

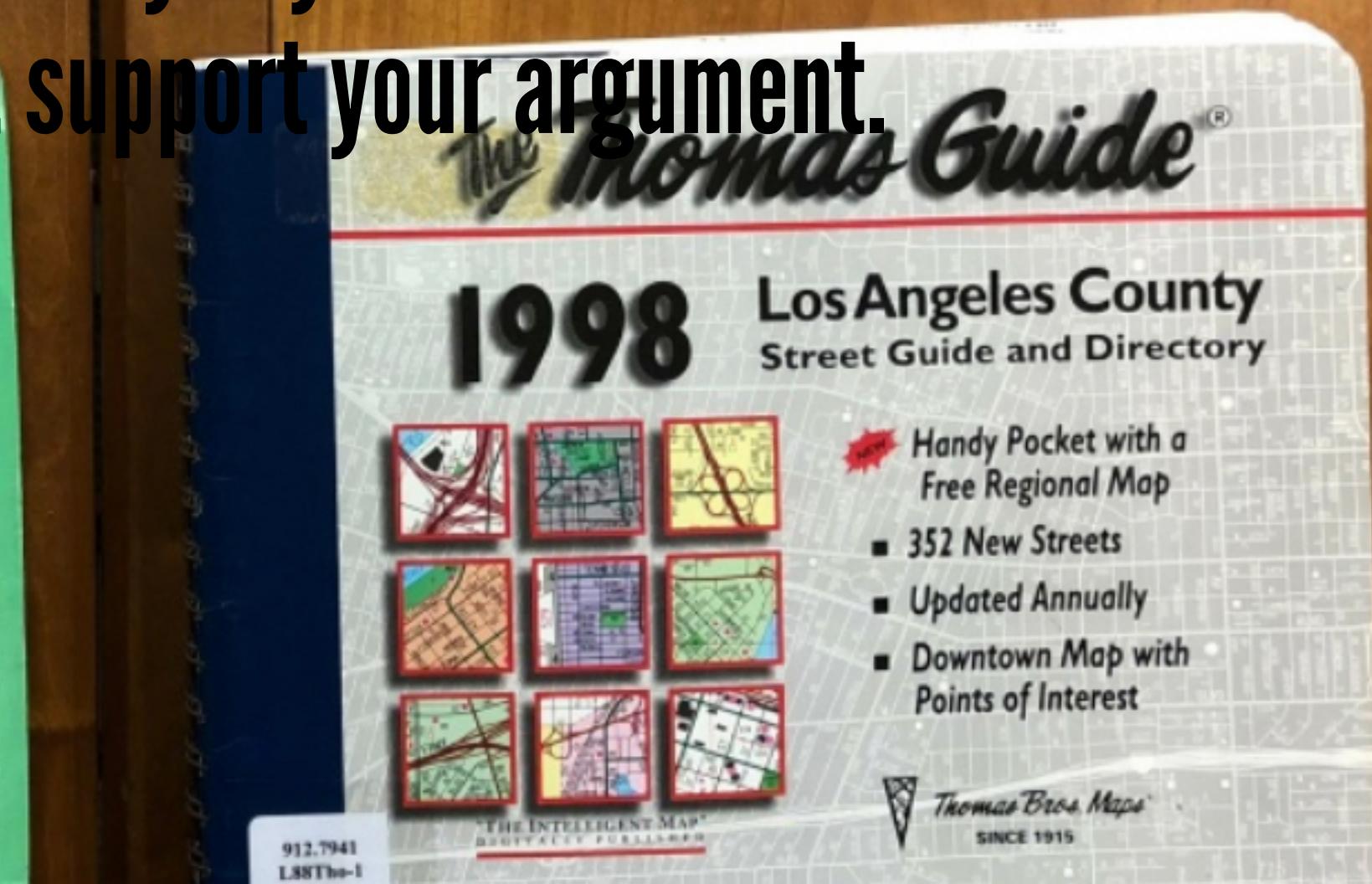
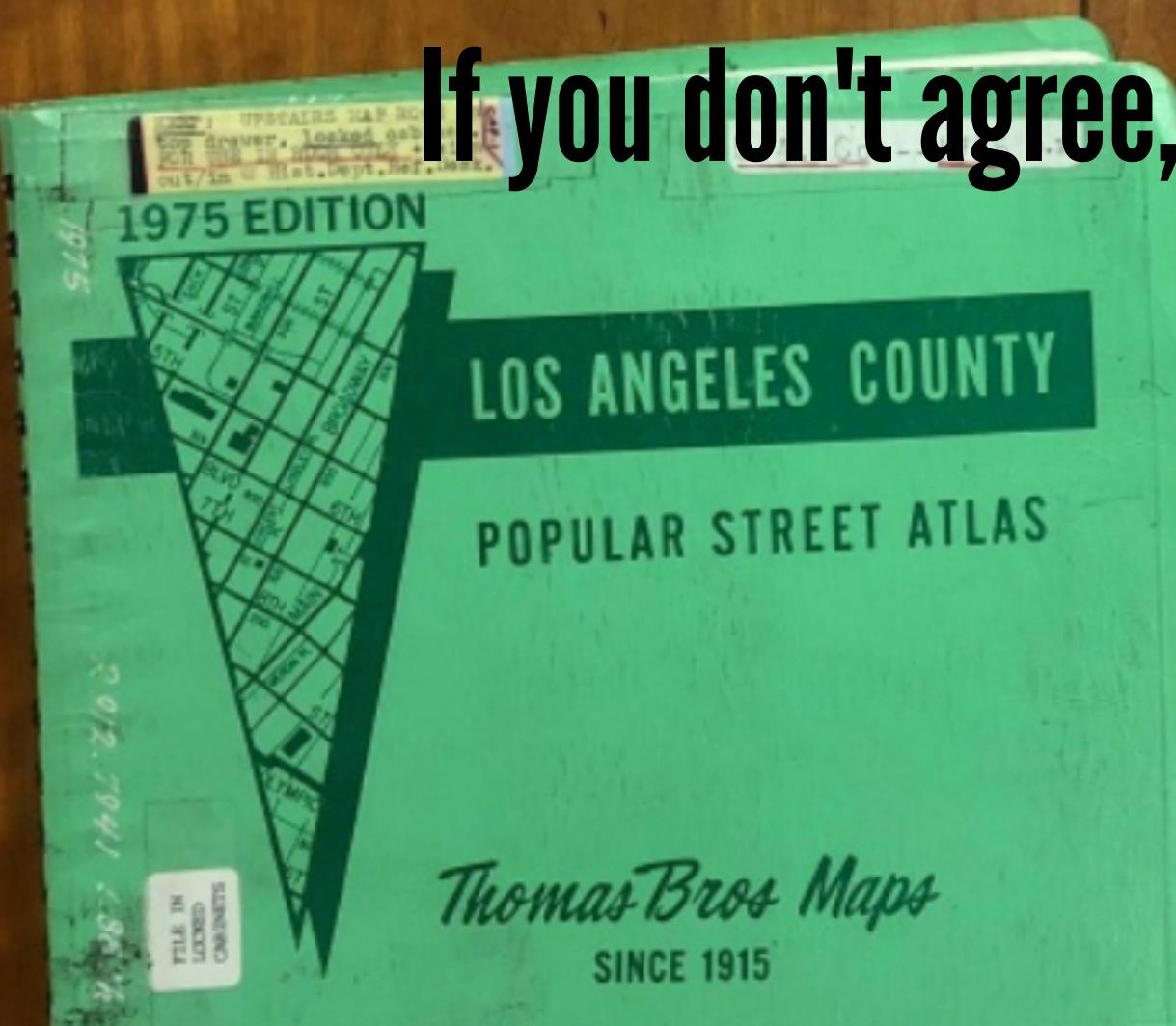
A dynamic scene of two vehicles racing on a dirt track. In the foreground, a dark brown horse is harnessed to a wooden carriage with large spoked wheels. The horse is in mid-stride, kicking up a cloud of dust. Behind it, a bright red sports car is also racing, its rear end slightly lifted from the ground. The background shows a long, straight dirt road stretching into the distance under a clear sky.

