



Photo by Joshua Ness on Unsplash

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"Yeah, except it's not going to happen."

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"Yeah, except it's not going to happen."

*Weird. Is it because it's a lot of work?*

**Senior Engineer:** You know, I've figured out a way to improve our database performance by 75%.



*me: Yeah? Wow, that sounds amazing.*

"Yeah, except it's not going to happen."

*Weird. Is it because it's a lot of work?*

No, it'd take maybe two weeks to complete.



*Uh... then why not do it? Seems like an obvious win.  
What gives?*



*Uh... then why not do it? Seems like an obvious win.  
What gives?*

Yeah, I emailed the head of that team. Shared my idea with proof that it'd work. But they're in the middle of an 18 month project and I didn't get a response. I guess my idea just isn't important enough.





*Wait, what? Your idea improves database performance by 75% across the entire product, takes two weeks, and is tabled for working on an 18 month project?*



*Wait, what? Your idea improves database performance by 75% across the entire product, takes two weeks, and is tabled for working on an 18 month project?*

Yeah, I'm frustrated.



*Did you ever follow up outside  
of sending an email?*



*Did you ever follow up outside  
of sending an email?*

Look man, I did my part. I looked into a hard problem and found a solution and offered it to the relevant team. And at the end of the day nobody cared. So I'm frustrated.

# Outcomes

- A senior engineer at a company developed a brilliant idea to dramatically increase product performance at minimal engineering cost.

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- A senior engineer at a company developed a brilliant idea to dramatically increase product performance at minimal engineering cost.
- That idea will not be executed, and as a result, customers will suffer.
- That senior engineer feels like their ideas, no matter how brilliant, do not have an impact.



**Dan Na**  
**Staff Engineer, Squarespace**  
**Internationalization Platform**



Trusted by the world's best,  
Squarespace empowers people  
with creative ideas to succeed.

Entrepreneurs  
Photographers  
Restaurants  
Musicians  
Small Businesses  
Fashion Designers



Idris Elba — 2HR SET

↑ 26 ↓ It seems like Squarespace sponsors every single podcast. Does any... CLOSE

Posted by u/reezyreddits 4 years ago  
It seems like Squarespace sponsors every single podcast. Does anyone else notice the same two or three sponsors being mentioned?  
Squarespace, Stamps.com and Audible (Audible actually makes a lot of sense) seems to sponsor like 70% of the podcasts I listen to. Has anyone else noticed

r/podcasts  
792k Members  
569 Online

**BUSINESS**

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talks.danielna.com

@dxna

# Pushing Through Friction

**Dan Na, Squarespace**

SREcon19 EMEA | October 04, 2019 | Dublin, Ireland



dan 🙌  
@dxna

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An opinion I find myself repeating in a lot of 1:1s:

The key to getting things done in a mid-sized (100-1200) company, especially one that's grown a lot recently, is your willingness to see things through to the end and internal refusal to be blocked.

7:47 AM - 7 Mar 2019

362 Retweets 1,703 Likes



25



362



1.7K





dan 🙌

@dxna

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Often many "typical" things - practices, policies - were reactionary or arbitrary. There was a sudden need for a policy so someone made one, maybe without considering the externalities of that decision.

7:47 AM - 7 Mar 2019

7 Retweets 132 Likes



4



7



132





dan 🍷  
@dxna

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If you can build an objective, data-driven that a thing could be improved (or should exist), the onus becomes on you to push it. If your rationale is sound you have a good shot of it working. But because the status quo is always easier, you will encounter friction.

7:47 AM - 7 Mar 2019

11 Retweets 124 Likes



1



11



124





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@dxna

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A lot of people throw their hands up at friction on principle. "Why doesn't anyone see that this improves everyone's life?!" Then they stop caring or burn out.

Push through that friction. Slack messages/emails might not work; you might have to go to (many) peoples desks.

7:47 AM - 7 Mar 2019

18 Retweets 171 Likes



4



18



171







dan 🍷  
@dxna

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The more you push through that friction the more you train that muscle. And the more you empower yourself to get things done.

Caveats: you can't be an asshole about it (table stakes). And you must be open to the idea that your rationale is wrong. That's an equally good ending.

