

# 280 Characters? Sad.

## Communicating complex ideas in the Twitter age



PRESENTED BY

Phyllis Teague



## Abstract (remove later)

IT faces unique issues communicating with the Laboratory community: We must communicate complex ideas (new processes or services, cyber vulnerabilities, or outages, e.g.) to busy people who may or may not love IT for its own sake and who are already suffering from information overload. At the same time, users tell us both that they get too much AND not enough information about IT, and this need varies among generational cohorts. The challenge: Find communication methods that capture user attention as successfully as a compelling tweet and get the crucial messages across. This presentation will discuss what Sandia IT is doing to modernize IT messaging and reduce the information overload as much as possible.



# Topics in this hot mess

- The multi-pronged problem
- A little about what the research says
- What can we learn from Twitter for IT messaging?
- References

**SCOPE:** End-user communications (IT-to-IT communications *are out of scope*, although same principles apply)

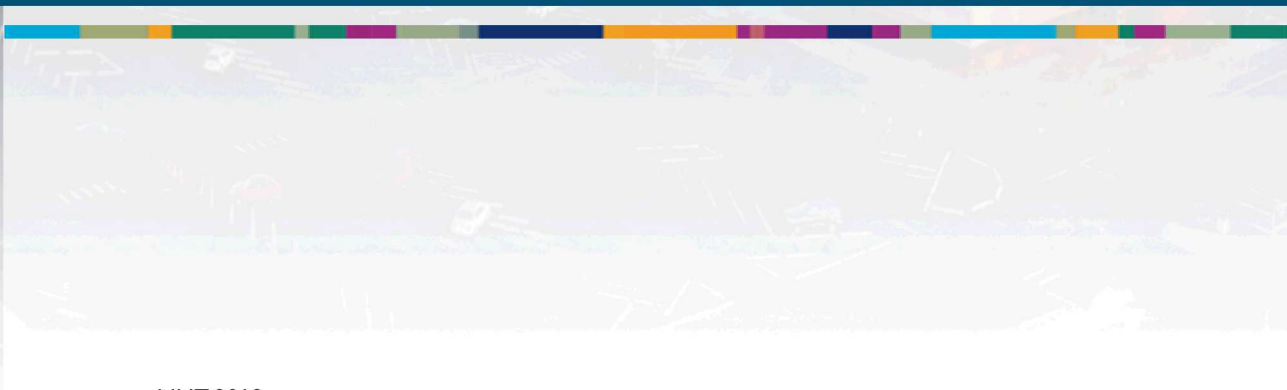
# “IT” is my shorthand for ...

... all the entities that together provide the end-to-end service of “enterprise computing”:

- Infrastructure
- Connectivity
- App development
- Systems
- Data (and its storage and backup)
- Computing devices
- Support
- Policy and security
- etc.



# The multi-pronged problem



# IT *must* communicate some things

It's important  
that you know  
this thing

New, changed, or retired  
products & services

New, changed, or retired  
processes or policies that  
affect end users

Events or training that  
will improve your user  
experience

You must take  
action (or avoid  
taking action)

Application or OS  
lifecycle management

Vulnerabilities require  
attention

Cyber event requires  
action or action avoidance

Replace [old solution]  
with [new solution]

Your user  
experience is  
affected by  
something in the  
IT environment

Planned or unplanned  
system, network, app,  
database outage

Service degradation

Widespread application  
errors

# IT messaging is ... problematic

## ■ Complex

- Hard to summarize, hard to “hashtag”
- Full of opaque concepts
- Often requires following precise instructions

## ■ More unpopular than popular

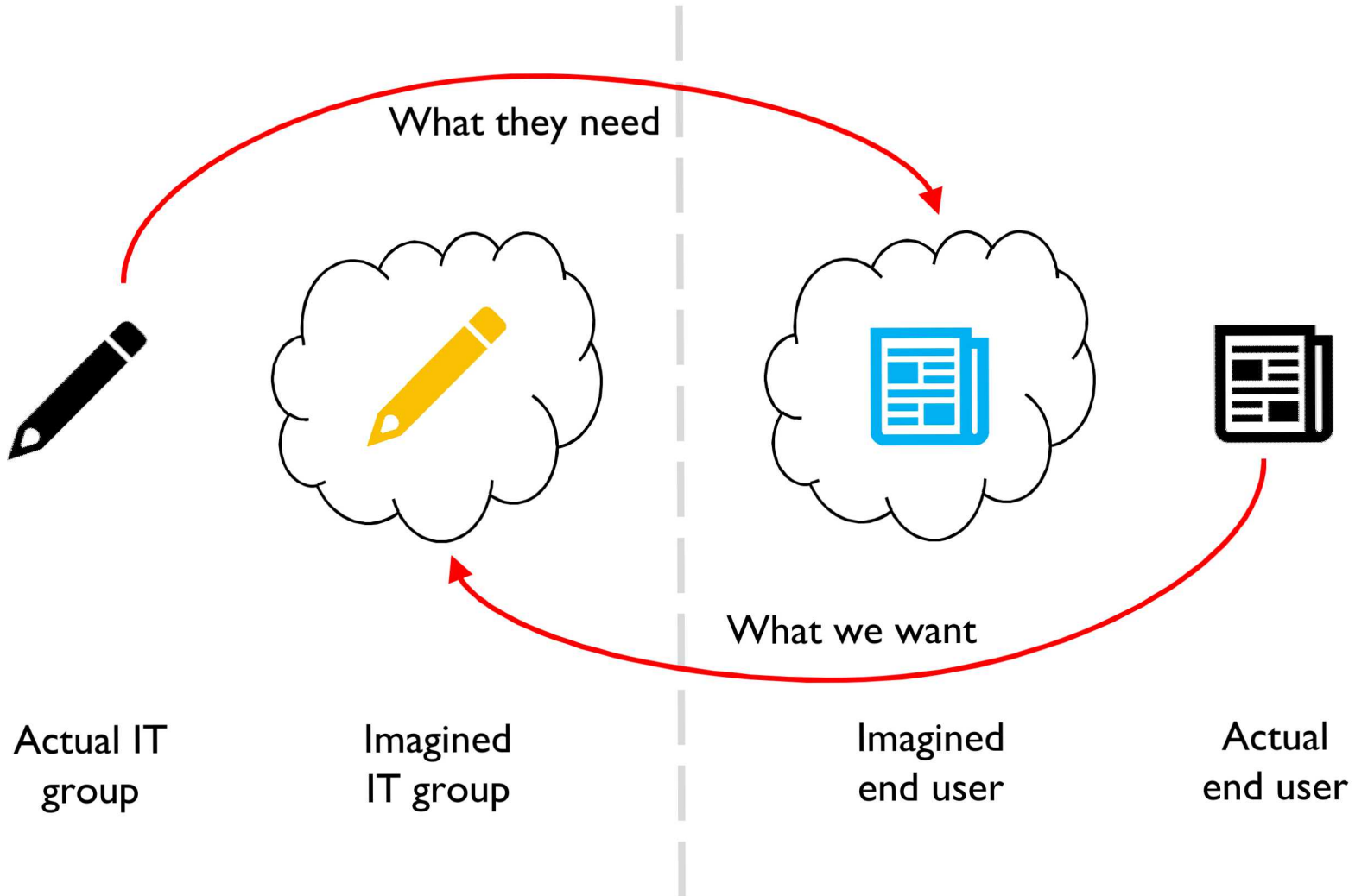
- Don't touch my machine
- XP is fine. Why should I upgrade?
- Why did my accounts suddenly expire? (Automated notifications filtered to Trash)
- You've orphaned my conference room scheduling app
- I don't want to use my badge to log in

