

# BEFORE WE BEGIN...

**Full Screen**

F

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**Next Slide**

Space bar

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**Slide Notes**

S

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**Thumbnail View** Esc

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

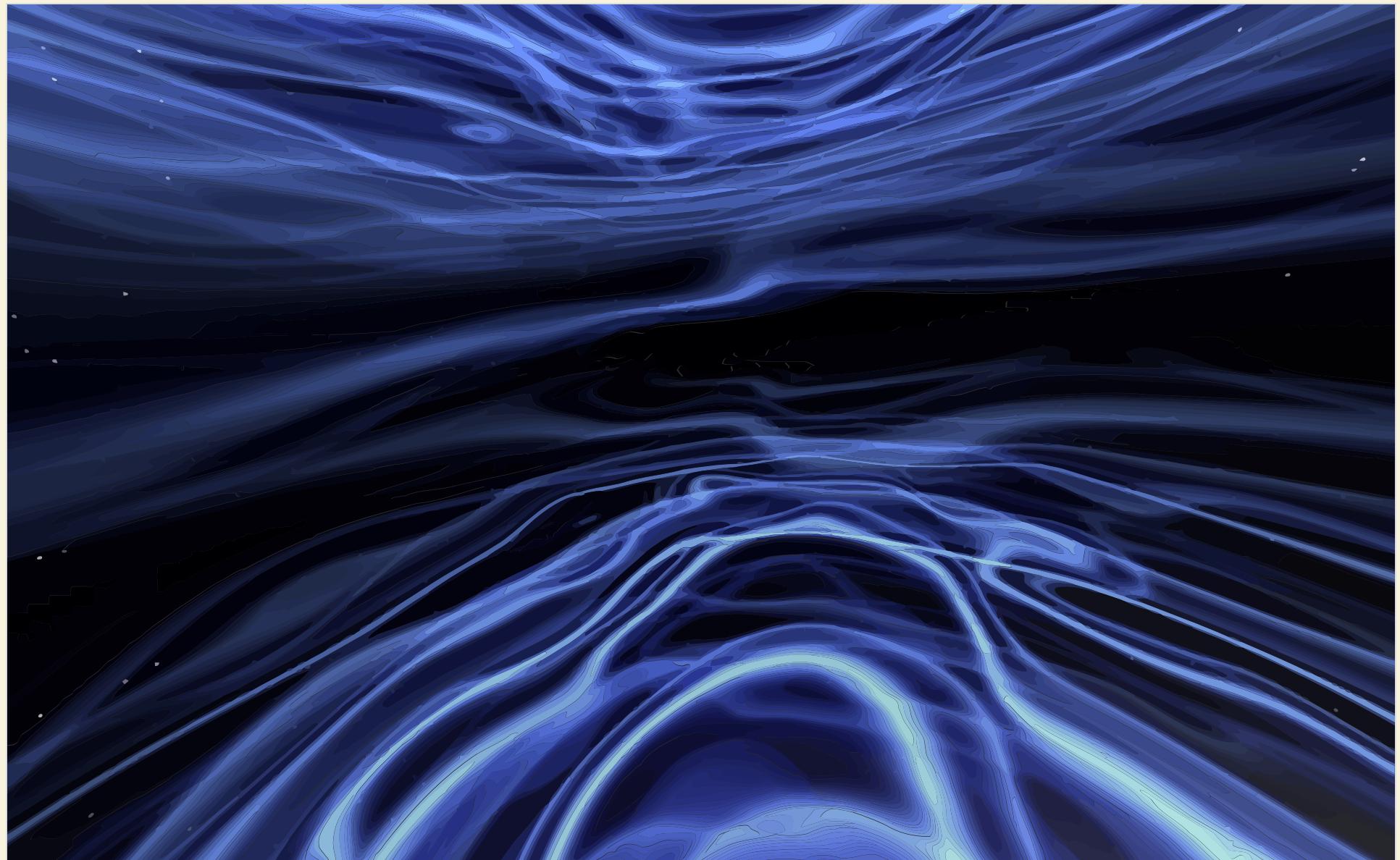
**Note:** Some slides move down instead of to the side, so use the space bar to advance slides.

# INNOVATION IN TECHNICAL COMMUNICATION

TCWORLD INDIA 2015

Created by Tom Johnson / [@tomjohnson](#)

# STARTUP CULTURES ENCOURAGE INNOVATION



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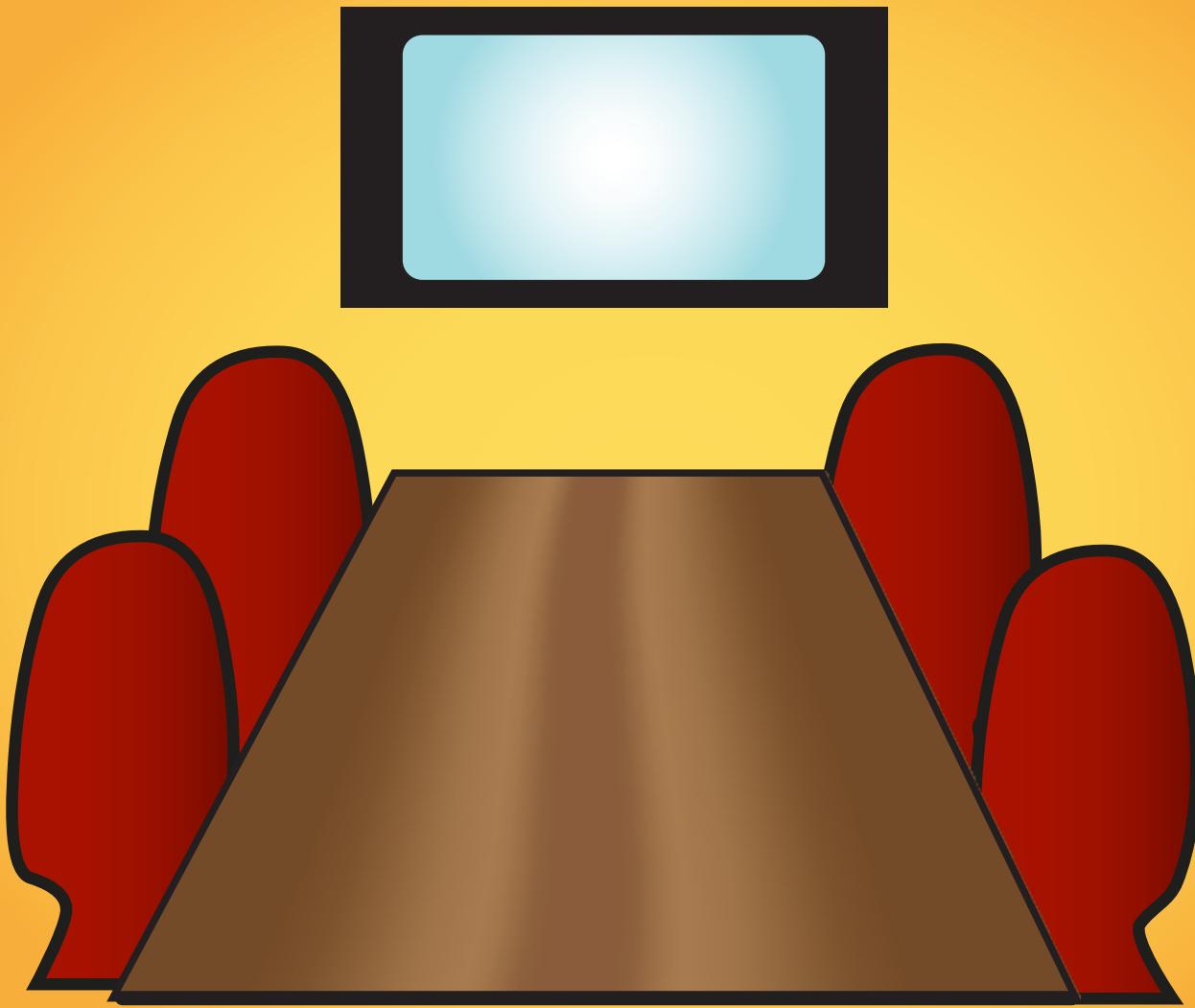
*"As to what your journey says, I think it says  
that all the current models of tech comm  
development are deeply unsatisfactory in one  
way or another."*

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— Mark Baker, *Every Page Is Page One*

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# "THINK BIG THURSDAYS"