7:47 AM - 7 Mar 2019

8 Retweets 240 Likes



3



8



240



# Agenda

1. What causes friction?
2. How can organizations and individuals overcome friction?

**What is friction?**





**dna** 11:22 AM

hey team, is this the correct room to ask questions about A?



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We don't own that anymore.



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Nobody.





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# FRICTION



**bizarro\_dna** 11:22 AM

Nobody.



**dna** 11:22 AM

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**dna** 11:22 AM

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# More friction

- You git blame a file that's used everywhere but nobody understands it and the person who wrote it left the company five years ago.
- You begin work to update an old, untouched but critical part of the codebase, only to realize there are no tests.

# More friction

**FRICTION**



it be the... the... ever... are...  
... use... and... he... er... n...  
... the com... any... e... a... g...  
... you... to... da... an... ,... b... ne...  
... but critical part of the codebase, only to  
realize there are no tests.

# Organizational friction

- New hires often feel lost, disengaged and unhappy.

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- New hires often feel lost, disengaged and unhappy.
- Teams are building redundant or non-complementary features.
- You look around the lunch room and everyone looks the same.



Friction lies within the gap between how things are and how they should be; your reality and your ideal.

**Friction is all the work it's going to take to get there.**

Why does **friction**  
occur?

**Growth**

# Tech company categories by headcount

Category	# of employees
Startups	< 100
Mid-sized	100 - 2,000
Large	2,000 - Google (100,000+)

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A man in a grey t-shirt and dark pants stands on a stage to the left of a large projection screen. The screen displays the text "MOVE FAST AND BREAK THINGS" in large, bold, orange letters. The stage is lit, and the audience is visible in the foreground. The background behind the screen features a geometric, low-poly design in shades of blue and grey.

**MOVE  
FAST AND  
BREAK  
THINGS**

# Startup Priorities

- Ship fast
- Figure out the product
- Find customers

## **Startup Priorities**

- Ship fast
- Figure out the product
- Find customers

## **Mid-sized Priorities**

- Scale the product
- Scale the organization
- Don't implode



**MOVE  
FAST WITH  
STABLE  
INFRA**



The success criteria moves from individuals shipping code out the door as fast as they can to **teams executing, in concert, with operational excellence.**

# Aviation Safety

Runway Overrun During Rejected Takeoff  
Gulfstream Aerospace Corporation G-IV, N121JM  
Bedford, Massachusetts  
May 31, 2014



**Accident Report**

NTSB/AAR-15/03  
PB2015-105492



**National  
Transportation  
Safety Board**

1. There are five checklists and mandatory control checks that are required to be run prior to flying. The pilots never ran any of them.

1. There are five checklists and mandatory control checks that are required to be run prior to flying. The pilots never ran any of them.
2. Pilot interviews and voice recordings also showed that mandatory flight control checks were not performed on this flight, nor were they ever performed.

3. The crew received an alert message indicating that the rudder's load limiter had activated. This is abnormal.

3. The crew received an alert message indicating that the rudder's load limiter had activated. This is abnormal.
4. The pilot realized the gust lock was engaged, and said so several times. The aircraft had about 5,000 feet of runway remaining. They chose to continue anyway.



# The Normalization of Deviance

<http://danluu.com/wat/>

The normalization of deviance is when deviant behavior becomes the norm.

**To anyone outside of your organization it's obvious that what you're doing doesn't make sense, but to those inside the organization it's normal and standard procedure.**

```
new person joins  
new person: WTF WTF WTF WTF WTF  
old person: yeah we know we're concerned about it  
new person: WTF WTF wTF wtf wtf w...  
new person gets used to it
```

```
... time passes...
```

```
new person #2 joins  
new person #2: WTF WTF WTF WTF  
new person: yeah we know. we're concerned about it.
```

A woman with her hair in a high bun, wearing a blue fur stole and a dark dress, is adjusting her hair on a stage. She is looking down with a focused expression. To her right, another woman's hand is visible, also adjusting the first woman's hair. In the foreground, there is a red Dunkin' Donuts cup with a straw. The background is dark with some blurred figures of people.

**SPOT ON!**

# Real Onboarding WTFs

- We don't have a staging environment?