## ■ Hard to find the right level of detail

- How much background?
- How much definition?
- How detailed must the instructions be (What's the Software Center? What's the Windows key?)



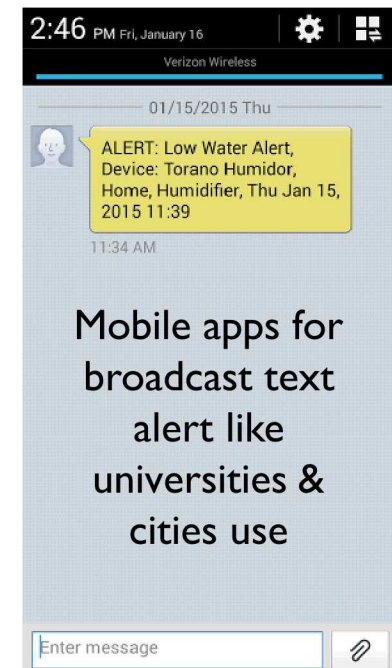
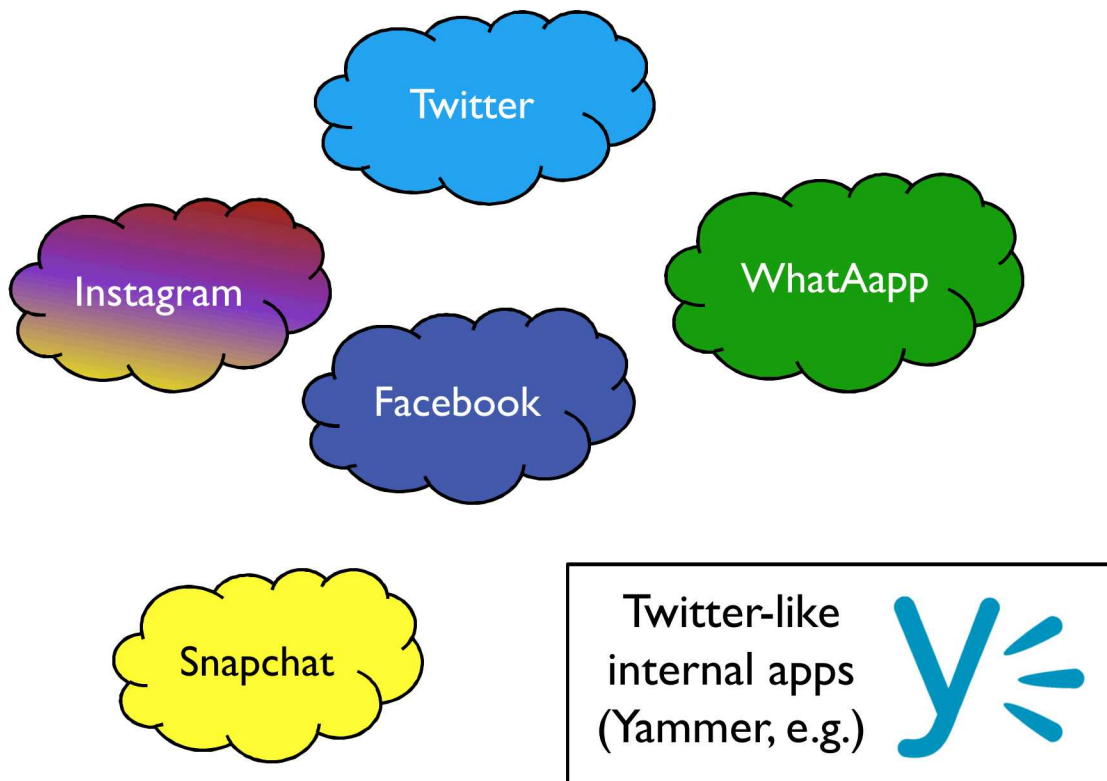
# 8 | Perceptions get in the way – from both directions



# 9 We can't always use modern technology

- Information protection requirements apply
- External services may not be approved
- Locally hosted technology may be beyond budget

