

# Storytelling for Engineers

Brad Shively (@bjshively)

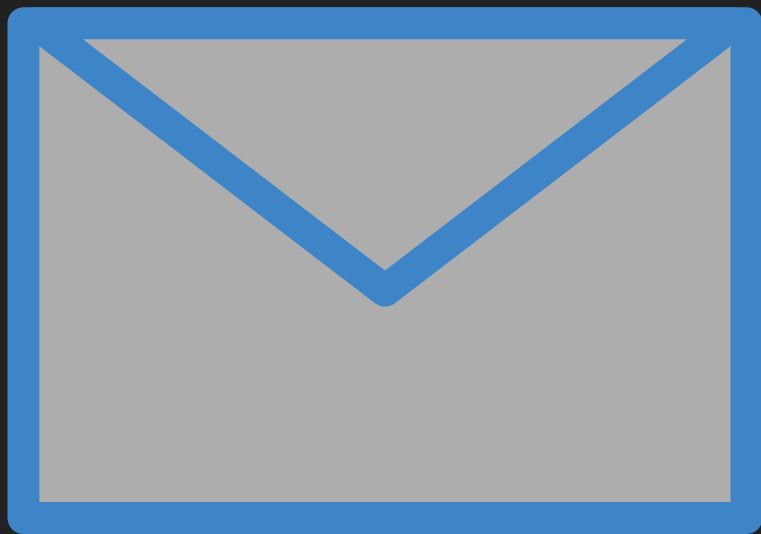
Uber ATG

# Hi, I'm Brad.

Engineering Manager @ Uber ATG



If you don't communicate with other humans,  
then this talk isn't for you.





**Communication** is an  
essential engineering skill.

Engineering communication  
is **broken**.

**Storytelling** is the solution



**Everything\*** is a story,  
and **everyone** is a storyteller

Most of us are just  
**pretty bad** at  
storytelling

**Why?**

Storytelling causes **changes in brain chemistry** that increase awareness, activate the rewards center of the brain (**dopamine**), and increase empathy and pro-social behavior (**oxytocin**)

Source:

<https://www.forbes.com/sites/giovannirodriguez/2017/07/21/this-is-your-brain-on-storytelling-the-chemistry-of-modern-communication/#44097c2bc865>

Stories result in **better understanding** of key points, **increase voluntary compliance**, and **improve memory**.

Source: <https://hbr.org/2014/10/why-your-brain-loves-good-storytelling>

If you want them to  
listen, understand, and  
remember:

**tell a story**

This is not a **TED** talk.