**TECHNICAL
CHANGE**



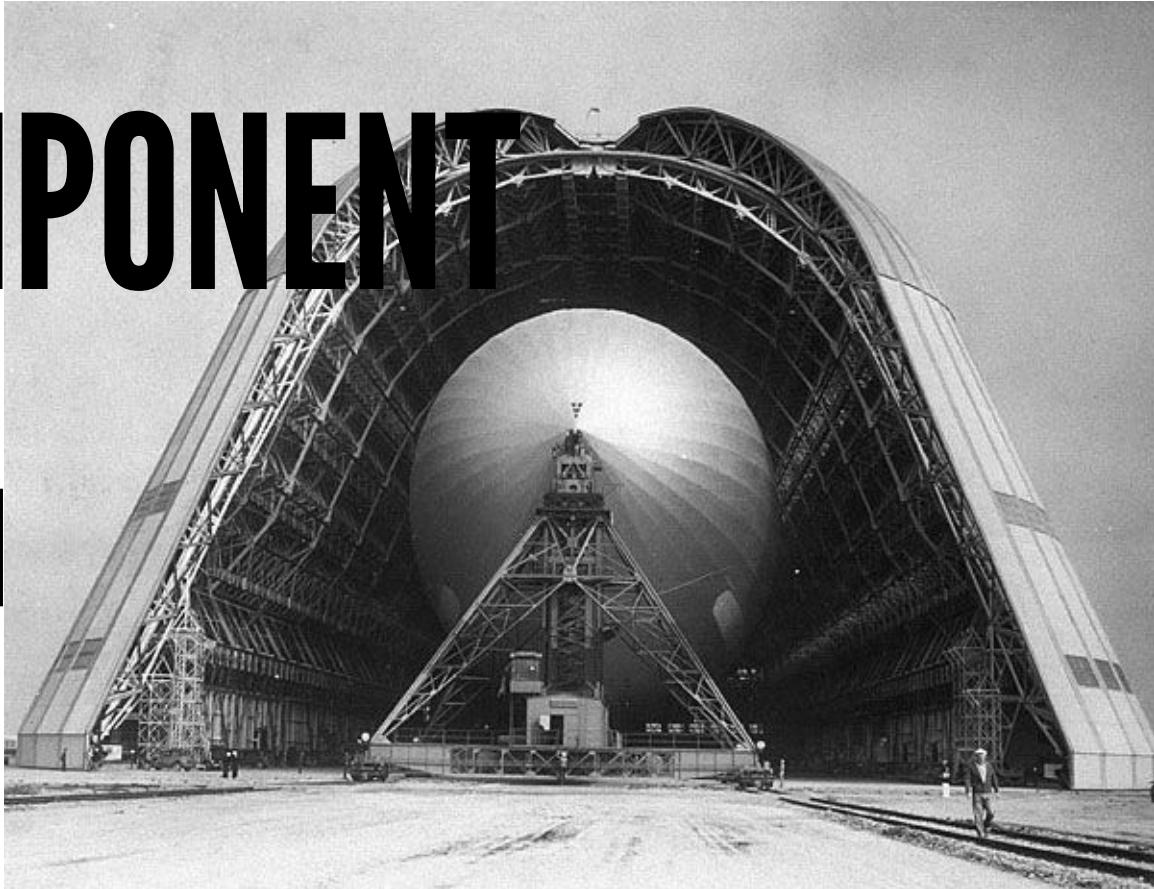
THE ONLY CONSTANT IS CHANGE

All change is disruptive, there will always be the leaders, the followers,
1943 1956 and the nay sayers.



