Java ME Challenges

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This message is not new

- January 2009 EC face-to-face
- January 2010 EC face-to-face
- Many EC meetings
- Countless developer posts/discussions
Moving Forward

- Developers are a Required for a Healthy Ecosystem
- Developers provide an Early Warning System
What do developers need?

- What we discuss
  - App Store
  - Modernization
  - Consistent Device Behavior
    - Unambiguous API Specifications
    - Bake-offs
    - Maintenance Releases

- What developers actually need?
Developer Enablement

- Onboarding
- Documentation
- Training
- Community
- Tools
- Devices
- Distribution
- Payment
- A Future
“New World Order”
- Java is a *proprietary* platform, constrained by *patents*
- Who owns Java? Who benefits from JCP (community) efforts?

Risk to ME Efforts
- Expect charges of openwashing
- SE/EE developer response is uncertain
- Developer backlash could overflow into ME
- Fallback position for SE/EE is equivalent to .NET ecosystem
- Fallback position for ME is *no ecosystem*

On the other hand...
- Most developers are building apps, not platforms
- However, the ecosystem leaders rely on platform access
What is your plan?
Appendix A

Presentation of developer issues to EC during Santa Clara Face to Face, January 2010 (JSPA update added)
What are developers asking for?
The usual...

- Touch screen API
- Reasonable on-boarding fee
- State of the art UI APIs
- Fewer device bugs
- Single deployment process
- Compatibility effort
- Consist permission behavior
- On-device debugging
- Consistent spec interpretations
- Single signing entity
- More accurate emulators
- Better device identification
- Open tools on all platforms
- Compatible with the IT department
- Less ambiguous specs
- Compelling smartphone story

...and lots more

Sources: [http://forums.java.net/jive/thread.jspa?threadID=55105](http://forums.java.net/jive/thread.jspa?threadID=55105), and developer interviews
Top three concerns
(depending who you ask)

- Fragmentation
  - Device bugs
  - API interpretations

- Security Related
  - Certificates
  - Permissions
  - Application testing

- Marketplace Access
  - App store
  - Common deployment mechanism
Why are developers looking to the ME EC for help?
The ME EC’s charter is to approve JSRs

**[EC] DUTIES AND RESPONSIBILITIES**
- Select JSRs for development within the JCP.
- Approve draft Specifications for Public Review.
- Give final approval to completed Specifications and their associated RIs and TCKs.
- Decide appeals of first-level TCK test challenges.
- Review maintenance revisions and possibly require some to be carried out in a new JSR.
- Approve transfer of maintenance duties between Members.
- Provide guidance to the PMO and JCP Community to promote the efficient operations of the organization and to guide the evolution of Java platforms and technologies. Such guidance may be provided by mechanisms such as publishing white papers, reports, or comments as the EC deems appropriate to express the opinions of one or both Executive Committees. (Added in version 2.7, March 15, 2009).

Source: JCP 2 Process Document version 2.6 (March 9, 2004)
...this is what developers see

Develop

Evolve

Join Now

Shape the future of Java

Representing a Cross-Section

Reconciling Discrepancies

Sources: JCP.org, JCP 2.6 Executive Summary
“The JCP is the **official organization** for making your improvements to the **platform**”

“The JCP offers you a chance to become a permanent part of the **Java platform**'s history by contributing your work and **recommendations as a member**.”

“**the best way to contribute ideas**, and the only way to contribute JSRs for review, **is as a JCP member**.”
The result:

- The JCP is marketed as a **community** for the development of the Java ME **platform**...
- JCP members look to the **top** for platform leadership...

...The **ME EC** is perceived as a **steering body** for the **platform**.
Why should the EC take this on?
Key questions:

- Is it necessary?
- Is it urgent?
- Is any other group better positioned to take the required actions?
Appendix B

Presentation of ME Working Group status to EC, Santa Clara Face to Face, January 2010 (highlights added)
Recap for new members

- Formed in 2009 to address ME issues
- Any EC member may participate
- Meets every other Tuesday
- Reports to ME EC
- Participation by outside experts
- Wiki at http://wiki.jcp.org
Areas of focus

- Security
  - Increase predictability of security-related behaviors
- Marketing
  - Reach out different audiences and promote Java ME
- JATAF
  - Use testing and issue reporting to help attack implementation issues
- Licensing
  - Identified as an issue to both ECs and raised to EC level

[ Missing: Distribution (App Store) ]
Successes

- Existence of EC level group to discuss ME issues
- Identification of a possible route to alleviate security issues:
  - through operator agreement to reduce security behaviors to defined subsets
Challenges

- Interest in addressing issues
  - The economy
  - Non-Java ME phone platforms
- Technology
Possible 2010 Objectives

- Refine objectives in light of changed environment
- Identify interest in ME and pursue it
- Investigate role in standardizing the Java core in modern phones
- Move ahead on addressing issues:
  - Facilitate security discussion among operators
Thank you.