Storytelling for Engineers

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Hi, I’m Brad.

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If you don’t communicate with other humans, 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**.

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
Things Your Audience 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!
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=1092.6s
Total Run Time=785.7s
Total Run Time=798.7s
Total Run Time=1286.5s
Total Run Time=988.5s
Total Run Time=815.7s
Total Run Time=769.3s
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
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Total Run Time=688.5s
Total Run Time=815.7s
Total Run Time=769.3s
Responses:

“What?”

<delete>
You make data useful with context, analysis, and insights.
effort

value

WISDOM

KNOWLEDGE

INFORMATION

DATA

Source: 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
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