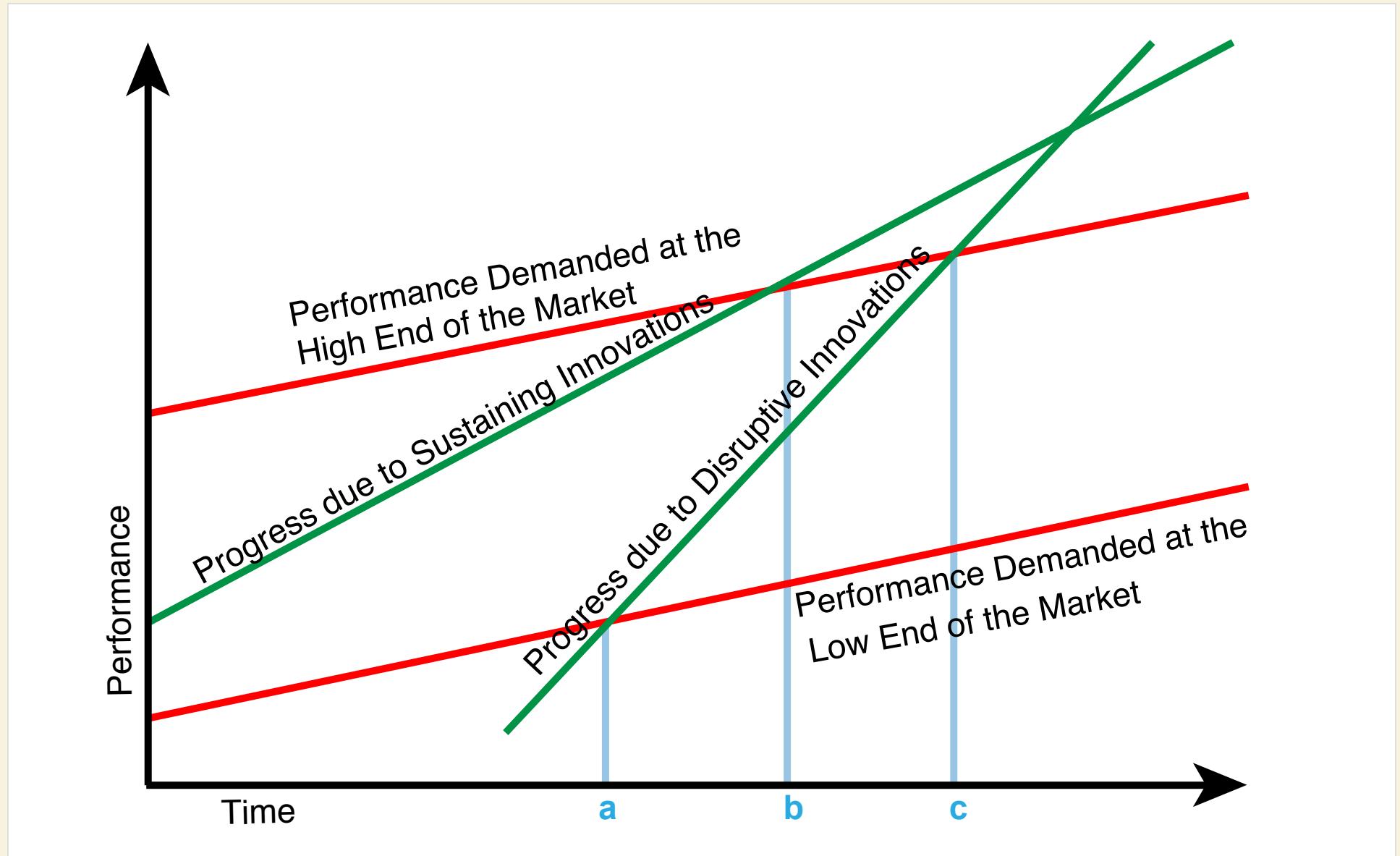


# STORY OF TELEGRAPH AND TELEPHONE



Bell and an early model of the telephone.

# SUSTAINING VS DISRUPTIVE INNOVATIONS



# 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

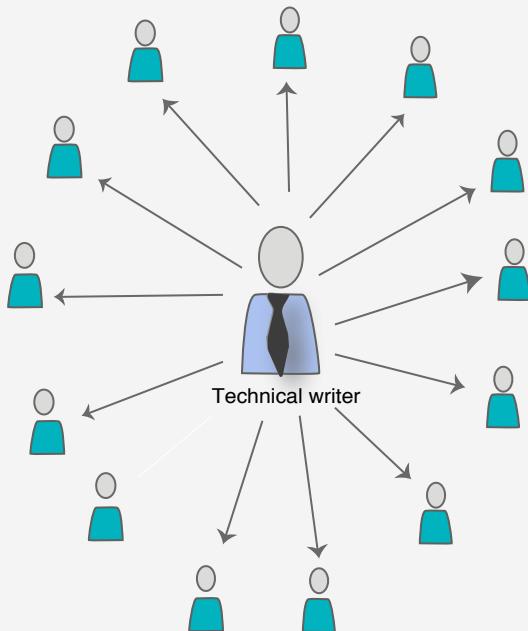
# INNOVATIONS IN TECH COMM

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

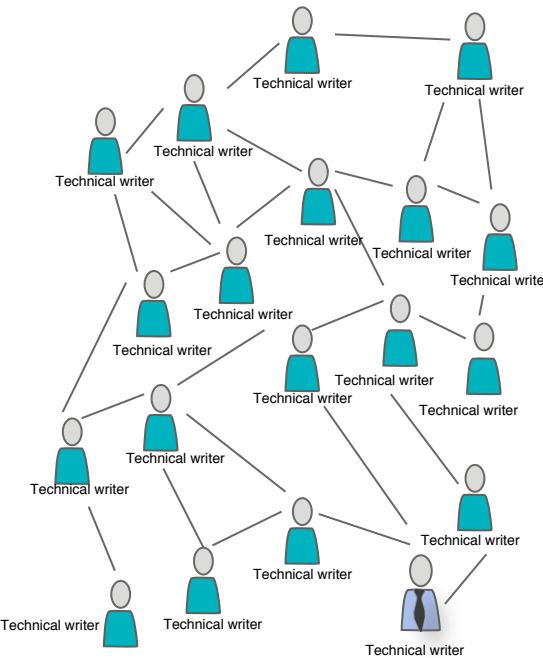
# MOST SIGNIFICANT INNOVATION FOR TC?

**EVERYONE IS A TECHNICAL WRITER**

Before the web



After the web



Information Distribution

# UNOFFICIAL TECHNICAL WRITER

StackExchange ▾ 7 +5 user:6884

Questions Tags Users Badges Unanswered Ask Question

Christian Specht less info meta user network profile

 bio website [christianspecht.de](http://christianspecht.de)  
location Kerpen, Germany  
age 34  
  
visits member for 6 years, 5 months  
seen 13 hours ago  
  
17,797 stats profile views 1,475  
reputation 6 45 91

In-house developer (C#/T-SQL/VBA) and DBA at [weinor](#), a mid-sized manufacturing company in Cologne, Germany.

My hobby projects:

- [Bitbucket Backup](#) - backup your Bitbucket repositories
- [MissileSharp](#) - .NET library to control an USB Missile Launcher
- [Recordset.Net](#) - convert .NET POCOs to ADODB.Recordsets
- [RoboShell Backup](#) - simple personal backup tool (PC -> NAS -> USB disk, with optional TrueCrypt integration)
- [SimpleLeague](#) - minimalistic tool to display tabular league data in existing websites.
- [Tasko \(WORK IN PROGRESS!\)](#) - simple to-do list app for your own server (with Android client)
- [VBA Helpers](#) - a collection of useful VBA functions

summary answers questions tags badges favorites bounties reputation activities

632 Answers votes activity newest 17,797 Reputation top 2% overall

82 What NoSQL solutions are out there for .NET?  
34 How to create jobs in SQL Server Express edition +10 Multi-row blog list in Jekyll

Page 1 of 1

# JOB TRENDS FOR TECHNICAL WRITER

Job Trends

**"technical writer" Job Trends**

Scale: Absolute - [Relative](#)

**Job Trends from Indeed.com**  
— "technical writer"

Percentage of Matching Job Postings

Jan '06 Jan '07 Jan '08 Jan '09 Jan '10 Jan '11 Jan '12 Jan '13 Jan '14 Jan '15

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.

