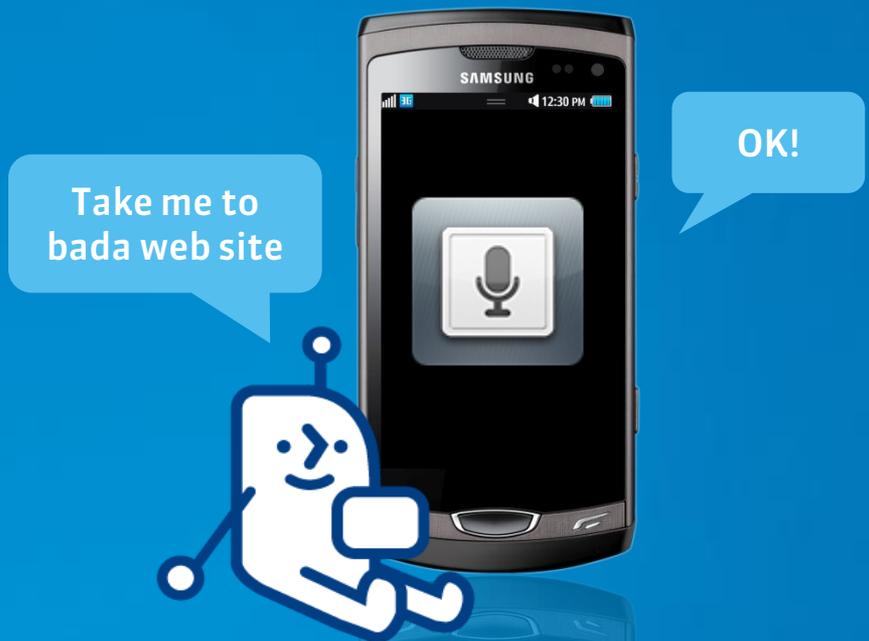
Flash®-based
interactive lock screen

User interaction



OpenAL

3D sound by changing position of audio sources and listener



Voice enabled

STT(Speech-to-Text) and TTS(Text-to-Speech)

User interaction

Demonstration:
STT and TTS

New features in bada 2.0

Application framework

Communication

User interaction

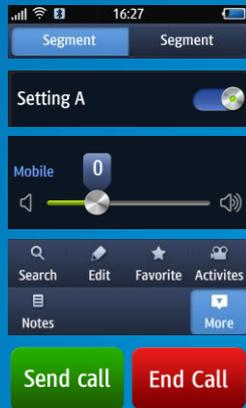
Web-centric application



Web-centric application

Demonstration:
HTML5

Web-centric application



JS Framework



with HTML5

bada web application

Incorporation of HTML5, JS Framework and WAC 2.0



WAC



+80 API's

System

Background launch
Multi-application execution
App Control
Performance enhancement

Better user interaction

Smart home-screen
Layout management
UI personalization
Animation effect
Speech recognition
TTS
OpenAL
FlashLite 4

Communication

NFC
Wi-Fi direct
Push notification

Security enhancement

Secure I/O
DRM

bada 2.0

Enhanced SDK

Emulator
Code analyzer
Performance analyzer
Profiler
Faster simulator

Web-centric application

HTML5
WAC compatibility
JS framework

Revenue model support

Operator billing
Advertising

Evolution of a competitive platform

- From bada 1.0 to bada 2.0 in 2011
- Continuous effort to make bada competitive



More bada phones

- 5M total bada phones in 2010
- Over 10M total bada phones within 1H, 2011
- Focusing on mid-high to mass devices



bada 1.0



bada 1.1



bada 1.2



bada 2.0

Better business support



Samsung
Apps

118 Countries

Global coverage

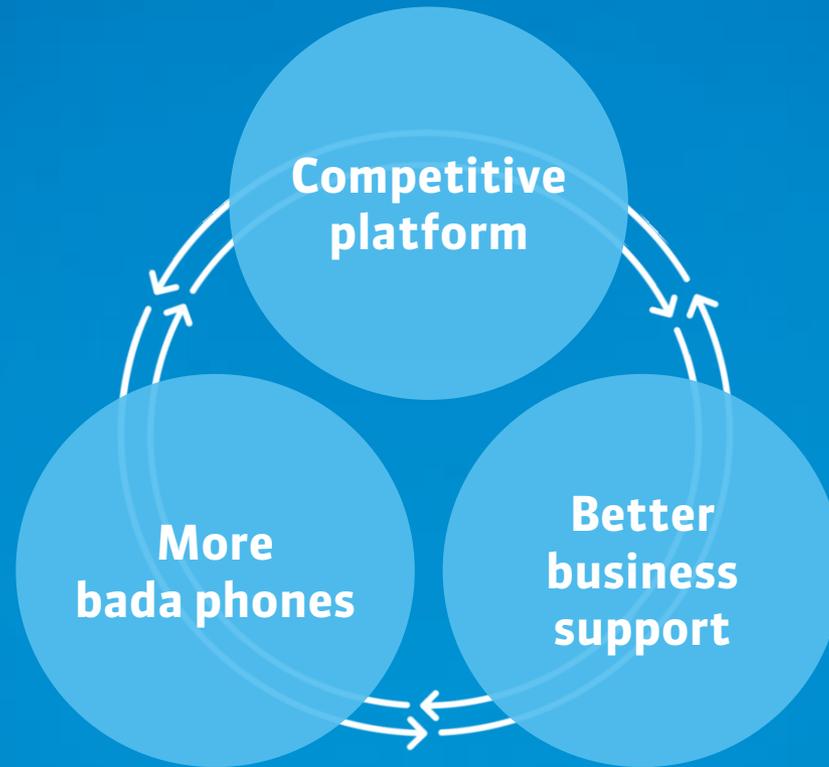
118 countries & 80M downloads *



Various revenue streams

Advertising,
phone billing, prepaid card,
cyber cash

Future of bada 2.0



**“Be the Early Bird
in the Blue Ocean of bada”**

Thank You