

Cross-platform mobile development



InfoSupport

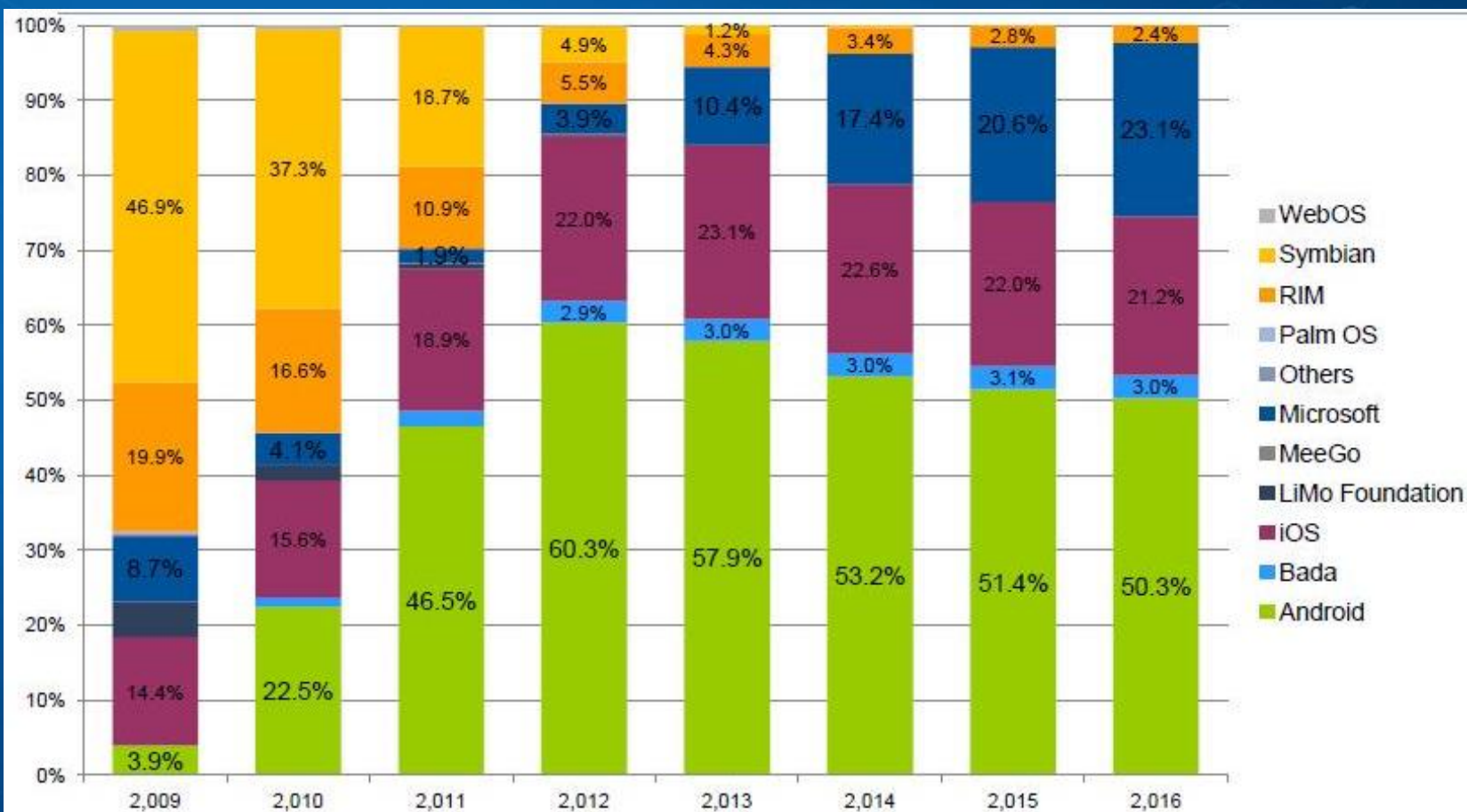
InfoSupport

Survey



- WiFi: WLANFREE
- Pass: kenniscentrum

Prediction

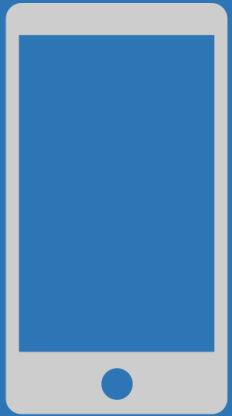


Source: Gartner

Forecast: Mobile Devices by Open Operating System, Worldwide, 2009-2016, 2Q12 Update

