

Cross-platform mobile development



InfoSupport

.infoSupport

Hi!

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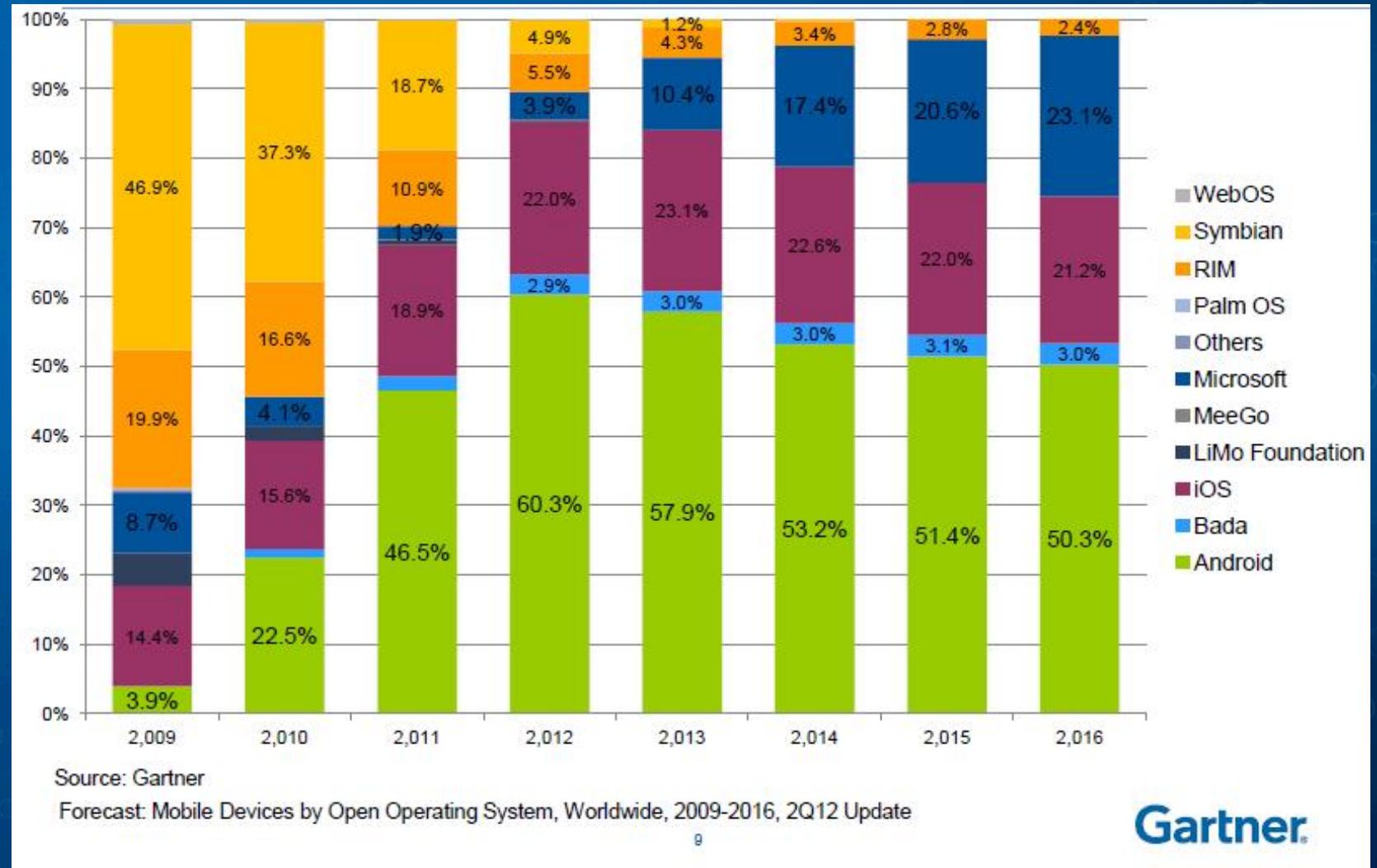


