INNOVATION IN TECHNICAL COMMUNICATION

TCWORLD INDIA 2015

Created by Tom Johnson / @tomjohnson

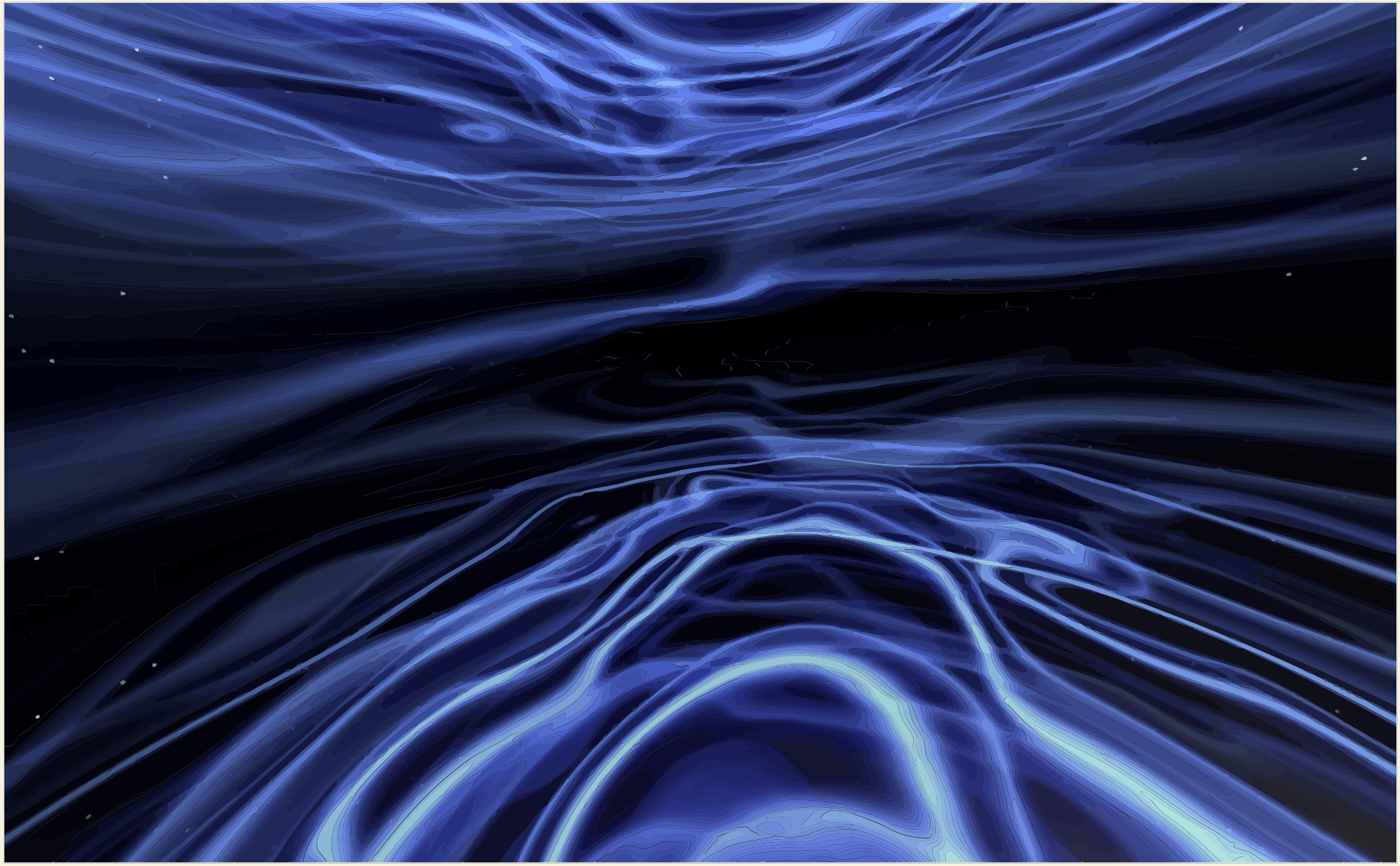
KEYBOARD SHORTCUTS

Full Screen	F
Next Slide	Space bar
Slide Notes	S
Thumbnail View	Esc

View online at http://tomjohnson1492.github.io/innovation

Note: *Some slides move down instead of to the side, so use the space bar to advance slides.*

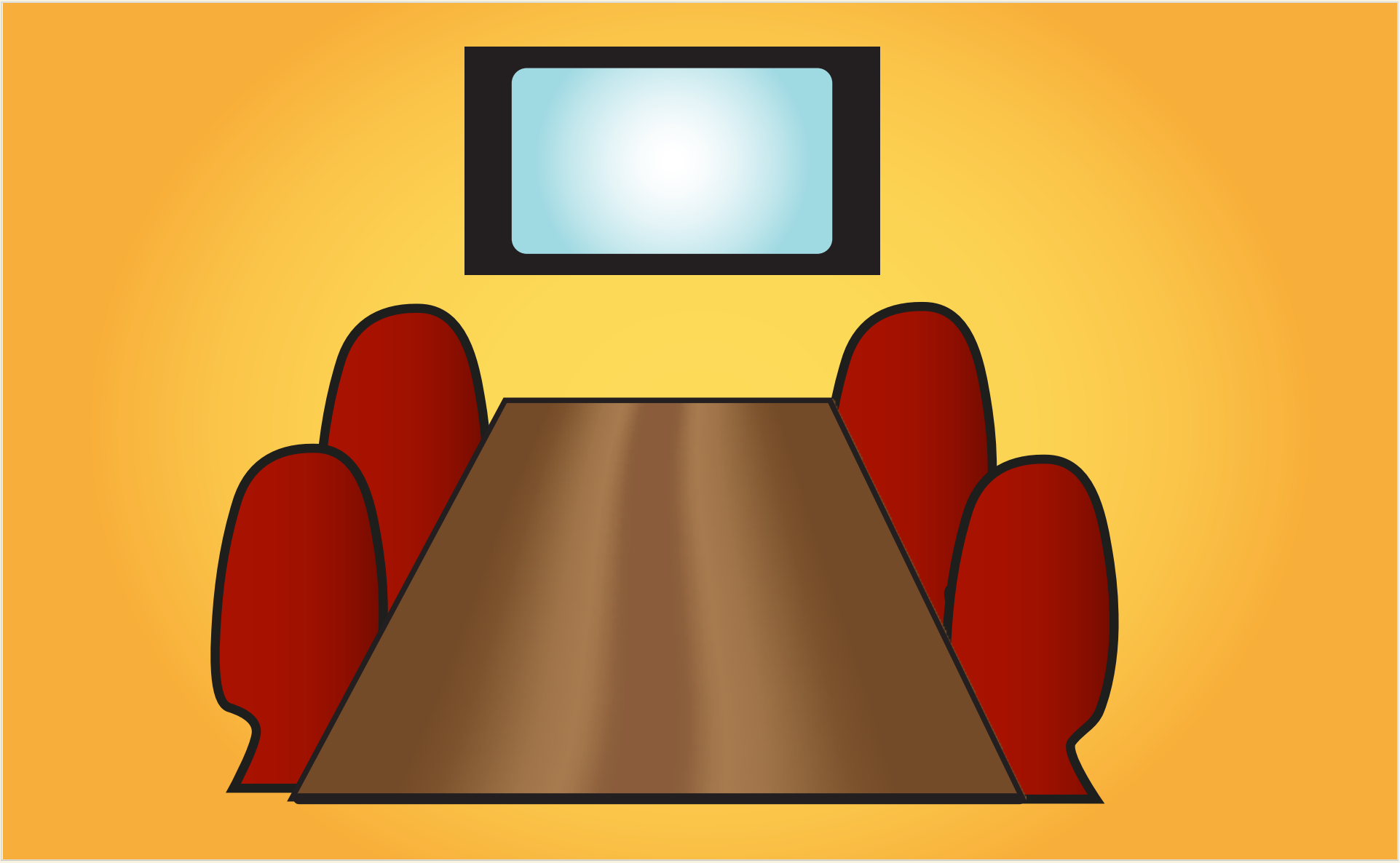
STARTUP CULTURES ENCOURAGE INNOVATION



"As to what your journey says, I think it says that all the current models of tech comm development are deeply unsatisfactory in one way or another."

— Mark Baker, Every Page Is Page One

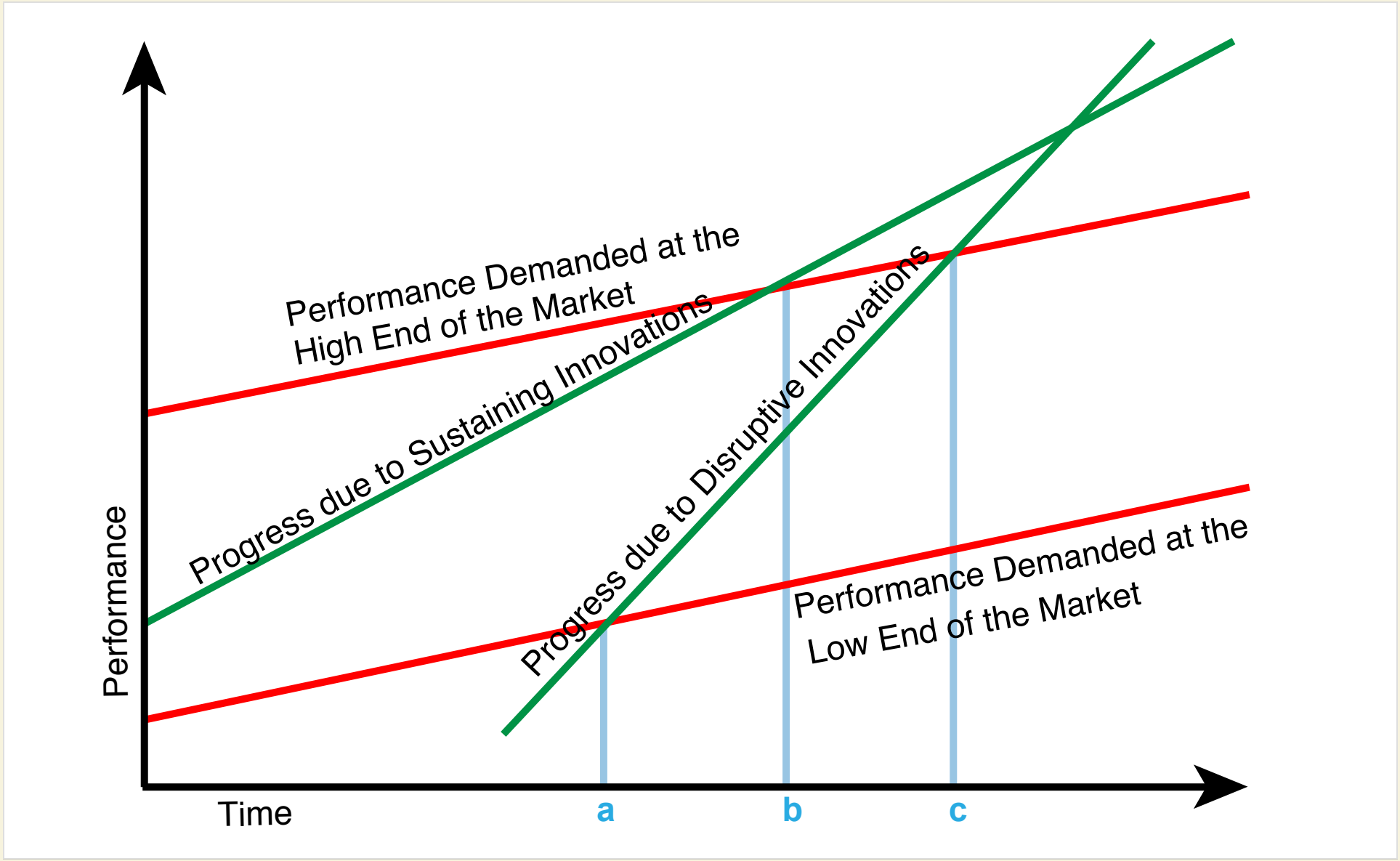
"THINK BIG THURSDAYS"



STORY OF TELEGRAPH AND TELEPHONE

Bell and an early model of the telephone

A FRAMEWORK FOR INNOVATION



SURVEY OF INNOVATIONS

INNOVATIONS WITH TECHNOLOGY

HTML5 • REST APIs • CSS media queries • oAuth • AJAX • instant search • SVG • augmented reality • Internet of Things • big data • social networks • YouTube • Bootstrap • static site generators • jQuery • YouTube • StackOverflow • Github • continuous integration • LESS & Sass • wikis

INNOVATIONS WITH IDEAS

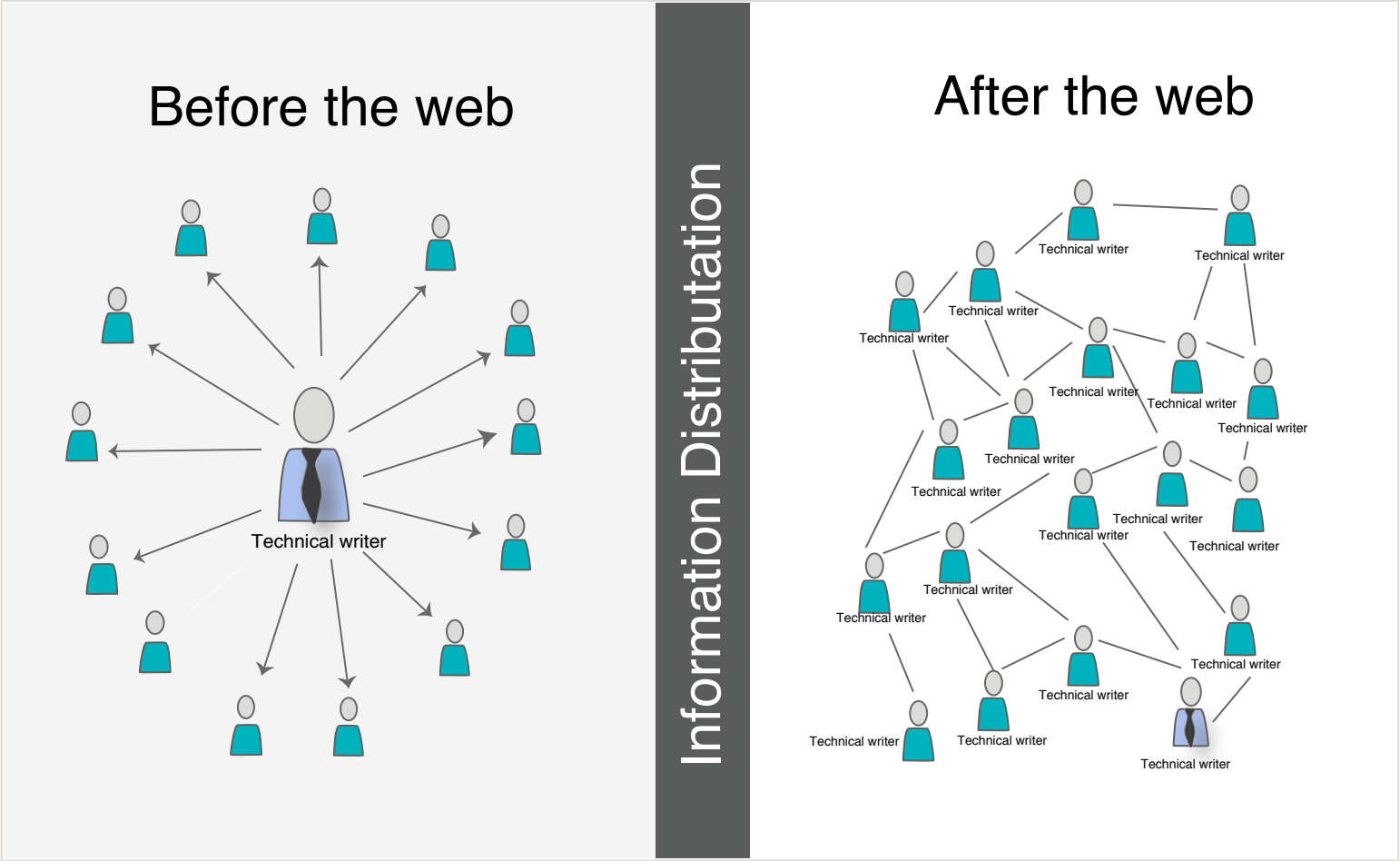
decentralization • agile • crowdsourcing • gamification • Cluetrain Manifesto (user-to-user communication) • "Everything Is Miscellaneous" • The Long Tail • semantic web • information architecture • content marketing • transparency • simplicity of design • open source • social coding

