

Effective Mobile App Development

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- 4+ Years Mobile Development experience
- Genetically predisposed programmer
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Background

Where are we now?

Tech in Canadian Biz

- Conservative
- Slow to adopt
- Slow to change
- Far behind
- Fewer startups

At a Glance

IDI Ranking - Canada

2017 Rank	29
2016 Rank	25
2015 Rank	23
2017 Value	7.77
2016 Value	7.62
2015 Value	7.55

Developer Landscape

- Skills gap
- Information overload
- Focus on keeping the lights on
- “Agile” tends to be abused
- Demand for skills outstrips supply

The Problem?

Notches...among other things...

Technology is hard

- Business Problems
- People Problems
- Technology Problems

Mobile apps are VERY hard

- Devices
- Stores/Distribution
- Testing
- Feedback
- Platform changes

And it's kind of strange...

INSPIRATION BEHIND THE NEW DESIGN



Challenges

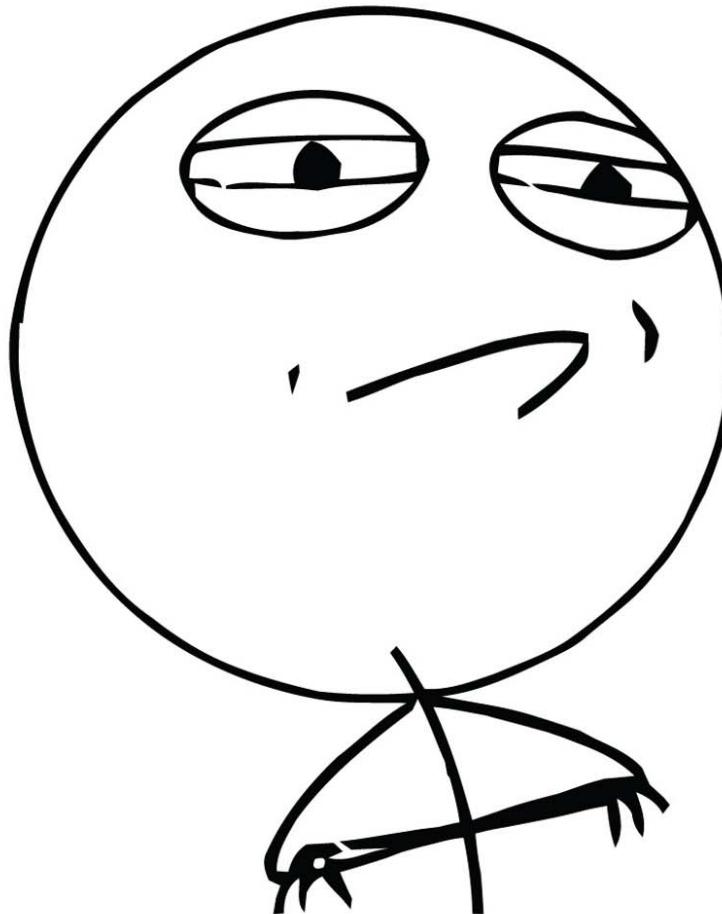
- Tech giants slow to rollout to Canadian market
 - ie. Cloud data centres within Canada
- Regulatory concerns (privacy)
- Technology changes fast

More Challenges

- What about web?
- Technical constraints
 - Network availability/data limits
 - Device & platform capabilities
 - Battery usage
- Versioning
- Offline

