Lessons Learned Building and Selling a Mobile App Business

Ralf Brockhaus
Founder and CEO Smilefish
Agenda

- **What does it mean to build a business?**
  - Success factors
  - Be Bold and a little naïve!

- **Mobile and Social Media Applications**
  - Development Process
  - From Mobile to Emerging Technologies

- **Mistakes**
  - We made a lot of them – every day
  - 2 kinds of projects. Burn vs. Business
  - What’s next? “Smilefish 2.0”
5 kinds of stupid

— #1: Intelligence creep

• *Doctors are intelligent*

• *Somehow they transfer that into investing*

• *Doctors underperform in the stock market!!*

• *The same holds true for another profession – watch out ;-)*
entrepreneur:
(noun)
someone who jumps off a cliff and builds a plane on the way down

Success factors:

– Parents
– ‘Right Moment’
– UCI Division of Continuing Education
– EO Entrepreneurs’ Organization
– Smilebeacon platform
Who We Are

• Smilefish is an innovative software development firm headquartered in Newport Beach, CA
• We build business-critical mobile & web applications and highly scalable, secure cloud infrastructure
• Our team has a passion for applying emerging technologies to real business solutions
• We work best with clients who have $1.5 to $20 million in annual revenue and measure us on their growth

Background

• 20+ years of professional software development
• Trusted relationships and dedication to client’s success
• Hands-on experience in large variety of client and server technologies
• 15+ years teaching at UCI – access to excellent local resource pipeline

Partnerships
FEATURED CLIENTS

- MGM Resorts International
- HART & BEAUTY
- Microsoft
- TutorGroup
- Monte Carlo
- Siemens
- ISS
-plainjoe studios
- Beacon Healthcare Systems
- BRANDIFY
-Alibaba Group
-David & Goliath
-intel
-BMW
-Department of Defense
-Vista
How to build a mobile application?

• Process:
  – Story (business goals, competitive analysis, user experience, launch)
  – NDA, POC, MVP, budgets and timelines
  – Mockups, flow, and narrative!
  – Data Model,
  – 3pt integrations
  – REST Services
  – iPhone, Android, Hybrid, Mobile Web?
  – Full design
  – Agile Implementation
Problem: Existing mobile website had major user drop off and hotel found it difficult to connect with the younger, mobile based generation.

Solution: We implemented an engaging iOS and Android application allowing greater access for room booking, promotion for in-hotel amenities, and deep social integration.

Value: The solution tripled mobile booking revenue as well as increased time spent by hotel residents in hotel restaurants, shows, and activities.
Problem: Vista Metals needed a real-time engine to track metals through their production, QA, storage, and delivery process.

Solution: Smilefish delivered a QR and barcode scanning mobile application and cloud based solution.

Value: The environment drastically reduced the need for paper tracking, material misplacement, and provided real time data and analytics allowing Vista to make better-informed decisions.
Problem: The cosmetic industry does not provide a consistent method to match individual skin types to tailored beauty products.

Solution: Smilefish developed a mobile application with Facial and skin tone recognition alongside a desktop and mobile e-commerce marketplace.

Value: Users can now use the mobile app to scan their skin type and get recommendations on products through an Amazon affiliated network of manufacturers.

CASE STUDY: Hart and Beauty

Understand all stakeholders - serve, be humble – (shut up!!)
Problem: IHSS lacked a mobile friendly solution to automate hearing test execution through its mobile workforce and report back to the state.

Solution: Smilefish provided a cloud based application to schedule hearing tests, collect and classify the data results, report data to the state of CA, and execute medical billing.

Value: Removed all need for double data entry, increased data correctness, automated reporting to the state, and doubled the number of hearing tests executed without increasing workforce.
CASE STUDY: Beacon Healthcare Systems

• Problem: Beacon Healthcare Systems needed help in quickly replacing an off-shore development team.

• Solution: Smilefish engaged our local team to assess code base and took over product development for 2 of BHS’s healthcare products.

• Value: Development continued without disruption to the business. Products were completed within set timeframe and budget.

Really explain UCI – people will still misunderstand.
CASE STUDY: Airstrip

- Problem: Airstrip developed two very successful products for iOS and Android. Hospitals that standardized on Microsoft partnership were not able to adopt the solution.

- Solution: Smilefish collaborated with Microsoft and Intel on porting the applications following Microsoft Surface guidelines.

- Value: The application design was approved within 3 weeks and implemented within time and budget.

Think out of the box – MS & Intel vs. Apple & Google
Invest my own money if I see an opportunity. Up or Down!
CASE STUDY: Digital Marketing - Beacon – Coupon – Wallet
Evolution: Punch Card, Keyboard, Mouse, Touch, Chat, Voice, Ambient Computing, Augmented/Virtual Reality
Emerging Technology
Selling a Business

• Build a business with M&A in mind!
  – Contracts, IP, books, team, clients

• Don’t do it alone
  – Attorneys, advisors, family
  – Liability
  – Financial planning

• Plan your next move
  – Get your wings back!!!
  – Non-compete, Cool-off
  – Network!
Machine Learning & Data Science

We make your data work harder and smarter.

Know More
Questions
Backup Slides
What we do different in ‘smilefish2.0’

• **Optimize100x**
  – Focus on data analytics to provide value fast
  – 101 reusable lightweight API integrations
  – Own the stack based on open source.
  – Focus on RR, retainers, business incentives
  – Identify the verticals and assign PM/Sales
  – Templated apps and out of the box solutions.
    • ReactJS admin template - (full responsive)
    • SEO optimized front templates – (mobile companion)
    • Mobile React Native
  – Build towards Machine Learning
This example describes the flow of one of our data marketplace projects. A picture says more than 1000 words, and we can create a lot of clarity in ~1h.
Analytics and visualization add clarity and additional business value.
We own our technology stack. Everything is built 100% on open source. We can grant licenses at will.
Optimize100x can be deployed in any cloud and most VMs.
Backup Slides
Mobile – x - Platform
Agenda

Cross Platform Development
• Definitions
• Advantages and Challenges
• Examples
• Deep Dives
  – Cordova
  – Flutter
  – React Native
• Summary
• Assignments
Cross Platform Development - Problem Space

Business Questions
• What would be the cost reduction of having one code base for iOS and Android?
• Reach: Where is my user base?
  – iOS phone/tablet, Android phone/tablet, desktop (PC/Mac), watch, car, Alexa, Google Home, TV, play-stations
• Cost: What is my total cost per satisfied user?
  – Frontend development, backend development, maintenance, operations, content, marketing

Technical Questions
• What is cross-platform development?
• What is native development?
• Is responsive HTML5 cross platform development?
• What is the Hybrid model?
• Is support for Windows Phone, Desktop and Xbox considered cross platform?
• Mobile cross platform means one code base to support at least iOS and Android.
Environments

- Xamarin
- Appcelerator Titanium
- React Native
- Sencha
- Kony
- Flutter
- Dart
- Progress Telerik
- Adobe PhoneGap
- Ionic
- Apache Cordova
Definitions and Problem Space

Advantages

• One code base seems to reduce the cost.
• Might not need to hire and train two sets of experts.
• Might be able to utilize existing web development resources.
• Might be able to utilize web development assets and also save time.
• Smaller code base also might mean smaller maintenance and operations.

Challenges for Responsive Web

• No offline-support and limited access to phone (hardware and OS) capabilities.

Possible Disadvantage

• It’s not easy to get the full iOS and Android feeling.
• We might get an 80% solution with an exponential 20% challenge.
• Might need to re-tool once we compete with native iOS/Android applications.
• Are web development resources really able to handle a cross-platform dev environment?