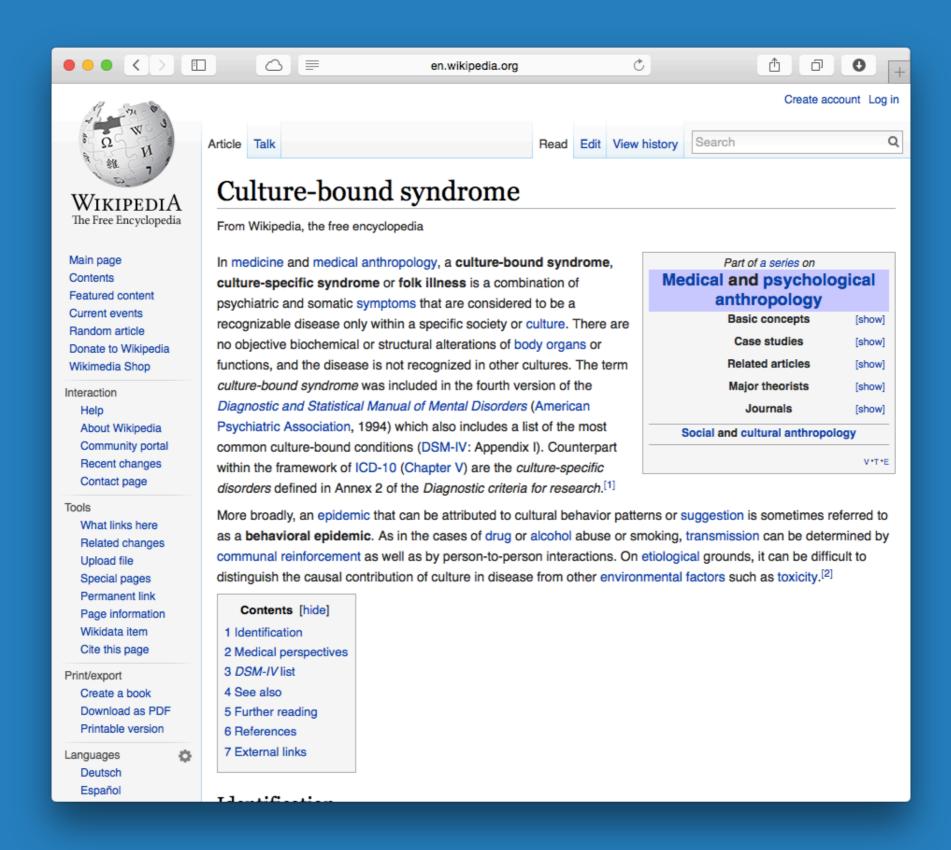
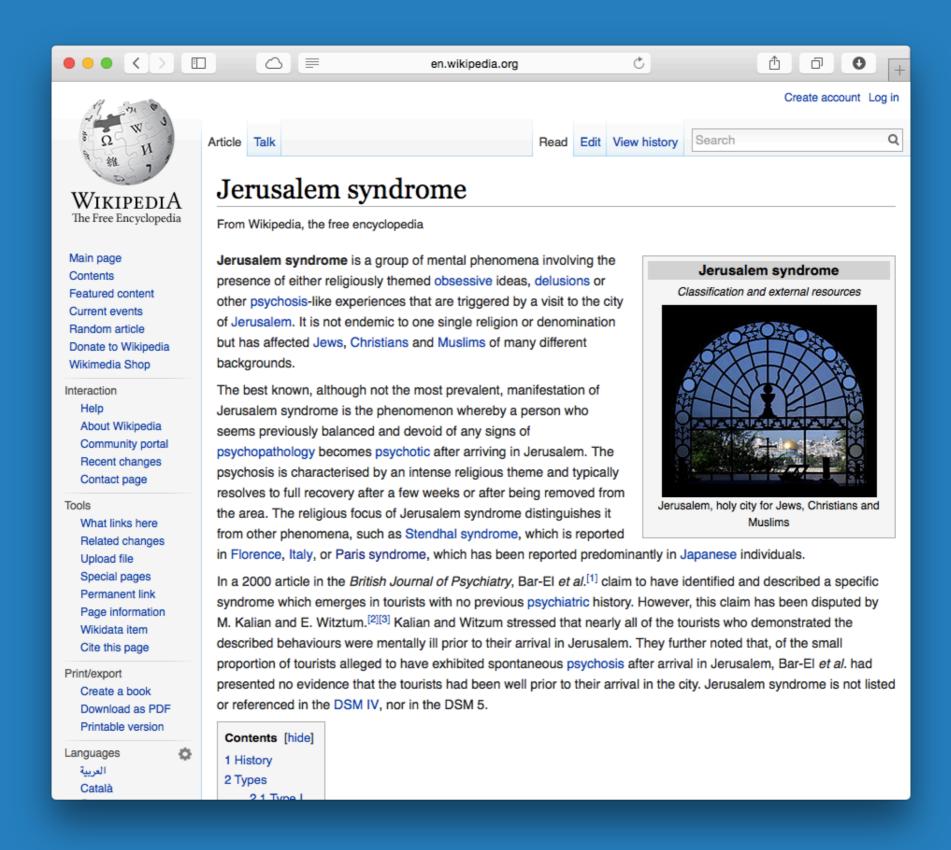
Culture Shift