Email is the go-to delivery medium for complex information



# So we use traditional “push/pull” methods

## Email (push)

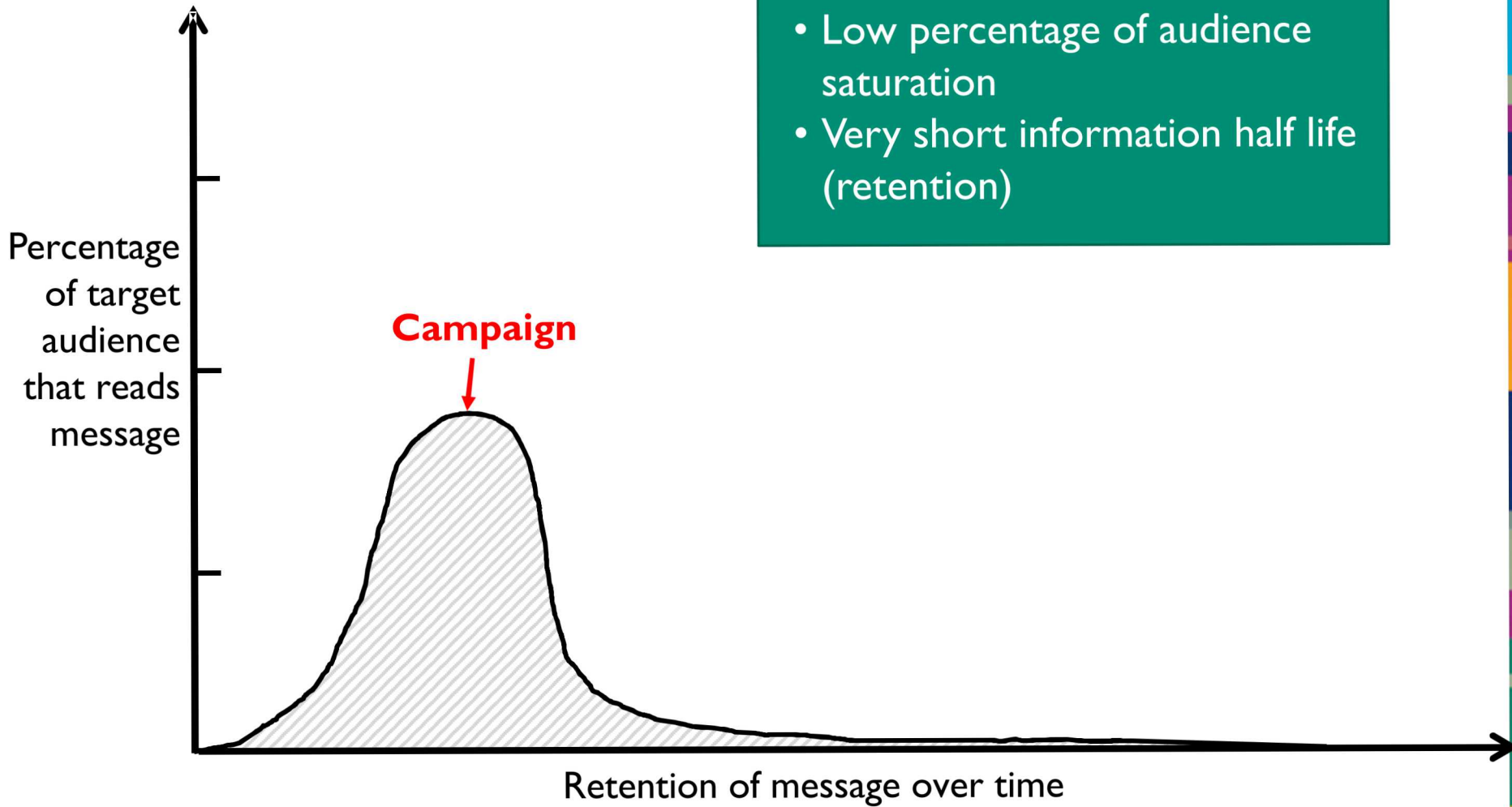
- Lends itself to long or long-ish messages
- Users say they hate (and also depend on it)
- Email clients (typically Outlook) limit responsive design
- Users sometimes automatically trash messages from certain entities

## Intranet publication (pull)

- Typically, SharePoint, websites, blogs, wikis, WordPress-like sites
- Depends on users to go get the message

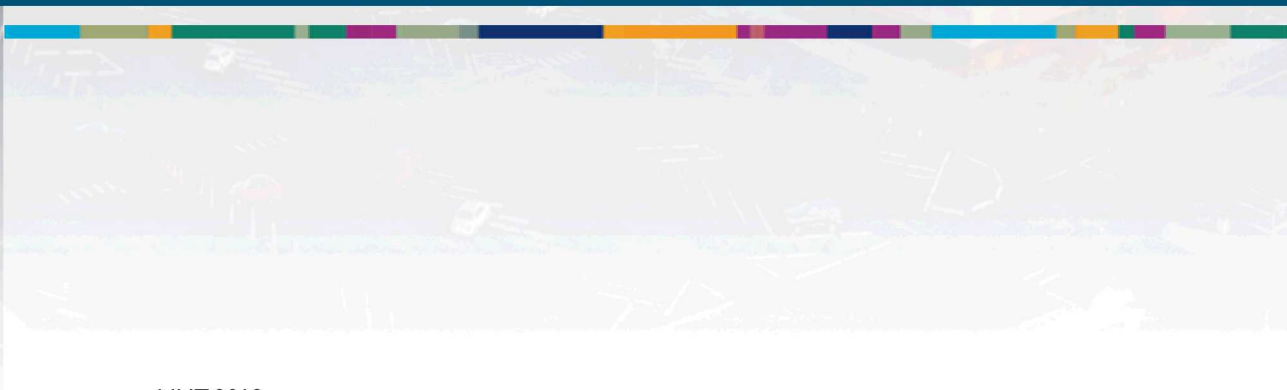


# || The end result?





## A little about what the research says



# How people read digital content

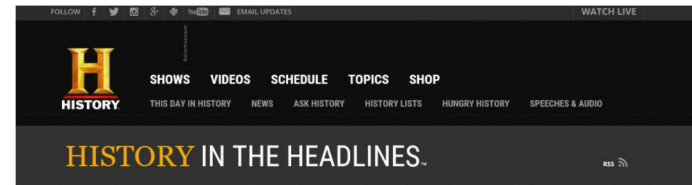
They **scan**, not **read**

Scanning pattern is **F-shaped\*** especially when ...

- “Wall of text” (not much formatting)
- User trying to be efficient
- User isn't committed or interested

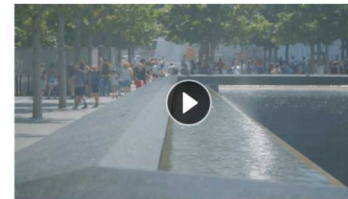
**First 2 words** of each line are crucial scanning signals (reading down the left side)

*\*from eyetracking studies*



## Remembering 9/11: 15 Years Later

SEPTEMBER 9, 2016 By Sarah Pruitt



September 11th: Why We Remember

Volunteers from the 9/11 Tribute Center reflect on the importance of sharing their stories of 9/11 with future generations.

### TRENDING NOW

- Scientists Virtually Unravel, Read Ancient Biblical Scrolls
- Why are countries classified as First, Second or Third World?
- DNA Study Finds Aboriginal Australians World's Oldest Civilization

Since it opened in 2006, the 9/11 Tribute Center in Lower Manhattan has become a place where visitors can connect with the stories of those who lived through the attacks. It's a place where family members who lost loved ones, first responders, rescue and recovery workers, longtime Lower Manhattan residents and other trained volunteers tell their stories in the hopes of providing a greater understanding of the impact of 9/11, as well as the ongoing recovery and resilience of New York City. We asked five of those volunteers to share some of their thoughts, including how 9/11 changed them, what they want people to remember and what advice they would give future generations.