INNOVATIONS IN TECH COMM

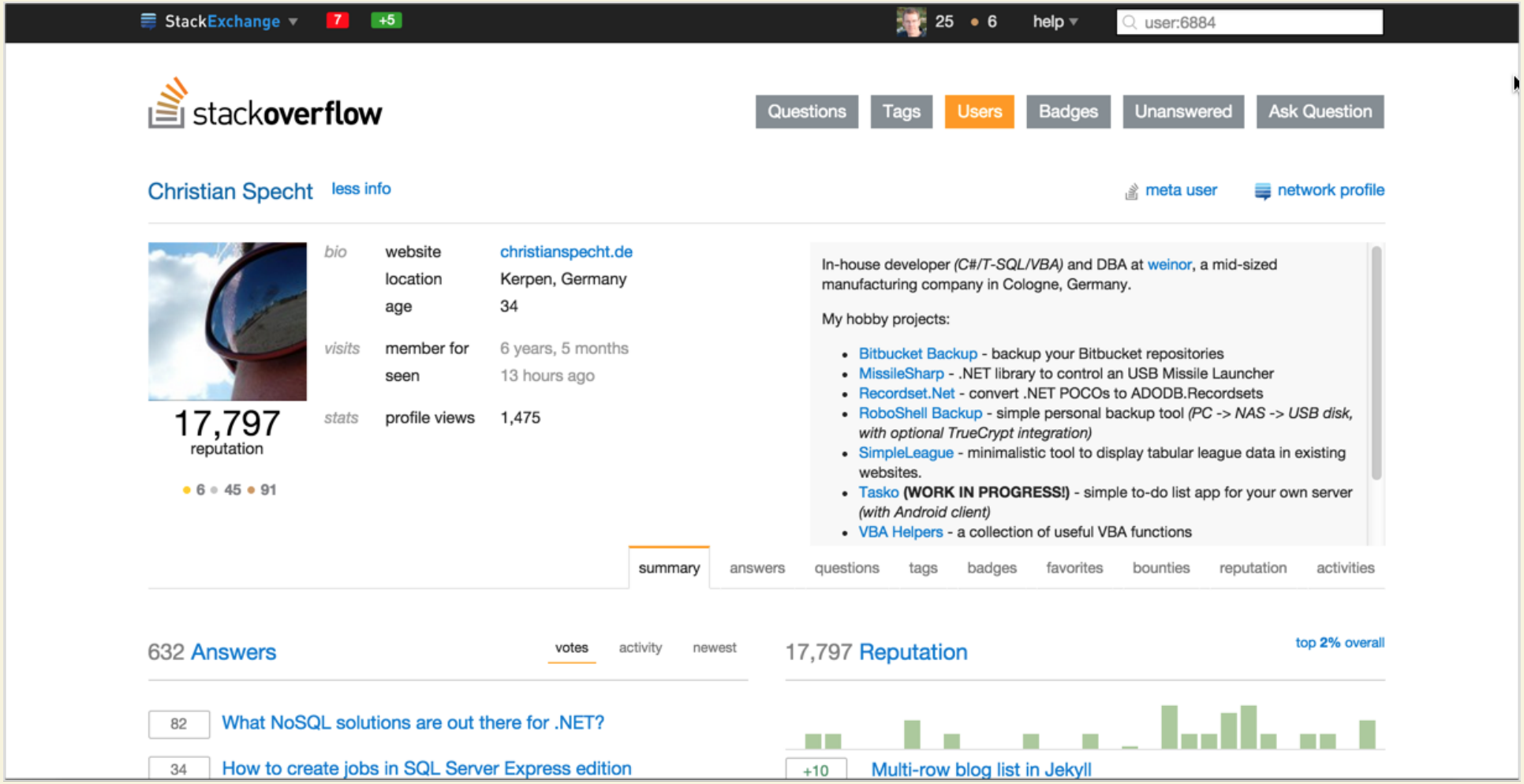
information typing • minimalism • task-based documentation • topic-oriented documentation • DITA • DocOps • Every Page Is Page One • emotional language • personalization • interactive video • user-generated content • content strategy • single sourcing

MOST SIGNIFICANT INNOVATION FOR TC?

EVERYONE IS A TECHNICAL WRITER



UNOFFICIAL TECHNICAL WRITER



JOB TRENDS FOR "TECHNICAL WRITER"

Job Trends

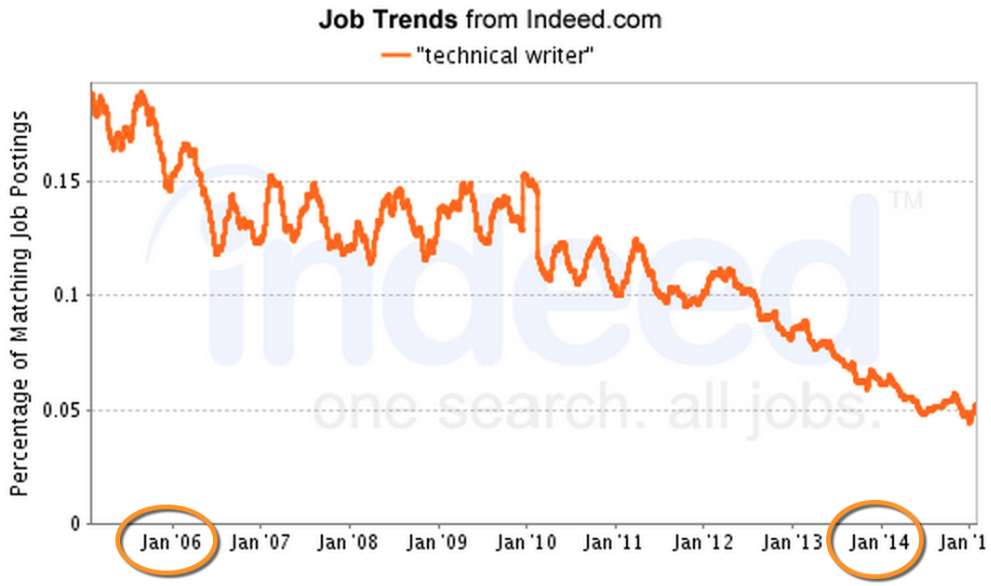
STC Salary Survey (USA)

2008: 47,460 employed technical writers

2013: 47,300 employed technical writers

"technical writer" Job Trends

Scale: **Absolute** - Relative



Indeed.com searches millions of jobs from thousands of job sites.
This job trends graph shows the percentage of jobs we find that contain your search terms.

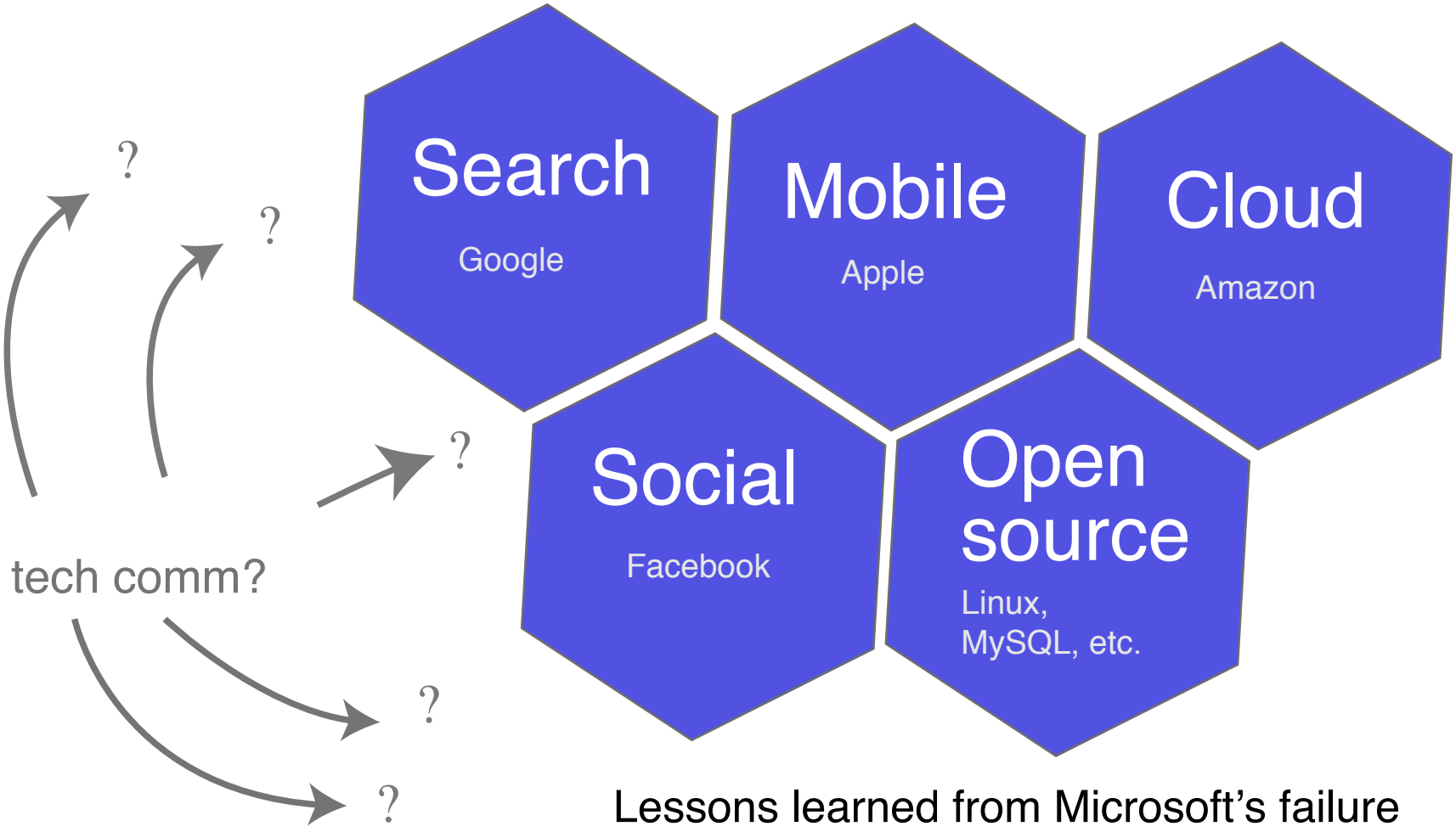
Find "technical Writer" jobs

indeed one search. all jobs.

Top Job Trends

1. HTML5
2. MongoDB
3. iOS
4. Android
5. Mobile app
6. Puppet
7. Hadoop
8. jQuery
9. PaaS
10. Social Media

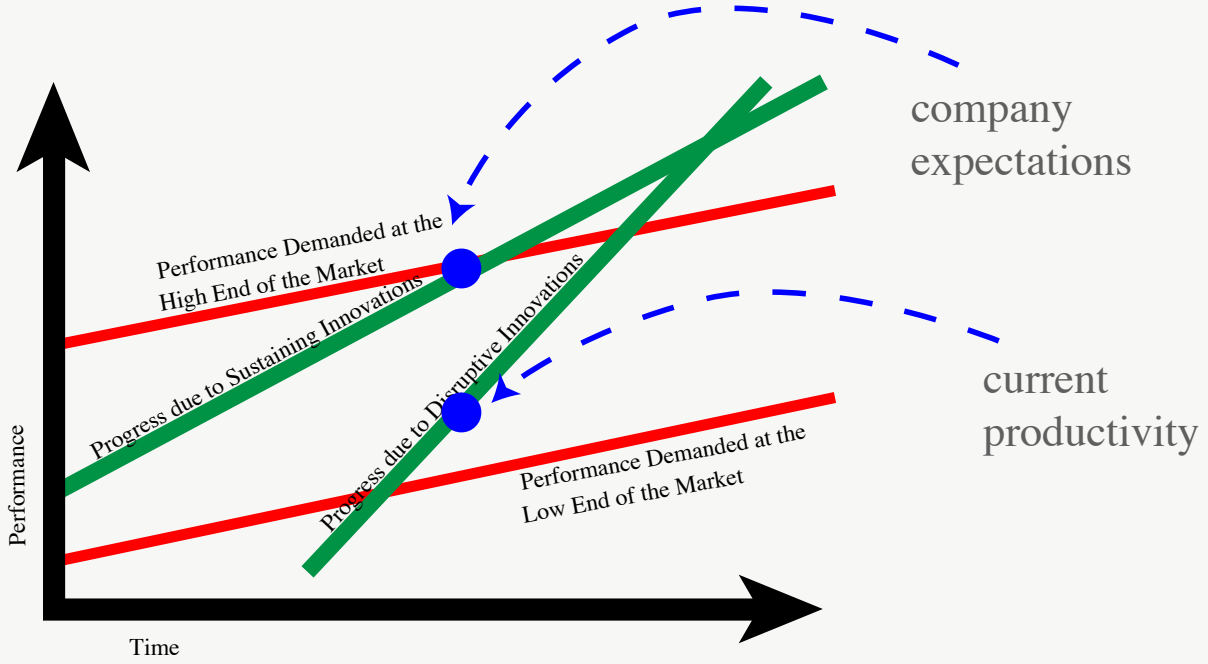
HOW TO STAY RELEVANT?



