Orchestrating
Mobile Application Ecosystems

Application Stores and Beyond…

Ankur Tarnacha, PhD
Research Analyst, IDC, USA

Early 2000's in the US

- The Reign of Mobile Voice

- "Multimedia" capability of phones
  - Colorful Screens, Camera, SMS, and Limited Location Capabilities and Bluetooth/USB Connectivity

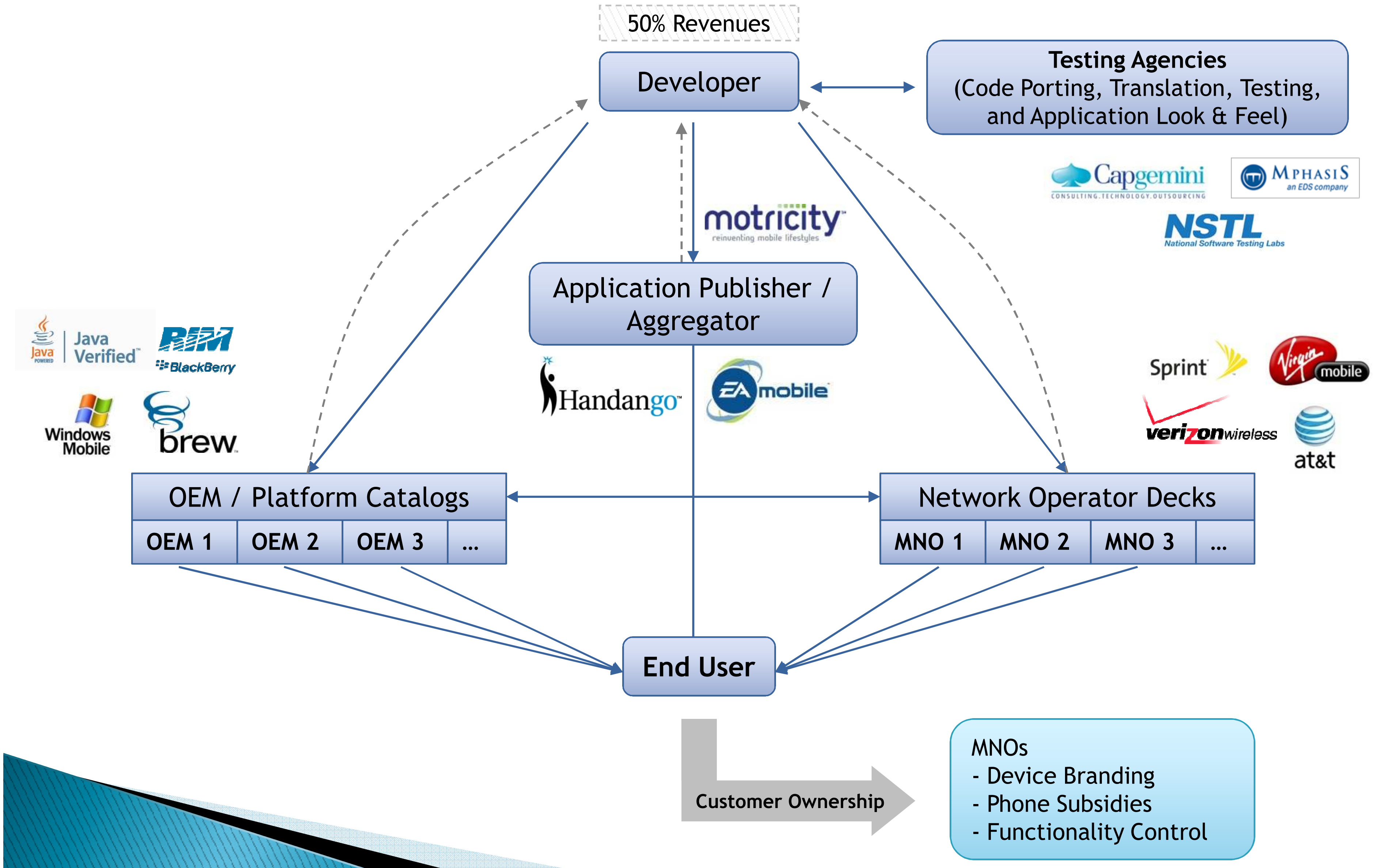
- Mobile Content was primarily defined as
  - Ringtones, Ring-back Tones, Wallpapers
  - User-Generated Content: Messaging (mostly SMS)
  - Email Access and extending the computer

- Mobile Network Operator centric model
  - Operator Subsidized Phones
  - Crippled Connectivity: Bluetooth, Wifi, and 2.5 G networks
  - Operators Experimenting with ARPU opportunities