Even More Challenges

- Cost
- Developer competency
- Lack of stakeholder understanding

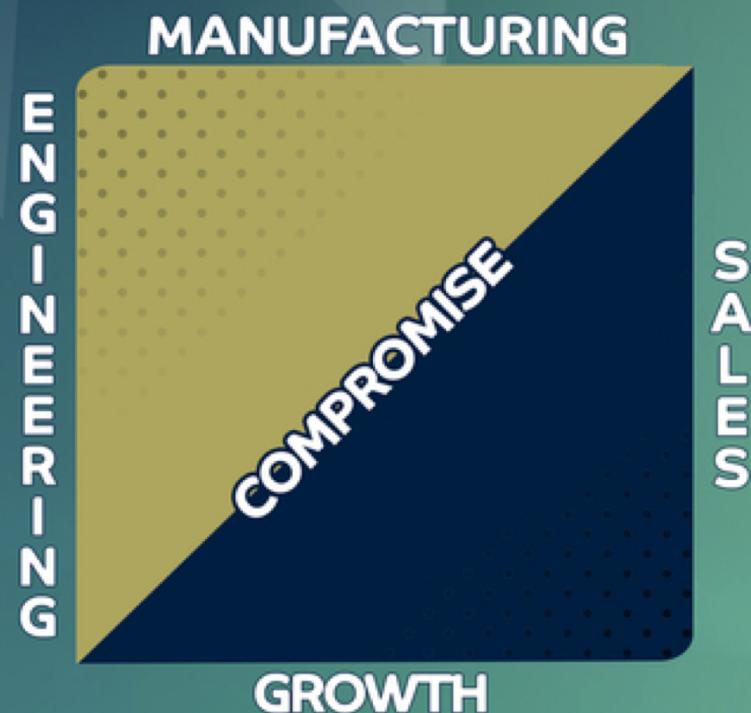


CHALLENGE ACCEPTED

The Solution.

If you fail to plan, plan to fail.

CONJOINED TRIANGLES OF SUCCESS >>>



Culture

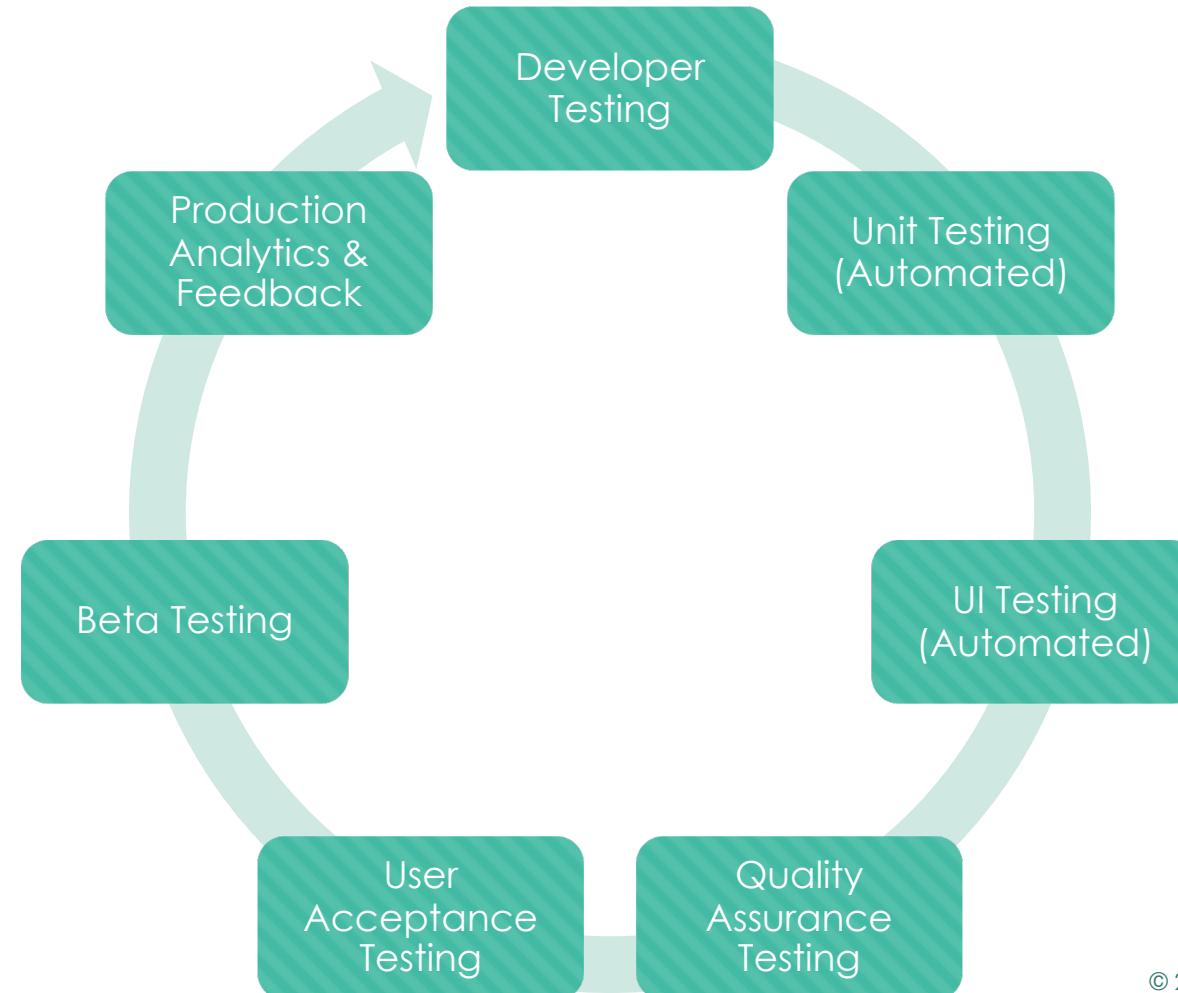
Together
Everyone
Achieves
More



Processes

- Iterative
- DevOps
- User Feedback

Mobile Testing Process



How Long Does it Take to Build an iOS or Android App?