Lessons learned from Microsoft's failure

DILEMMAS WITH INNOVATION

HOW LONG CAN YOU OPERATE AT A SUB-PERFORMING LEVEL WHILE YOU DO RESEARCH AND DEVELOPMENT?

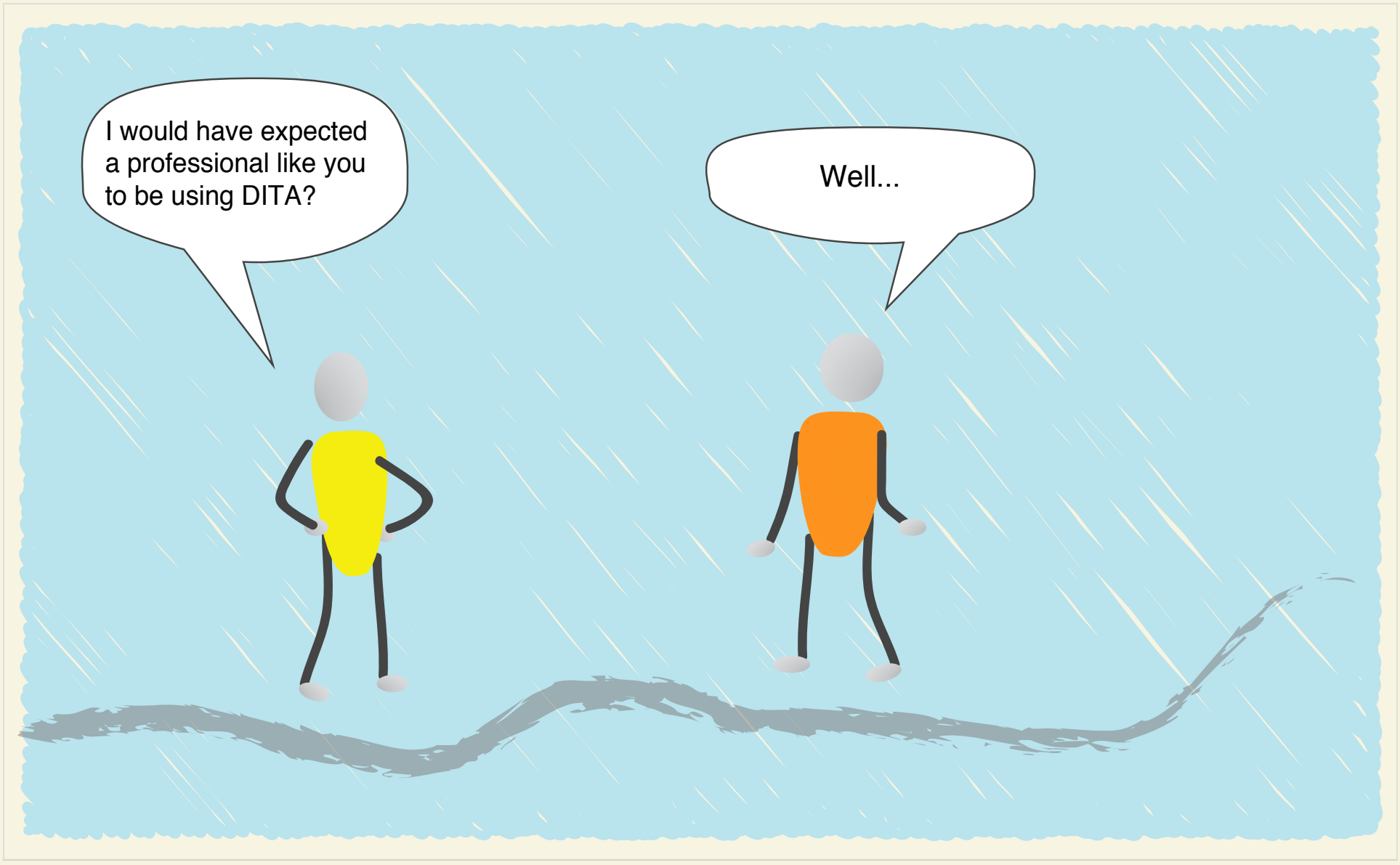


HOW CAN YOU SWITCH MODELS WHEN YOU'RE MIRED IN LEGACY CONTENT AND SYSTEMS?

HOW CAN YOU BUILD ANYTHING IF YOU'RE NOT REALLY AN ENGINEER?

WHAT HAPPENS TO YOUR CAREER SKILLSET WHEN YOU INVEST IN AN OBSCURE TECHNOLOGY?

PRESSURE TO CONFORM TO MAINSTREAM



SO MANY LIMITATIONS

HTTP GET

Returns the single Call resource identified by {CallSid}.

Example

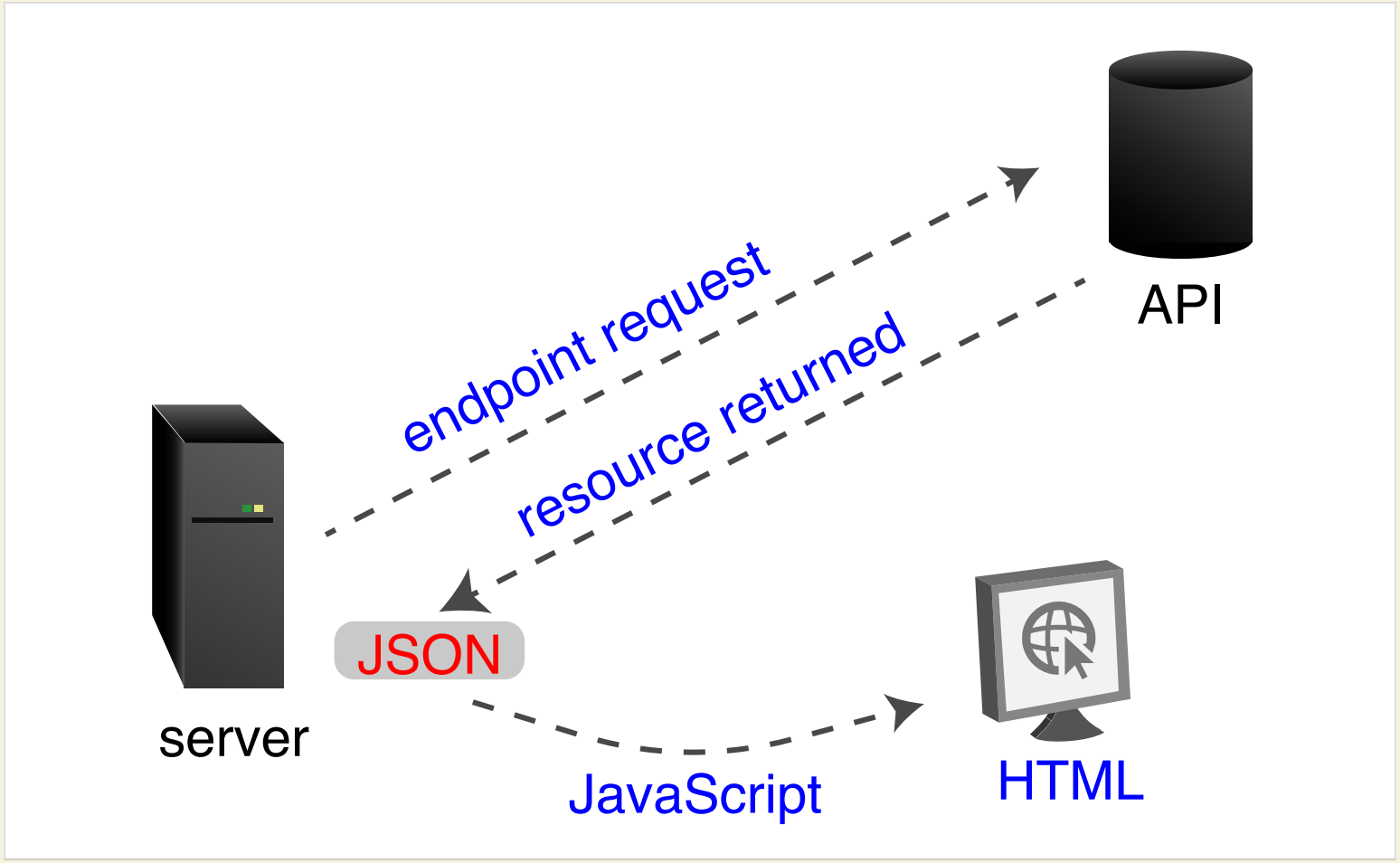
JSON | XML | PHP | Python | C# | Java | Ruby | Node.js

```php
<?php
// Get the PHP helper library from twilio.com/docs/php/install
require_once('/path/to/twilio-php/Services/Twilio.php'); // Loads the library

// Your Account Sid and Auth Token from twilio.com/user/account
$sid = "AC5ef8732a3c49700934481addd5ce1659";
$token = "{{ auth_token }}";
$client = new Services_Twilio($sid, $token);

// Get an object from its sid. If you do not have a sid,
// check out the list resource examples on this page
$call = $client->account->calls->get("CA42ed11f93dc08b952027ffbc406d0868");
echo $call->to;
```

HTTP POST

XML AND THE WEB: DRIFTING APART?

JSON IS STANDARD



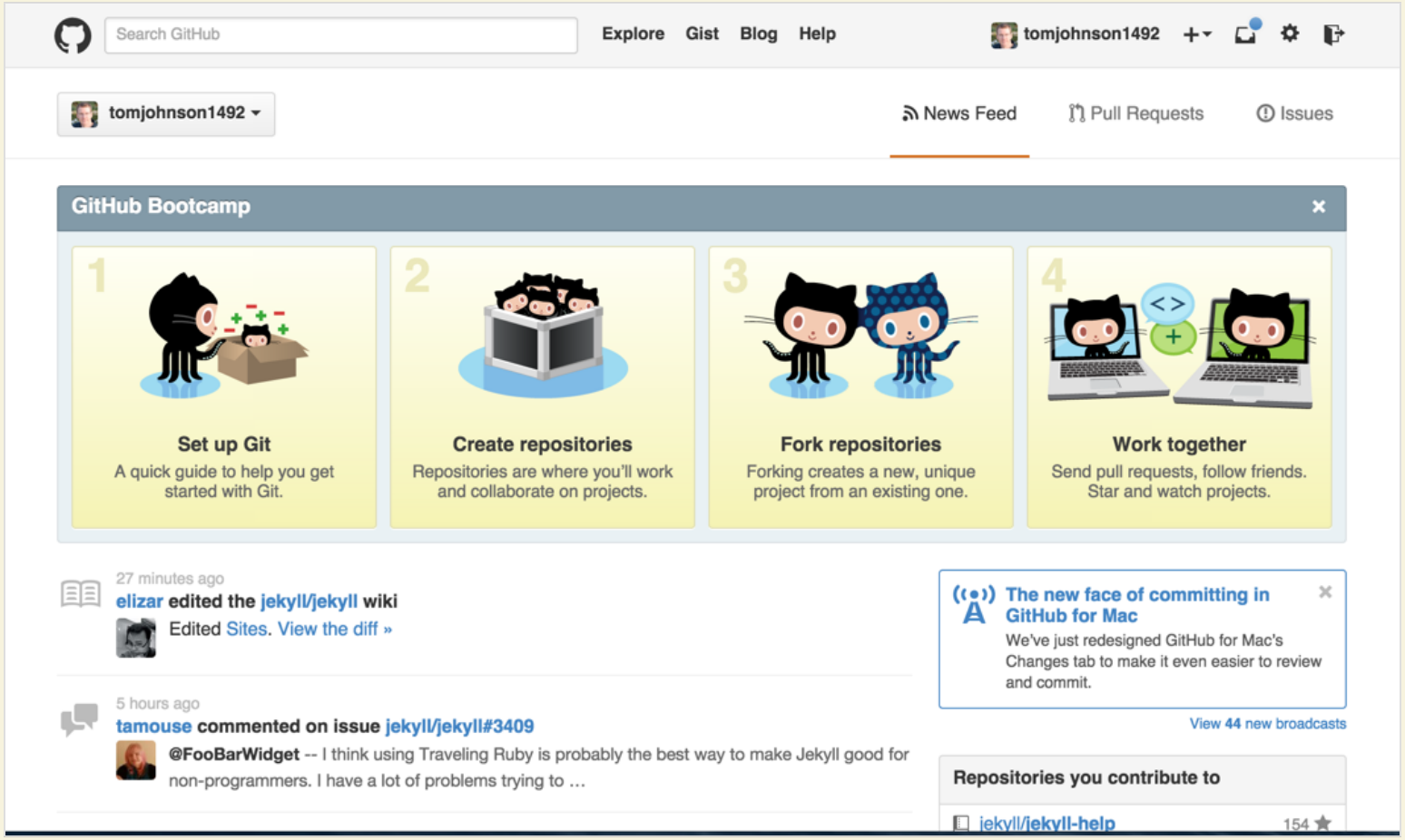
TECHNOLOGIES USED BY WEB DEVELOPERS

THE TURNING POINT

The web is where innovation is happening. To keep up, tech comm needs to ride the wave of innovation of the web.

THE GENIUS OF GITHUB AND OPEN SOURCE

COLLABORATE, VERSION, DISTRIBUTE



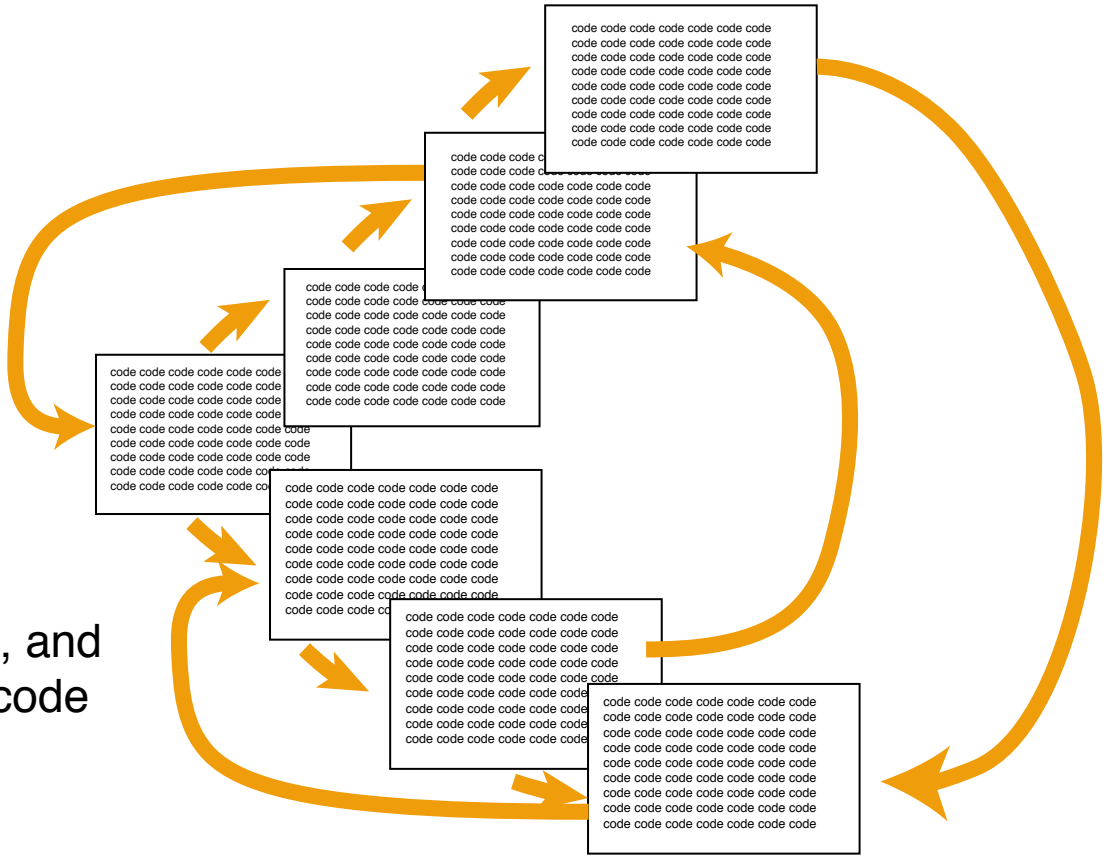
REVOLUTIONARY FOR SOFTWARE DEVELOPMENT

"Github, in my humble opinion, is one of the most revolutionary things that has happened to software in 20 years."