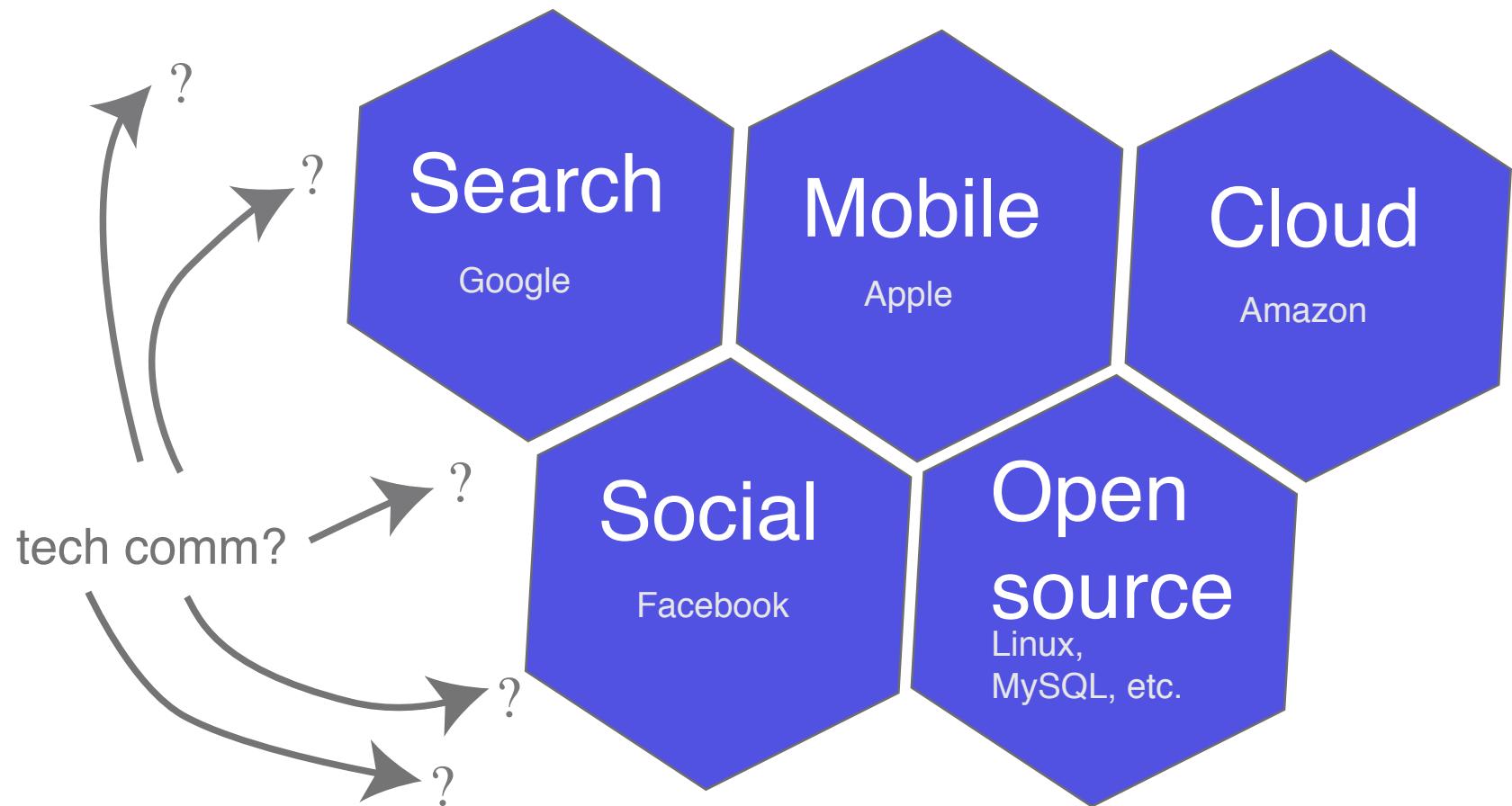
Find "[technical Writer](#)" jobs

**indeed**<sup>®</sup>  
one search. all jobs.

**Top Job Trends**

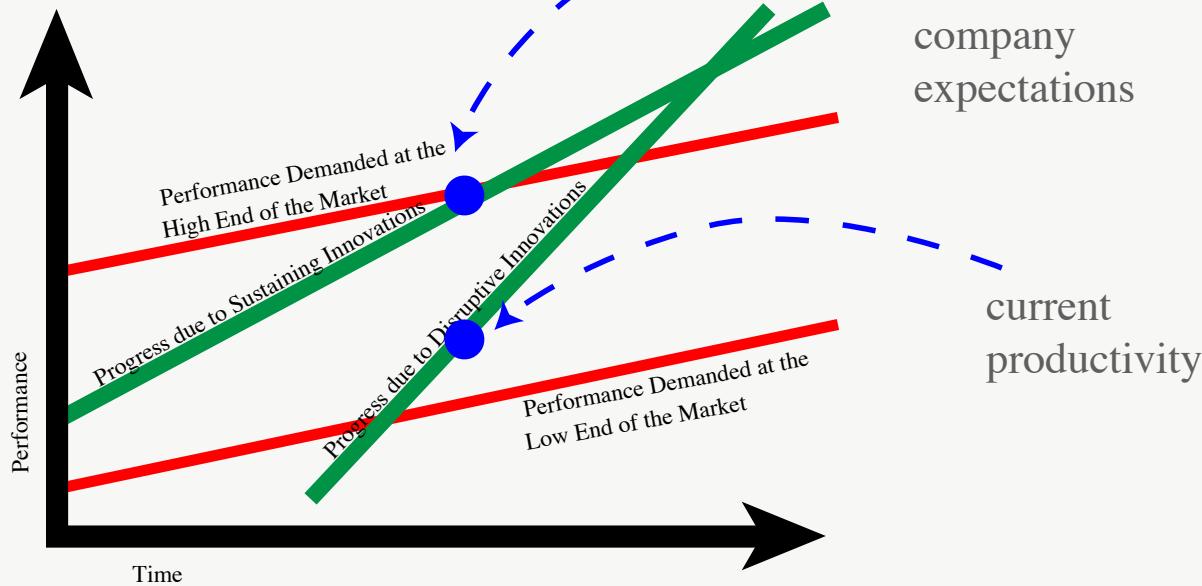
- [HTML5](#)
- [MongoDB](#)
- [iOS](#)
- [Android](#)
- [Mobile app](#)
- [Puppet](#)
- [Hadoop](#)
- [jQuery](#)
- [PaaS](#)
- [Social Media](#)

# MICROSOFT AND LAST 5 GREAT INNOVATIONS



# DILEMMAS WITH INNOVATION

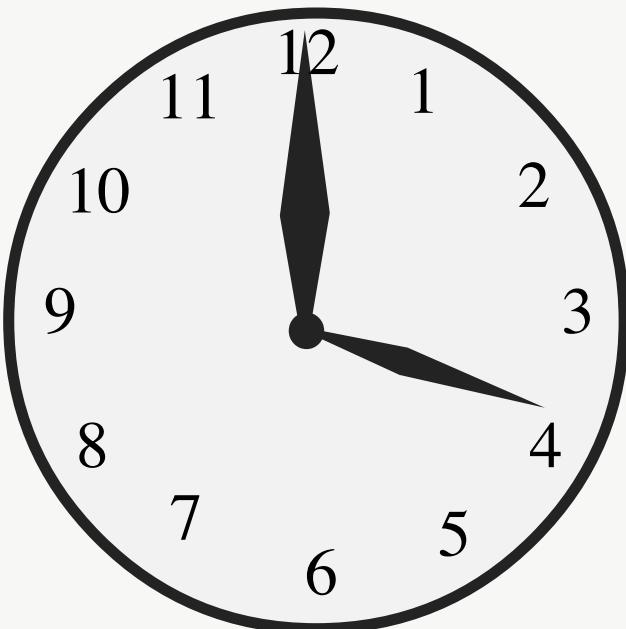
HOW LONG CAN YOU OPERATE AT A SUB-PERFORMING LEVEL WHILE YOU DO RESEARCH AND DEVELOPMENT?



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



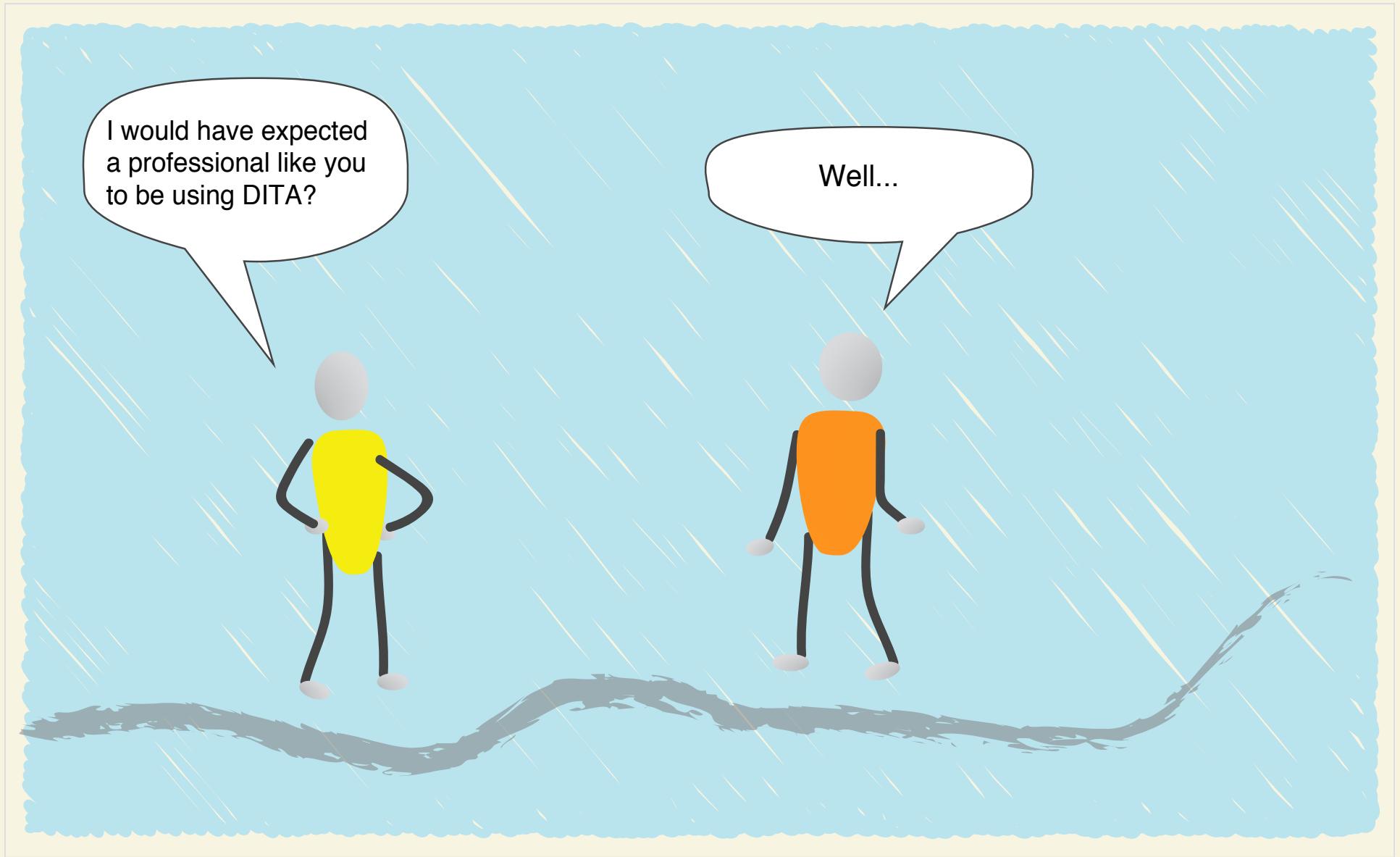
# HOW DO YOU KNOW IF YOU'RE JUST WASTING YOUR TIME?