Joan Mastropolo, a former New York City firefighter and a member of the 9/11 Tribute Center's board (who was on the scene on 9/11), says that the 9/11 attacks changed her life. She says that she was one of the few firefighters who survived the attacks. She says that she was one of the few firefighters who survived the attacks. She says that she was one of the few firefighters who survived the attacks.

Looking back at the past 15 years, what has stayed the same for New Yorkers?

Matt Crawford: I think what has stayed the same for New Yorkers is the rush to get back to work. I think that's what has stayed the same for New Yorkers is the rush to get back to work. I think that's what has stayed the same for New Yorkers is the rush to get back to work.

Joan Mastropolo: What has stayed the same in New York City is the sense of pride and commitment that our residents have for our city. ... [W]hat has changed is the level of resilience on the part of New Yorkers in watching their

Eyetracking by Nielsen Norman Group [nngroup.com](http://nngroup.com) NN/g

# When information is too complex ...

... busy people's brains struggle to simplify; they latch onto the stand-out details

## What the MFA Team said

- Use once a week (heading toward every time); use once every 24 hours; use every time
- Exception process for certain machines in certain situations
- YMMV with remote access
- Classified vs unclassified
- Restart multi-uses machines after each user
- Use your badge on travel

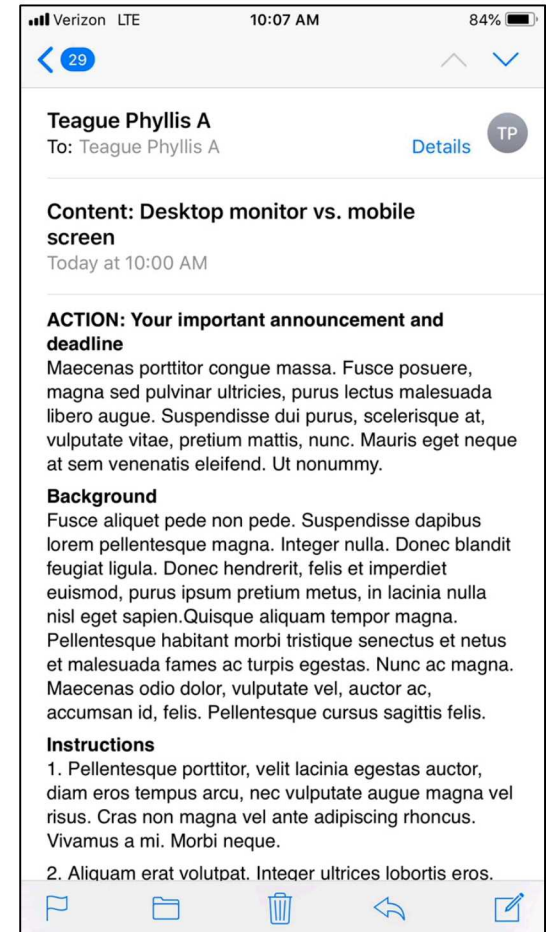
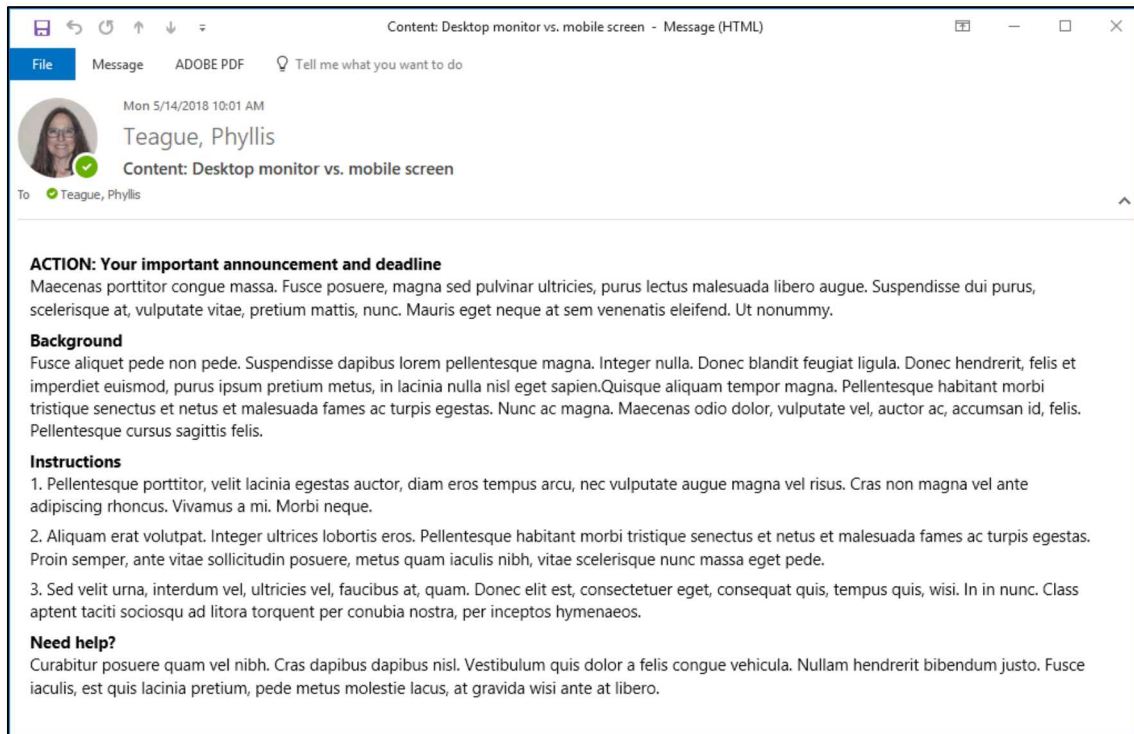
## What we heard from MFA users

- Use once a week
- Won't work remotely
- Doesn't work when people share computers
- Can't use badge on travel
- Horrible that Sandia affected their productivity