How DevOps changed the way we think about IT







Culture Shift

How DevOps changed changes the way we think about IT

Roadmap

- 1. Why Culture?
- 2. Our Context
- 3. Meet DevOps
- 4. Open Discussion

Culture

The outlook, attitudes, values, morals, goals, and customs shared by a group.

Culture (more simply)

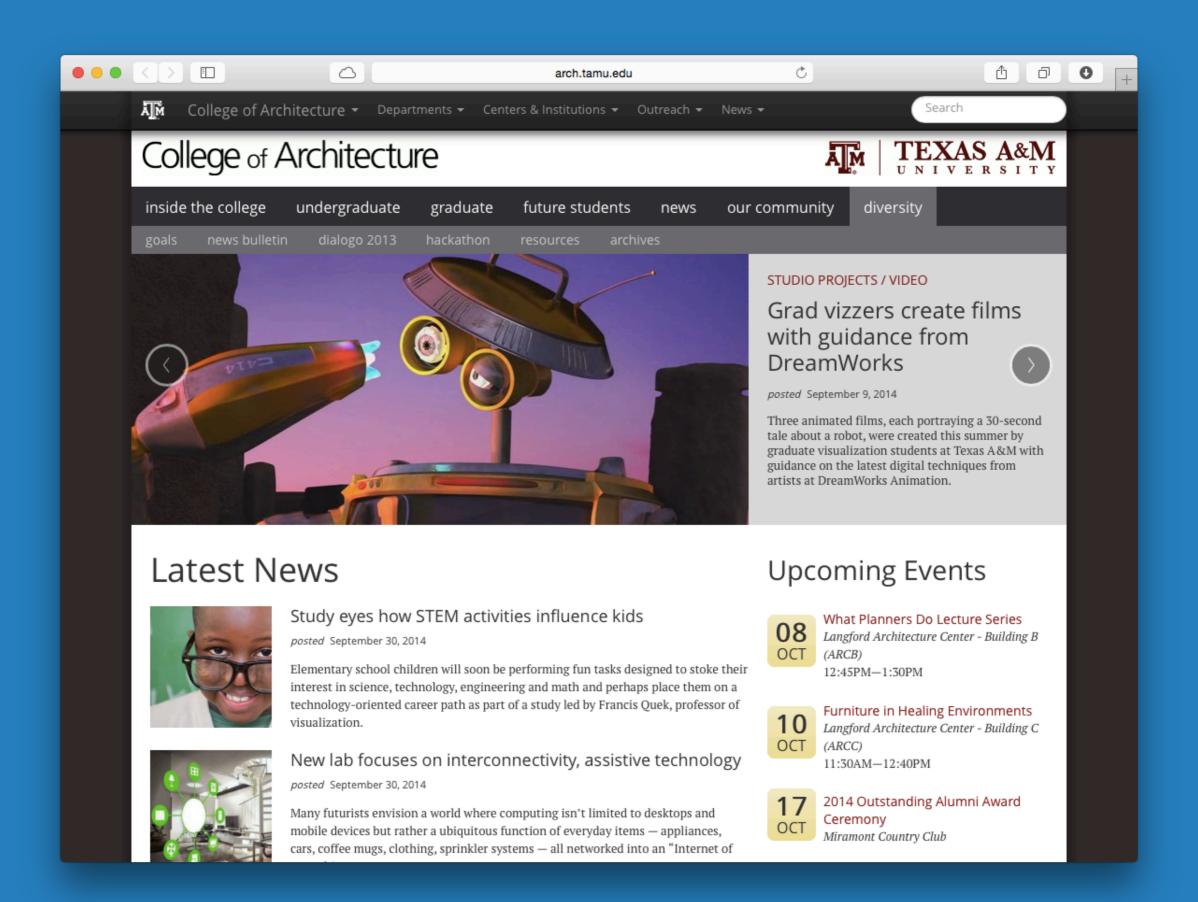
Culture is the way you think, act, and interact

