## PLANNING YOUR MIGRATION TO A FRAMEWORK

**#PMFW, Process and Methodology** 

Brian Ghidinelli www.ghidinelli.com

#### CF CF.Objective()

## Launch Day: May 3<sup>rd</sup>, 2008 It was a dark and stormy Saturday morning...



## Why switch to a framework?

- In-house framework hit ceiling
- Skills evolved; looking to continue learning
- Cost of bringing outside developers up to speed





#### Problems due to...

- Inexperienced developer?

  Developing CF for 10+ years

  Original application not reliable?

  In production for four years, CFC based

  Little or no testing?
  - Unit tests, Bug Parties

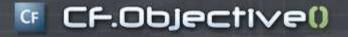


## How I did the work

- Researched options, selected Transfer + Coldspring + Model-Glue
- Branched SVN, setup 2<sup>nd</sup> CF instance
- Converted API first and wrote tests
- Refactored as I learned to take advantage of framework

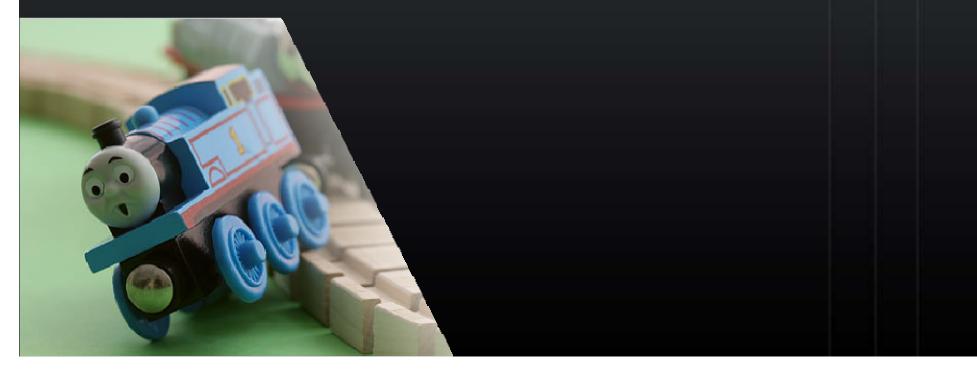
## Where I finished

- Launched May 3<sup>rd</sup> (target: Jan 1)
- Managed not to lose a customer
- ~11 months effort in 8 month span
- Obtained solid understanding of OO, MVC and concrete knowledge of MG/CS/TR



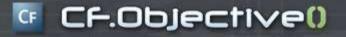
#### What went wrong?

Or, how we turn a train wreck into a learning opportunity



## Four sins of migration

- 1. Applications are more complex than you remember
- 2. Coding efficiency drops when learning
- 3. Misdirected or inadequate testing
- 4. "While you're in there..."



## #1: Underestimating application complexity

Or, don't trust your gut under any circumstances

#### Improving your estimates

- Treat migration like a consulting project
   Your gut instincts are almost certainly wrong
- Inventory how you interact with database
- Look for user interface and custom tag libraries
- Identify external dependencies

#### Improving your estimates #2

- Look for duplicate or "stinky" code
- Document all non-standard views like Ajax, Flex, etc.
- Identify abstracted, re-usable code Implied
  - Even great code probably needs refactoring
- Beware of working solo!



#2: Historical returns are no guarantee of future productivity

Or, how to spend an entire day on five lines of code

#### G CF.Objecti∨e()

## Regaining Productivity

- Budget 2x time to learn new paradigms for coding, debugging and make decisions
- Is existing code base a jump start?
- Obtain independent analysis of your estimates
- Include extra time for unit tests
- Hire a mentor to keep learning curve steep



## #3: Inadequate testing Or, the #!@#\$ site is broken!

#### How to get value from testing

- Decide how to test database early
- Decide on pragmatic test coverage %
- Focus on validating business logic
- Run at least one load test to avoid an "aha" moment
  - Selenium and OpenSTA support recording browser sessions – very straightforward!



# #4: "While you're in there..."

Or, how to *not* paint yourself into a tiny corner

#### Limiting scope creep

- Hold on to backwards compatibility at all costs; ability to run in parallel or roll back is priceless
- You are switching to the framework to buy flexibility and speed so wait for it
- Migration itself will teach you a great deal; patience now will be rewarded later



## Where am I today? I'm still alive, but am I still in business?

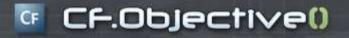


#### Current status

- Test coverage improved but still < 50%
- Solved performance with DL360 G4s
- Accommodated 60% user growth
- Speed of innovation has increased
- Leverage MG/CS/TR communities as my "team"



## Would I do it again? No witty subtitle available at press time



#### Q&A

#### When are *you* switching? *Why* are you switching?