# Huge percentage read on mobile screen

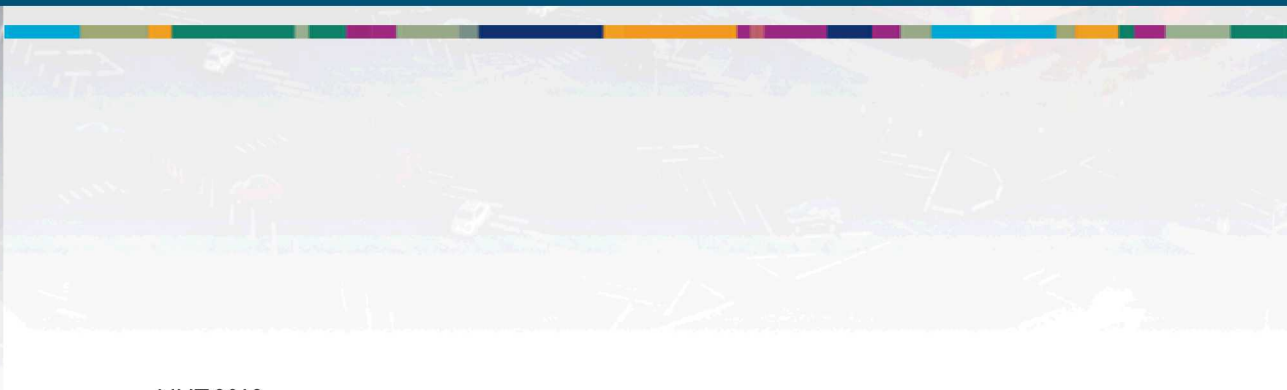
50 to 80 percent read at least some email on mobile devices

- Pinch, zoom, scroll works against you
- As does non-responsive email design





# What can we learn from Twitter for IT messaging?

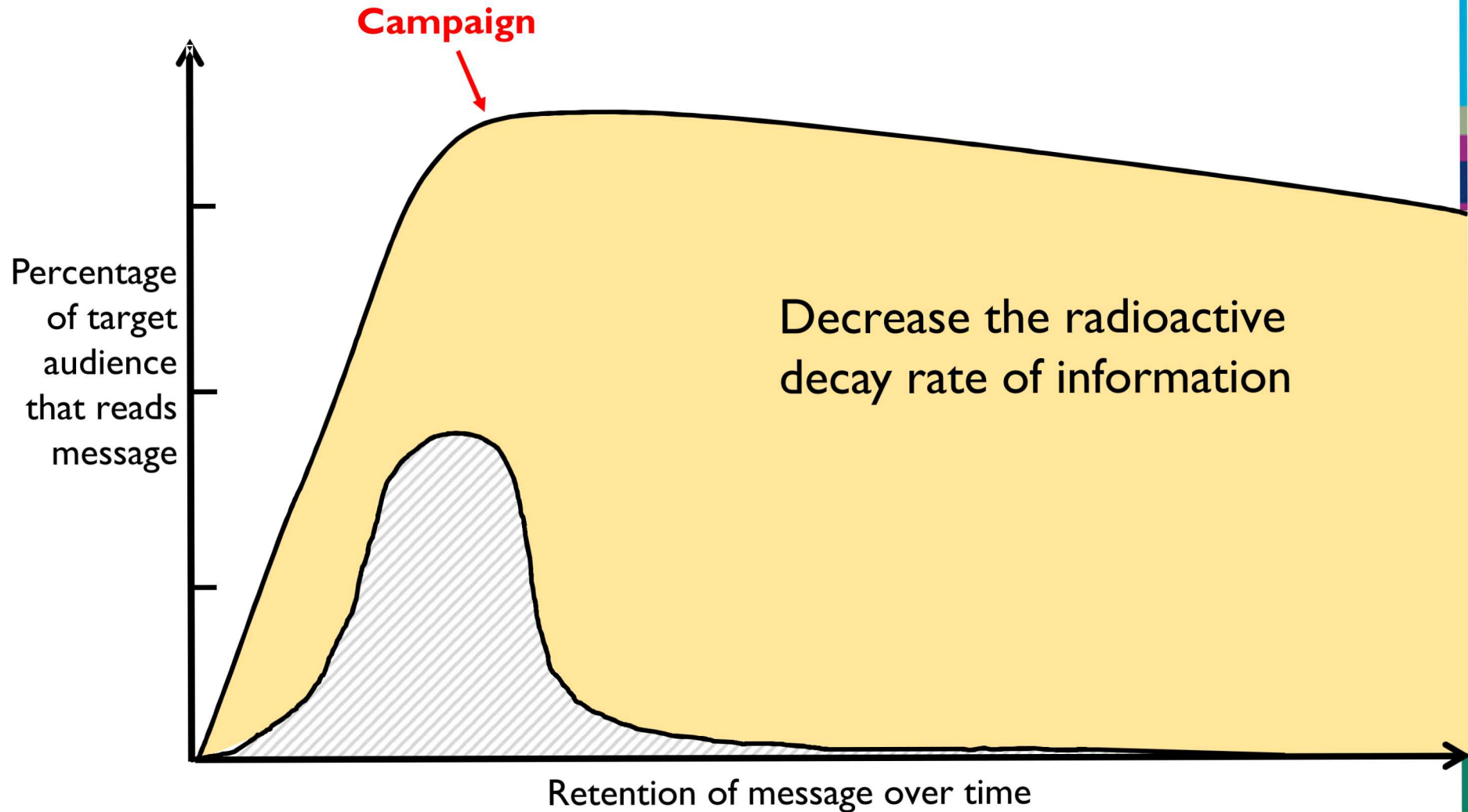


# What *does* make Twitter messages sticky?

Although not always applicable to IT, they are **memorable** (sticky) and **shareable** (contagious):

- Simplicity
- Unexpectedness
- Concreteness
- Credibility
- Emotions
- Stories

# If sticky messages are the goal ...



## ... IT can address these three things

- Write short, consumable content *with empathy*
- That's visible easy to digest
- Using modern media (or modern media principles)