**How?**



**Identify your audience**

# What You Imagine

**Things You Know**  
Things Everyone Knows

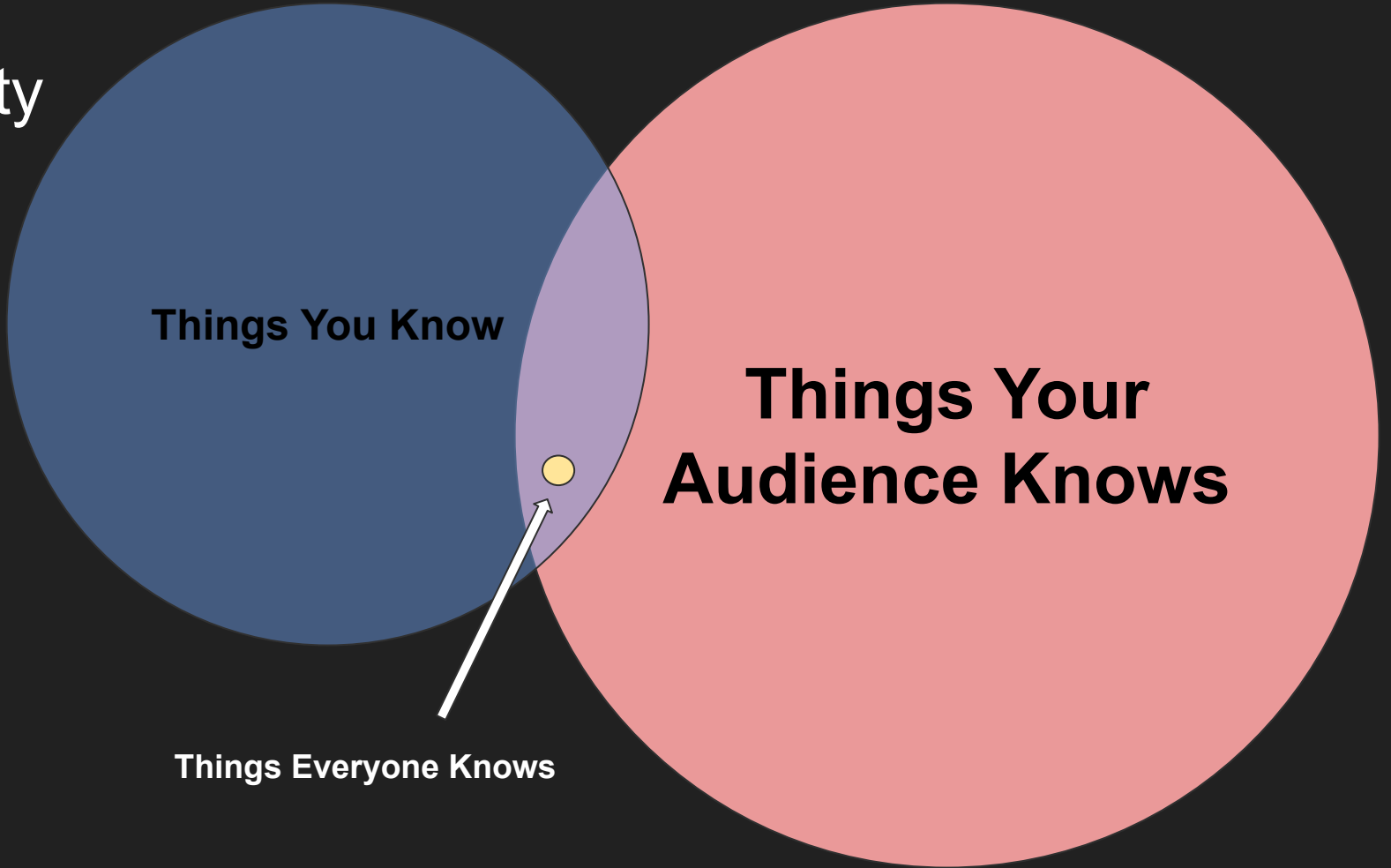
Things Your  
Audience Knows

Reality

Things You Know

Things Your  
Audience Knows

Things Everyone Knows



Your job as a storyteller is to **map  
your brain onto your audience's  
brain.**

Identify your audience

**Figure out what story  
you're telling**

Who is your **character**?

What is the **character arc**?

Identify your audience

Figure out what story  
you're telling

**Tell the story, with context**



**Let's write an email!**



Simone Giertz

# Remote Testing

Remote test execution has been enabled.

-Brad

Is this email **good** or **bad**?

It depends...

Who is our **audience**?

If my audience is the  
Build Team, this email  
*might* be fine

Let's assume this e-mail is  
for the entire software org

**Pros:** **Easy** and **fast** to write



**Cons: Everything else**

# Responses:

“So what?”

“Why?”

Worst of all... <silence>

Am I announcing that tests are better (or worse) now?

Do I want the recipients to take some action? If so, I need to explicitly **ask them.**

Let's talk about **data**

“I’m data driven”

**...and other lies people tell.**

**Just** data often isn't  
really that useful

# Remote Testing Results

Remote test execution has been enabled. Attached are results for several test runs.

-Brad

# Attachment: results.txt

Total Run Time=1088.2s  
Total Run Time=1086.5s  
Total Run Time=1111.7s  
Total Run Time=1180.0s  
Total Run Time=1092.6s  
Total Run Time=685.7s  
Total Run Time=707.7s  
Total Run Time=686.5s  
Total Run Time=688.5s  
Total Run Time=815.7s  
Total Run Time=769.3s  
Total Run Time=1280.0s  
Total Run Time=1692.6s  
Total Run Time=985.7s  
Total Run Time=1007.7s  
Total Run Time=986.5s  
Total Run Time=388.5s  
Total Run Time=615.7s

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Total Run Time=1080.0s  
Total Run Time=1292.6s  
Total Run Time=886.7s  
Total Run Time=405.7s  
Total Run Time=676.3s  
Total Run Time=583.5s  
Total Run Time=2115.7s  
Total Run Time=969.3s  
Total Run Time=1280.0s  
Total Run Time=1092.6s  
Total Run Time=785.7s  
Total Run Time=708.7s

