Mobile Development @ PayPal

Usman Abbasi
Senior Manager, Mobile Development
• Technology is changing fast!
• Lots of competition/innovation
• Fragmentation is continuing problem
• Uncharted territory
What is PayPal doing?

- **Consumer Application**
  - Access all payment methods anywhere
  - Send/Invoice Money
  - In-Person payments via Bump

- **Merchant Checkout**
  - In-app, rich authentication
  - 1-click payment, sign-up and sign-in
  - Single integration
  - Guest checkout
  - Auto-detect mobile web
Huge Growth and Opportunity
Global Perspective

NA Trend
1. Trad. Web ↔
2. SMS ↔
3. Mobile Web ↑
4. Smart Phone ↑
5. Tablet Client ↑

EU Trend
1. SMS ↔
2. Trad. Web ↔
3. Mobile Web ↑
4. Smart Phone ↑
5. Tablet Client ↑

LatAm Trend
1. SMS ↑
2. Trad. Web ↑
3. Mobile Web ↑
   -- Smart Phone ↑
   -- Tablet Client ↑

Asia Trend
1. SMS ↔
2. Mobile Web ↑
3. Trad. Web ↑
   -- Smart Phone ↑
   -- Tablet Client ↑

Africa/MF Trend
1. SMS ↔
2. Mobile Web ↑
   -- Trad. Web ↑
   -- Smart Phone ↑
   -- Tablet Client ↑

PayPal Footprint
- Localized
- Send/Receive/Withdraw
- Send Only
Platform Survey

**iPhone**
- Flagship platform
- Easier for C/C++ & Mac developers
- Walled garden
  - Good: Protected, uniform platform
  - Bad: TOS causes confusion with every change

**Android**
- Flagship platform by 2011
- Easier for Java Developers
- Fragmentation—only going to get worse
- “Open Platform”
  - Good: Flexible and adaptable
  - Bad: Evolving security model
Portability Frameworks

Benefits:
- Cost & Time to Market
- Easier to hire—Javascript vs Objective-C
- Easier to pickup
- Good for rapid prototyping

Challenges:
- Lock-in!!!
- Need native control over UI
- Write once, debug everywhere!
- Obfuscation over long run
- Feature Lag
Mobile Web

- Mobile Web helps with portability
- Rendering technology helps with fragmentation
- Webkit has paved the way for great experience
- HTML5 brings rich experience
Mobile commerce is already bigger than you think
Mobile is in flux! New technology announcements daily
Fragmentation is going to get worse before it gets better. Deal with it!
Convergence is inevitable but will not be to one platform
Rules of the road:
1) Global products require a variety of technologies (SMS, Apps, Mobile Web)
2) Technology changes quickly. Expect to change along with it.
3) Prefer Native environments to create rich experiences
4) Do X-platform thru web. HTML 5 is the future
5) Use portability frameworks as prototyping tools