THE HUMAN COMPONENT

Moffett Field

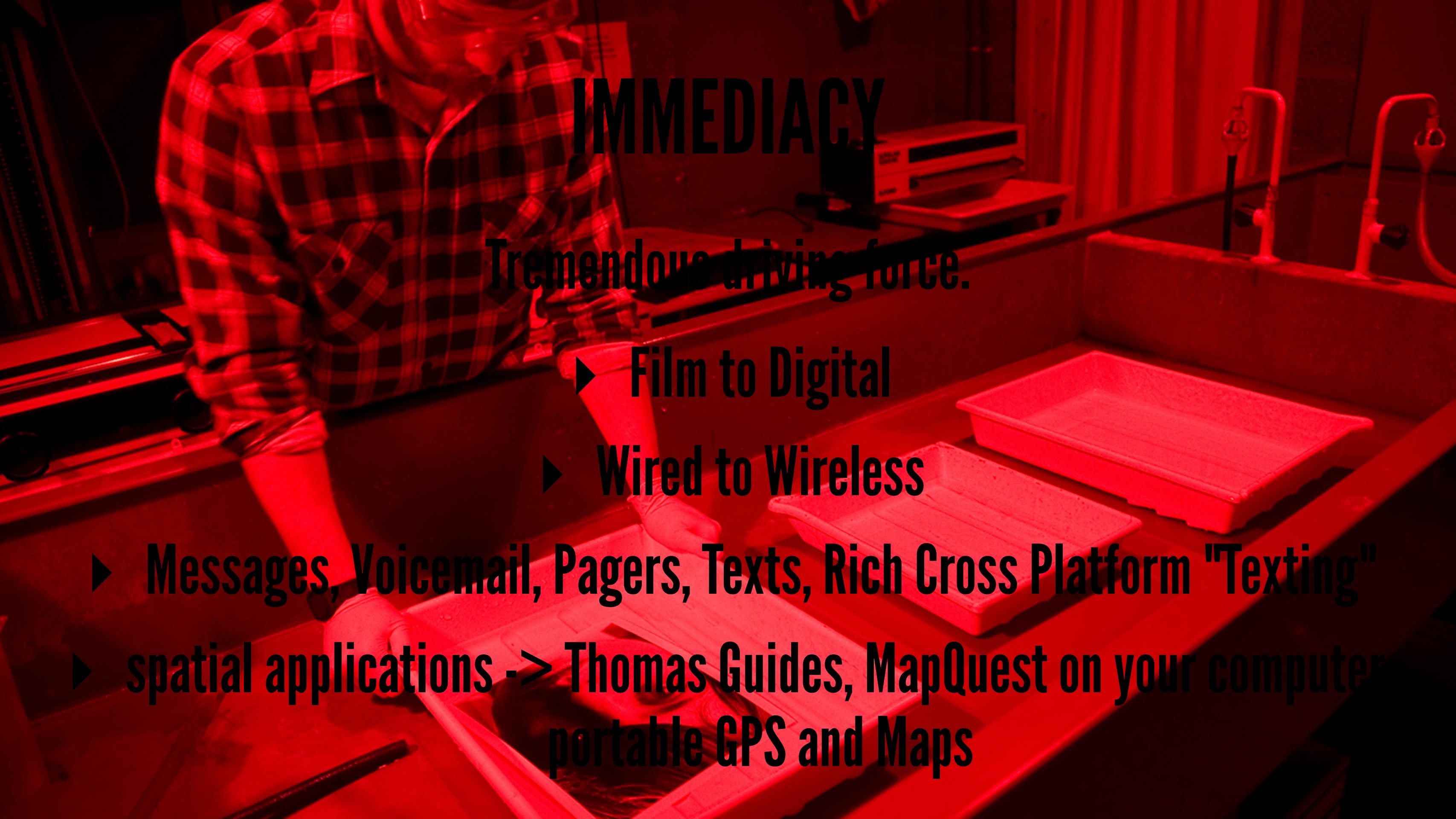


THE HUMAN COMPONENT

I'll focus on Technical Change but it is important to remember that technical change often leads to organizational change.

Often that is the most challenging.