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# Real Onboarding WTFs

- We don't have a staging environment?
- How do we deploy to prod? Ask the CTO to do it.
- I didn't have a 1-on-1 with my manager until a year after my start date.
- There was a hard limit on how much code we could deploy, so we switched our indentation from spaces to tabs and bought ourselves a few more months.



Organizations and processes  
incur friction ***slowly***.

# Summary so far

- Friction is an inevitable outcome of company growth, which we can't control.
- But friction is often made worse by the normalization of deviance, which we can control.

**How do we **fix** it?**

# Organizations

**Organizations**

**Short-term:  
Discrete Fixes**

**ORGANIZATIONS: SHORT-TERM  
DISCRETE FIX #1**

**Document single  
sources of truth and  
keep them updated**

# how does the javascript build work?



5526 search results

Filters



## How we build JavaScript

From  February 16, 2012 

First step: open your local instance of Internet Explorer 5.

# how does the javascript build work?



5526 search results



How we build JavaScript

From  February 16, 2012

First step: open your local

## Source



master ▾



javascript-builder /



README.md

**TODO: Write README**



# Effective docs criteria

- Single source of truth
- Updating docs is part of the acceptance criteria for shipping new work

**ORGANIZATIONS: SHORT-TERM  
DISCRETE FIX #2**

**Adopt processes to vet  
technology decisions**

**Goal: Small change across services**

# Goal: Small change across services

- Java
- Python
- OCaml
- Haskell

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- Java
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- ELK
- Splunk
- Disk
- VMs
- Kubernetes
- Bamboo
- Jenkins
- Travis
- Drone
- Manual

## RFC: *Title Here*

*Delete notes in italics. Remove sections that are not applicable.*

**Primary author(s):** *who owns this document and should be contacted about it?*

**Collaborators:** *anyone who contributed but isn't a primary author.*

**Created:** *date*

**Last updated:** *date*

**Approver(s):**

Name	yes   not yet	Date

**Other reviewer(s):** *people whose comments would be helpful but who don't need to approve.*

### Overview:

*If someone only reads this far, what do you want them to know?*

### Goals and Non-Goals:

*What problems are you trying to solve? What problems are you not trying to solve?*

### Background & Motivation:

*What is the current state of the world? Why is this change being proposed?*

*Define any key terms or internal names here.*

### Design:

*What exactly are you doing? Include architecture and process diagrams.*



**ORGANIZATIONS: SHORT-TERM  
DISCRETE FIX #3**

**Solicit the WTF of  
new hires**

new person joins

new person: WTF WTF WTF WTF WTF

old person: yeah we know we're concerned about it

new person: WTF WTF wTF wtf wtf w...

new person gets used to it

new person: WTF WTF WTF WTF WTF

new person joins

new person: WTF WTF WTF WTF WTF

~~old person: yeah we know we're concerned about it~~

old person: oh yeah? How could this be better? What's missing here?

What have you seen work better elsewhere?

new person: <lots of wisdom>

everyone levels up|

**Organizations**

**Long-term**

**cultural behaviors**

**ORGANIZATIONS: LONG-TERM  
CULTURAL BEHAVIOR #1**

**Address hard  
truths -- kindly**

# The normalization of deviance in healthcare delivery

[John Banja](#)

▼ Author information ▶ Copyright and License information [Disclaimer](#)

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See other articles in PMC that [cite](#) the published article.

## Abstract

Go to:

Many serious medical errors result from violations of recognized standards of practice. Over time, even egregious violations of standards of practice may become “normalized” in healthcare delivery systems. This article describes what leads to this normalization and explains why flagrant practice deviations can persist for years, despite the importance of the standards at issue. This article also provides recommendations to aid healthcare organizations in identifying and managing unsafe practice deviations before they become normalized and pose genuine risks to patient safety, quality care, and employee morale.