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



# PRESSURE TOWARDS DITA



# A BASIC NAVTAB?

## HTTP GET

Returns the single Call resource identified by {CallSid}.

### Example

JSON

XML

PHP

Python

C#

Java

Ruby

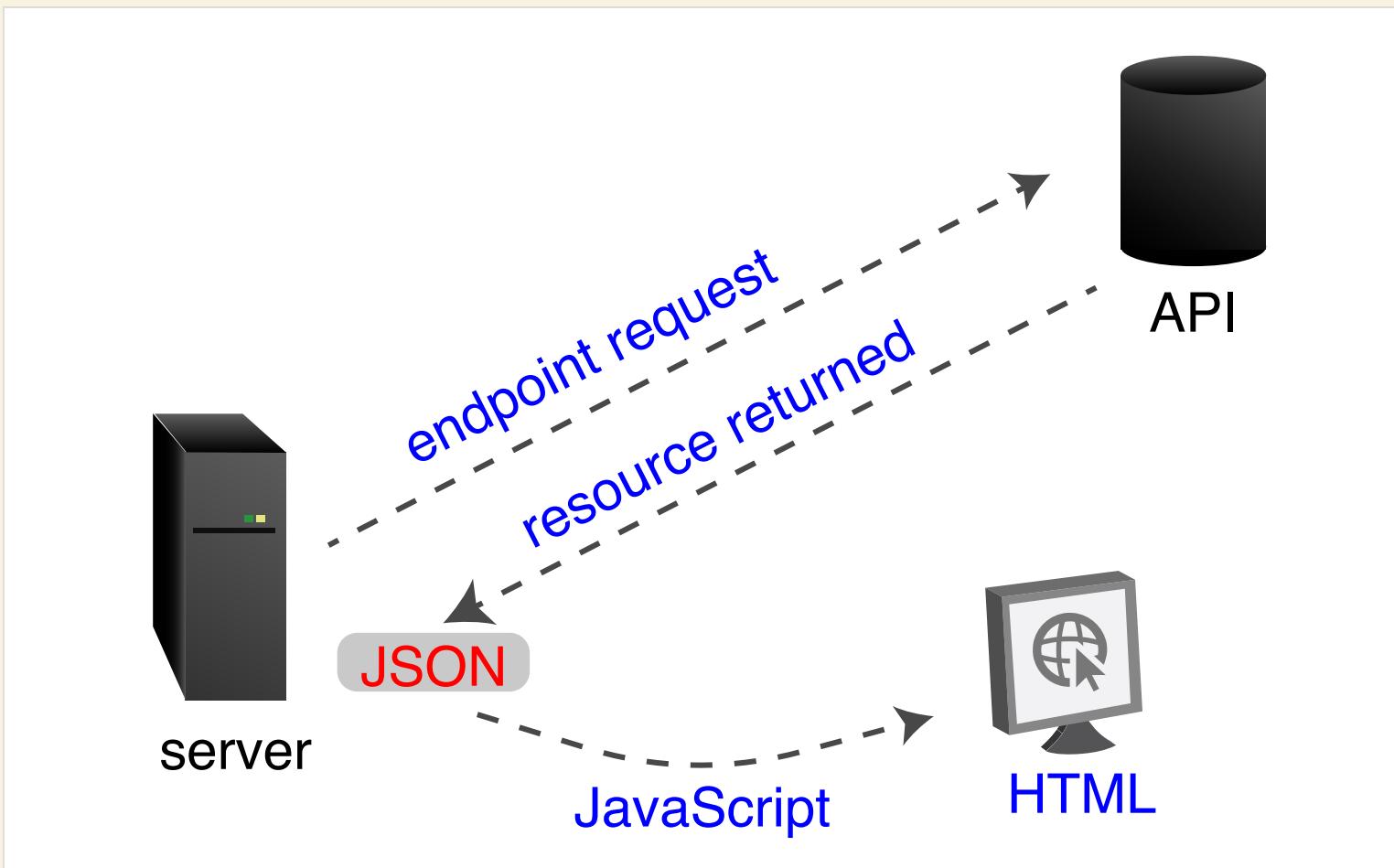
Node.js

```
1 <?php
2 // Get the PHP helper Library from twilio.com/docs/php/install
3 require_once('/path/to/twilio-php/Services/Twilio.php'); // Loads the Library
4
5 // Your Account Sid and Auth Token from twilio.com/user/account
6 $sid = "AC5ef8732a3c49700934481addd5ce1659";
7 $token = "{{ auth_token }}";
8 $client = new Services_Twilio($sid, $token);
9
10 // Get an object from its sid. If you do not have a sid,
11 // check out the list resource examples on this page
12 $call = $client->account->calls->get("CA42ed11f93dc08b952027ffbc406d0868");
13 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.  
Tech comm needs to  
ride the wave of  
innovation with the web.



# THE GENIUS OF GITHUB AND OPEN SOURCE

## COLLABORATE, VERSION, DISTRIBUTE

The screenshot shows the GitHub homepage with the following elements:

- Header:** Search GitHub, Explore, Gist, Blog, Help, User profile (tomjohnson1492), and various navigation icons.
- User Profile:** tomjohnson1492, News Feed (selected), Pull Requests, Issues.
- GitHub Bootcamp Guide:** A modal window titled "GitHub Bootcamp" with four steps:
  - Set up Git:** A quick guide to help you get started with Git.
  - Create repositories:** Repositories are where you'll work and collaborate on projects.
  - Fork repositories:** Forking creates a new, unique project from an existing one.
  - Work together:** Send pull requests, follow friends. Star and watch projects.
- Recent Activity:**
  - 27 minutes ago: elizar edited the [jekyll/jekyll wiki](#). Edited [Sites](#). View the diff »
  - 5 hours ago: tamouse commented on issue [jekyll/jekyll#3409](#). @FooBarWidget -- I think using Traveling Ruby is probably the best way to make Jekyll good for non-programmers. I have a lot of problems trying to ...
- News Card:** "The new face of committing in GitHub for Mac". We've just redesigned GitHub for Mac's Changes tab to make it even easier to review and commit. View 44 new broadcasts.