Gartner

Logistics



Agenda



App development



Xamarin.Android



Xamarin.iOS



Code sharing



Xamarin.Forms



Testing

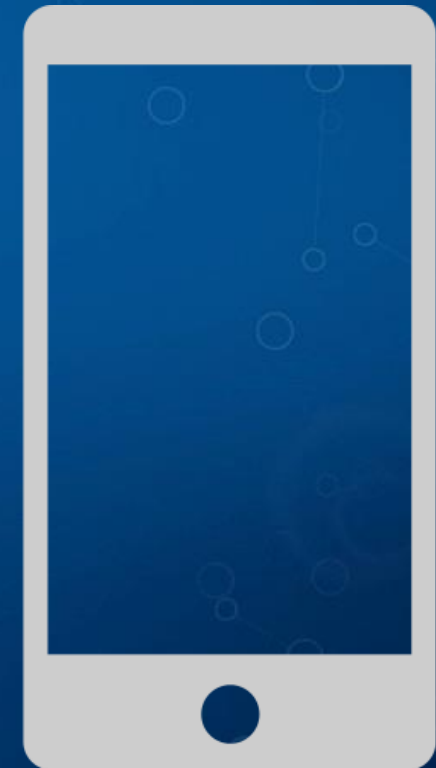
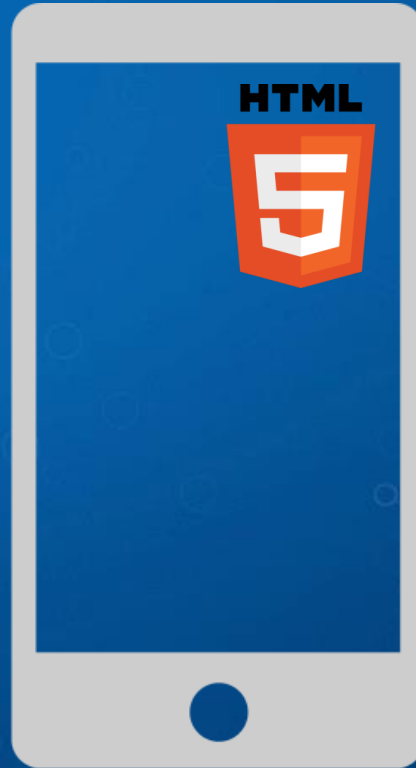
App development






Building mobile apps



Application types



Application types

			
Native look & feel	--	--	++
Camera access	--	+--	++
GPS	++	++	++
Secure service communication	JSON/REST	JSON/REST	JSON/REST
Access to OS apps	--	--	++
Social media integration	+--	+--	+
Distribution	++	AppStore presence	AppStore presence

Mobile is personal

- Always with you
- Association with OS
- User experience is key



Native?