**Keywords:** Medical errors, Patient safety, Preventable harms, Deviations from standards of care, Normalization of deviance

## 1. Compliance failures and normalizing deviance

Go to:

Over the last decade, hospital safety personnel have gradually become disabused of a long-standing but incorrect belief: that harm-causing medical errors, such as wrong-side surgeries or retained surgical instruments, result from a single individual doing something inexplicably stupid. Rather, contemporary research on mega disasters—for instance, Chernobyl, space shuttles Challenger and Columbia, Bhopal, and any number of patient care catastrophes—has consistently shown that major accidents require (1) multiple people (2) committing multiple, often seemingly innocuous, mistakes that (3) breach an organization’s fail-



Dr. Smith's penmanship is frequently illegible, but he becomes very testy and sometimes downright insulting when a nurse asks him to clarify what he's written down. So, rather than ask him, the annoyed nurse will proceed to the nurse's station, consult with another nurse or two, and collectively try to decipher Dr. Smith's scrawl.

**"The normalization of deviance in healthcare delivery."  
Banja, 2011**





Photo by Oskar Yildiz on Unsplash

**1.** Continue towards a failed launch

OR

**2.** Stop the project.

**1. Continue towards a failed launch**

OR

~~**2. Stop the project.**~~



**Manager:** Hey Dan, I wanted to let you know  
— we've decided to stop the project.



**Manager:** Hey Dan, I wanted to let you know  
— we've decided to stop the project.

***me:** What?! Why? Do you know how hard we've  
worked on this?*



**M:** Yeah, we do. I want to make a few things clear.

Number one: we recognize your team's effort on this. We think you've done amazing work in response to a really hard ask. We also think you've learned a ton and we know that everything you've learned will only help you ship harder and more visible projects moving forward. We are super proud of all of the work you've done.



But the data on the project isn't lining up. We miscalculated and it's our fault, not yours. We've received new data that proves our original forecasts were wrong, and instead of having you spend the next four months working on something we don't think will work, we'd rather put you on a project that we think is better positioned for success.



But the data on the project isn't lining up. We miscalculated and it's our fault, not yours. We've received new data that proves our original forecasts were wrong, and instead of having you spend the next four months working on something we don't think will work, we'd rather put you on a project that we think is better positioned for success.

*Oh; okay. Well that... is a bummer.  
Can I take some time to process this?  
I can't say I'm not disappointed.*





Yeah, absolutely.

Take some PTO and get your mind right. We just want to make sure we're honest with you because we value your trust.



Yeah, absolutely.

Take some PTO and get your mind right. We just want to make sure we're honest with you because we value your trust.

*Okay. Well, thanks for letting me know.*

**ORGANIZATIONS: LONG-TERM  
CULTURAL BEHAVIOR #2**

**Celebrate the  
glue work**

<https://noidea.dog/glue>



Of course coding is an important skill in a software engineering team. But there are a ton of other skills that we need to bring to work every day. Skills that can mean the difference between a project that succeeds and one that fails.



Like noticing when other people in the team are blocked and helping them out. Or reviewing design documents and noticing what's being handwaved or what's inconsistent. Or onboarding the new people and making them productive faster. Or improving processes to make customers happy.

I call all of this glue work.

**“Being Glue”, Tanya Reilly**

Make glue work **promotable work.**

In fact, make glue work  
**mandatory for promotion.**

**ORGANIZATIONS: LONG-TERM  
CULTURAL BEHAVIOR #3**

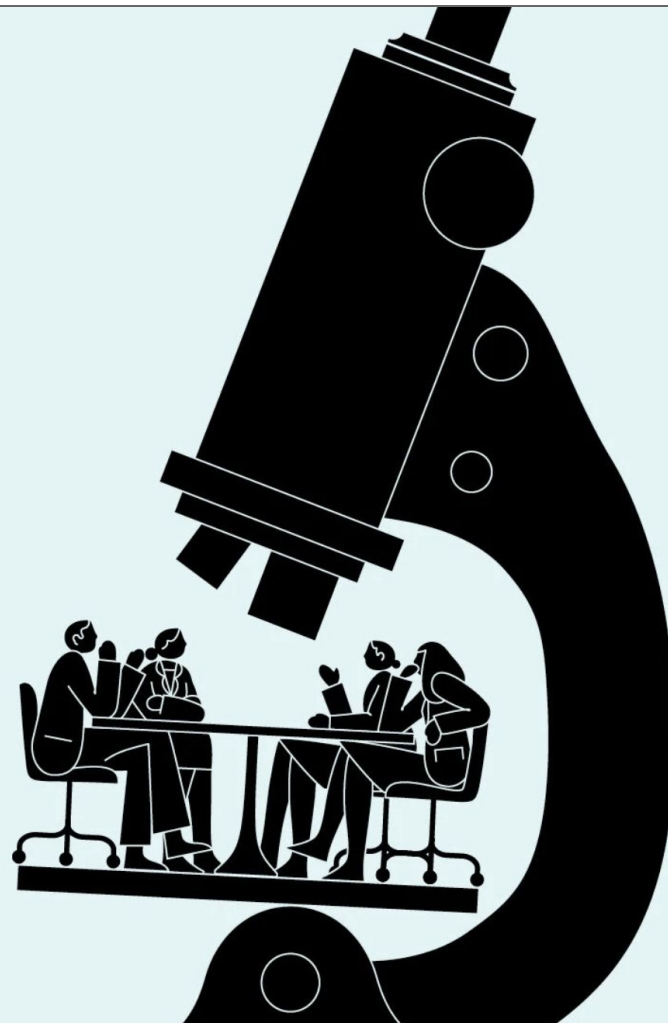
**Make psychological  
safety paramount**



