Status Report
ME EC Meeting
IBM, Hursley, UK
May 15th, 2009

ME WORKING GROUP
Define “Developer”
“Developers” by sales per app

- Walled Garden app developers
- Business app developers
  - Enterprise developers
  - “Small” developers
“The Long Tail” wired, 2004

Revenue Per App

Number of Applications

10 100 1000 10K 100K
ANATOMY OF THE LONG TAIL

Online services carry far more inventory than traditional retailers. Rhapsody, for example, offers 19 times as many songs as Wal-Mart’s stock of 39,000 tunes. The appetite for Rhapsody’s more obscure tunes (charted below in yellow) makes up the so-called Long Tail. Meanwhile, even as consumers flock to mainstream books, music, and films (right), there is real demand for niche fare found only online.

THE NEW GROWTH MARKET: OBSCURE PRODUCTS YOU CAN’T GET ANYWHERE BUT ONLINE

Sources: Erik Brynjolfsson and Jeffrey Hu, MIT, and Michael Smith, Carnegie Mellon; Barnes & Noble; Netflix; RealNetworks
“Developers” by total volume

- Walled Garden app developers
- Business app developers
- Enterprise developers
- Home developers
The “Fragmentation” Barrier:

- Walled Garden app developers
- Business app developers
- Enterprise developers
- Home developers
The “Fragmentation” Barrier:

- Lost app revenue
- Lost data revenue
- Increased churn

Revenue Per App

Number of Applications
OVER ONE BILLION SERVED
Most App Stores Will Fail...to meet expectations, unless those expectations are low
App Stores Need...

Apps

Apps need... Developers

Enterprises and “small” developers will not write / maintain dozens much less three versions of an application.

... on which platforms will those three be?
“But if ANYONE can provide apps…”

- “Quality”
- “Security”
- “Race to the Bottom”

Response

- Solved by Palmgear in 1999
- Ratings
- Preview Community
- Opt-in handset enablement
- App revocation
- Small set of “successful” security patterns
- “Panic button”
- Community of previewers
- Require free apps to provide (and be built from) open source
- Let’s examine some “free” applications...
Case study

- A small US operator decided:
  - All handsets would have Java
  - All handsets would have GPS
  - No signing needed for full access to GPS or network*

*GPS permission on first use: “Grant always, Once, or Never?”
Result

- **53% Market Share of LBS applications**
- **$100M Data + App Revenues (early 2006)**
  - Total operator subs: 17M
  - Only charging 20-30% rev share
  - Does not include voice revenue
  - 50% of data subs were enterprises who had written their own applications – *not even purchasing available enterprise apps*
- Other US operators trying to emulate this
“An Oracle mobile story is a good complement to the Oracle enterprise database story.”

from the Director responsible for this operator’s enterprise initiatives
Mobile Message:

Enable the Enterprise

(this will help enable everyone else)
Mobile Vision Statement

“To provide *stewardship* of mobile Java by enabling a *best-in-class ecosystem* for *development* and *deployment* of *compelling* mobile applications”
The ME Working Group

- Focused on Mobile (as in cell phones)
  - But others (embedded, TV) are watching
- Now an official JCP EC activity
- Has held two meetings
  - Provided update during last EC meeting
- Scheduled to meet every other week
“Working Group” as a model for future work

- Governance and ME working groups seem to be working for carrying out EC-level work
- Possible model for future “single EC” Java stewardship?
ME Working Group
Topics on the table

- Fragmentation
- Marketing
- Licensing
- Governance
- Technology
- SE/ME Convergence
Fragmentation

- Need a definition/classification
  - Aplix has a presentation
  - Many other ME EC members have studied this
- Need for a converged security model across domains
  - Form a JSR to facilitate agreement by stakeholders.
- Improved testing (interoperability testing, testing beyond TCKs)
  - Form an Expert Group?

-> Need to tap expertise of those impacted by the problem in creating a solution
Topics on the table

- Fragmentation
- **Marketing**
- Licensing
- Governance
- Technology
- SE/ME Convergence
Marketing

- Vision statement
- Analyze and understand the business environment (Aplix)
- Promote Java as a "first class" citizen in the mobile space
- Promote our activities, let people know that we are working to solve problems, are competitive
Why a “vision statement”?

- Describes why we are here
- Helps focus activities
- Final authority
Mobile Vision Statement

“To provide stewardship of mobile Java by enabling a best-in-class ecosystem for development and deployment of compelling mobile applications”
Vision Statement autopsy

- “provide stewardship” – emphasizes stewardship role
- “mobile Java” – not just Java ME
- “enabling” – working group depends on external resources for implementation
- “best-in-class” – cites need to measure against other platforms
- “ecosystem” – underscores soup-to-nuts approach required for success
- “development and deployment” – not just technical, but also “business” issues
- “compelling” – not just a game platform
- “mobile applications” – as opposed to browser (do we want to limit ourselves in this way?)
Mission Statement

- Describes “how” to implement vision at high level
- Bullet list
- Possible example:
  - ...
  - “Recommend and seek sponsors for new JSRs”
  - ...

Topics on the table

- Fragmentation
- Marketing
- Licensing
- Governance
- Technology
- SE/ME Convergence
Licensing

- TCK licensing
- Need for consistent RI licensing

-> comments from other EC members?
Topics on the table

- Fragmentation
- Marketing
- Licensing
- Governance
- Technology
- SE/ME Convergence
Governance

- TCK transparency
  - Could be tackled in Governance Work Group (aka JSR-215 WG)

-> Track issue in ME Working Group but move it to Governance Working Group to be addressed
Topics on the table

- Fragmentation
- Marketing
- Licensing
- Governance
- Technology
- SE/ME Convergence
Technology

- MIDP2 to MIDP3 evolution path/planning
- Additions to current featureset

-> This is arguably not “Smartphone Java”
Topics on the table

- Fragmentation
- Marketing
- Licensing
- Governance
- Technology
- **SE/ME Convergence**
SE/ME Convergence

- Smartphone Java with SE core
- More modular Java

-> Can we choose an existing platform and organize behind it?
Concerns

- If we don’t make major changes immediately
  - ME declared “mature” and no smartphone Java convergence
  - Future investment limited to reduction of maintenance costs
  - Warnings:
    - Lack of quorum in ME EC (these folks are the innovators and implementers)
    - ME innovation stalled in past 3 years
      - Independent efforts fragmenting mobile Java
      - Why???
        - Desire to control IP?
        - JCP governance issues?
        - Viable alternatives?

-> What change is needed to restore this?
Possible near-term actions

- Security JSR
  - “Permission” to kick one off
    - Who will do the work?
    - Getting operator “blessing”?
- Interoperability
- Smartphone Java
  - Should we pick an existing solution and go with it?
  - Does this need to wait for Oracle closure?
    - JavaFX Mobile vs Android/Dalvik
Conclusion

- ME Working Group has EC support
- Multiple potential major initiatives
- Time to move forward on one of these