- Repositories you contribute to:** [jekyll/jekyll-help](#) (154 stars).

# REVOLUTIONARY FOR SOFTWARE DEVELOPMENT

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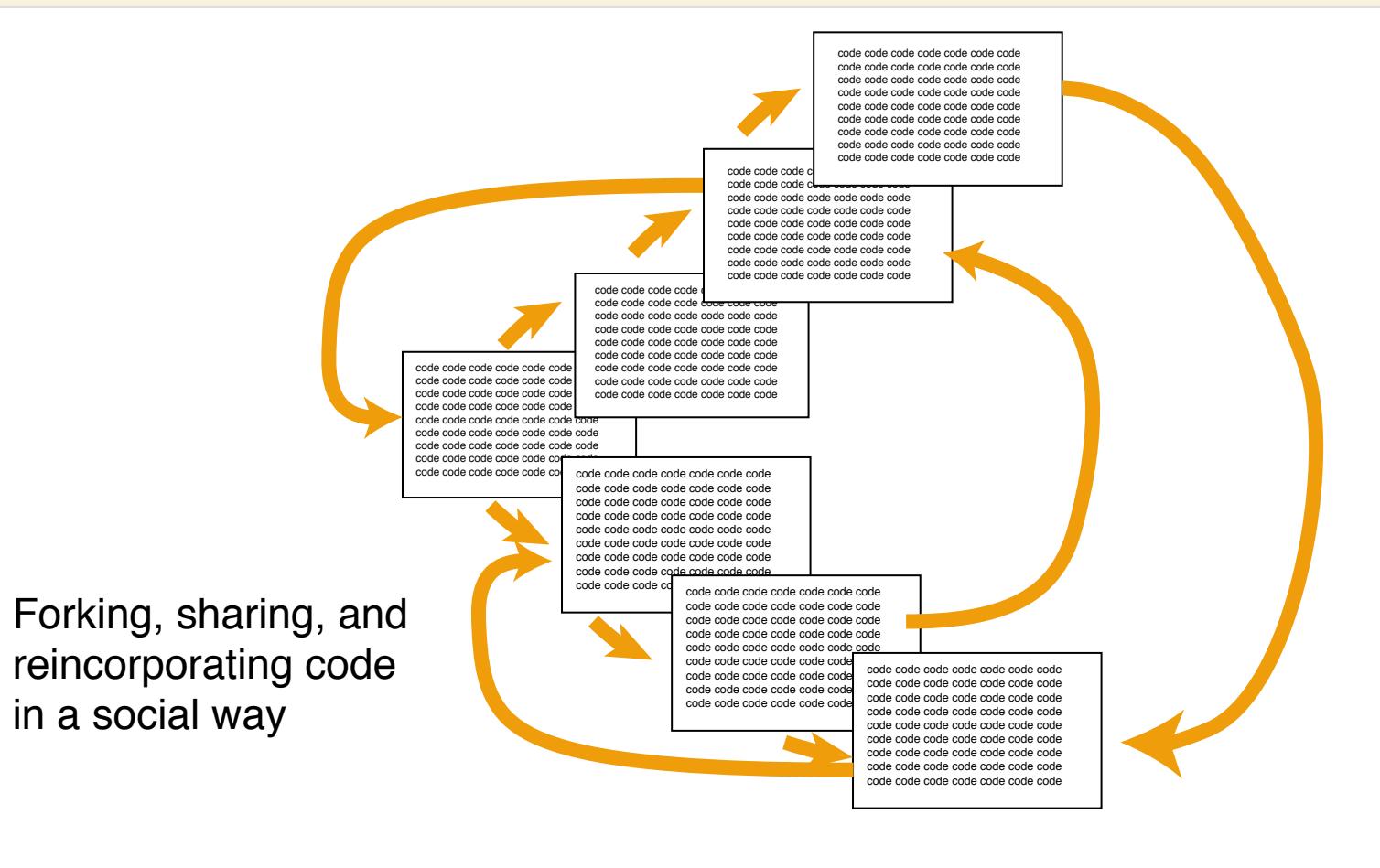
*"Github, in my humble opinion, is one of the most revolutionary things that has happened to software in 20 years."*

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— Joe Malin

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# "SOCIAL CODING"



# TREATING DOCUMENTATION AS CODE

## WRITING DOCUMENTATION LIKE A DEVELOPER

**File format:** Text files

**Authoring:** Text editor

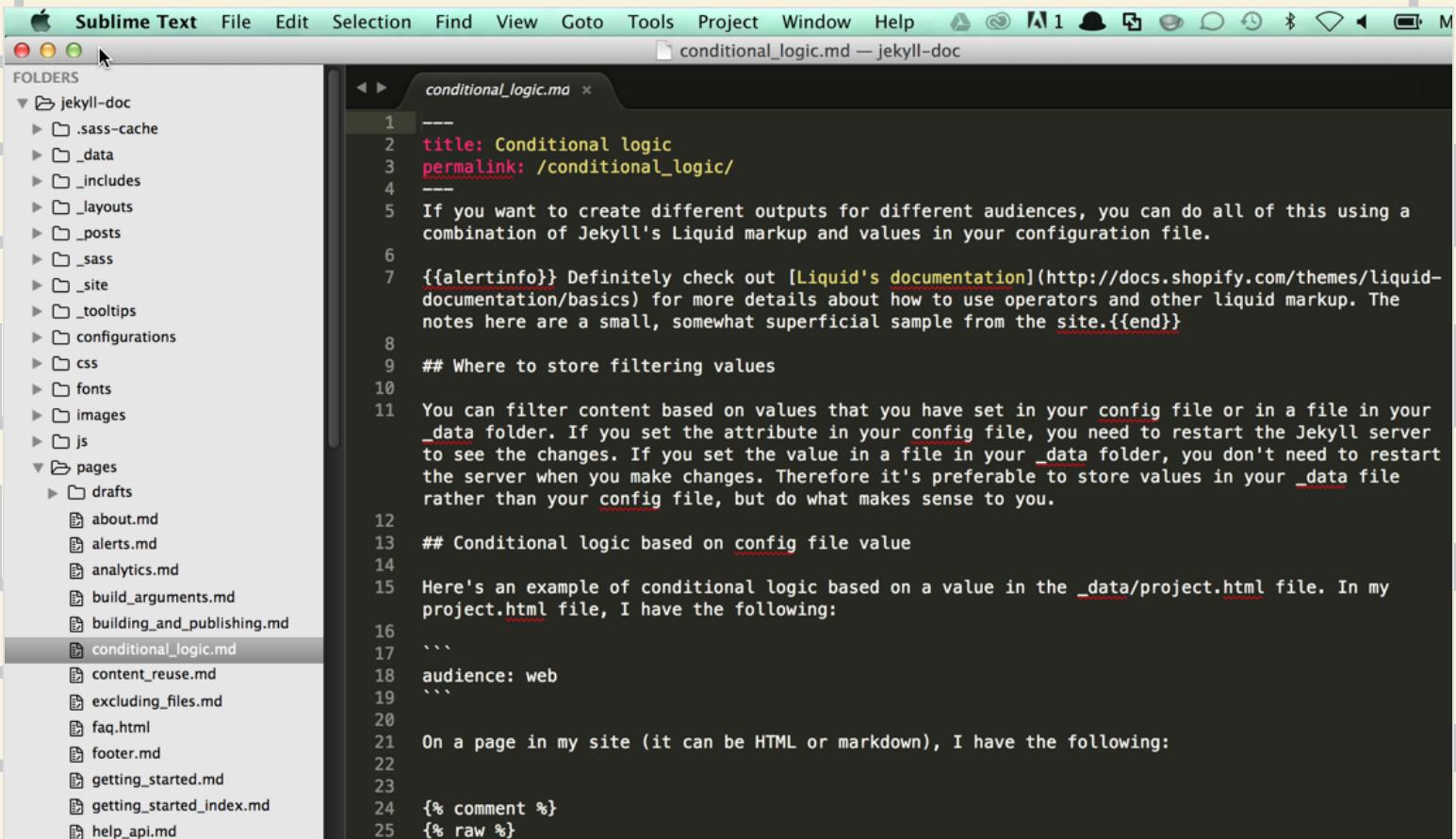
**Building:** Continuous build scripts

**Collaborating:** Source control

**Versioning:** Source control

**Pushing live:** Terminal commands

# SUBLIME TEXT AS EDITOR



```
1 ---
2 title: Conditional logic
3 permalink: /conditional_logic/
4 ---
5 If you want to create different outputs for different audiences, you can do all of this using a
6 combination of Jekyll's Liquid markup and values in your configuration file.
7 {{alertinfo}} Definitely check out [Liquid's documentation](http://docs.shopify.com/themes/liquid-
8 documentation/basics) for more details about how to use operators and other liquid markup. The
9 notes here are a small, somewhat superficial sample from the site.{{end}}
10 ## Where to store filtering values
11 You can filter content based on values that you have set in your config file or in a file in your
12 _data folder. If you set the attribute in your config file, you need to restart the Jekyll server
13 to see the changes. If you set the value in a file in your _data folder, you don't need to restart
14 the server when you make changes. Therefore it's preferable to store values in your _data file
15 rather than your config file, but do what makes sense to you.
16 ...
17 audience: web
18 ...
19
20 On a page in my site (it can be HTML or markdown), I have the following:
21
22
23
24 {%- comment %}
25 {%- raw %}
```

# 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/tomjohnson1492/innovation/">https://github.com/tomjohnson1492/innovation/</a></p>
    <p><i>So much more satisfying to work in text<br/>file formats.</i></p>
</section>
```