Based on a survey of 100 iOS, Android and HTML5 developers, it takes nearly 18 weeks to build v1 of a native app.



SERVER-SIDE LOGIC

How a developer truly customizes the user's experience.



USER MANAGEMENT

Creating user accounts, managing authentication, security and access control.



Start Here

DATA STORAGE

The building block of any native app's backend.



CACHING

Storing data locally to speed load time.



SYNCHRONIZATION

Enable off-line usage and resolve data conflicts.



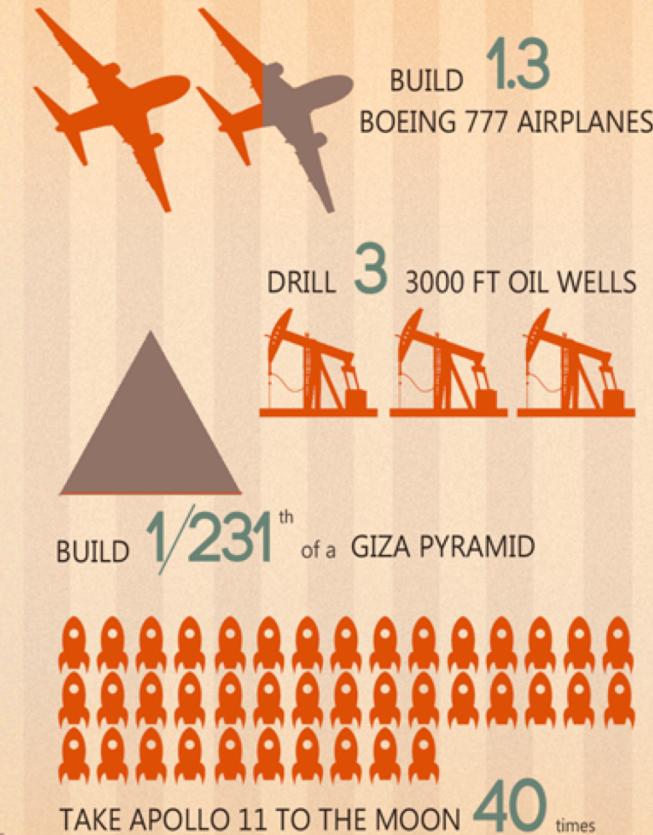
WIREFRAMING

Blueprint for user interface and experience.



It Also Takes 18 Weeks to:

In the 18 weeks it takes to develop and publish a native app, one could:



DATA INTEGRATION

Allowing users to access information from and publish data to third party sources, including social networks.



PUSH

Maintaining engagement with users continuously.



VERSIONING

Make version 2 live ... without breaking version 1.



UI POLISH

The differentiating "last mile" of the user interface, where an app truly stands out from the crowd.



UI DEVELOPMENT

Translating mock-ups into functioning user interface code.



UI DESIGN

Pixel perfect mock-ups of user interface.

THIS MESSAGE WAS BROUGHT TO YOU BY



Credits: Joe Chernov, Dave Wasmer of Kinvey. Survey data: AYTM

Primary sources:

AYTM survey of 100 iOS, Android and HTML 5 developers

Other sources:

<http://www.universetoday.com/13562/how-long-does-it-take-to-get-to-the-moon/>

<http://www.airlinereporter.com/2012/01/how-long-does-it-take-to-build-a-boeing-777/>

