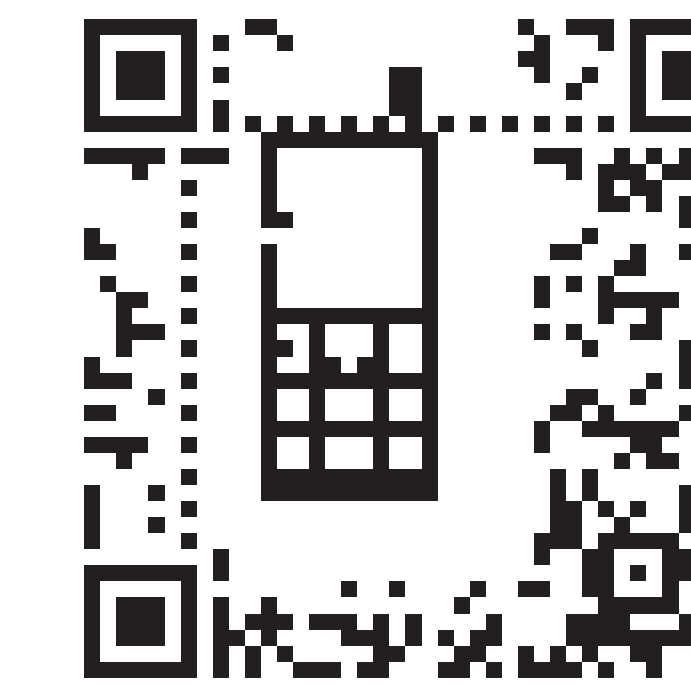


# Selecting a Mobile Platform Strategy

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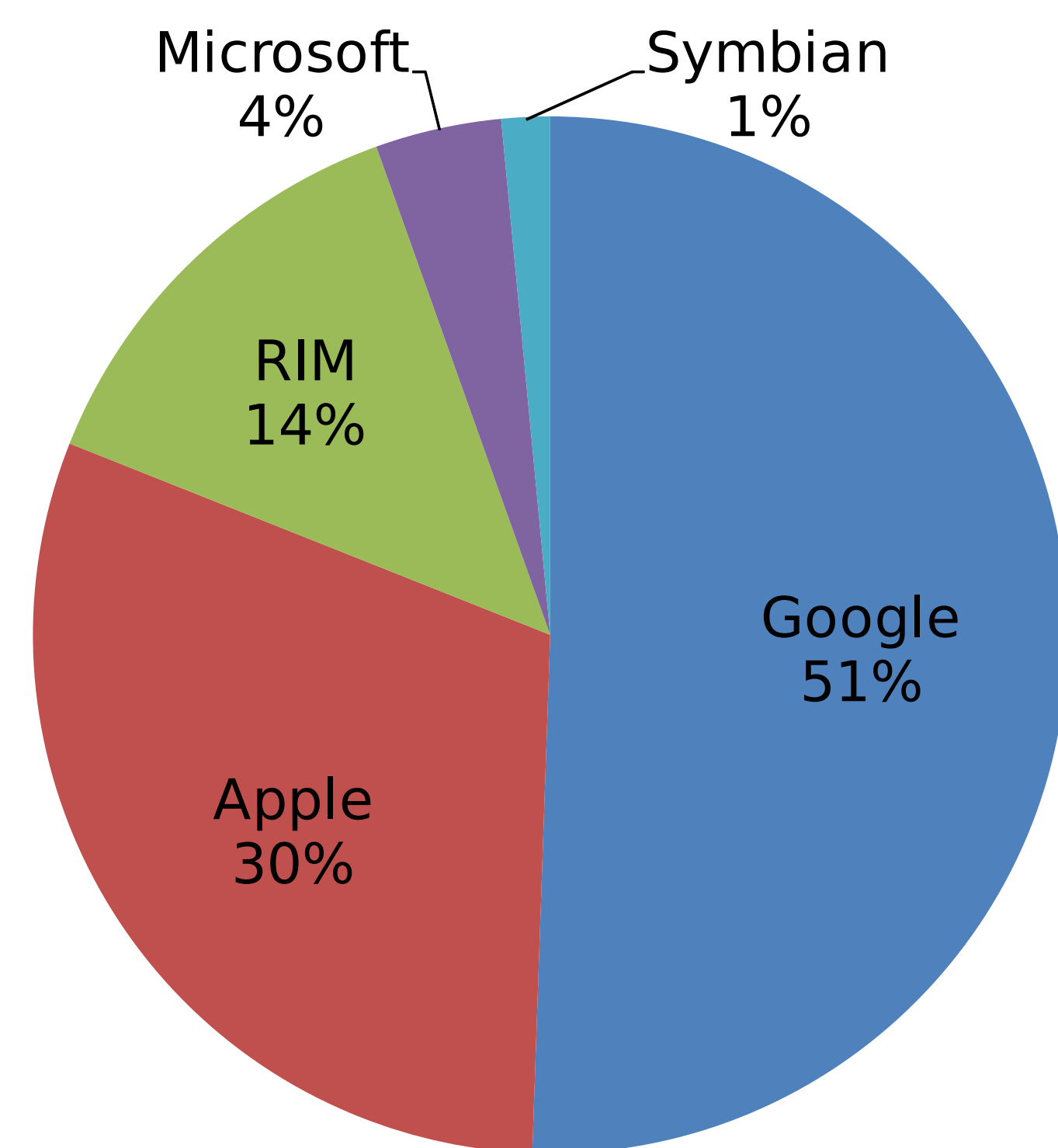
## Additional Information