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

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

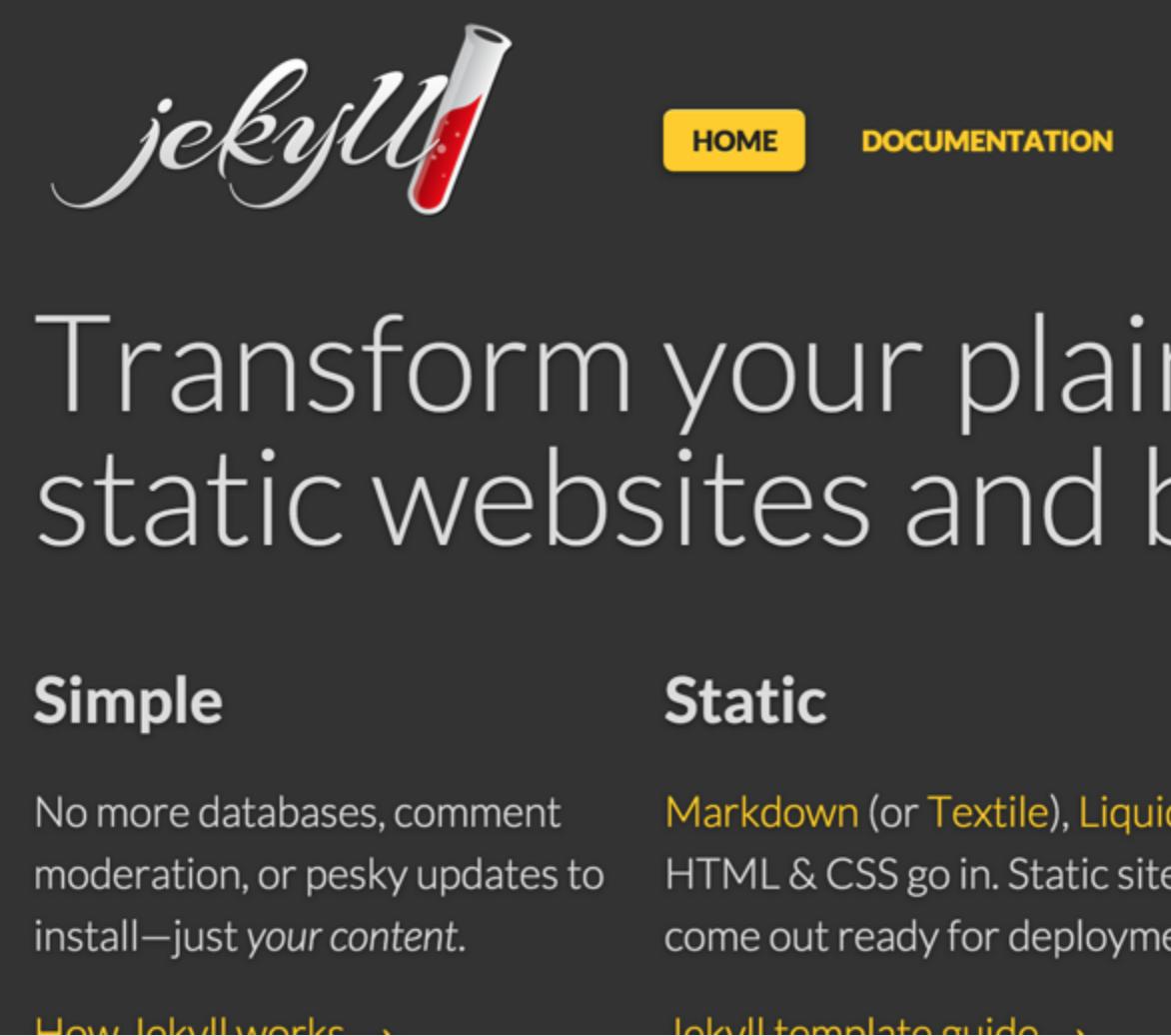
# STATIC SITE GENERATORS REPLACE DB SITES

## LIGHTWEIGHT, FLEXIBLE, TRANSPARENT

The screenshot shows the homepage of StaticGen, a platform for comparing open-source static site generators. The page has a dark purple header with the title "StaticGen" and subtitle "Top Open-Source Static Site Generators". A "SHARE" button is in the top right. Below the header is a navigation bar with "All languages" and "Sorted by stars" dropdowns, and links to "About StaticGen" and "The Rules". The main content is a grid of cards for eight generators: Jekyll, Octopress, Pelican, Hexo, Middleman, Brunch, Hugo, and Metalsmith. Each card includes the generator's name, website, star count, commit count, and PR count, along with a brief description and language information.

Generator	Website	Stars	Commits	PULL Requests
Jekyll	jekyllrb.com	18834 117 ▲	3874 24 ▲	113 -2 ▼
Octopress	octopress.org	8781 15 ▲	3180 -3 ▼	258 1 ▲
Pelican	blog.getpelican.com/	4364 31 ▲	1023 4 ▲	159 -3 ▼
Hexo	hexo.io/	4175 70 ▲	626 7 ▲	170 12 ▲
Middleman	middlemanapp.com	3957 46 ▲	387 6 ▲	48 -8 ▼
Brunch	brunch.io/	3930 11 ▲	270 0	35 2 ▲
Hugo	gohugo.io/	3468 97 ▲	488 9 ▲	152 11 ▲
Metalsmith	www.metalsmith.io/	3075 33 ▲	238 2 ▲	9 1 ▲

# JEKYLL IS MOST POPULAR



The screenshot shows the official Jekyll website. At the top left is the Jekyll logo, which consists of the word "jekyll" in a white, cursive, handwritten-style font next to a test tube containing red liquid. To the right of the logo are two buttons: a yellow one labeled "HOME" and a white one labeled "DOCUMENTATION". The main title "Transform your plain static websites and b" is displayed in large, light gray letters. Below this, there are two sections: "Simple" and "Static". Each section has a brief description and a link at the bottom.

Simple	Static
No more databases, comment moderation, or pesky updates to install—just <i>your content</i> .	Markdown (or Textile), Liquid HTML & CSS go in. Static site come out ready for deployment.
<a href="#">How Jekyll works →</a>	<a href="#">Jekyll template guide →</a>

# DOCUMENTATION THEME I BUILT ON JEKYLL

The screenshot shows a web browser window with the URL [tomjohnson1492.github.io/documentation-theme-jekyll/](https://tomjohnson1492.github.io/documentation-theme-jekyll/). The page has a green header bar with a navigation menu. On the left, there's a sidebar with a dropdown menu for 'Getting started' containing links like 'Getting started with the theme', 'Content reuse', 'General info', 'Supported features', etc. Below this are sections for 'Formatting', 'Blog content', 'Special layouts', 'Conditional filtering', and 'Publishing Content'. The main content area features a large h1 'Documentation theme for Jekyll'. Below it is a paragraph about the theme's unique approach to single sourcing. A callout box contains a note about the author's experiment with the theme. Further down are sections for 'Intended audience' and 'Supported tech comm features with Jekyll', along with a note about the theme's support for technical writers.

Documentation theme for Jekyll

About News Jekyllrb Github Repo Getting started More drop-downs search...

Getting started

Getting started with the theme

Content reuse

General info

Supported features

Formatting

Blog content

Special layouts

Conditional filtering

Publishing Content

This is a Jekyll theme intended for documentation projects. What makes this theme unique is the approach in using Jekyll for single sourcing, that is, producing multiple outputs from the same theme. For example, you might have 3 different help systems that you're generating from the same Jekyll files. More than anything, this Jekyll theme shows you how to use Jekyll for documentation projects from the perspective of a technical writer.

**💡** I'm using this theme for my own technical writing projects, replacing my previous OxygenXML DITA workflow, so this is an evolving project. I'm still in the pilot phase of the experiment.