# Start with empathy

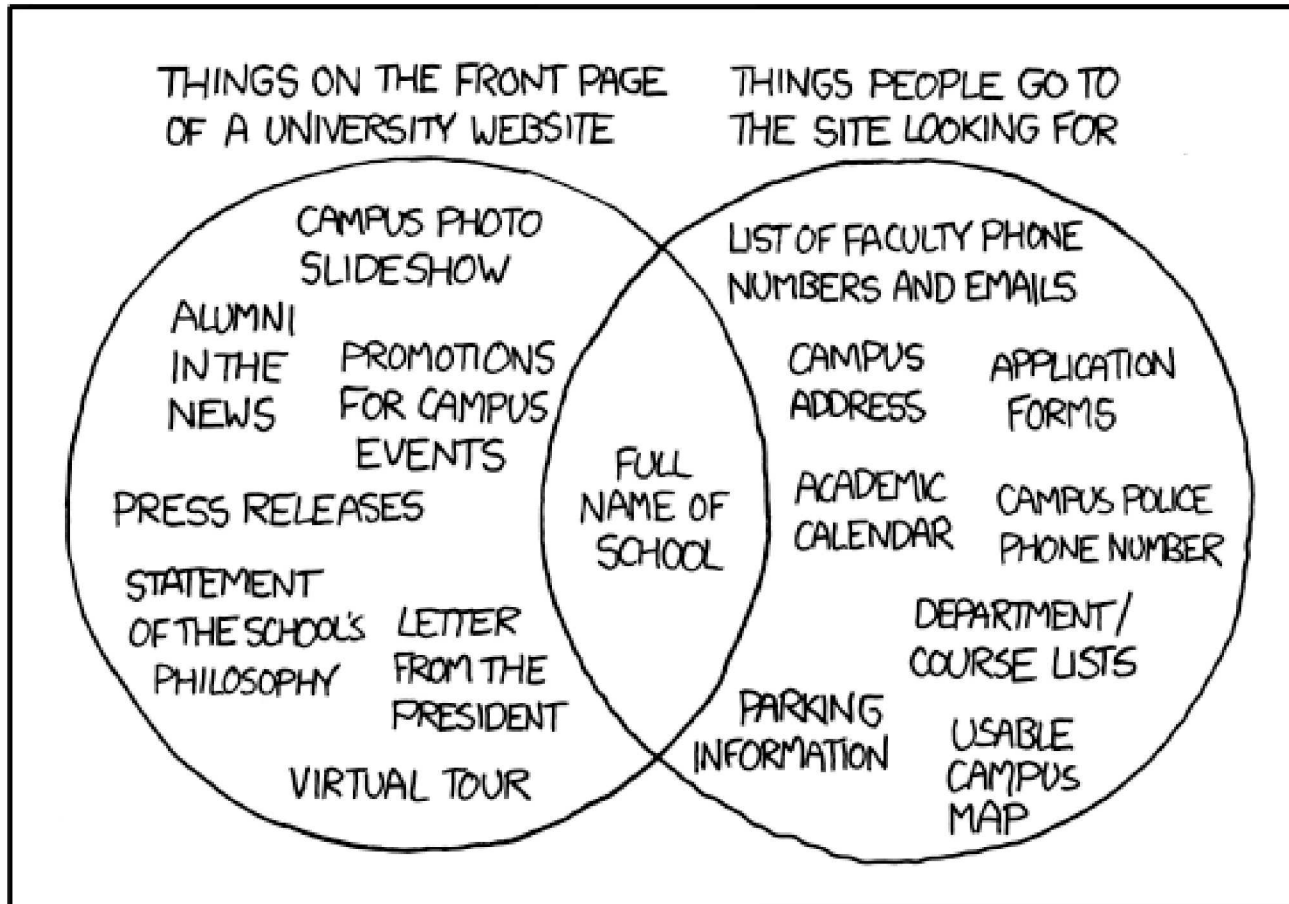
Positive messages – or messages that acknowledge user frustration – are stickier!

Lose the unflattering assumptions about users

- Okay, most users *are* sometimes/often frustrated by technology
- Many millennials equate technology with social connection rather than loving technology for its own sake
- Many older adults are the equivalent of digital natives
- Not everyone who reads your messages is your same gender or ethnicity



# Identify what users *really* need to know



<https://www.xkcd.com/773/>

# Then write short

- Mind the signal-to-noise ratio
  - Important info in **1st line of body!**
  - Include actions, dates, etc.
  - Hyperlink to background info and more details
- Aim to keep all the text “above the fold”
  - “Above the fold” on a monitor is 2 or 3 screens on a smartphone
- Just the facts, but
  - Address the reader as “you”
  - Address IT as “we”
  - It’s okay to admit mistakes (mea culpas)

“For sale. Baby shoes.  
Never used.” – Ernest  
Hemingway

“I didn’t have time to  
write a short letter, so I  
wrote a long one instead.”  
Mark Twain

“The most valuable of all  
talents is that of never  
using two words when  
one will do.” Thomas  
Jefferson

# Treat your subject line like a Twitter post

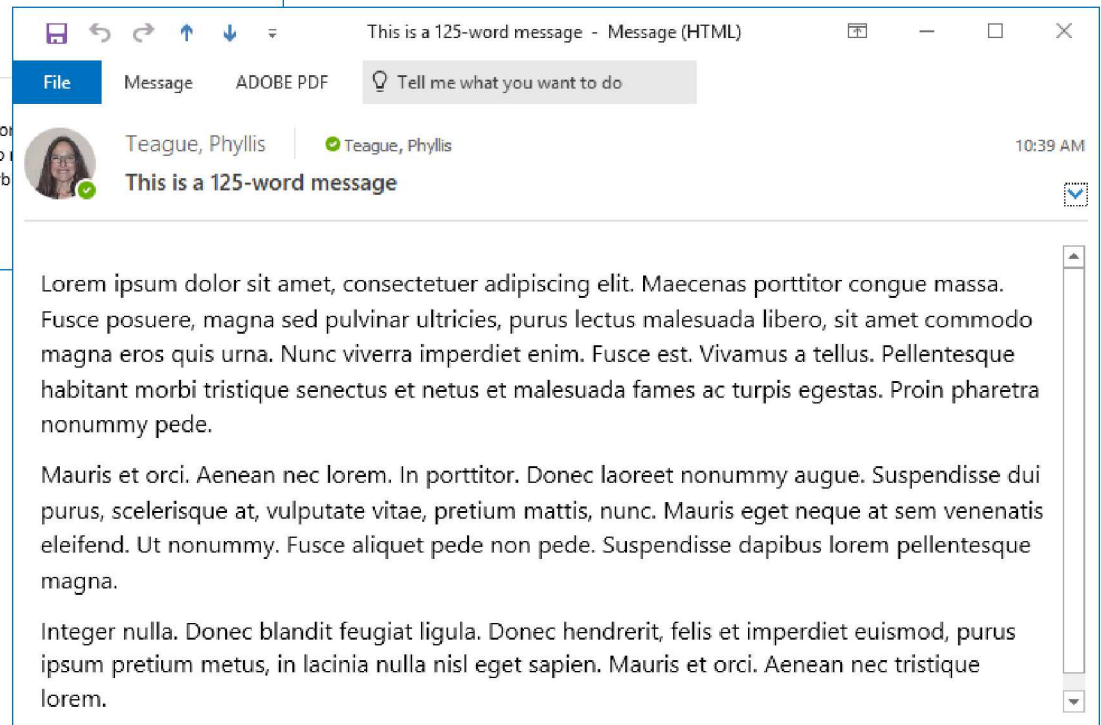
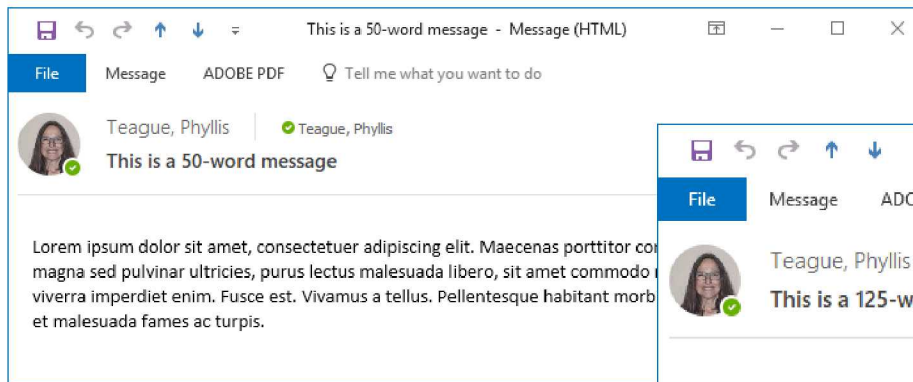
- Nouns and verbs
- Complete statements
- All the most important points

