User Interaction: Intro to Mobile Development Landscape

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INF 133 Fall 2014
Mobile Development

Issues:

- Market Share
- Are we talking about OS or hardware?
World wide Mobile OS Device Sales Market Share

Source: Gartner Research, IDC
Intro to Mobile Development

Source: http://www.androidauthority.com/state-smartphone-industry-2014-527300/
Figure 39: Leading Mobile Browsers Seen Across All Networks, Q2 2014
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Manufacturer operating system share—smartphones

Nov ‘10 - Jan 11, postpaid mobile subscribers, n=14,701

Source: http://blog.nielsen.com/nielsenwire/online_mobile/who-is-winning-the-us-smartphone-battle/
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Smartphone manufacturer share by operating system
Q2 2012, US mobile subscribers

- Samsung: 17%
- HTC: 14%
- Motorola: 11%
- Other: 9%
- Apple: 34%
- RIM: 9%
- Nokia: 0.9%
- HTC: 2.9%
- Nokia: 0.3%
- Palm: 0.6%
- Android OS: 51%
- Apple iPhone: 34%
- RIM Blackberry: 9%
- Windows Mobile: 7%
- Symbian: 0.5%
- Palm OS: 0.1%
- Other: 0.5%

Source: Nielsen

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SMARTPHONE MANUFACTURER SHARE BY OPERATING SYSTEM

Q2 2013, US MOBILE SUBSCRIBERS

- **ANDROID OS**
- **APPLE iOS**
- **WINDOWS PHONE**
- **BLACKBERRY**

- **APPLE**
  - 40%

- **SAMSUNG**
  - 24%
  - 0.7%

- **HTC**
  - 9%
  - 0.4%

- **MOTOROLA**
  - 9%

- **LG**
  - 7%

- **RIM**
  - 3%

- **OTHERS**
  - 2%

- **NOKIA**
  - 1.2%

- **HUAWEI**
  - 1%

Read as: During Q2 2013, 24% of U.S. smartphone owners used Samsung’s Android handsets and 0.7% had Samsung Windows Phone handsets.

Source: Nielsen

## Worldwide Smartphone Sales to End Users by Vendor in 4Q13 (Thousands of Units)

<table>
<thead>
<tr>
<th>Company</th>
<th>4Q13 Units</th>
<th>4Q13 Market Share (%)</th>
<th>4Q12 Units</th>
<th>4Q12 Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung</td>
<td>83,317.2</td>
<td>29.5</td>
<td>64,496.3</td>
<td>31.1</td>
</tr>
<tr>
<td>Apple</td>
<td>50,224.4</td>
<td>17.8</td>
<td>43,457.4</td>
<td>20.9</td>
</tr>
<tr>
<td>Huawei</td>
<td>16,057.1</td>
<td>5.7</td>
<td>8,666.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Lenovo</td>
<td>12,892.2</td>
<td>4.6</td>
<td>7,904.2</td>
<td>3.8</td>
</tr>
<tr>
<td>LG Electronics</td>
<td>12,822.9</td>
<td>4.5</td>
<td>8,038.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Others</td>
<td>106,937.9</td>
<td>37.9</td>
<td>75,099.3</td>
<td>36.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>282,251.7</strong></td>
<td><strong>100.0</strong></td>
<td><strong>207,662.4</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Gartner (February 2014)
Market share by brand from Q2 '08 to Q2 '14.

Source: http://www.androidauthority.com/state-smartphone-industry-2014-527300/
Mobile Development

Issues:

- Stores
- iTunes
- Android
- Blackberry
- OVI
- Microsoft
Mobile Development

Issues:

- Programming Languages
  - C++
  - C#
  - Java
  - Objective-C
  - Python
  - Others?
Mobile Development

Issues:

- Device Variability
  - Android
  - Microsoft (Nokia)
  - Apple
  - BlackBerry
Issues:

- Programmer Freedom
  - Distribution
  - Background Processes
  - Device Access
  - Profit Models
    - Pay per app
    - In-app payments