— Joe Malin

"SOCIAL CODING"

Forking, sharing, and reincorporating code in a social way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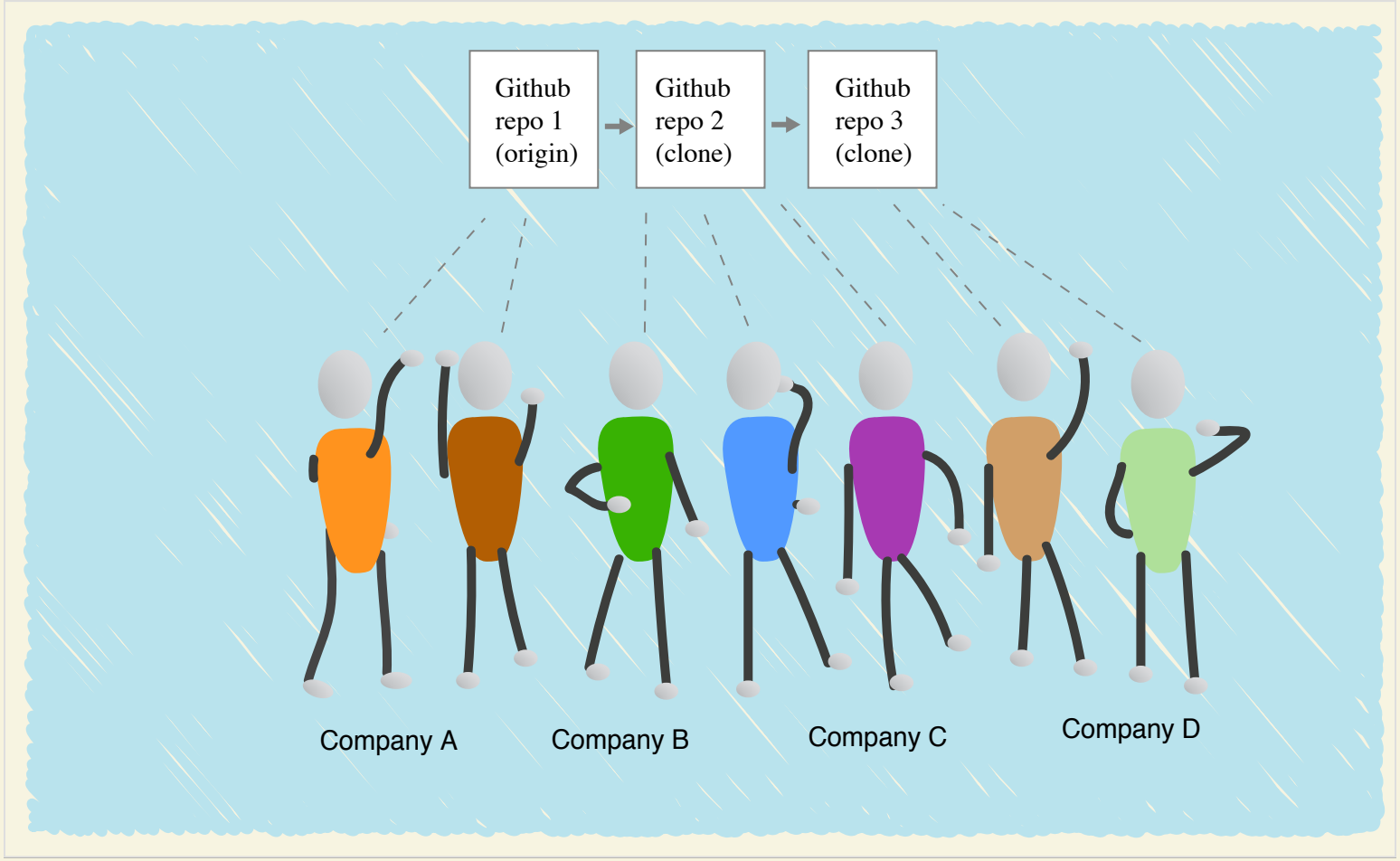
WHAT IF EVERYONE'S HELP WERE IN AN OPEN GITHUB REPO?



TREATING DOCUMENTATION AS CODE

WRITING DOCUMENTATION LIKE A DEVELOPER

File format:	Text files
Authoring:	Text editor
Building:	Continuous build scripts
Collaborating:	Source control
Versioning:	Source control
Pushing live:	Terminal commands

THIS SLIDEDECK IS JUST HTML5.

Here's the code for this slide:

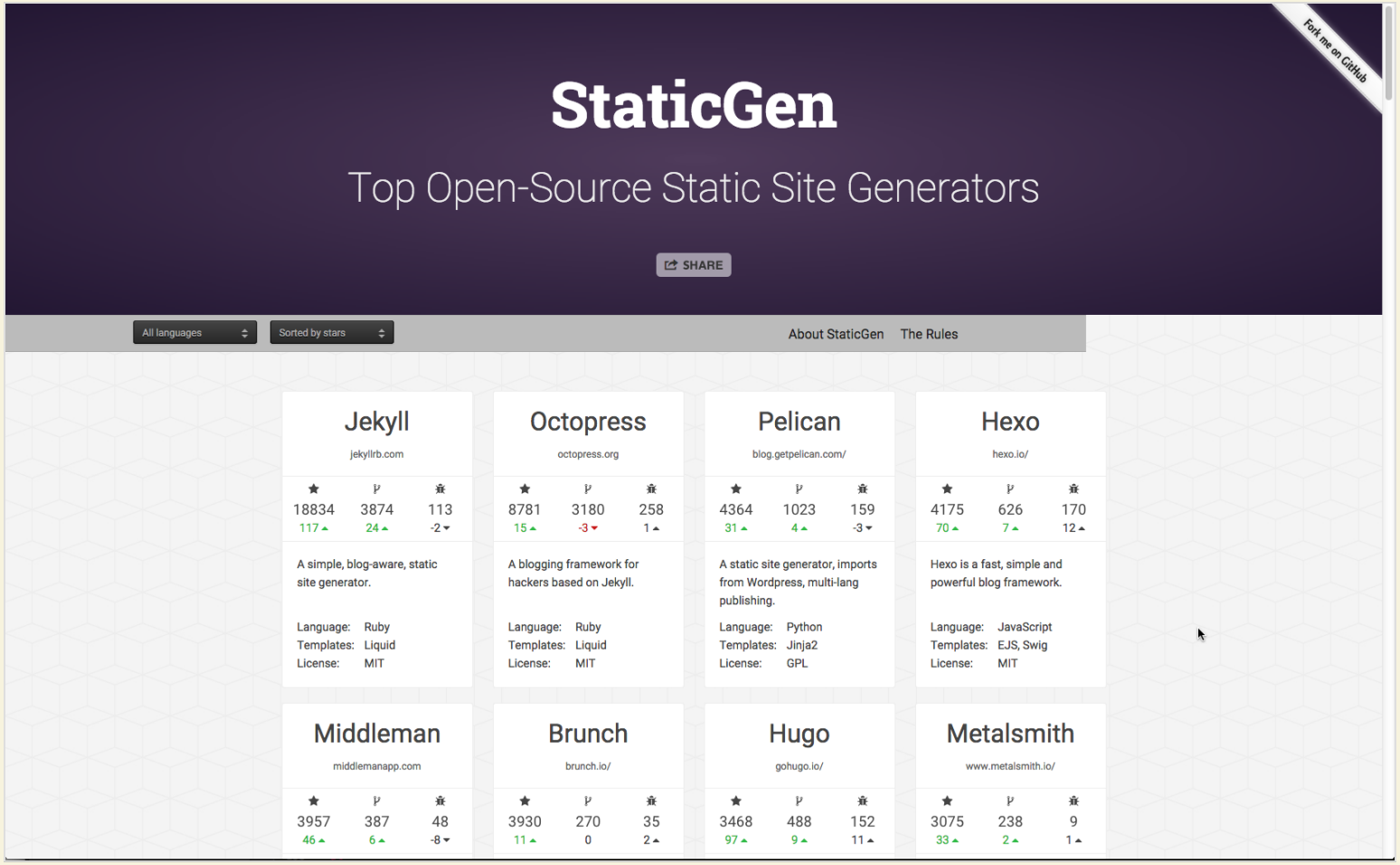
```
<section>
  <h3>This slidedeck is just HTML5.</h3>
  <p>Here's the code for this slide:</p>
   <p>Github repo: <a target="_blank" href="https://github.com/
   https://github.com/tomjohnson1492/innovation/</a></p>
  <p><i>So much more satisfying to work in text
  file formats.</i></p>
</section>
```

Github: https://github.com/tomjohnson1492/innovation/

So much more satisfying to work in text-file formats.