The best UI experience

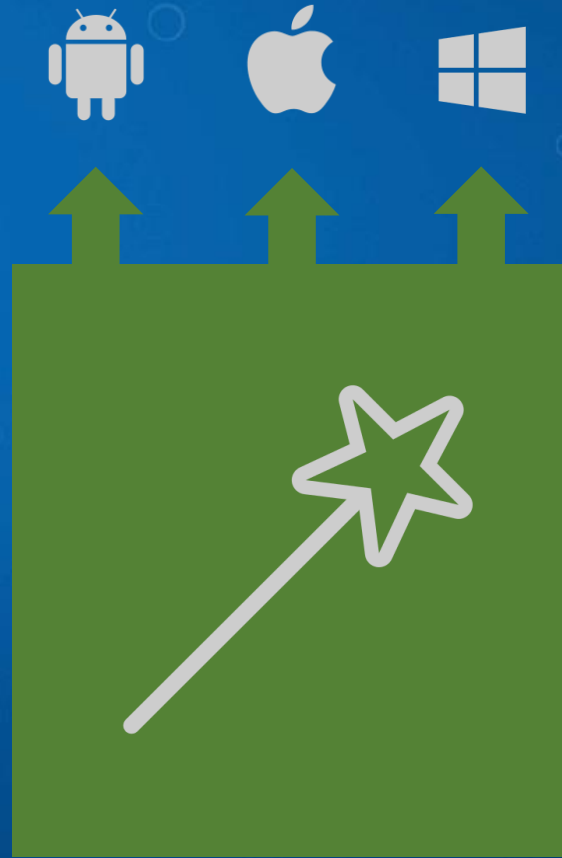
The best performance

Full access to native
libraries and OS features

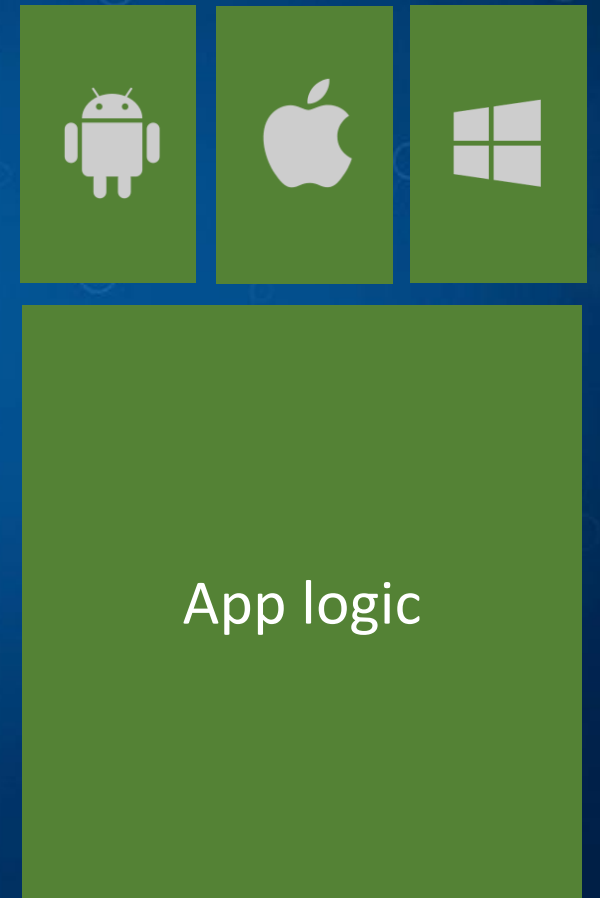
Three native flavours



Vendor



“Magic box”