## Intended audience

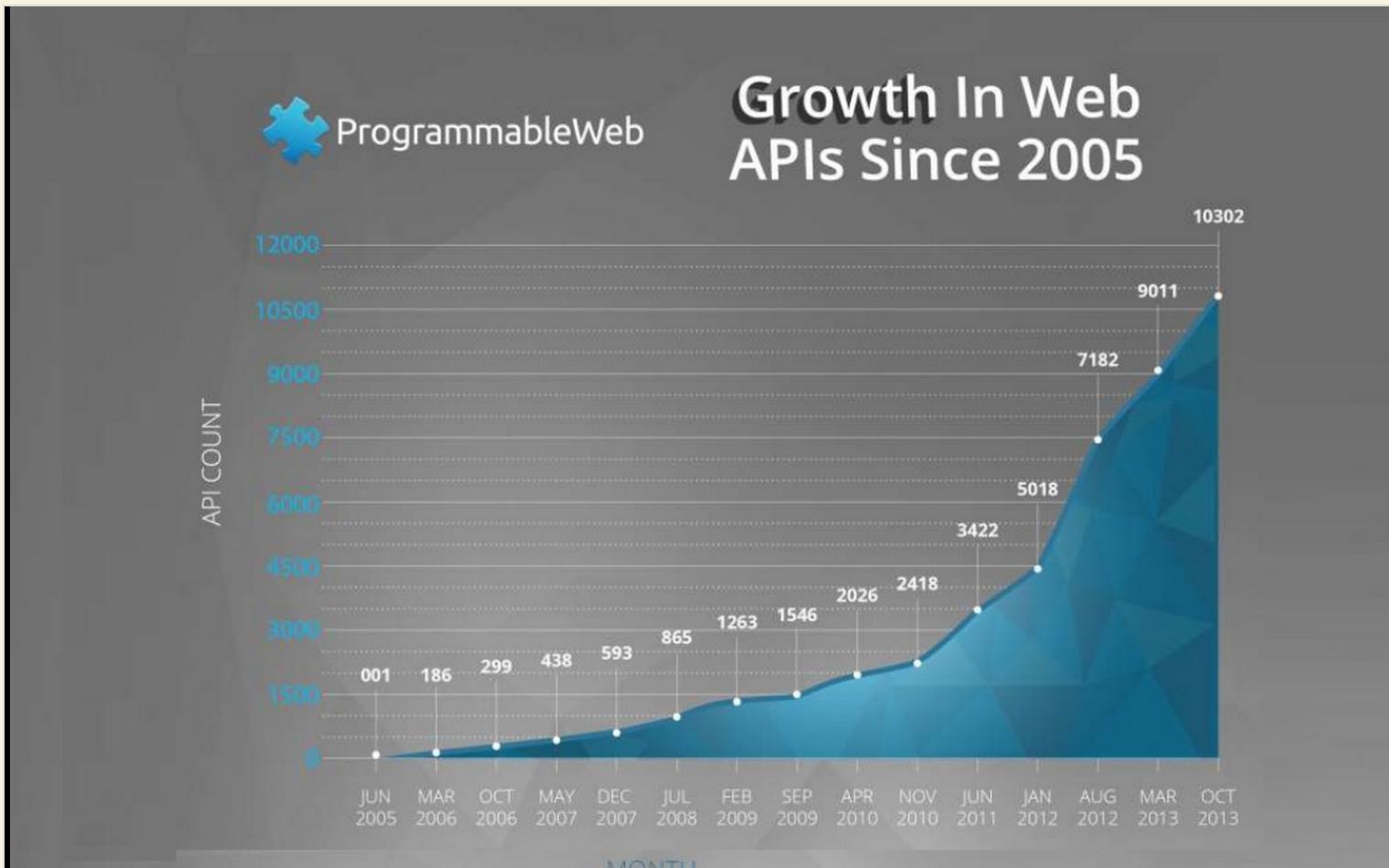
Although this theme could be used for any website, I'm assuming that my main audience involves technical writers. Very few technical writers are even aware of Jekyll as a platform, let alone how to use it for tech comm scenarios. The instructions for this theme, therefore, are extensive because they discuss a lot of Jekyll basics as well. I'm not going to assume that you're already familiar with Jekyll, or that you're a UX guru, or that you know how to do backflips in Liquid. I'll try to hold your hand as much as possible.

## Supported tech comm features with Jekyll

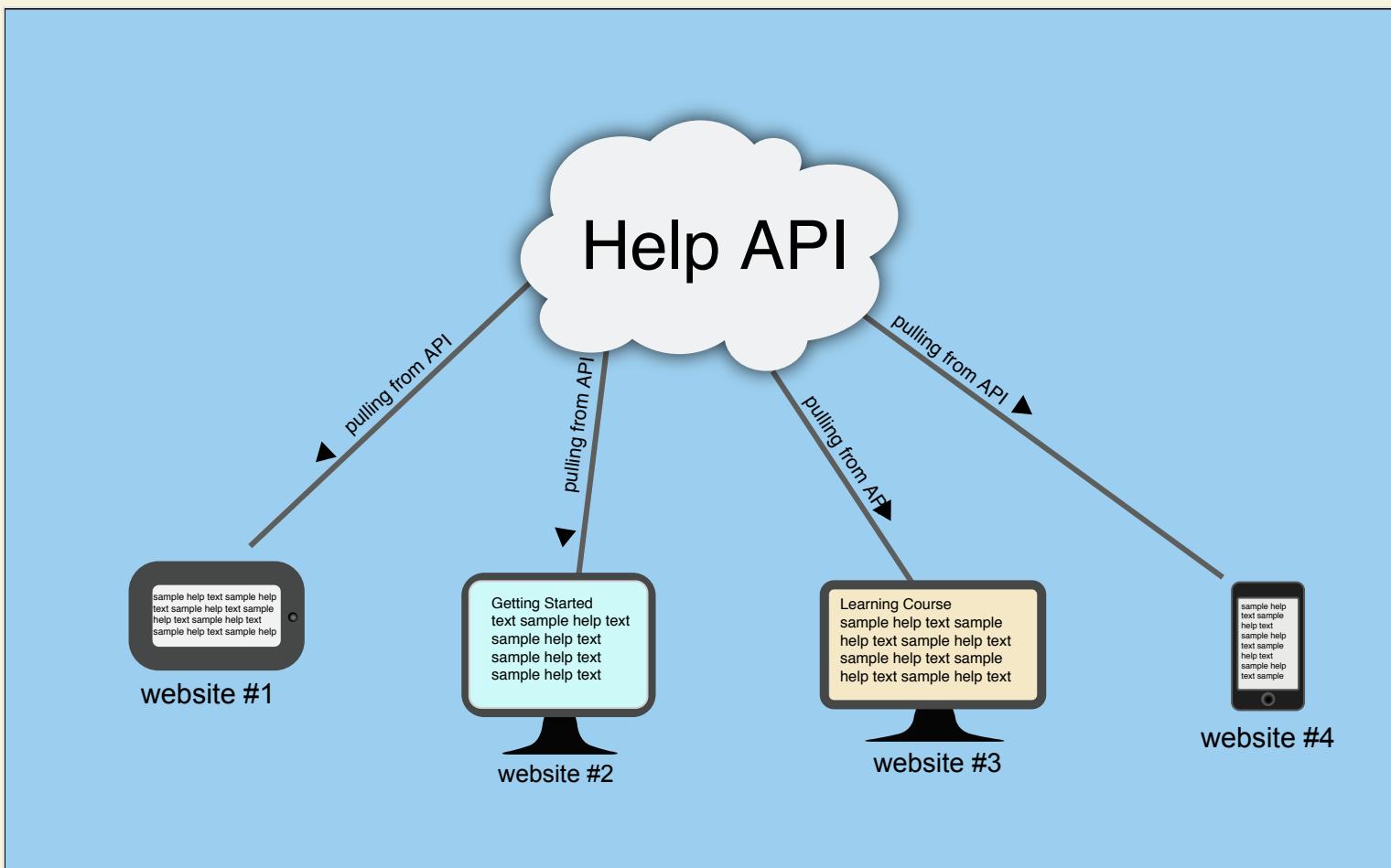
As far as I can tell, Jekyll supports most of the features a technical writer needs to author and publish content. See [Supported features](#) for an extensive list. Most importantly, using Jekyll allows you to take full advantage of a modern web development platform.

# HELP APIs

## GROWTH IN REST APIs



# WHY NOT CREATE HELP CONTENT APIs?



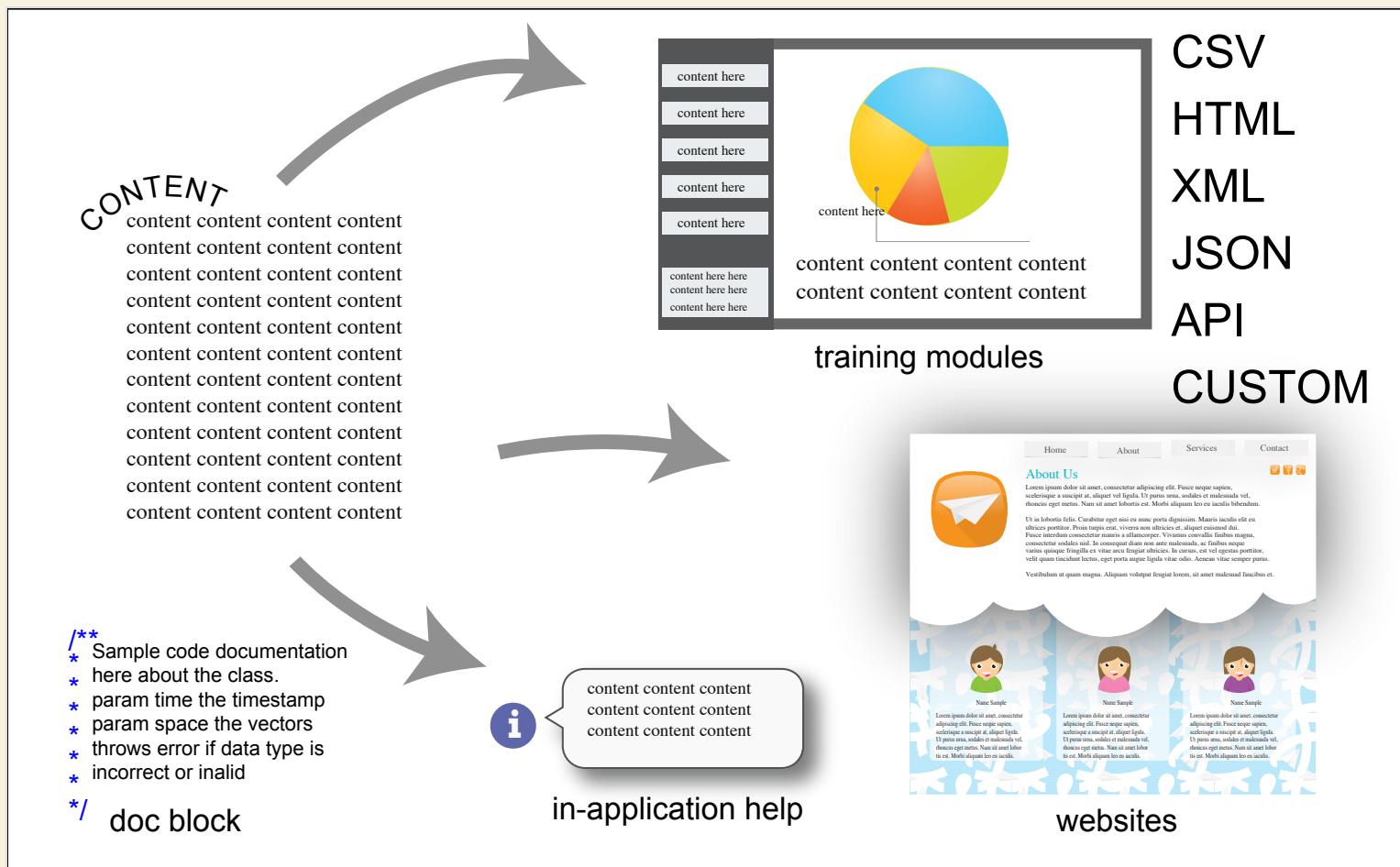
# POPULATE TOOLTIPS DYNAMICALLY FROM API