DISRUPTIVE TECH: STATIC SITE GENERATORS

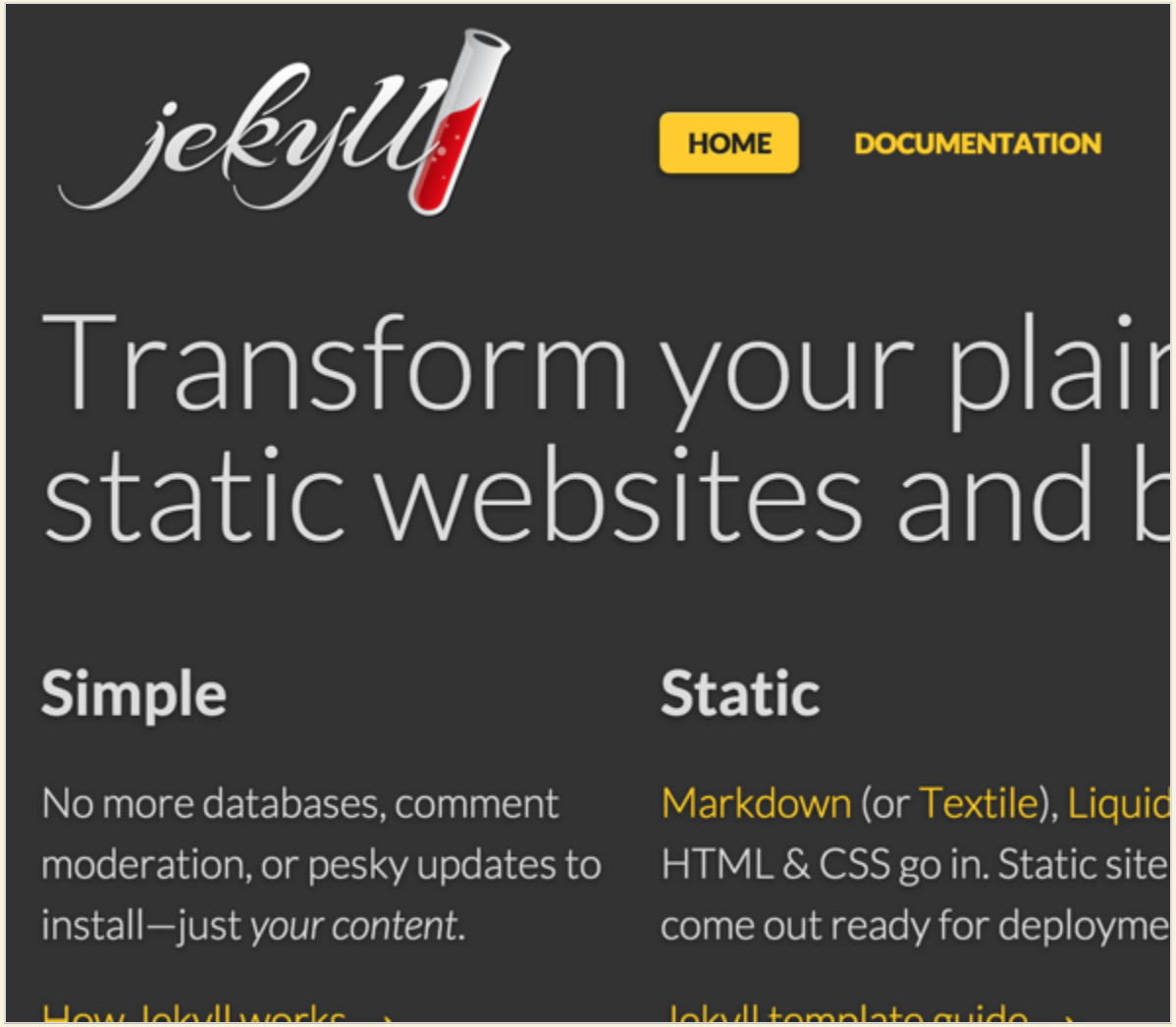
LIGHTWEIGHT, FLEXIBLE, NO DATABASE



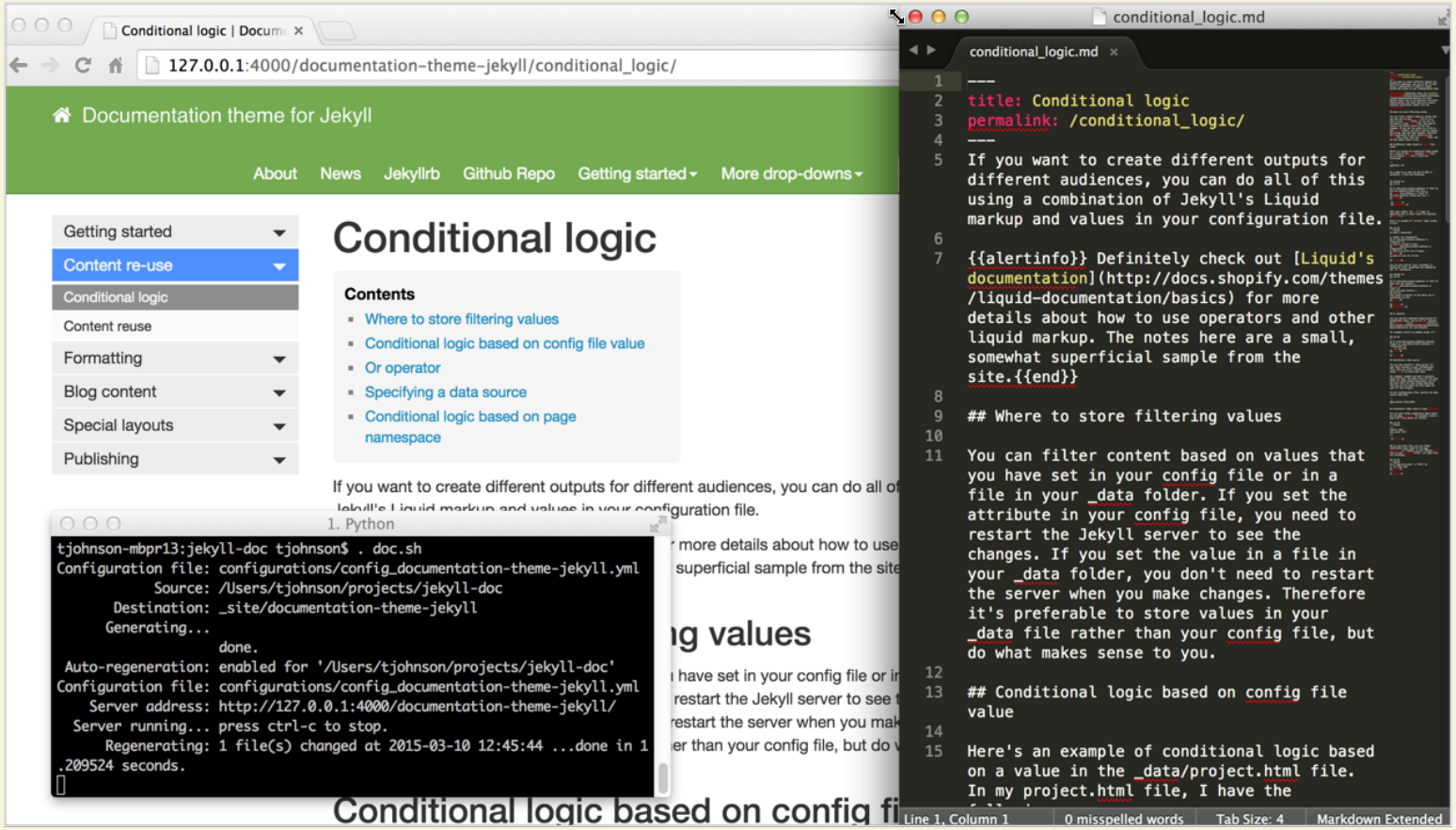
STATIC SITE GENERATOR CHARACTERISTICS

- **Lightweight.** No database — output is just static files.
- **Fast.** As static, pre-built files, pages load < 1 second.
- **Usability.** Write in Markdown. Add HTML or JS as needed.
- **Flexibility.** Complete control to define entire site.
- **Secure.** As static files, very secure.
- **Suitable for hackers.** Treat content just like code.

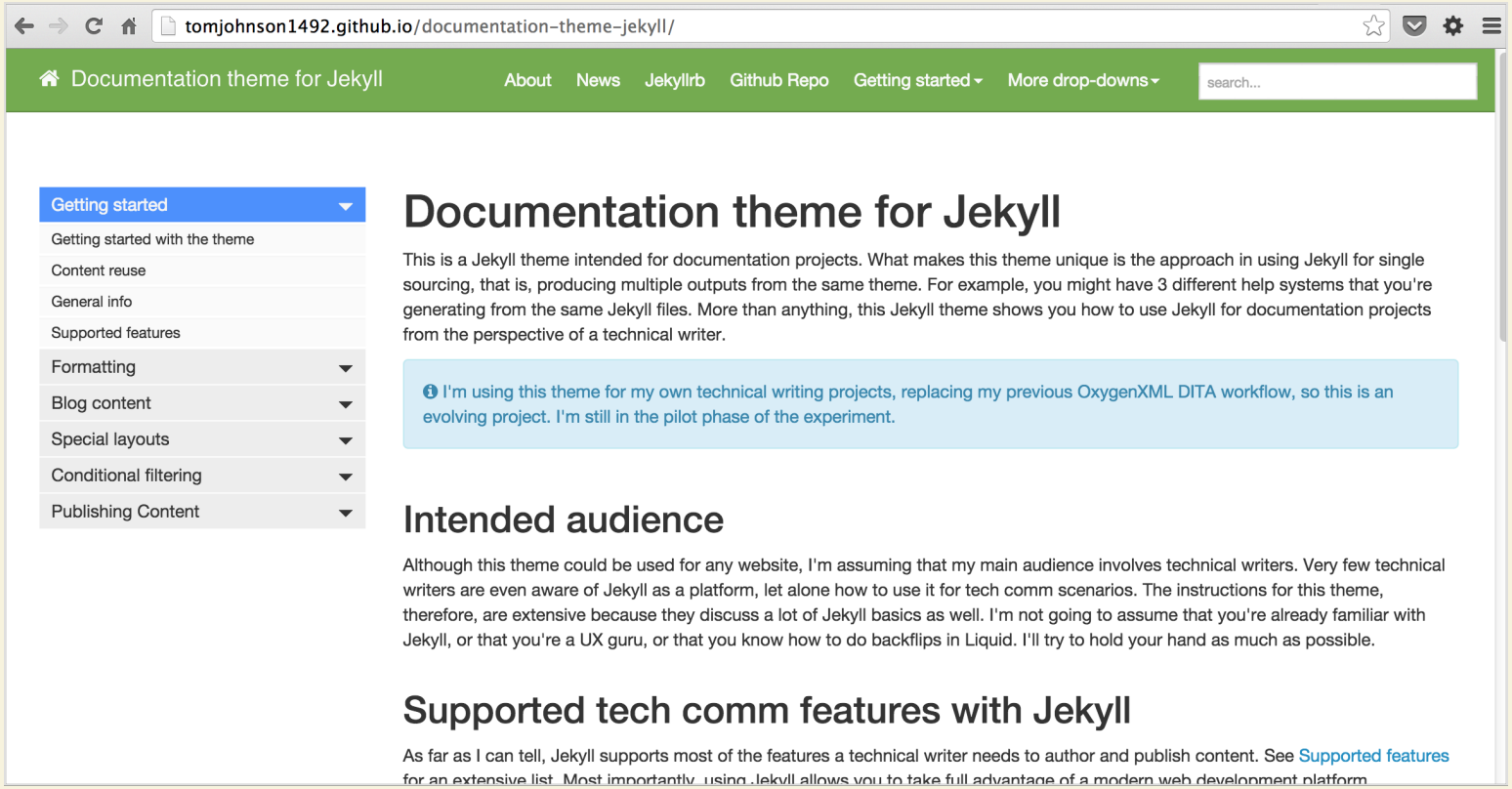
JEKYLL IS MOST POPULAR



LIVE PREVIEW REBUILDS WITH EACH SAVE



DOCUMENTATION THEME I BUILT ON JEKYLL



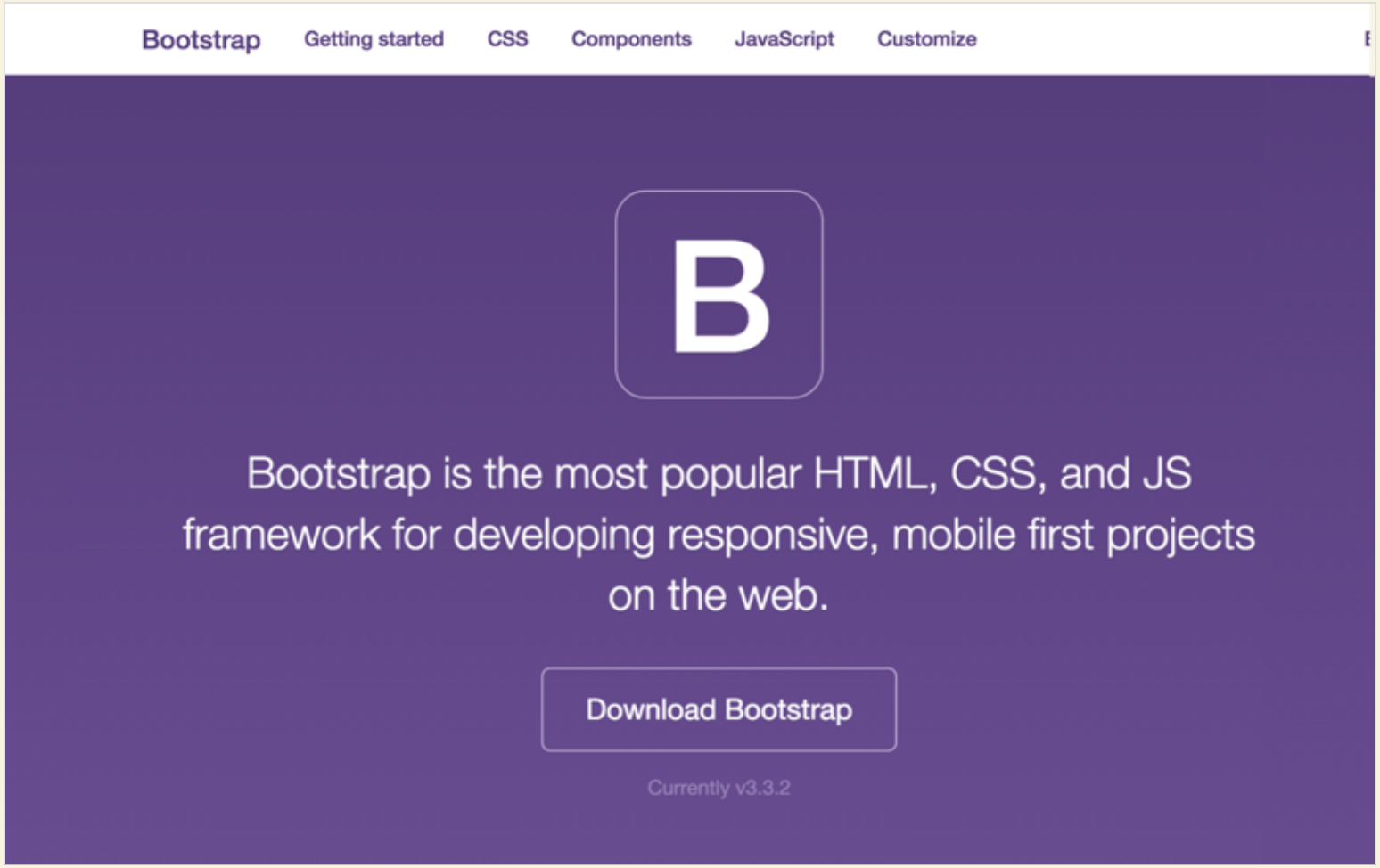
Clone me here: http://tomjohnson1492.github.io/documentation-theme-jekyll/

5 REASONS WHY STATIC SITE GENERATORS CAN BE A DISRUPTIVE TECHNOLOGY

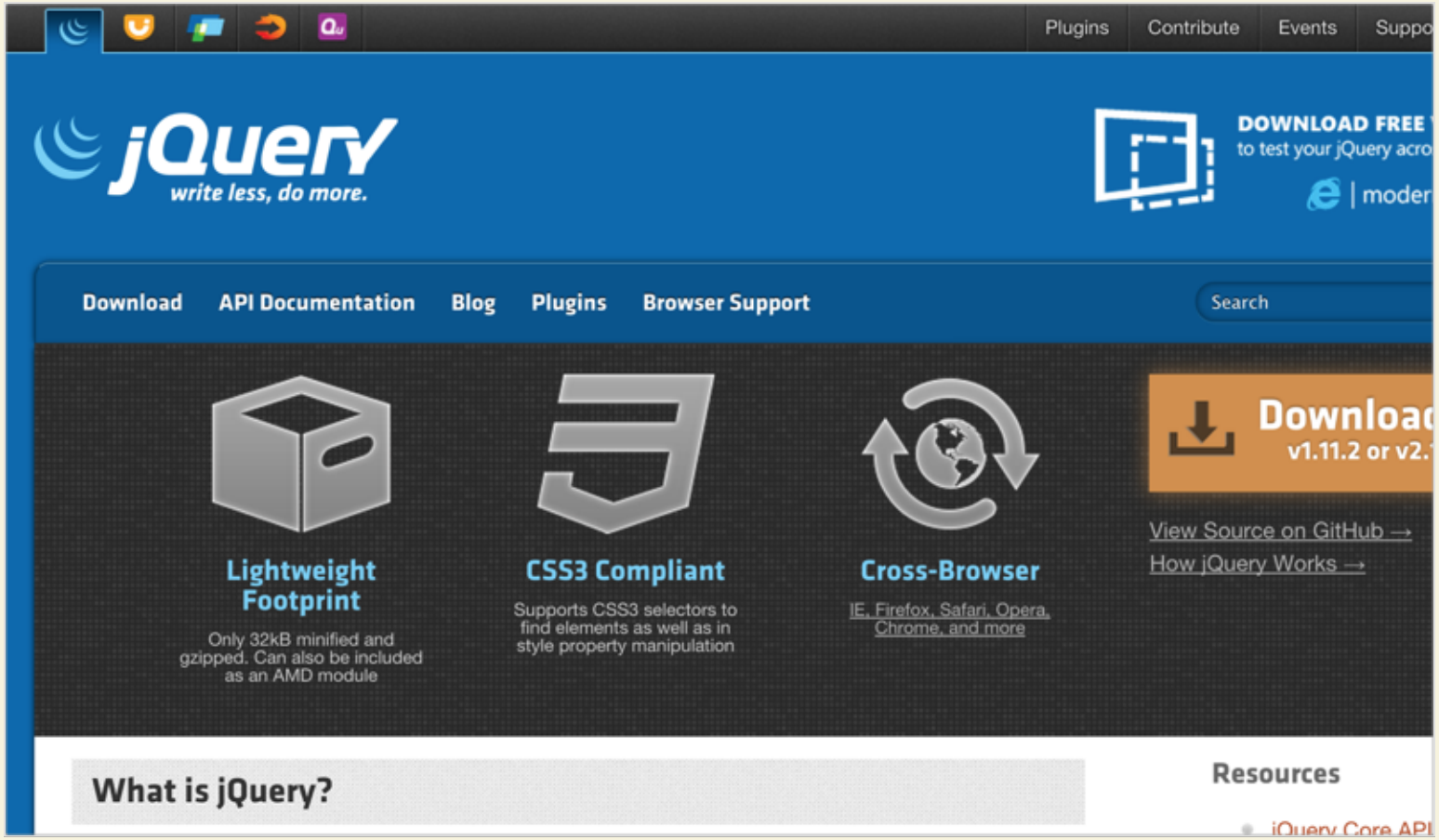
REASON 1: SNUG FIT INTO WEB TECHNOLOGIES