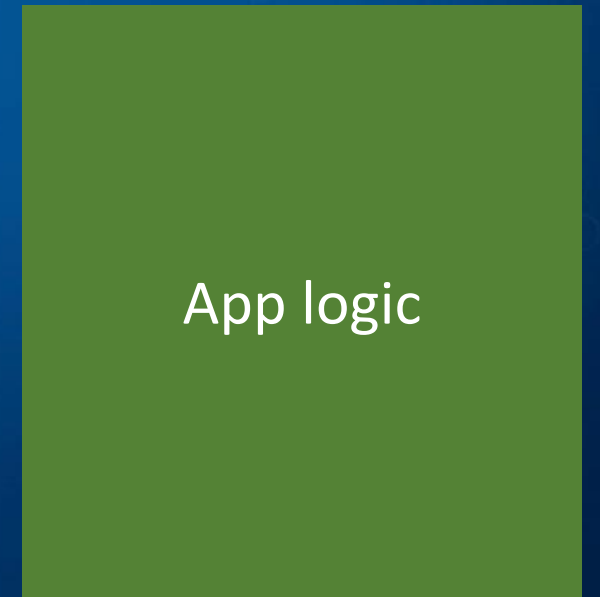


Hybrid

Three native flavours

App logic

- Shared language

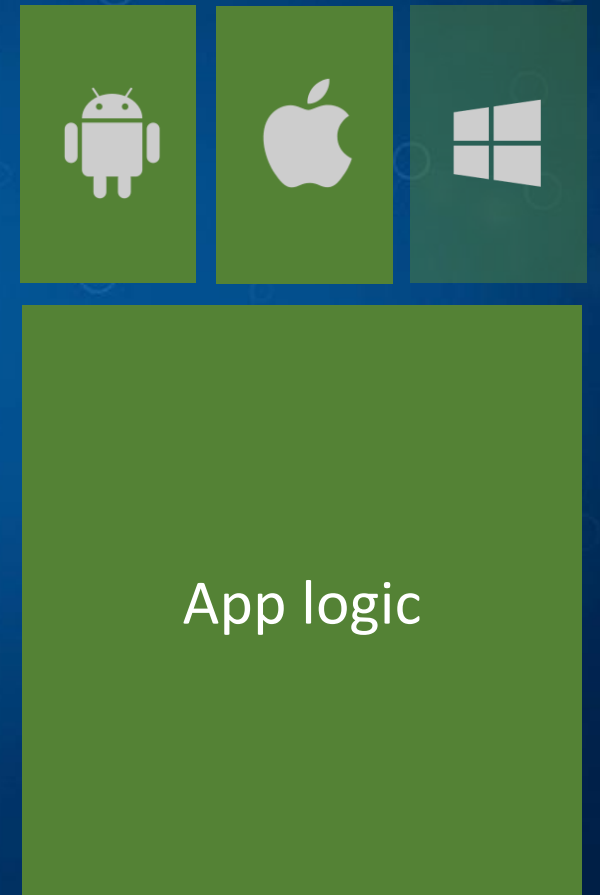


Hybrid

Three native flavours

Xamarin

- Xamarin.Android
- Xamarin.iOS

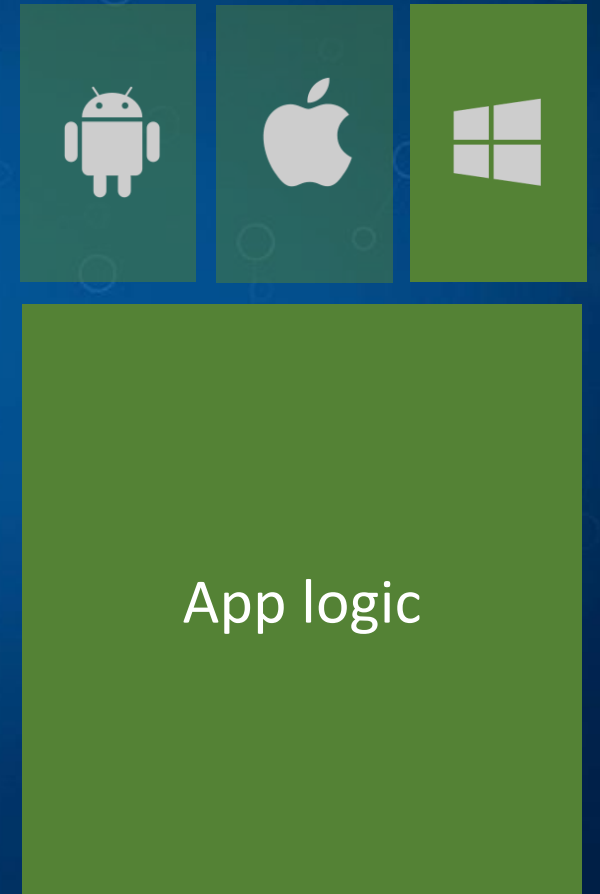


Hybrid

Three native flavours

Visual Studio

- XAML, WinRT



Hybrid

Mobile specific



Battery life

- To increase battery life, all platforms have a way of suspending apps
- There is no such thing as multitasking for apps
 - There is (fast) app switching
 - There are background processes
 - You can run under lock screen
 - Special case, additional certification requirements



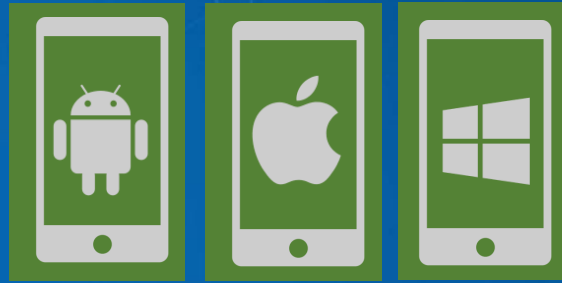
CPU Power

- CPU cycles matter
 - 1~2 GHz ARM processor (average)
 - CPU cycles drain battery
- Rendering of UI on 1 thread
 - Ensure you do actual work on background threads
 - Switch to foreground only when UI interaction is need
 - E.g. Data binding, updating controls etc.



App architecture

App logic



Internet



Services



Xamarin History