Survey

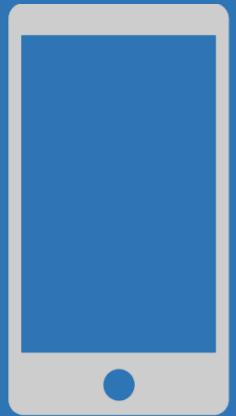


- WiFi: WLANFREE
- Pass: kenniscentrum

Prediction



Logistics



Agenda



App development



Xamarin.Android



Xamarin.iOS



Code sharing

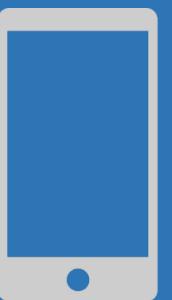


Xamarin.Forms



Testing

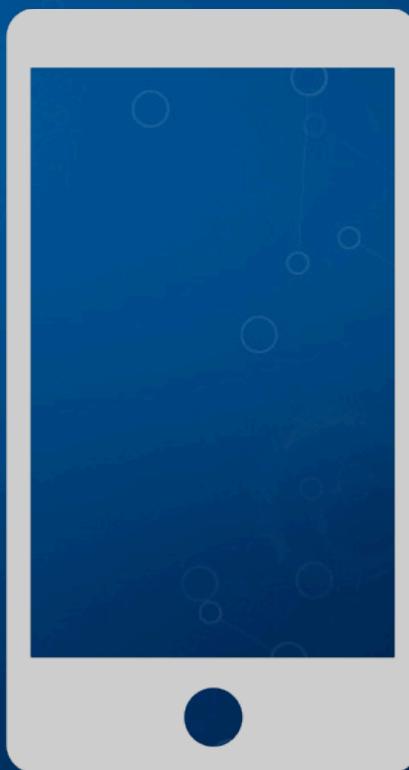
App development



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

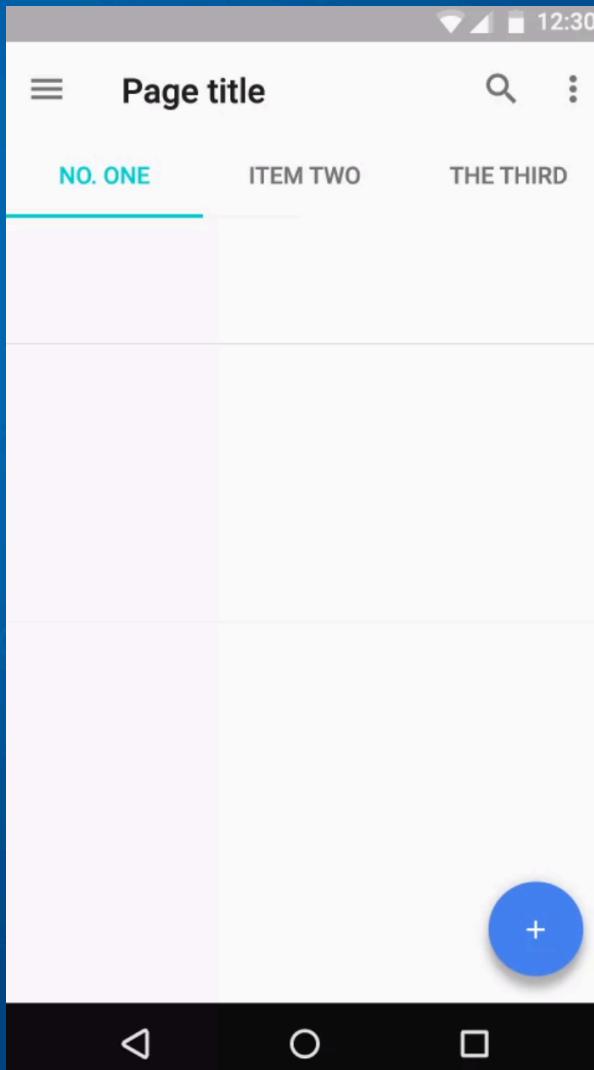
- Always with you
- Association with OS
- User experience is key



