... or:

Onboarding as an engineering problem
Wix is...

- A web *publishing platform*
- Distributed R&D
  - Tel-Aviv (Israel)
  - Dnipropetrovsk (Ukraine)
  - *Vilnius (Lithuania)*
- Growing rapidly
  - July 2013: 120 engineers
  - Nov 2015: >350 engineers
  - In 2017: *double that*
Engineering 101

Problem Statement

Research

Propose Solutions

Implement

Post-mortem
Fundamental premise: Scaling up is hard
Guilds and Companies

Guild

Company
Our Customers

Server Guild

React Guild

NG Guild
Challenges

- Onboarding
- Doctrine
- Bandwidth
Challenges

Onboarding
- High barrier of entry
- High overhead

Doctrine

Bandwidth
Challenges

- Doctrine
  - Methodologies
  - Operational awareness

- Onboarding

- Bandwidth
Challenges

Bandwidth
- Overloaded teams
- Rapid growth

Onboarding

Doctrine
Challenges

- Onboarding
- Recruiting
- Diversity
Challenges

Onboarding

• High overhead
• Major bottleneck

Recruiting

Diversity
Challenges

- Recruiting
  - Accelerated demand
  - Sustainability

- Onboarding

- Diversity
Challenges

- Onboarding
- Recruiting

Diversity
- Limited shared baseline
- Mostly not Wix-specific
Challenges

Onboarding

Recruiting
Challenges

Onboarding
- Domain-specific
- High overhead

Recruiting
Challenges

- Recruiting
  - Accelerated demand
  - Sustainability

Onboarding
Proposed Solution: WIX Academy
Proposed Solution

1 day
- Orientation
- HR
- Admin

2 weeks
- Play “catch up”
- Learn tech stack
- Team orientation

2 months
- End-to-end experience
- Full ecosystem
Training Kit
Training Kit: Customers

As a *Guild Lead*, I want to:

- Start onboarding as *early* as possible
- Reduce *overhead*
- Have quality *reference material*
Training Kit: Customers

As a *Team Lead*, I want to:

- *Simplify training* of new hires
- *Minimize disruption* to my team
- Have quality *reference material*
Training Kit: Customers

As a *new hire*, I want to:

- Understand the *technology stack*
- Be productive *quickly*
- Learn *on my own*
  (and not be a pest)
Training Kit: Design Goals

- Guided self-learning
- Customizable
- Based on external resources
THE DEVELOPMENT PROCESS
Workflow

Kickoff

Development

Feedback
Kickoff

- Meet the Guild Lead
  - Validate assumptions
  - Identify key (technical) partners

- Scope definition
  - Meet key partners
  - Set scope expectations
  - Generate “bucket list” of desirable topics

- Review and prioritize
Development

- **Guild Days**
  - Ask for some volunteers
  - Host them for a full day
  - Volunteers pick subjects
  - Volunteers search & evaluate material
Development

- Postprocessing
  - By a professional training developer
  - Wording, formatting
  - Consistent structure
Workflow

Kickoff

Development

Feedback
Feedback Collection

- **Per-subject feedback**
  - Simple web form
  - Highlights substantial issues (if any)

- **Guild Day (one-off)**
  - Technical review by experts

- **Interviews (one-off)**
  - Team leads
  - New hires
Crash Course
Crash Course: Overview

- Complements the Training Kit
- Scheduled every 2 months
- 3 weeks
- End result: a working MVP
Crash Course: Rationale

- End-to-end production experience
- Groups mimic team structure
- Focus on methodology, philosophy
Crash Course: Challenges

- Cost-prohibitive below 10 participants
- Requires mix of server/front-end
- Mentorship and preparation
Planning: Week 1

• Ramp-up:
  – Heavy on **doctrine** (TDD, CD)
  – Basic **stack** (Scala, TypeScript)
  – Domain-specific **idioms** (SEO)

• Interleaved lectures (frontal) and workshops (hands-on)
Planning: Weeks 2-3

• Project time!
  – Divide into teams
  – Mix of client/server

• 2 days bootstrapping
  – “Walking skeleton”
  – Heavily guided

• The rest: build it!
  – Constant mentorship
  – Interspersed lectures
POST-MORTEM
Notable Successes

- Client/server
- TDD
- Peopleware
Notable Successes

Client/Server

• Gained understanding of client/server integration
• Helped remove the “wall” between client/server

TDD

Peopleware
Notable Successes

Client/Server

TDD
- Gained invaluable hands-on practice
- TDD became “more and more natural”

Peopleware
Notable Successes

Client/Server

TDD

Peopleware

- Mentoring and pairing were praised
- “Amazing investment in new personnel”
Notable Issues

- Tracking
- Administration
- Project
Notable Issues

Tracking

- More visibility into team progress
- Daily standups and updates via Slack

Administration

Project
Notable Issues

Tracking

Administration

- Clear and visible schedule
- Predetermined pair/mentor assignments

Project
Notable Issues

Tracking

Administration

Project

- Too much incidental complexity
- Hard to change scope ("extra credit")
Lessons Learned

• Mentors are your *biggest asset*!
  – Track team progress
  – Help overcome obstacles
  – Teach, teach, teach

• Include them in *everything*
  – Have status/venting meetings. *Listen* to them
  – Provide guidance, tools and prep time
  – Make sure to *follow up*
Lessons Learned

- Running a course is a big project
- Massive *ramp-up*:
  - 1 month for design and planning
  - 1-2 months for content development
- Per *iteration*:
  - 1 week setup
  - 3 day staff prep
  - 3 weeks course
Thank you for listening

WE’RE DONE HERE!

... AND YES, WE’RE HIRING :-)