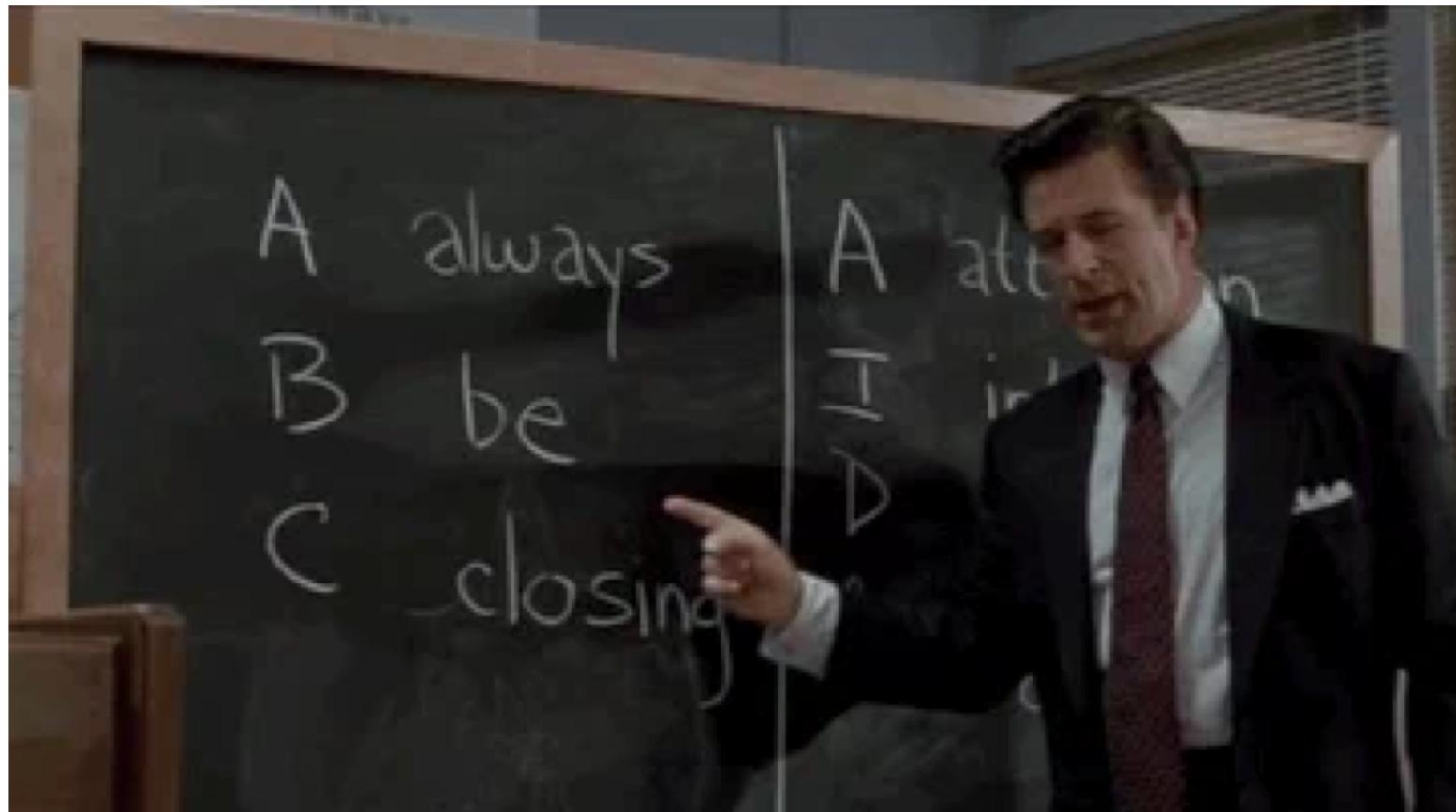
<http://www.cedarvalleyenergy.com/FAQs.htm>

<http://www.pbs.org/wgbh/nova/ancient/who-built-the-pyramids.html>

Designed by



Influence



The Tools

Let's see some %\$#@ code already.

Demo: Xamarin Forms

Demo 2: Flutter

Demo 3: Serverless

Protect Ya Neck

Demo 4: DevOps

Azure DevOps, App Center and the stores

Wrap it Up!

Conclusion, resources and thank you.

Know Thyself

Understand your needs

Native App? Hybrid App? PWA? Mobile friendly site?

Know when to ask for help

Community

Training

Consultants

Communicate

Talk to target users

Work with stakeholders and executives

Resources

<https://flutter.io/>

<https://docs.microsoft.com/en-us/xamarin/cross-platform/get-started/>

<https://www.jetbrains.com/rider/>

<https://visualstudio.microsoft.com/vs/mac/>

<https://www.mfractor.com/>

<https://www.livexaml.com/>

<https://github.com/TorontoMobileDevelopers>

References

Mobile App Spectrum

<https://dev.to/kayis/the-mobile-app-spectrum>

How Long To Build An App

<https://www.kinvey.com/how-long-to-build-an-app-infographic/>

Costs of Custom Mobile Business App Development

<https://blog.formotus.com/enterprise-mobility/figuring-the-costs-of-custom-mobile-business-app-development>

How Do I Fund My Startup

<https://www.marsdd.com/mars-library/funding-startup/>

Co-creation Designing with the User for the User

<http://www.uxbooth.com/articles/co-creation-designing-with-the-user-for-the-user/>

Thank You!