HOW AMATEUR CODERS CHANGED A SCHOOL

THE JOURNEY FROM FOUNDATIONS TO GLOBAL OPERATIONS OF A STUDENT TRACKING SYSTEM

ISHMAEL JOHNSON

DEVELOPERS:

AARON SISSON & JON LINK

A QUICK WARM UP TO SET THE MOOD

- Play Ninja, or

- Discuss for 4 minutes
  - Changes to administrative processes within your school or work
  - How the process was implemented and handled
  - Positive effects on your daily tasks or workflow
  - Negative effects on your daily tasks or workflow
  - Any projects you have worked on to identify or solve problems

BACKGROUND INFORMATION

- Who am I?
  - Ishmael Johnson
    - Center Director for Stafford House Calgary
    - Former Director of Studies of Stafford House Boston
    - Current Super Symba Ninja
      - One of Two Team Leaders
    - Started with Symba at inception with developers, Aaron and Jon
      - Early 2014

BACKGROUND INFORMATION

- What are we talking about?
  - A student tracking system named Symba
  - A URL, user profile based online interface accessible with internet browser
  - Database and server support allocated and provided by Head IT Office, UK.
  - Provides logistics, calculation, records and support for:
    - **Admissions** (Document Collection and Creation, Invoices, Emailing, Tracking…)
    - **Student Services** (Housing, Insurance, Compliance, Transfers, Activities…)
    - **Academics** (Class Schedule, Time Off, Resource Allocation, Class Management…)
    - **Operations** (Sales and Enrollment Reporting, Groups, Communication…)
    - **Site Wide Functionality** (Notes, Alerts, Conversations, Tasks, Tags, News Feed…)

BACKGROUND INFORMATION

- Today's Objectives
  - Outline the general history of Symba
  - Demonstrate use and span of the various interfaces
  - Explore change and conflict within development and implementation

WHY WAS IT CREATED?

Initially
- Solve long lineups of students at offices, multiple requests of the same type

Opportunity Noticed
- Why not create a digital appointment system?

WHO CREATED IT?

Aaron Sisson

- Ceramics Art Major
- Florida, USA
- ESL Teacher
- Director of Studies (Japan)
- Center Director (NYC)
- Hobby for coding and computers

Jon Link

- Poetry Major
- Long Island, NY
- ESL Teacher
- EFL Teacher (Japan)
- Director of Studies (Boston)
- Hobby and technical certificates in coding

But really, Why?

- Need to overhaul processes at BAE after recent SH purchase
- Dissatisfaction with existing system
- Paper lists, slow
- Poor support
- Limited customizability
- Cost

BREAK IN TIME – TWO MINUTES

- Think of some current processes you interact with that could be made digital, or never could be
  - If so, why not?

MODEST BEGINNINGS

- Aaron acts on an idea to fully create and implement his own tracking system

- Had just created and implemented a simple system to schedule appointments online

MODEST BEGINNINGS

- Work was Split
  - Aaron to develop mainly front end design and interface functionality
  - Jon to develop backend functionality and database queries
  - Management's Response - "Does it cost less? Did IT approve? Go for it."

MODEST BEGINNINGS

- Go Daddy hosted website: www.sh-boston.com
- Coding Languages used:
  - HTML, CSS, Javascript, MySQL, PHP
  - i.e. the basics

BREAK IN TIME – TWO MINUTES

- Discuss potential challenges to implementing this system, or ones previously proposed

FAST FORWARD

Sh-Boston.com – *2014*

- Boston school only
- No operating budget
- Mainly academic logistics, student lists, note tracking, student portal
- Drop TheBing, continue using Citrix Class for finance and invoicing

FAST FORWARD

Symba 1.0 – *2015 - 2016*

- **Context**: Stafford House purchases Intrax, 3 chain ESL schools in the US
- **Development**: focus on bugs, increased functionality in reporting, admin tracking, document creation, counseling
- The presentation goes well and Board approves!

FAST FORWARD

Symba 1.0 – *2015 - 2016*

- IT gets involved and server is now hosted out of Cambridge Head Office
- Get our current URL address my.staffordhouse.com
- Deployed and implemented in 4 US schools

FAST FORWARD

Symba 2.0 - *2016 – 2018*

- **Context**: Purchase of Omnicom Language Schools and Parent Company Restructure

- **Development**: Admissions Checklist, Housing, Insurance, Visa, and Transfers Inboxes created in tandem with Admissions Process Overhaul and Conversations, Tasks, Alerts

FAST FORWARD

Symba 2.0 - *2016 – 2018*

- **Deployment**: With UK and CA adoption, all 10 Stafford House schools now use Symba

- Creation of the Ninjas - April 2017

- Jon Link transitions to a full-time development company, May 2017, no replacement

FAST FORWARD

Symba 2.4 - *2018 – Current*

- **Context**: No new school acquisitions in favor of operational review and standardization of current schools, Parent Company Purchased

- **Development**: The Wiki, Group Overview and Profiles, Study Holidays, Bug Fixing

FAST FORWARD

Symba 2.4 - *2018 – Current*

- **Deployment**: SH Study Holidays North American schools on Symba

- Cracks in the Ninja and a Season of Lag

- A short-term contract staffer for technical development support given

FAST FORWARD

Symba 3.0 - *March 2020*

- **Context**: Desire for Symba to have financial tracking, New Management, Drop Intrinsiq

- **Development**: SH Study Holidays Head Office to fully transition all reporting, quoting, invoicing, scheduling, and numbers on Symba

FAST FORWARD

Symba 3.0 - *March 2020*

- **Deployment**: March release contains HO required pages and functionality, June for in-center staff functionality

- Stress testing and teaching an old company new tricks

- Rebirth of the Ninja?