HTML, JS, CSS

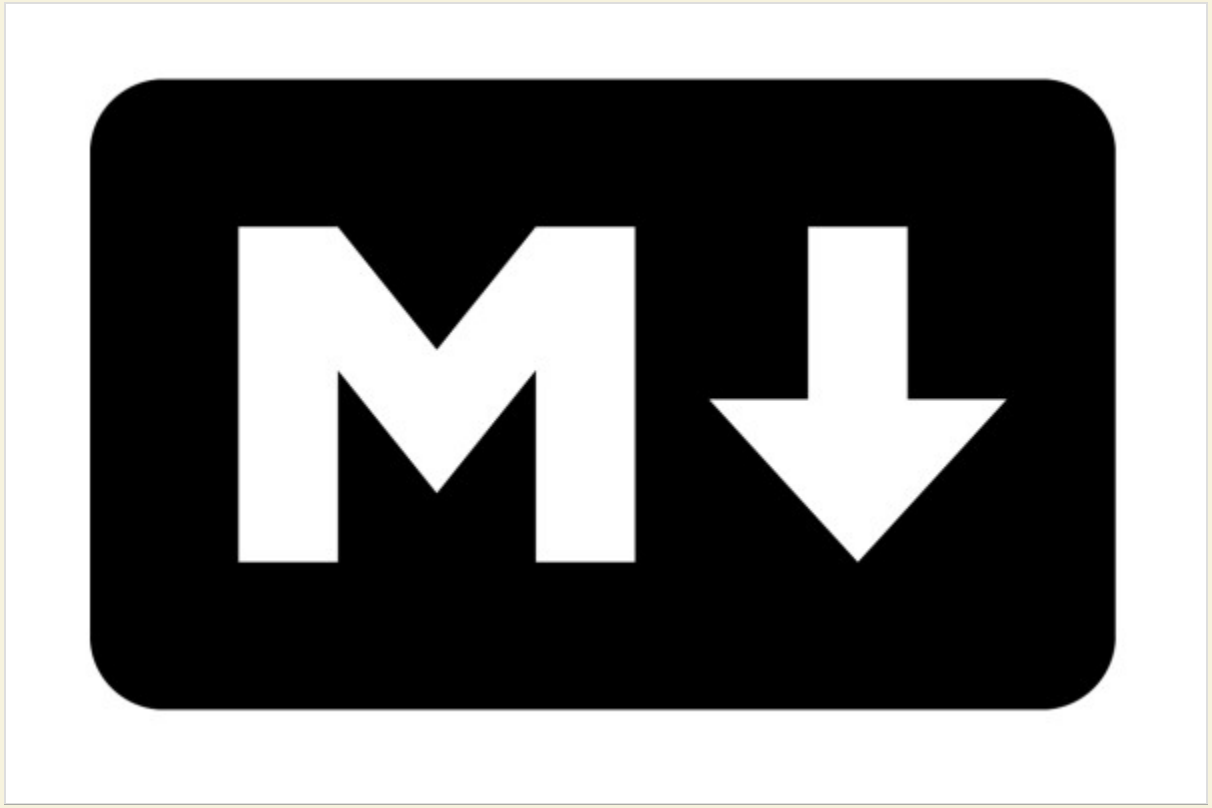
BOOTSTRAP


Bootstrap
Getting started
CSS
Components
JavaScript
Customize
B
Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.
Download Bootstrap
Currently v3.3.2

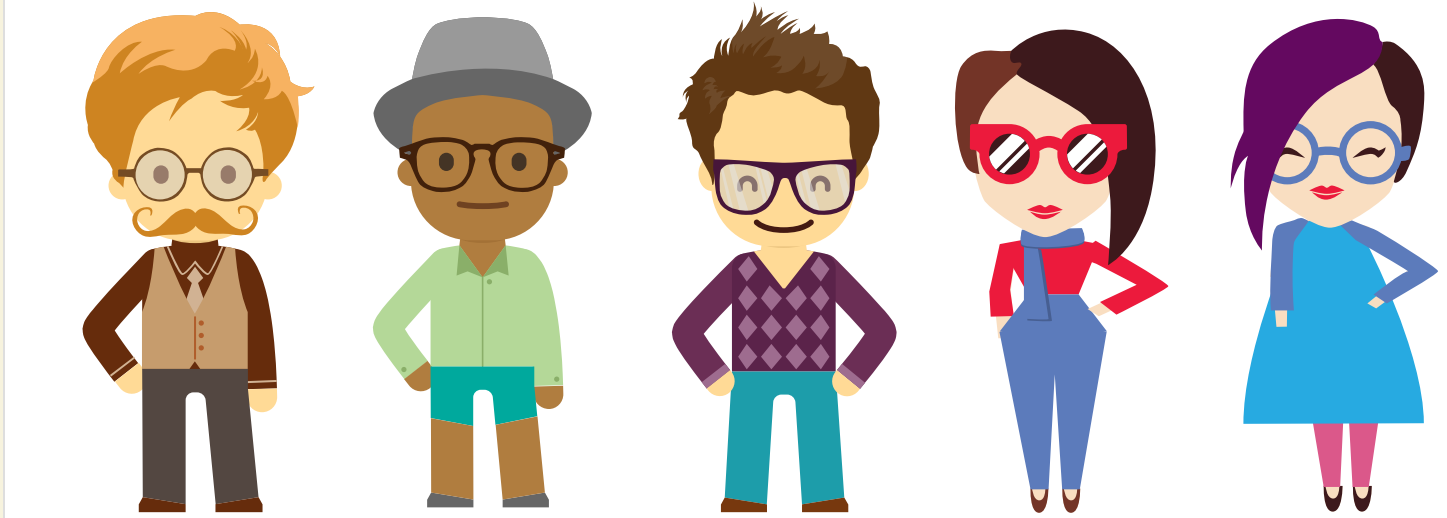
JQUERY


Plugins
Contribute
Events
jQuery
write less, do more.
DOWNLOAD FREE
to test your jQuery acro
Download
API Documentation
Blog
Plugins
Browser Support
Search
Lightweight Footprint
Only 32kB minified and gzipped. Can also be included as an AMD module
CSS3 Compliant
Supports CSS3 selectors to find elements as well as in style property manipulation
Cross-Browser
IE, Firefox, Safari, Opera, Chrome, and more
View Source on GitHub →
How jQuery Works →
What is jQuery?
Resources

MARKDOWN



UX TALENT WILL HELP WHEN PLATFORM IS WEB

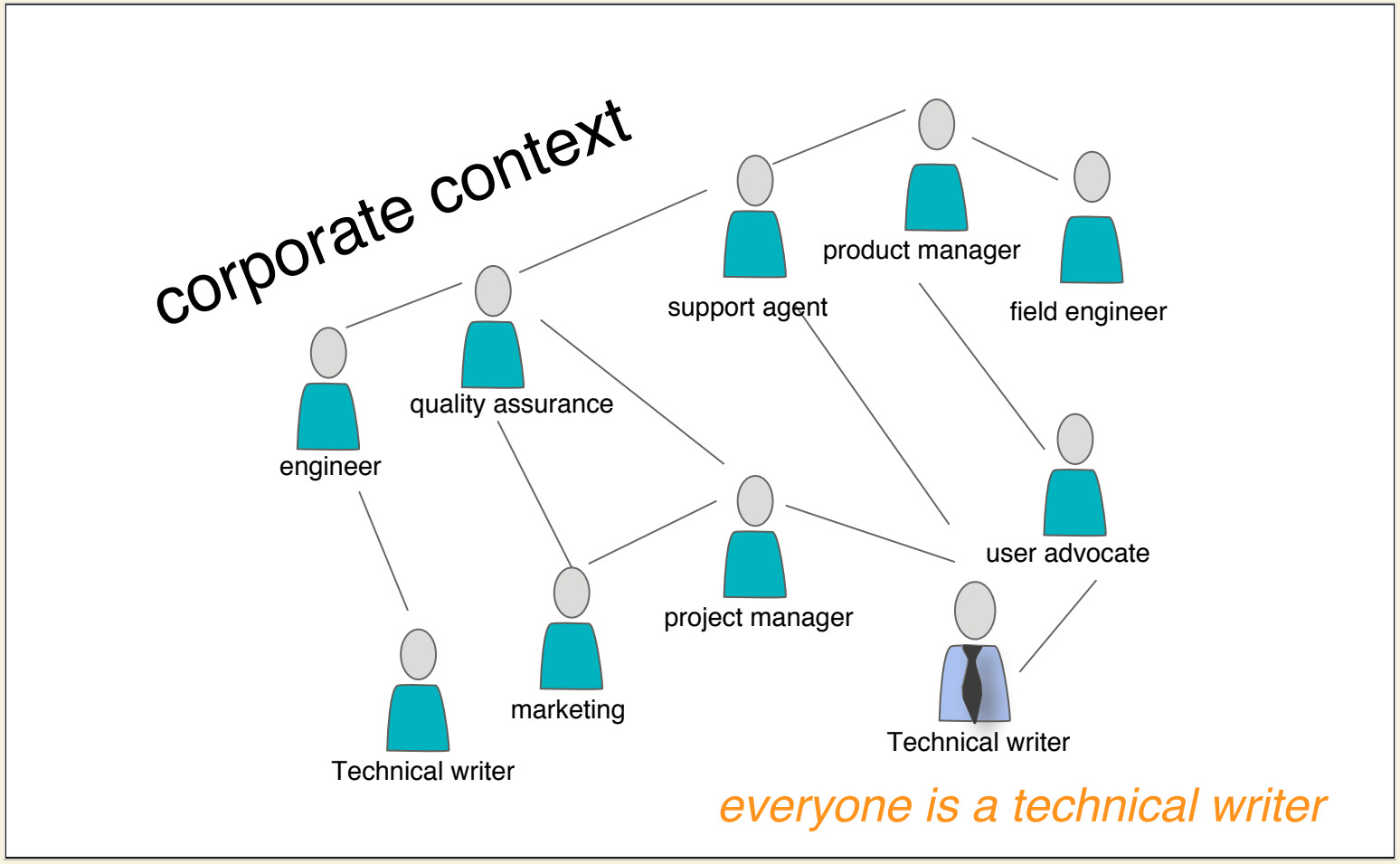


REASON #2: SCALE INFINITELY

GROW AS NEEDED WITHOUT BUDGET CONSTRAINTS

- Allow unlimited number of authors.
- No price per "seat."
- Avoid free-for-all content junkyard of wikis.
- Handle any type of content.