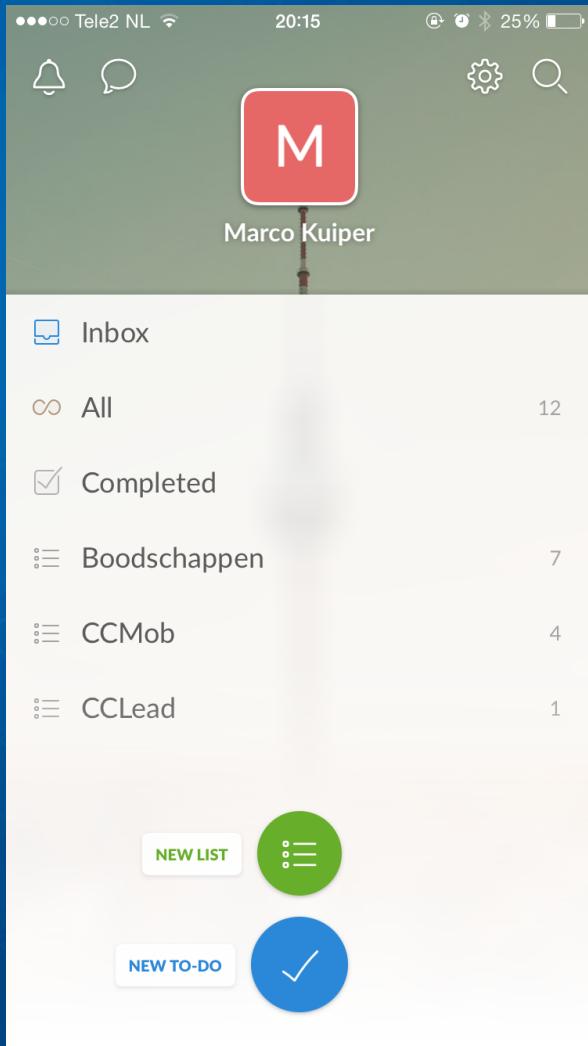
Cross-overs



Floating Action Button



Cross-overs



Native?