Get the research paper, view this poster, and additional project details.

<http://goo.gl/xyUIe>

## Mobile Platform Market Share



Platform Market share for February 2012 [1]

## Abstract

This research evaluates product-line software engineering of mobile applications. A native mobile application benefits from performance and device integration, but at the cost of multiple versions of the application for each mobile platform. This research shows HTML5 and the mobile web may be a valid solution for most applications if the application requirements do not rely on device optimization or hardware features.

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## Which Platform to Develop For

### Native App versus Mobile Web



	Native App	Mobile Web
Reaches widest audience	No	Yes
Download required	Yes	No
Access to device capabilities	Yes	No
Support frequent updates/changes	No	Yes
Develop & support versions for multiple Operating Systems	Yes	No
Push notification of alerts to users	Yes	No
Code performance	Yes	No
High frequency use	Yes	No
Work disconnected	Yes	No
Lower build/maintenance costs	No	Yes
Execute in the background	Yes	No

### Single Platform Strategy



Select a platform and develop a native application using only the common features available across the platform. Example: iPhone, iPad, iPod.

### Native Platform Strategy

BlackBerry

Develop a native application for each platform. This will have higher development costs but will be optimized for performance.



### Hybrid Strategy

Use a third party framework to abstract the device hardware to develop a native app deployable to multiple platforms.



PhoneGap



rhomobile

### Mobile Web Strategy



Use HTML5 to develop once and use on multiple platforms and devices. Easy to develop for, but not all device features may be available.

## Mobile Skill Set by OS Type

Mobile OS Type	Skill Set Required
Apple iOS	Objective-C
Google Android	Java
RIM BlackBerry	Java
Symbian	C, C++, Python, HTML/CSS/JS
Windows Mobile, 7 Phone	.NET (C++, C#, VB)
HP Palm webOS	HTML/CSS/JS
MeeGo	C, C++, HTML/CSS/JS
Samsung bada	C++

Required skill sets for mobile OS [2]

## References

- [1] comScore. (2012, April 7) "comScore Reports February 2012 U.S. Mobile Subscriber Market Share." [Online]. Available: [http://www.comscore.com/Press\\_Events/Press\\_Releases/2012/4/comScore\\_Reports\\_February\\_2012\\_U.S.\\_Mobile\\_Subscriber\\_Market\\_Share](http://www.comscore.com/Press_Events/Press_Releases/2012/4/comScore_Reports_February_2012_U.S._Mobile_Subscriber_Market_Share)
- [2] Andre Charland and Brian Leroux. "Mobile application development: web vs. native." Commun. ACM 54, 5 (May 2011), 49-53. DOI=10.1145/1941487.1941504 [Online]. Available: <http://doi.acm.org/10.1145/1941487.1941504>

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