Mobile Applications: An Import

- From 'Passive' to 'Active' Content: Mobile Applications
  - A Non-American Concept
  - Device OEMs Experience in International Mobile Markets
- Qualcomm's BREW (Binary Runtime Environment for Wireless)
  - 2001 Launch as a framework for OTA Application Deployment
  - Foster Qualcomm's CDMA handset and operator Ecosystem
  - Mostly Low-End Games
- Sun's open mobility push: J2ME (Java ME)
  - Success in international markets spill's into the US
  - RIM's Blackberry and proprietary Java implementation
- Symbian and Windows Mobile Smartphone penetration limited

Mobile Applications Value Chain



Value Proposition

- The Dorm Room Wave of Application Development
  - Technophiles, Hobbyists, and Students

- Many platforms to develop for…
- Too many devices with continuously updated firmware
- Plethora of distribution channels
- Operator device branding
- Skyrocketing application testing costs

- Severe Market Fragmentation
  - Device-level Variety
  - OS-level Variety
  - Operator-level Access Variety

Challenges of the Mobile ISV

- From Hobbyist to Entrepreneur…
- Where's the money?
  - Are the development, versioning and testing costs sustainable?
  - How to control the bite of the middle men?
  - Where are the promised volumes?
  - Are the consumer willing to pay?
  - What's the best price?
  - Are the operators serious?
- The painful realizations of the budding Mobile ISVs
  - Its who you know
  - Never depend on any one platform, operator or channel
  - Applications have seasons
  - Application version upgrades is a loosing proposition
- Few big application and content aggregators dominate

Mobile Application Ecosystems

- Apple's iPhone
  - A Definitive American Smartphone!
  - Touch Screen and Move to Software
  - Marketing Machine
  - Developer Engagement Becomes Red Hot!

- Other Smartphone Platforms Gain Steam
  - Google's Android and RIM Blackberry OS

- Vibrant Platform Ecosystems: Developer Communities
  - App Dev Tool Kits
  - Rewarding Best-of-Breed Applications
  - Best Practices for App Visibility
  - Negotiating Operator Policies
  - Streamlined Revenue Sharing and Business Model

- Manage Ecosystem for Platform Dominance!

Application Platforms and Stores

- Platform Vendors become Platform Promulgators
  - From 50-50 to 80-20
  - Direct Operator Engagement
  - Integrated Billing Systems and Pricing Control
  - Leveraging Traditional Media (TV, Magazines, Events…)
  - Centralized Application Testing and Certification

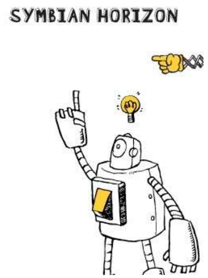
- Application Stores solve the supply-chain inefficiencies
  - Apple’s App Store
  - Google’s Android Market
  - RIM’s Blackberry App World
  - Sun’s Java Store
  - Symbian Foundation Horizon (Store-of-Stores)

App Store

market

BlackBerry App World

Java store



Has Fragmentation Disappeared?

- Not altogether
  - Powerful ally: *Platform Promulgator*
  - Tied fate, A seat at the table
  - Increased visibility

- Mobile ISVs facing new, yet similar challenges
  - More platforms and App Stores to Come
  - Testing and Certification can still be costly
  - Only Few Niches Lucrative (Games and Entertainment)
  - Smartphone penetration is still low
  - Application Portfolio Across Additional Platforms

- More Fragmentation!

What About Revenue Opportunities?

- Growing Acceptance and Market Size

- Consumer Appetite for Free Applications
  - Why update? Software tends to $0…
  - Many Similar Underpriced/free Applications
  - Hardly any Customer Lock-in

- Developer Burnout and Mobile ISV Consolidation
  - How can we monetize?
  - How can we scale?
  - Are platform promulgators really interested in updates?
  - Can we explore new business models?
    - Ad or Subscription Based Models

Orchestrating the Mobile Ecosystem

1. Keep it Simple and Accessible
2. Developer Engagement: Awards, Events, Best-Practices…
3. Show the Money and Profitability: 80-20 will Dwindle Soon
4. Explore Advertising and Subscription based revenue opportunities
5. Balance Quantity with Quality
6. Deal Directly with the select Best-of-Breed Mobile ISVs
7. Tackle the Mobile ISV Burnout

The Future of Mobile Ecosystems

- Platform Promulgators as Stewards of Business Ecosystems

- Signs of Healthy Ecosystems
  - Productivity (Market Share and Innovation)
  - Robustness (Survival Rates)
  - Niche Creation (Variety)

- A ‘Carrot and Stick’ approach
  - Ecosystem Membership Incentives
  - Certify to Manage (Applications and Mobile ISVs)

- Ecosystem Challenges Ahead
  - Background Applications
  - The Mobile Browser
  - Mobile Operators and Software-as-a-Service
  - Macro-Economic Recession!

Questions?

Ankur Tarnacha
atarnacha@idc.com
+1-508-988-7591