The best UI experience

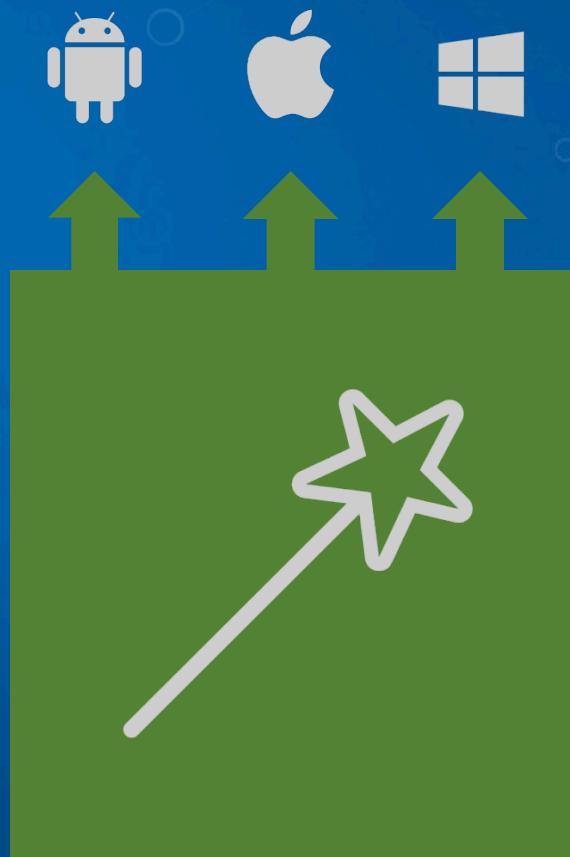
The best performance

Full access to native
libraries and OS features

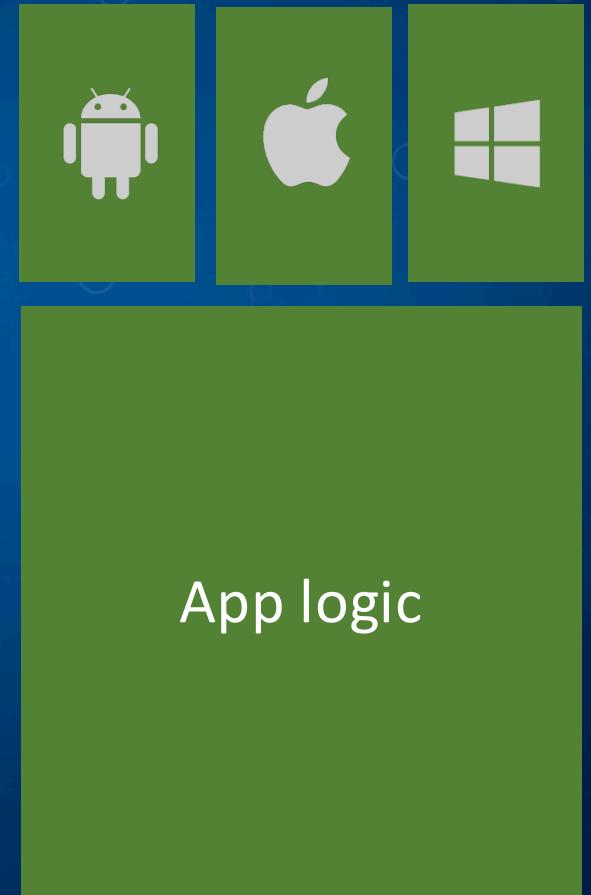
Three native flavours



Vendor



"Magic box"



Hybrid

Three native flavours

App logic

- Shared language



App logic

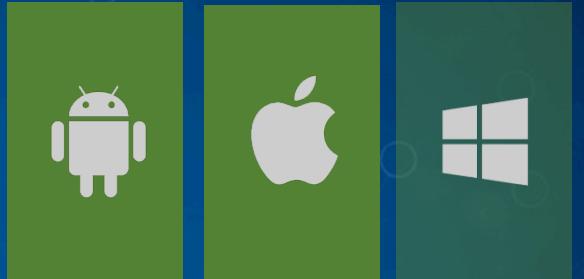
C#

Hybrid

Three native flavours

Xamarin

- Xamarin.Android
- Xamarin.iOS



App logic

Hybrid

Three native flavours

Visual Studio

- XAML, WinRT



App logic

Hybrid

Mobile specific



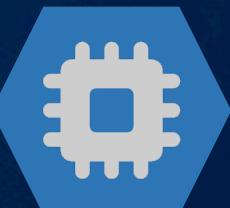
Battery life

- 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.

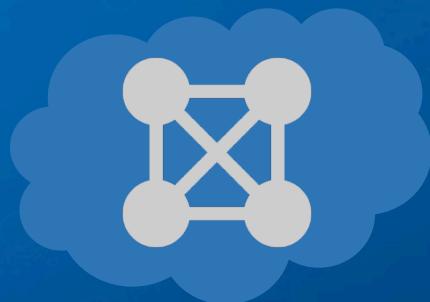


App architecture

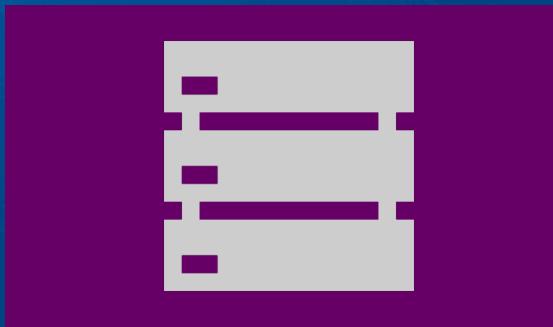
App logic



Internet



Services



Xamarin History