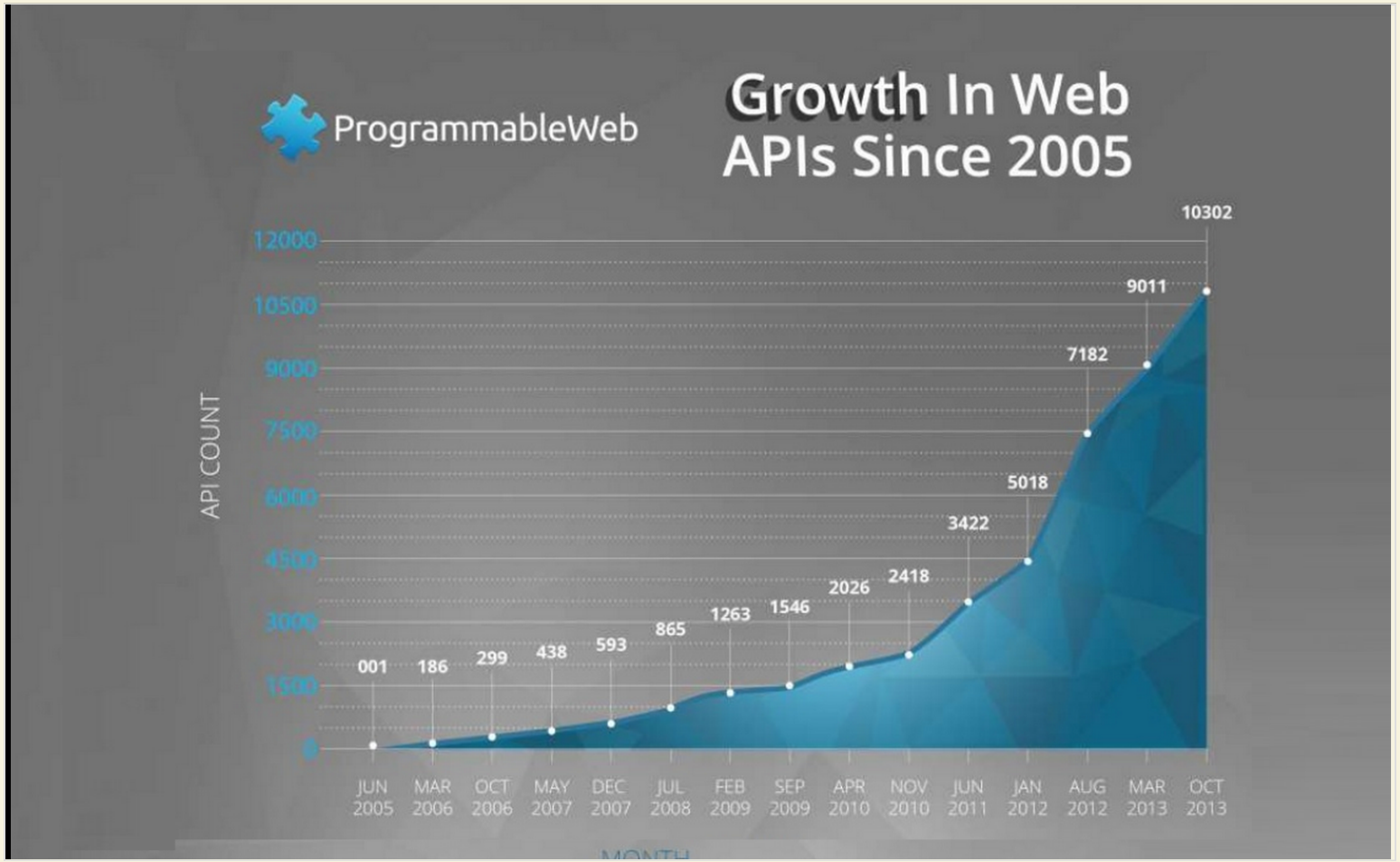
ALLOWS EVERYONE TO BE A TECH WRITER



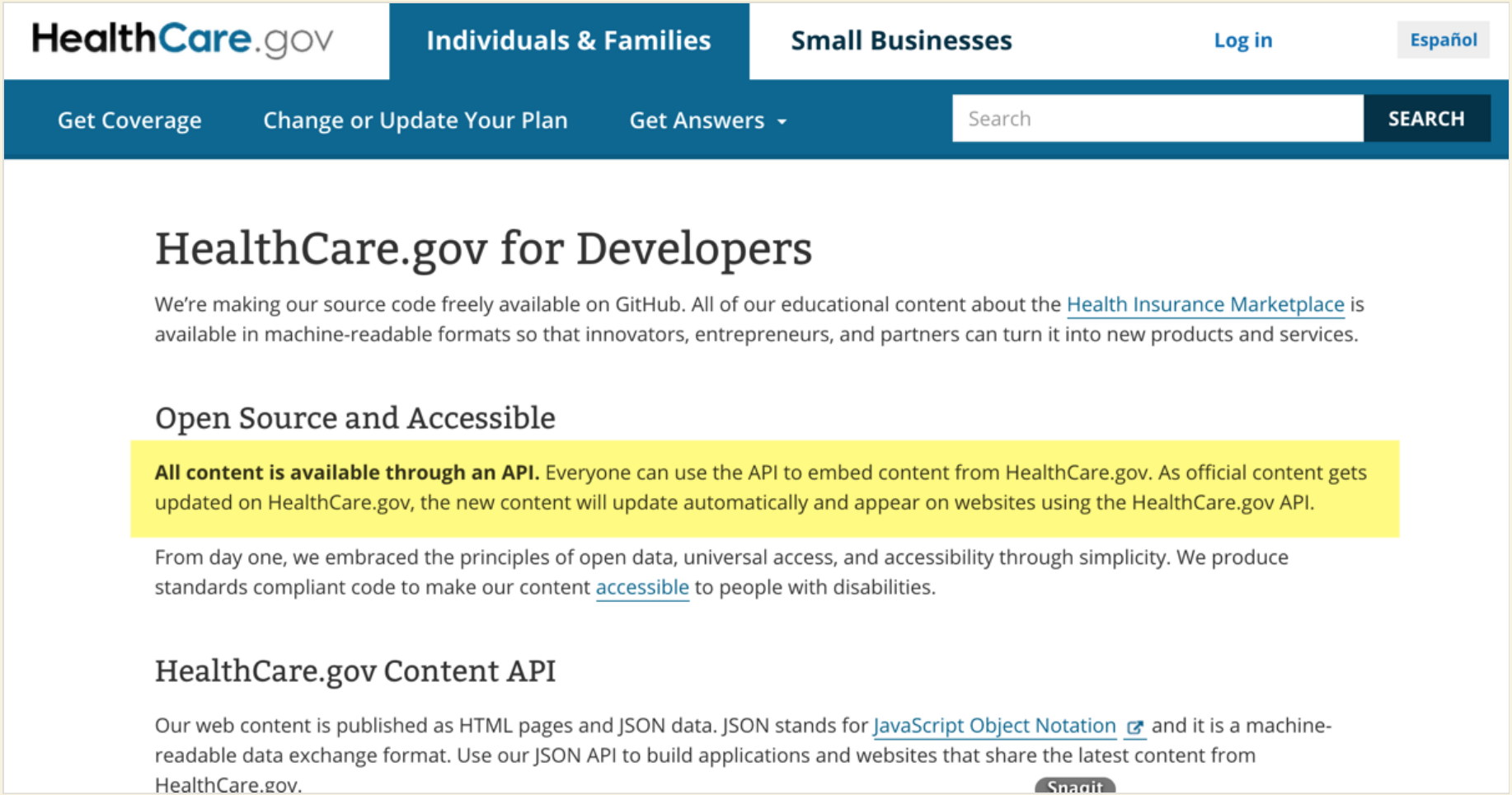
One person writing from one perspective in one company, especially an outsider to the actual business context of the user, can't possibly cover all the information needs for every user.

REASON #3: CONTENT APIS

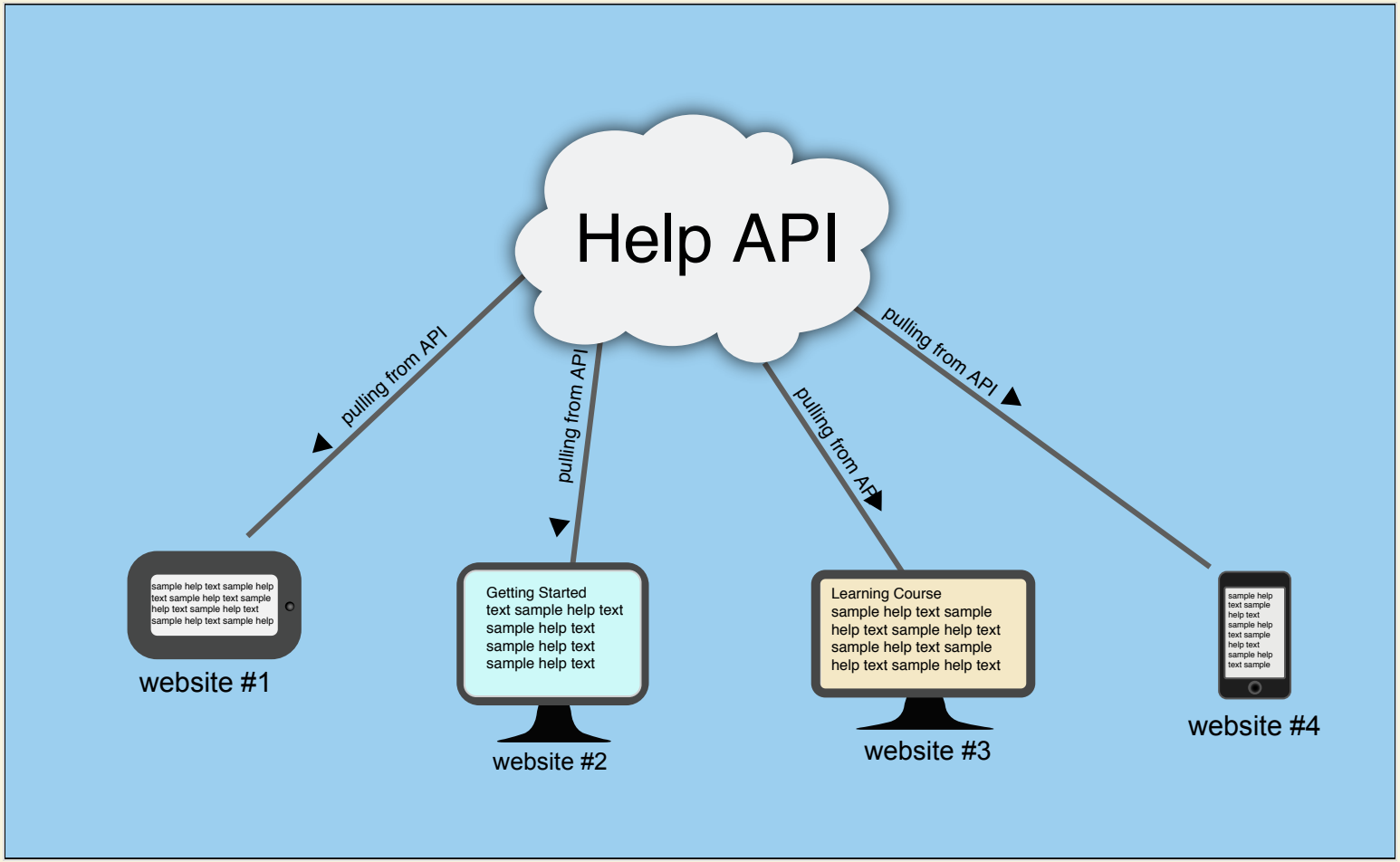
GROWTH IN REST APIS



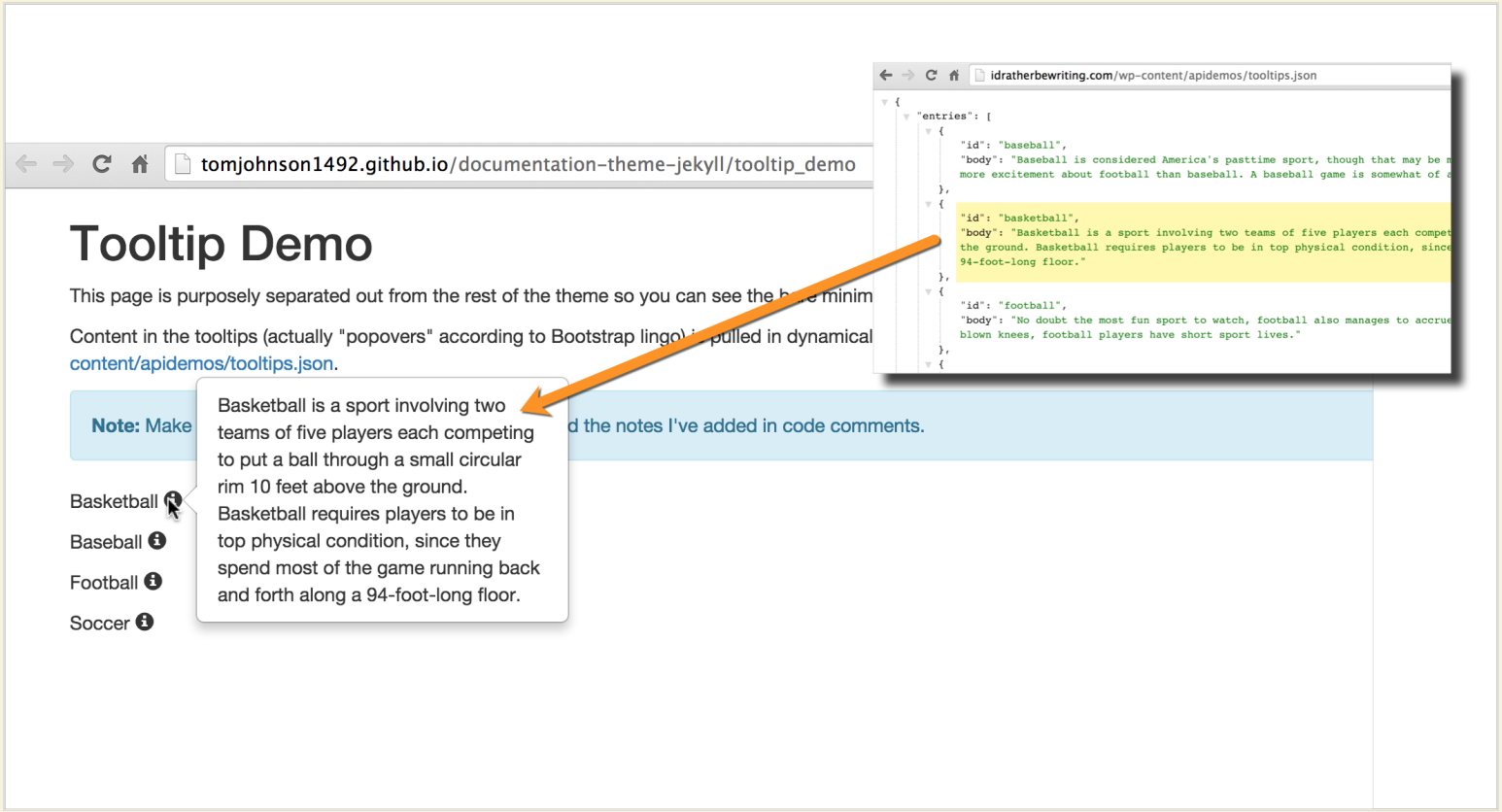
HEALTHCARE.GOV SITE AS API



WHY NOT CREATE HELP CONTENT APIS?

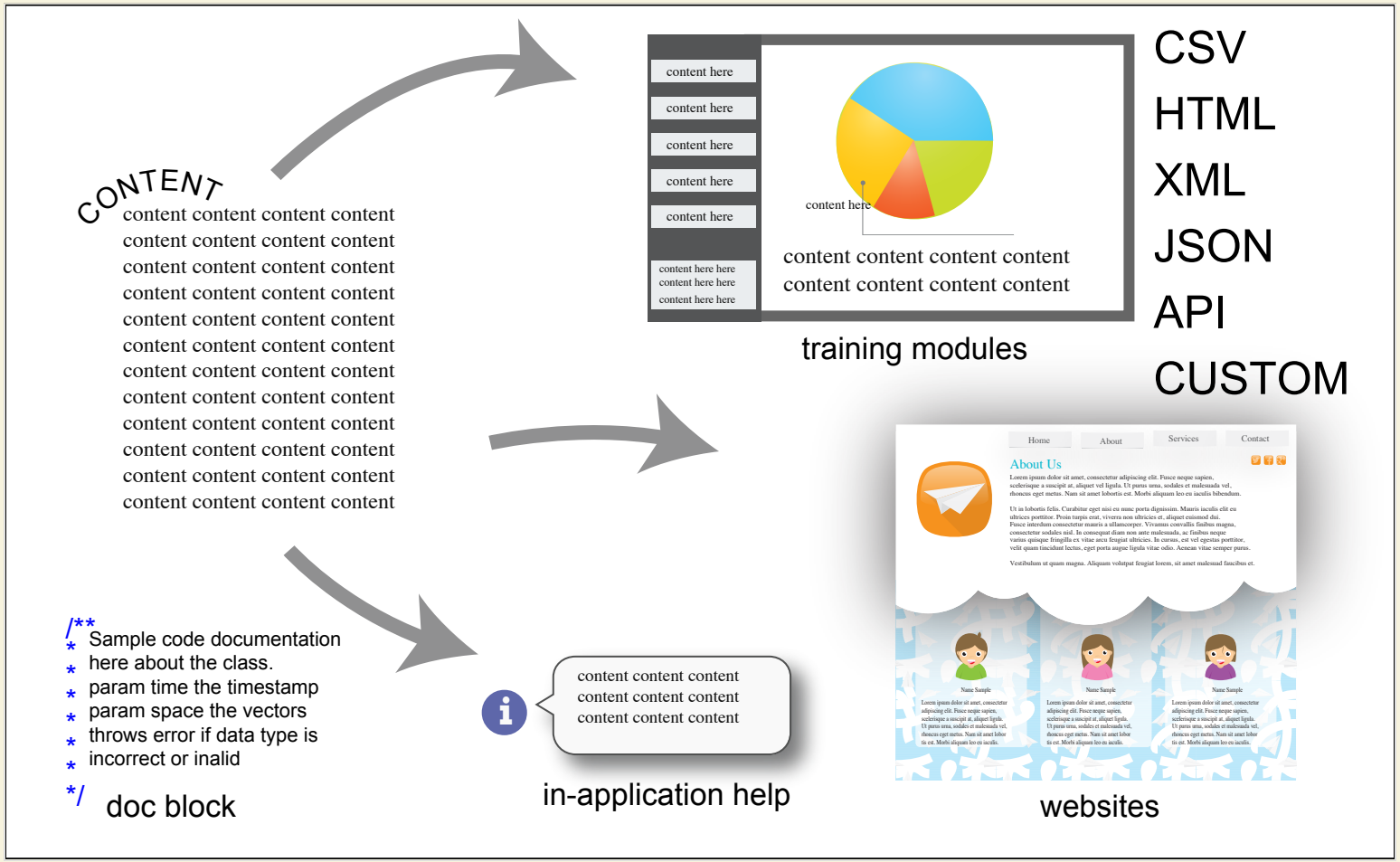


POPULATE UI TEXT DYNAMICALLY FROM API



REASON #4: PUSH CONTENT INTO TEMPLATES

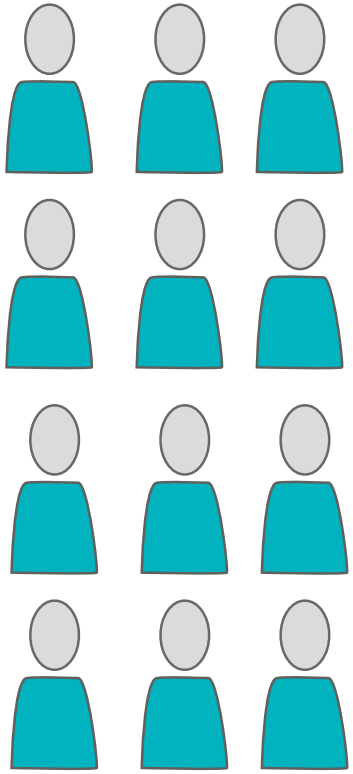
CUSTOM TEMPLATES FOR CUSTOM CONTENT TYPES