The screenshot shows a web browser displaying a tooltip demo page at [tomjohnson1492.github.io/documentation-theme-jekyll/tooltip\\_demo](http://tomjohnson1492.github.io/documentation-theme-jekyll/tooltip_demo). The page title is "Tooltip Demo". The content includes a note about the page being separated from the theme, a brief introduction, and a list of sports with their descriptions. A tooltip for "Basketball" is shown, containing the text: "Basketball is a sport involving two teams of five players each competing to put a ball through a small circular rim 10 feet above the ground. Basketball requires players to be in top physical condition, since they spend most of the game running back and forth along a 94-foot-long floor." An orange arrow points from this tooltip to a code editor window showing a JSON file named "tooltips.json" from the URL [idratherbewriting.com/wp-content/apidemos/tooltips.json](http://idratherbewriting.com/wp-content/apidemos/tooltips.json). The JSON file contains the following data:

```
{
  "entries": [
    {
      "id": "baseball",
      "body": "Baseball is considered America's pastime sport, though that may be more excitement about football than baseball. A baseball game is somewhat of a"
    },
    {
      "id": "basketball",
      "body": "Basketball is a sport involving two teams of five players each competing to put a ball through a small circular rim 10 feet above the ground. Basketball requires players to be in top physical condition, since they spend most of the game running back and forth along a 94-foot-long floor."
    },
    {
      "id": "football",
      "body": "No doubt the most fun sport to watch, football also manages to accrue blown knees, football players have short sport lives."
    }
  ]
}
```

# EXTRACTABLE CONTENT

# CONTENT SEPARATED FROM STRUCTURE



# ITERATE THROUGH PAGES

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

# INFINITE SCALABILITY

## REALIZATION

---

*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.*

---

# REQUIREMENTS

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

# UX TALENT WILL HELP WHEN PLATFORM IS WEB



# WEB TOOLS TO KNOW

HTML, JS, CSS



# BOOTSTRAP

Bootstrap   Getting started   CSS   Components   JavaScript   Customize   [GitHub](#)



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

The screenshot shows the official jQuery website. At the top, there's a dark header bar with several small icons (Twitter, GitHub, etc.) on the left and navigation links (Plugins, Contribute, Events, Support) on the right. Below the header is a large blue banner featuring the jQuery logo ('jQuery write less, do more.') on the left and a download section on the right. The download section includes a 'DOWNLOAD FREE' button, a preview image of a computer monitor, and a 'moder...' link. The main content area has a dark background with three white circular icons representing 'Lightweight Footprint', 'CSS3 Compliant', and 'Cross-Browser'. Below these icons are descriptive text blocks. To the right, there's a large orange 'Download' button for version v1.11.2 or v2.1, along with links to 'View Source on GitHub' and 'How jQuery Works'. At the bottom, there's a grey footer bar with a 'What is jQuery?' button on the left and a 'Resources' section on the right, which includes a link to 'jQuery Core API'.

Plugins Contribute Events Support

**jQuery**  
write less, do more.

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

**Download**  
v1.11.2 or v2.1

[View Source on GitHub →](#)  
[How jQuery Works →](#)

**What is jQuery?**

**Resources**

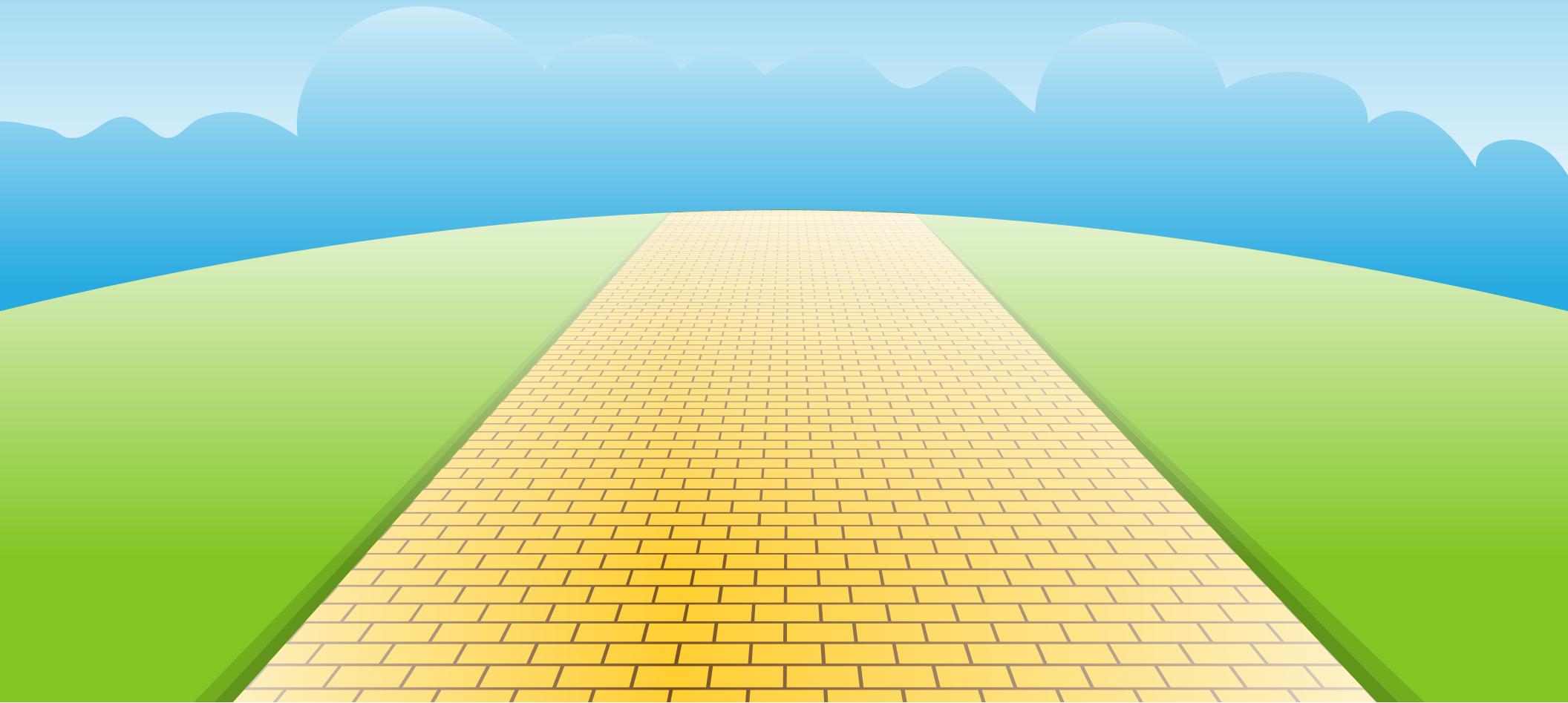
[jQuery Core API](#)

# MARKDOWN



# 3 STRATEGIES FOR INNOVATION

1. Look outside the tech comm bubble.
2. Ride the innovation of the web.
3. Leverage the wisdom of the crowd.



# THANKS!

## CONTACT INFO

- Blog: [idratherbewriting.com](http://idratherbewriting.com)
- Twitter: [@tomjohnson](https://twitter.com/tomjohnson)
- GitHub: [github.com/tomjohnson1492/innovation](https://github.com/tomjohnson1492/innovation)
- Email: [tomjohnson1492@gmail.com](mailto:tomjohnson1492@gmail.com)

# CREDITS

- Read the innovation series on my blog,  
<http://idratherbewriting.com>
- Slide framework from Reveal JS.
- Some vectors come from Vecteezy.com