The Context

The College of Architecture at Texas A&M

College of Architecture

- 4 departments
- 8 research centers and institutes
- -450 employees
- -8000 students
- locations across Texas and the globe

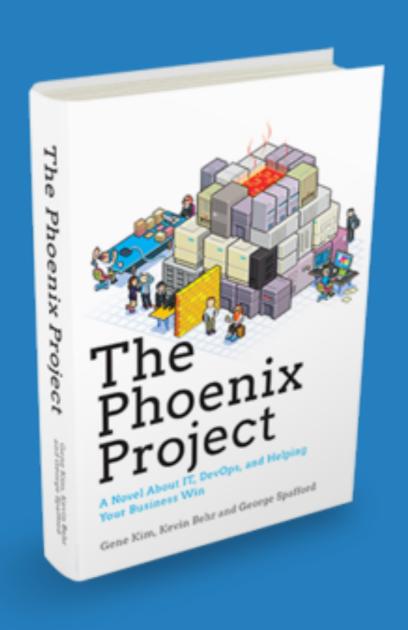


The Problem

Do we have a problem?

IT has always been like this

The Solution



The Phoenix Project

A management fable in the style of E. Golrdratt's *The Goal*.

Theory of Constraints — Systems management

What is DevOps?

DevOps is a service delivery concept that stresses communication, collaboration, and integration between software developers and IT professionals.

DevOps, from Wikipedia

What is DevOps (alternative edition):

Developers need to understand infrastructure. Operations people need to understand code. People need to f**king work with each other and not just occupy space next to each other.

John Vincent

DevOps - the Title Match from blog dot lusis

DevOps: Operations:: Agile: Development

DevOps seeks to maximize:

- predictability
- efficiency
- security
- maintainability

DevOps emphasizes:

- automation whenever possible
- infrastructure as code
- disaster indifference over recovery
- continuous integration / delivery

So documentation doesn't look like this—

- 1. Download the nginx binaries form the website
- 2. Edit the conf file to point to the correct data dir /root/path/to/dir
- 3. Somtehing else complicated and technical \$like_this in this step
- 4. And another thing that wraps multiple complex steps in a single, inadequate sentence

But rather, like this—

```
include_recipe 'nginx'
include_recipe 'git'
directory '/var/www' do
 action :create
 owner 'www-data'
group 'www-data'
end
git node['magic']['directory'] do
user 'www-data'
group 'www-data'
reference 'master'
 repo 'git://github.com/TAMUArch/magic'
end
template '/etc/nginx/sites/magic' do
 action :create
source 'magic.conf.erb'
end
```

Main lessons from The Phoenix Project

- 1. There are 4 types of work
- 2. Work-in-progress is the silent killer
- 3. Unplanned work accrues technical debt
- 4. Bottlenecks contrain work

Four types of work

- 1. Business projects
- 2. Infrastructure projects
- 3. Changes
- 4. Unplanned work

The Three Ways

- 1. Systems thinking
- 2. Amplify feedback loops
- 3. Culture of continual experimentation and learning

Back to Culture

Changes we made in Architecture were mostly about culture

More reading

On DevOps and organizational culture:

Empathy: The Essence of DevOps http://blog.ingineering.it/post/72964480807/empathy-the-essence-of-devops

DevOps Culture (Part 1) http://itrevolution.com/devops-culture-part-1/

Continuously Deploying Culture: Scaling Culture at Etsy

http://www.slideshare.net/mcdonnps/continuously-deploying-culture-scaling-culture-at-etsy-14588485

More reading

On DevOps methodologies:

The Phoenix Project: A novel about IT, DevOps, and helping your business win (IT Revolution Press) http://itrevolution.com/books/

Where To Learn More About Concepts In "The Phoenix Project" (Part 1) http://itrevolution.com/learn-more-about-concepts-in-phoenix-project/

About me

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Open discussion