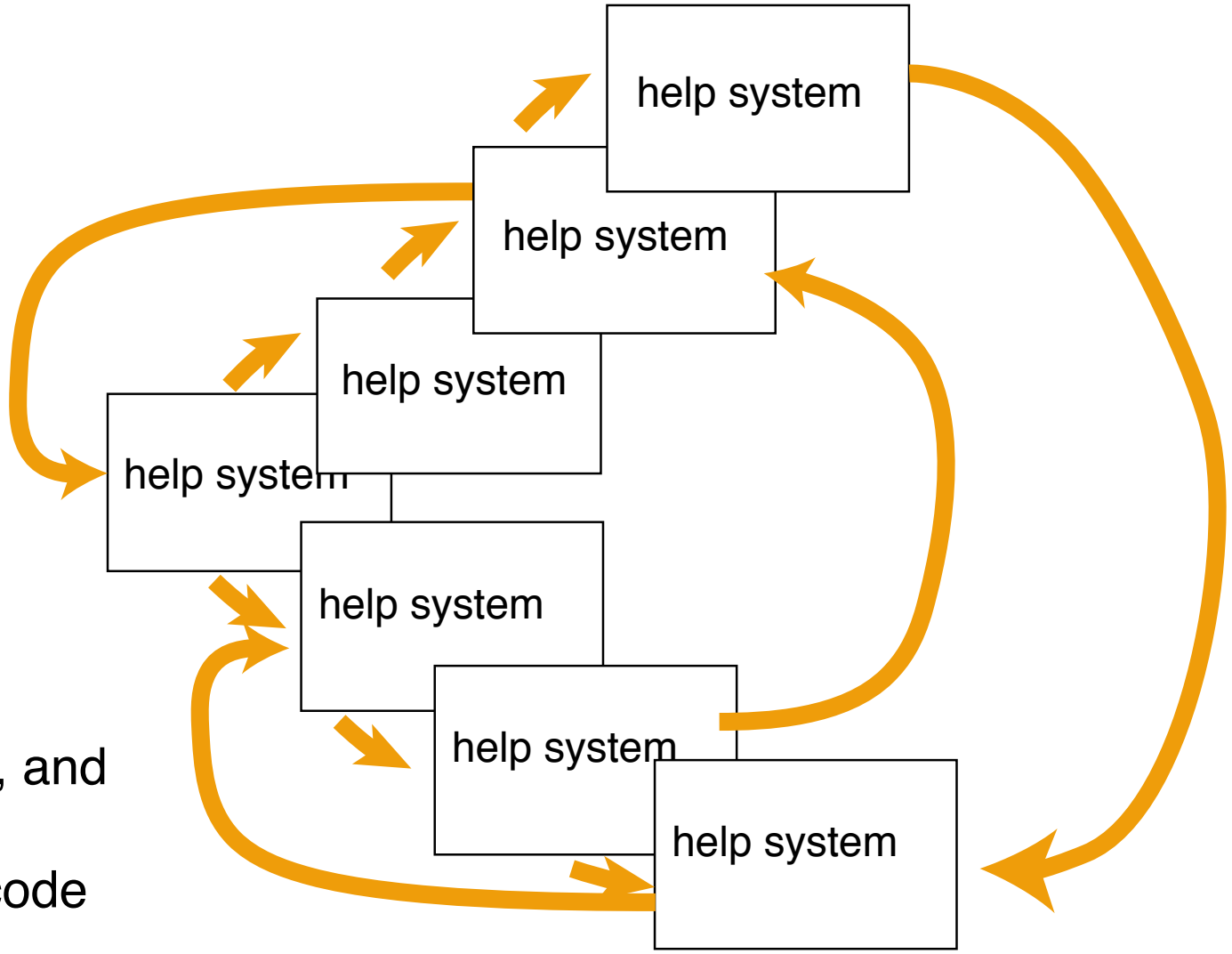


ITERATE THROUGH ITEMS

```
{
  "entries":
[
    {% for page in site.tooltips %}
    {
      "id"    : "{{ page.id }}",
      "body": "{{ page.content | strip_newlines | replace: '\', '\\\\' |
               replace: '"', '\\"' }}"
    } {% unless forloop.last %},{% endunless %}
  {% endfor %}
]
}
```

REASON #5: LEVERAGE OPEN SOURCE MODEL



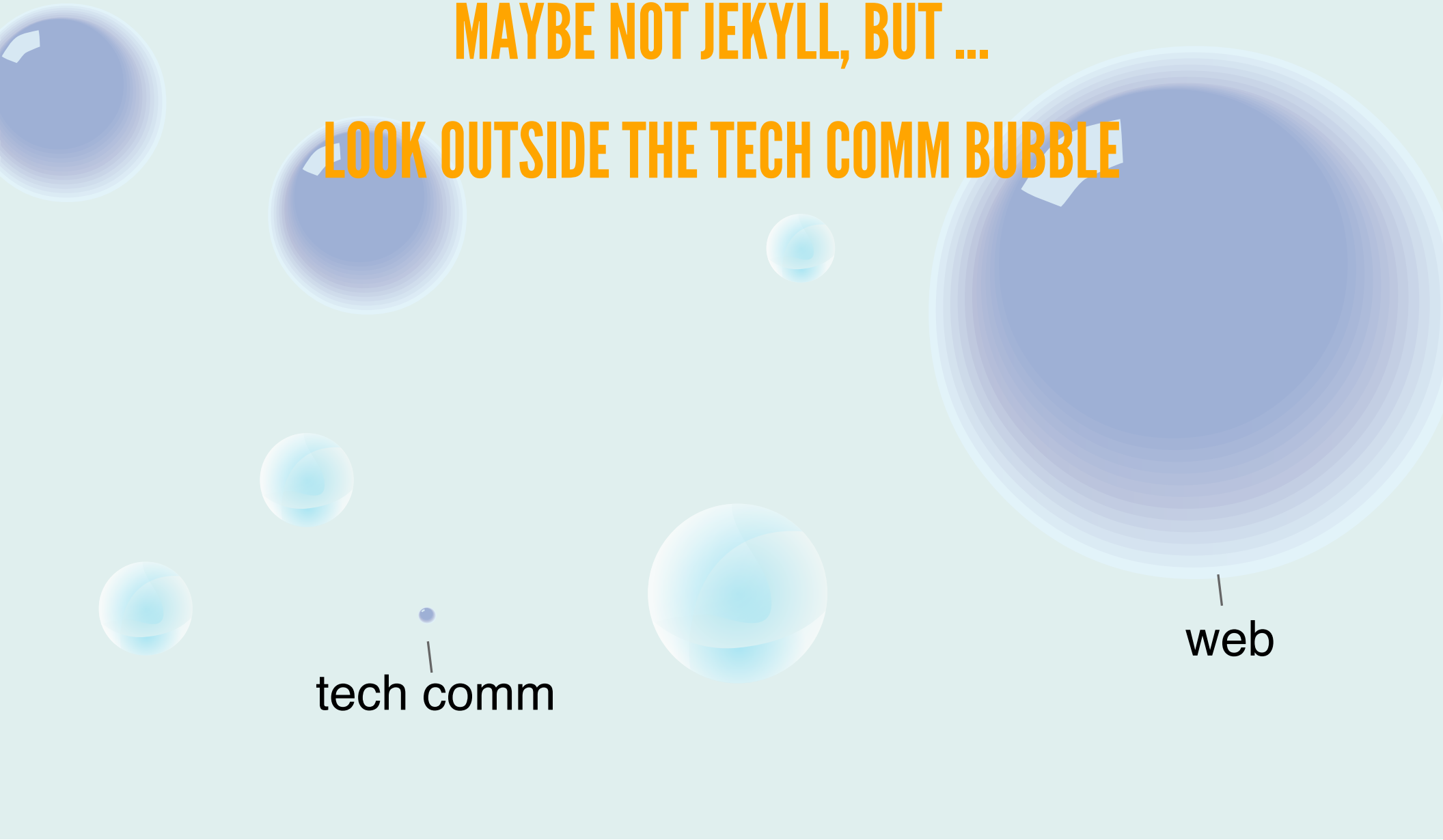


Forking, sharing, and reincorporating documentation code

MY LARGER POINT:

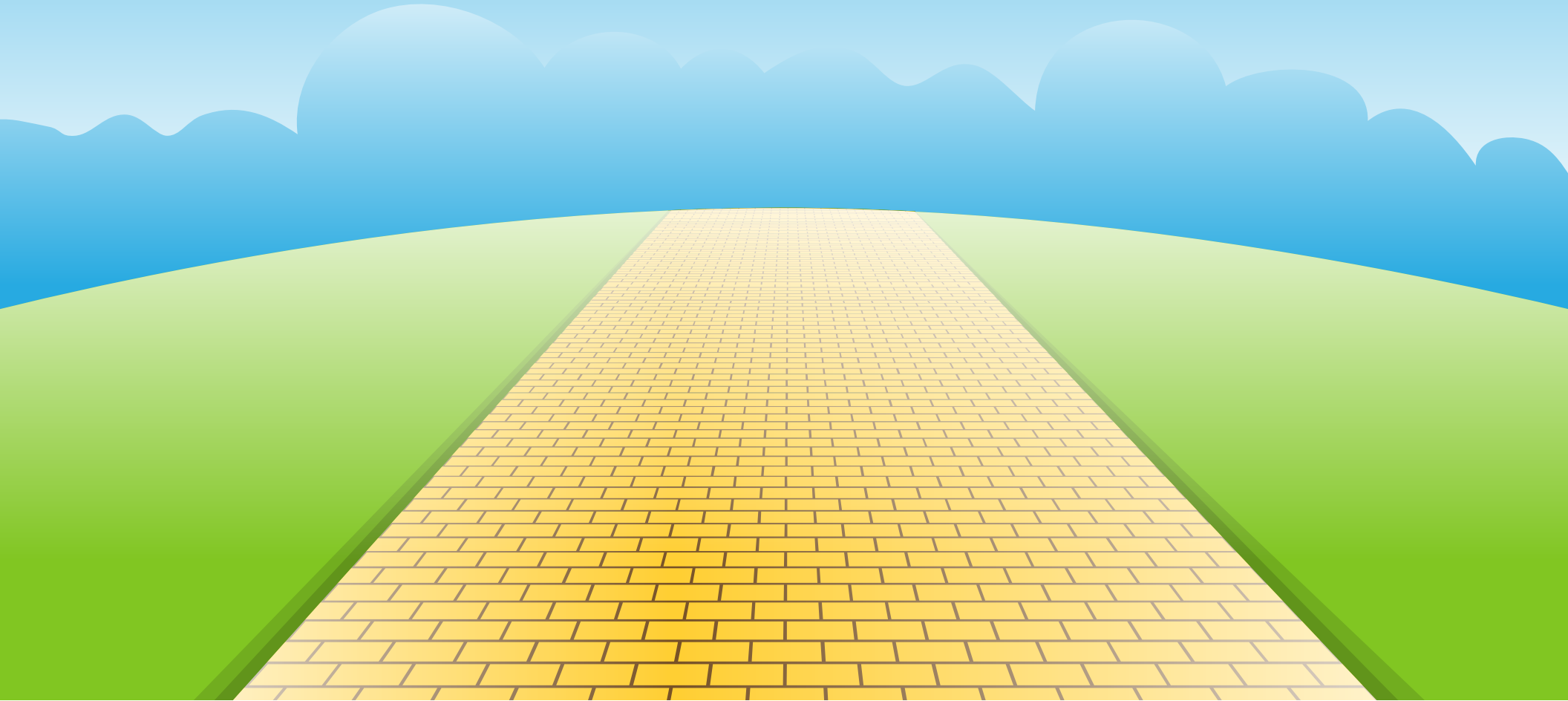
MAYBE NOT JEKYLL, BUT ...

LOOK OUTSIDE THE TECH COMM BUBBLE



3 STRATEGIES FOR INNOVATION

1. Look outside the tech comm bubble.
2. Ride the innovation of the web.
3. Share with the community around you.



THANKS!

CONTACT INFO

- Blog: idratherbewriting.com
- Twitter: @tomjohnson
- GitHub for slides: github.com/tomjohnson1492/innovation
- Github for Jekyll documentation theme: http://tomjohnson1492.github.io/documentation-theme-jekyll/
- Email: tomjohnson1492@gmail.com

CREDITS

- Read the innovation series on my blog, http://idratherbewriting.com/series/innovation-in-tech-comm/
- Slide framework from Reveal JS
- Some vectors come from Vecteezy.com
- Mark Baker quote, from comment thread at The genius of Github and its ability to transform tech comm
- Joe Malin quote, from The genius of Github and its ability to transform tech comm
- Theory of Disruptive Innovation, Clay Christiansen. *The Innovator's Dilemma*
- The graph of disruptive innovation. Pocket-sized Graph of the Theory of Disruptive Innovation
- Bell and an early model of the telephone, Wikipedia
- REST API Trends graph, Programmableweb.com
- Microsoft is very interesting again -- very, by Jason Calicanus. Linkedin