!	📧	📄	📧	FROM	TO	SUBJECT	RECEIVED
▲ Categories: (none): 2 item(s)							
				Teague, Ph...	Teague, Phyllis	PeopleSoft and related apps down for maintenance (5/19-23)	Mon 5/14/...
	📧			Teague, Ph...	Teague, Phyllis	PeopleSoft upgrade	Mon 5/14/...

# Make the message visually easy to digest

Ideal email length *may be* 50 – 125 words ...

- But 125 words looks like a WALL OF TEXT

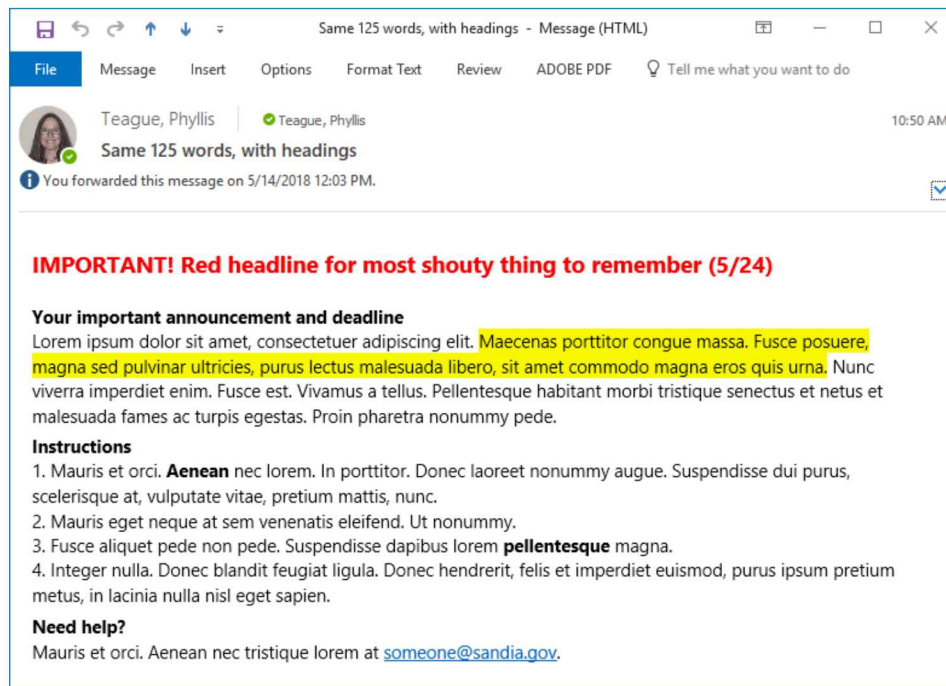


# Use “signage” and other visual cues

## Internal headings break up wall of text

- Honors the “first 2 words” rule
- Acts as psychological signposts to crucial information

Red text, yellow highlighting, and bolded words for important items

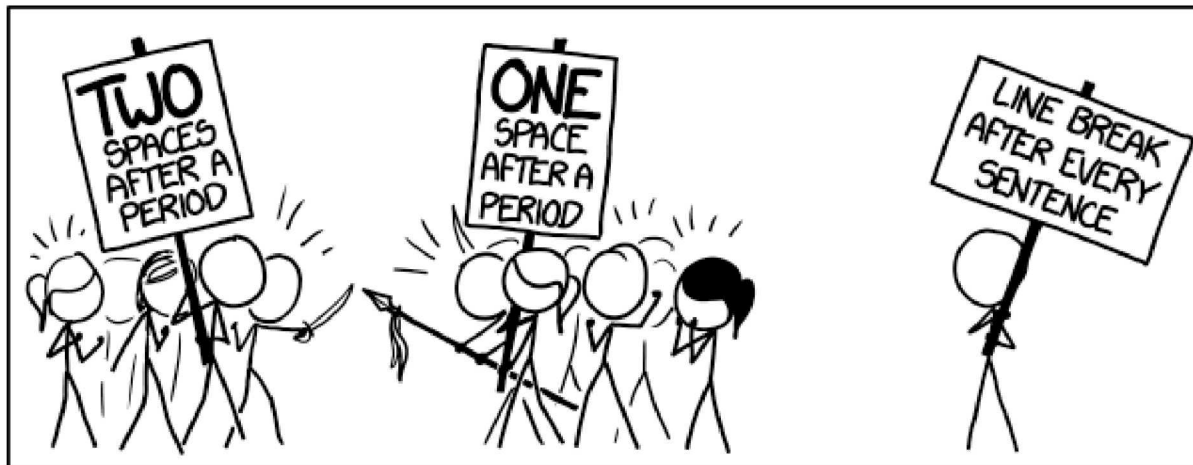


# Bogart those hard returns!

Line break after every line ...