THE WORK ISSUE

# What Google Learned From Its Quest to Build the Perfect Team

New research reveals surprising truths about why some work groups thrive and others falter.







Psychological safety is “a sense of confidence that the team will not embarrass, reject or punish someone for speaking up...

It describes a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves.”

**“What Google Learned From Its Quest to Build the Perfect Team”  
NYTimes, 2016.**

# Individuals

## **INDIVIDUALS**

**Develop and  
own your sense  
of agency**

Autonomy

# Intrinsic Motivation

Purpose

Mastery

```
npm install billing-components
```



“Oh, originally we thought we were building a suite of billing components.

Over time it became only checkout.”



**Dan Na** 🐶 3:00 PM

would you mind renaming the `billing-components` package to something that is more accurate?

it sucks to rename things, but it is worth it and gets harder as time goes on



**Paul Molluzzo** ✌️ 3:01 PM

I'm OK to rename it `checkout-ui`. We'll have to update the repo, package, library, then republish, and update all consumers.



**Dan Na** 🐶 3:01 PM

awesome! it is worth it.

```
npm install billing-components  
npm install checkout-ui
```



Making the best engineering decision will often have friction. There's often the correct path and the easy path.

**Take the correct path, even if it's hard, because it ultimately leads to better outcomes.**

## **MAJOR CAVEAT**

**Being a hero,  
or an asshole,  
doesn't scale.**

**INDIVIDUALS**

**Strategies**

**INDIVIDUALS  
STRATEGY #1**

**Have important  
discussions  
face to face**

**INDIVIDUALS  
STRATEGY #2**

**Get to know other  
people on other teams  
and in other orgs**

**INDIVIDUALS**  
**STRATEGY #3**

**New idea?**  
**Try it once.**

**This is the job.**

While it is true that deviant behaviors normalize over time,  
**so do constructive behaviors.**

**This is the job.**





Look man, I did my part. I looked into a hard problem and found a solution and offered it to the relevant team. And at the end of the day nobody cared. So I'm frustrated.



Look man, I did my part. I looked into a hard problem and found a solution and offered it to the relevant team. And at the end of the day nobody cared. So I'm frustrated.

*Hmm... are you sure that team understands what you're proposing? It doesn't make sense that they wouldn't care.*



Well I sent the email didn't I?



Well I sent the email didn't I?

*How many emails do you get per day?*



Well I sent the email didn't I?

*How many emails do you get per day?*

Like... a hundred...

*Did you try talking to them in person? Did you try writing up a formal RFC that outlines your findings and circulating it for advocates?*



*Did you try talking to them in person? Did you try writing up a formal RFC that outlines your findings and circulating it for advocates?*



No...



*Did you try talking to them in person? Did you try writing up a formal RFC that outlines your findings and circulating it for advocates?*

No...

*That could be the best way to get this done. That team is probably swamped too.*





*Did you try talking to them in person? Did you try writing up a formal RFC that outlines your findings and circulating it for advocates?*

No...

*That could be the best way to get this done. That team is probably swamped too.*

Okay, I'll give it a shot.

# Thank you.

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