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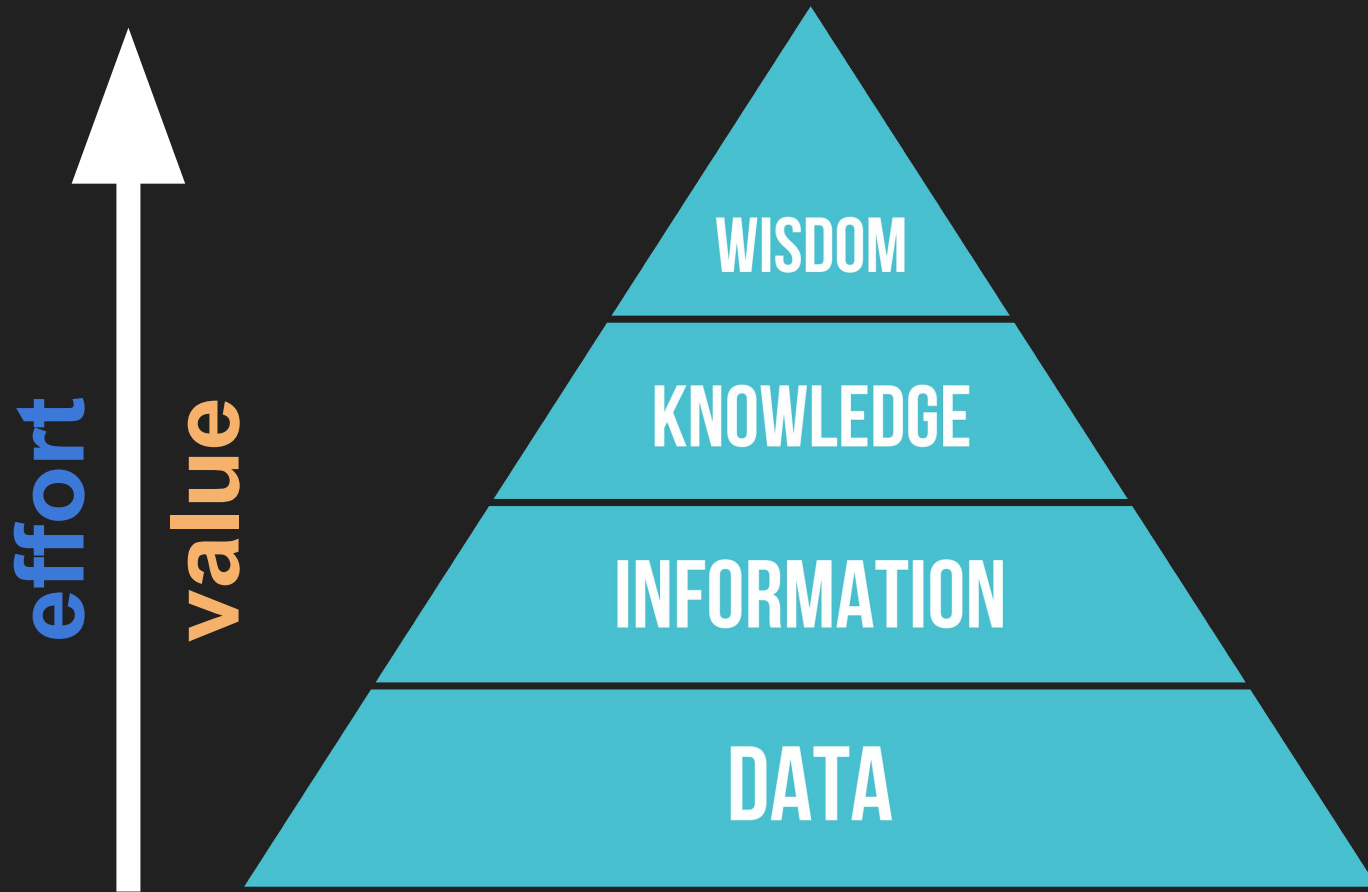


# Responses:

“What?”

<delete>

You make data useful with  
**context, analysis, and**  
**insights**



Source: [https://en.wikipedia.org/wiki/DIKW\\_pyramid](https://en.wikipedia.org/wiki/DIKW_pyramid)

Formulaic e-mails are bad...

But...

A Formula for  
**Better-Than-Average**  
Engineering Emails

**TLDR: <Result>**

**If you [use/care about/etc.] <system X>, keep reading**

**X is now [better/different/etc.] in aspect Y**

**...due to change Z**

**[Visual illustrating impact]**

**For those very interested, see details below.**

**Let's rewrite our email**



@AARONSANIMALS



# Remote CI testing is now faster

TLDR: Faster test results & queue submissions by 100s of seconds!

If you don't build/test repoX, you can stop reading.

The repoX test suite now supports test remote execution and caching, reducing total test time on CI by ~500 seconds on average.

**No action is required by you to see these benefits.**

Those interested can see the mechanics of the change in [PR123](#). Note that this change only applies to CI tests. For questions or more info, please contact the Build Team.

- Brad



# Tactical Recap

Understand who **your audience** is and **what story** you're telling.

**Context** is ridiculously  
important.

There are **very few globals.**

Turn **data** into **wisdom**.

**Ask.**

**Tell.**



As a last resort...

# Use the Formula

TLDR: ...

If you \_\_\_\_\_, then \_\_\_\_\_.

X has changed in Y way...

...due to Z

Thank you