- Decreases readability
- Takes up more screen space

Two to three sentences per paragraph for user messaging



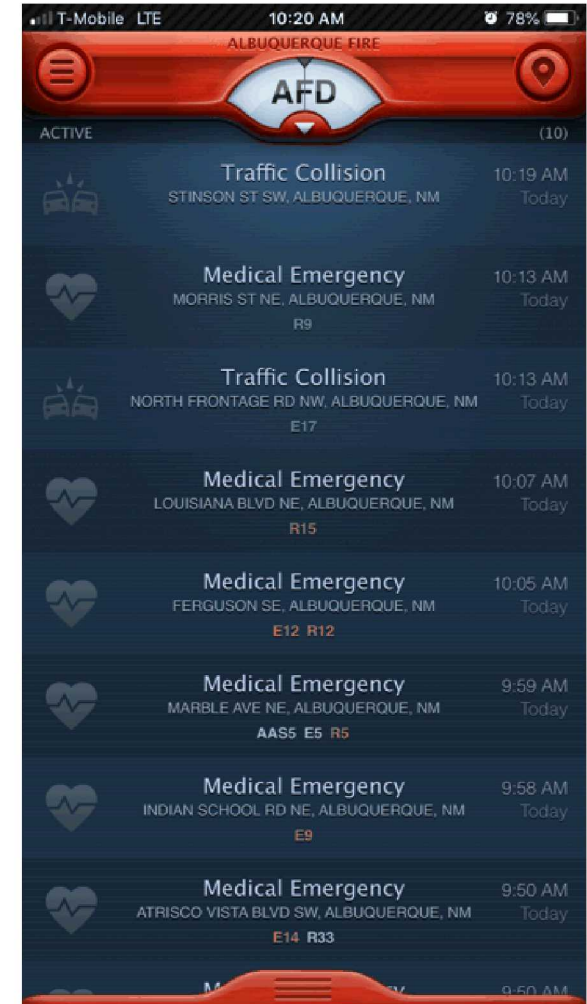
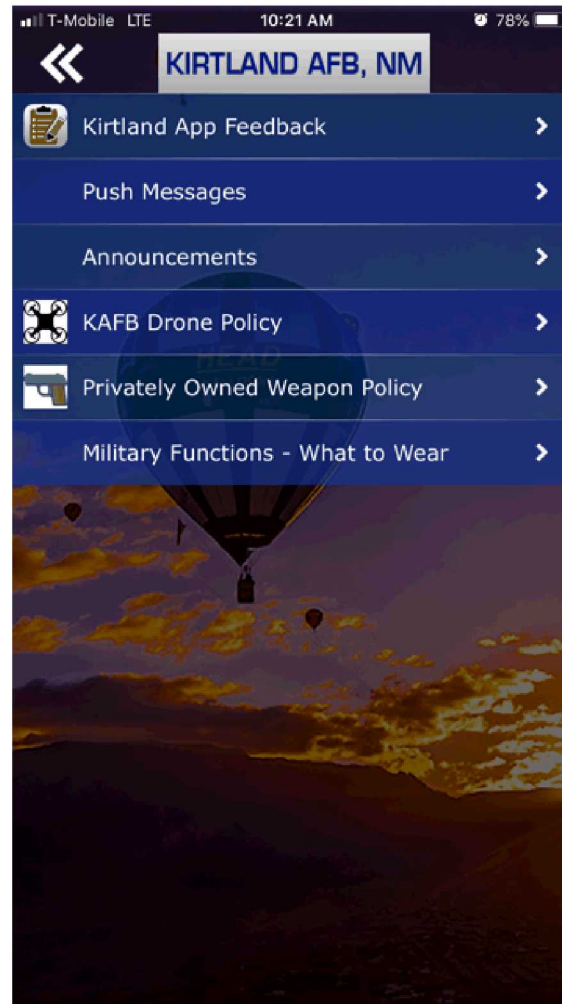
<https://www.xkcd.com/1285/>

# Use alternate delivery methods where possible

Computer popup messages (depends on users being there)

Homegrown or COTS mobile apps (not available so far at Sandia)

Labs-wide text messaging (often constrained by mobile vendor)



# Good messaging is good UX, good service delivery

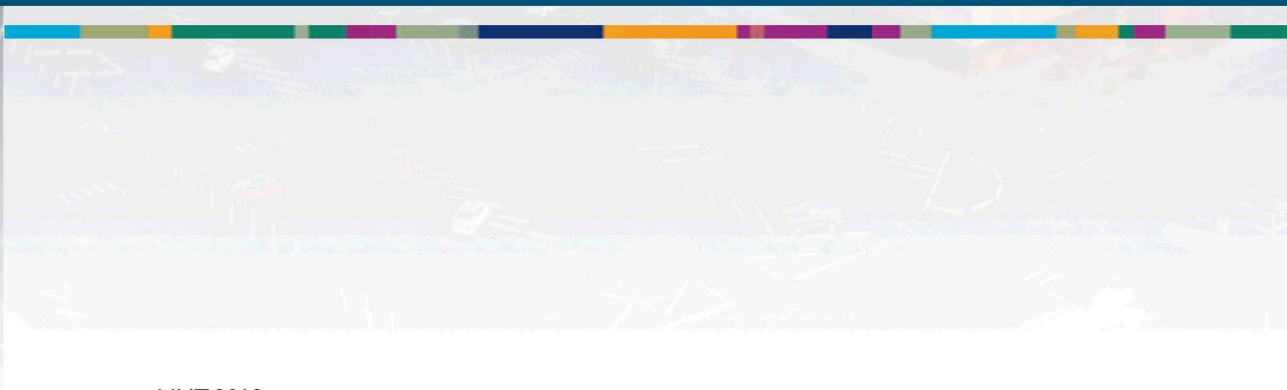
- Shoot for perfect user relationship management through perfect messaging
- Celebrate if you're as non-annoying as possible
- Stay in touch with users when it's called for
- Stay out of their hair when it's not



QA



# REFERENCES



# Interesting articles with good principles

[10 Awesome Twitter Examples with Critiques and Best Practices](#)

[3 communication theories that will help you write better microcopy \(and make better products\)](#)

[6 Ways to Make your Content Sticky](#)

[9 Powerful Tips for Communicating Better With Millennials Inc.com](#)

[Applying Writing Guidelines to Web Pages Article by Jakob Nielsen](#)

[Creating Viral Content? The Secret is Get Contagious](#)

[First 2 Words A Signal for the Scanning Eye](#)

[Horizontal Attention Leans Left \(Early Research\)](#)

[How Social Posts Go Viral Search Engine Journal](#)

[How to Say What You Mean in 140 Characters or Less – Art of Eloquence](#)

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[Information Foraging: Why Google Makes People Leave Your Site Faster](#)

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[Long vs. Short Articles as Content Strategy](#)

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[Millennials: Technology – Social Connection](#)

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[Six Principles of Stickiness Sightline Institute](#)

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[The Ideal Length of a Sales Email, Based on 40 Million Emails](#)

[The F word — how people read on the web - Briarbird](#)

[The Rules of Twitter Hashtags Hits and Misses From 7 Big Brands](#)

[TWEET SUCCESS Why We Love Twitter's 140 Character Limit](#)

[User Frustration with Technology in the Workplace](#)

[UX Research Cheat Sheet](#)

[Writing to Attract Readers User-centric vs. Maker-centric Language](#)