BREAK IN TIME – 3 MINUTES

- What questions did you think of?
- What just mentioned caught your attention?
- Did you anticipate some problems?
- What problems do you anticipate later?
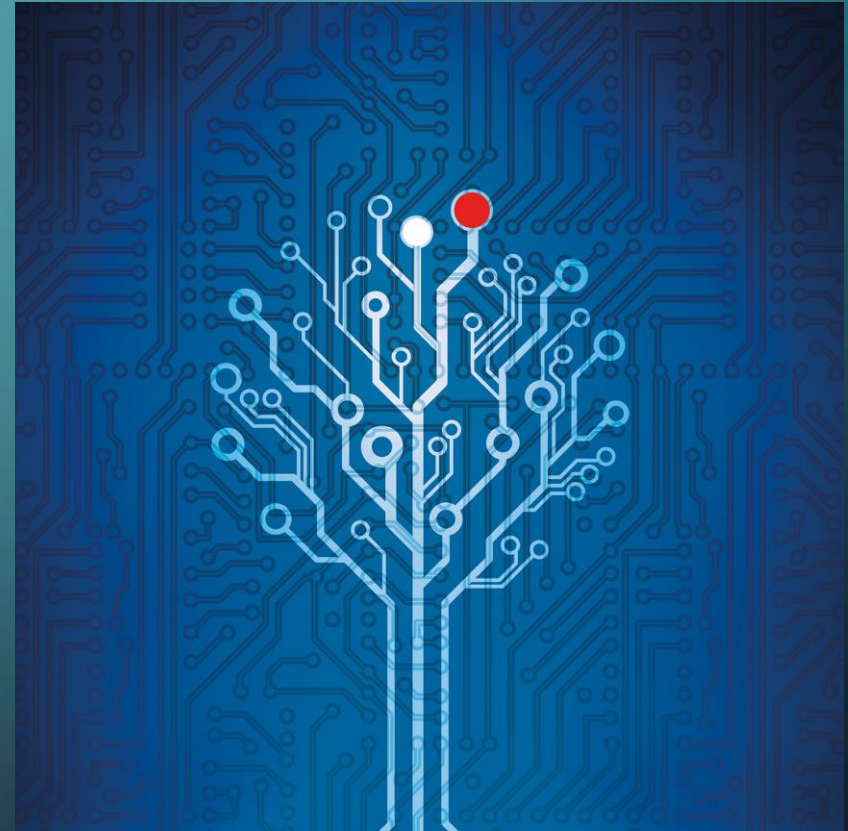
OVERVIEW OF PAGE FUNCTIONALITY

- By Student Journey
  - Pre-Arrival = Admissions Checklist, Student Profile, Doc Creation, Admissions Portal
  - Arrival = Arrivals, Classing, Schedule, Student Portal
  - Current = Student Profile, Student Progress
  - Post-Arrival = Certificates, Academic Docs

OVERVIEW OF PAGE FUNCTIONALITY

- By Department
  - Operations = Recent Bookings, Enrollment Snapshot, Enrollment Forecast, Group Overview
  - Student Services = Student Overview, Housing, Transfers, Visa, Events
  - Academic Admin = Class Schedule, Class Management, Test Creator

OVERVIEW OF PAGE FUNCTIONALITY

- By Department
  - Teachers = Attendance & Grade sheet, Resource Reservations, SH Wiki, Admin Dashboard
  - Management = Staff Profiles, School Settings, Academic Usage, Time Off, Closure Date, Notification Panel, Staff News

BREAK IN TIME – 5 MINUTES

- Break down one or several of the discussed processes or requirements into detailed, individual steps.
- How many steps are there? More or less than anticipated?
- Could it be changed in any way to become more efficient digitally?
- What challenges occur when thinking about implementation?
- Describe general best practices of implementing change in a team or company.

CHANGE AND CONFLICT - NINJA

- Creation of the ninjas as a troubleshooting, testing and training team
- **Pros**: in-center trained staff member to assist with new development testing, staff training post-release, and general troubleshooting expertise
- **Cons**: no budget means no extra pay, so salary staff only leading to a minimalized effort and maximized pressure

CHANGE AND CONFLICT – BUY IN

- BAE, Intrax, Omnicom, and Stafford House school standardization - changes in process for everyone
- How to get people invested in change?
- Resistance, misuse, disinformation

CHANGE AND CONFLICT – IT DEPT

- Not being in the IT department
- **Pros**: Not held to IT budget, developer's manager is the managing director
- **Cons**: Not having any budget, no full-time staff support for development or product management, interesting working relationship with IT

CHANGE AND CONFLICT – FEEDBACK, TROUBLESHOOTING, AND BUG REPORTING

- Ninjas work in-center, but are infrequently trained (budget restrictions - or lack of product operation management?)

- Hazy bug reporting system, underuse of Wiki pages caused by…?

- User frustration with common bugs and fix times

CHANGE AND CONFLICT – DEVELOPMENT CYCLES

- Regular maintenance postponed in favor of new development
- Misunderstood timeframes for development and testing hours
- Inconsistent communication to IT and users

DEFECT SOLUTION EXERCISE

- Choose two from those you have already talked about at length with your group.
- Create, outline, and debate proposed solutions to both issues that can be implemented using a digital platform
- Share and Debate at large

THANK YOU

- Questions?
  - ijohnson@staffordhouse.com
- Concerns?
  - ijohnson@staffordhouse.com or Calgary@staffordhouse.com
- Contact?
  - Stafford House Calgary
  - 840 6th Ave, SW
- Solutions create their own problems, but that's half the fun.