- Stanford Business School
- Ames Research Center at Moffett Field
- JPL

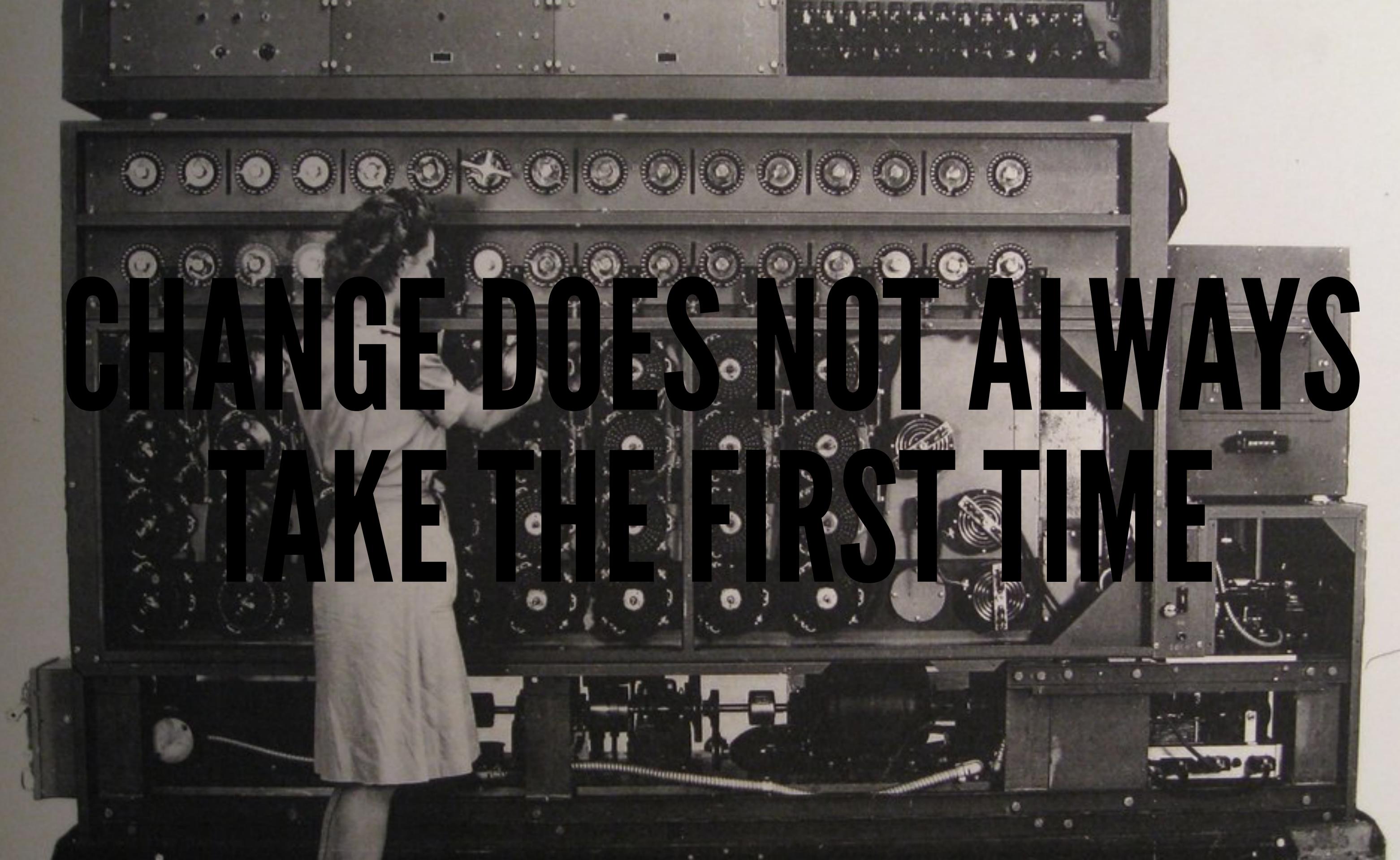
A person wearing a plaid shirt is shown from the waist up, operating a complex industrial machine. The machine has numerous black belts, pulleys, and metal components. The background is dark and out of focus.

IMMEDIACY

Tremendous driving force.

- ▶ Film to Digital
- ▶ Wired to Wireless
- ▶ Messages, Voicemail, Pagers, Texts, Rich Cross Platform "Texting"
- ▶ spatial applications -> Thomas Guides, MapQuest on your computer
portable GPS and Maps

**CHANGE DOES NOT ALWAYS
TAKE THE FIRST TIME**



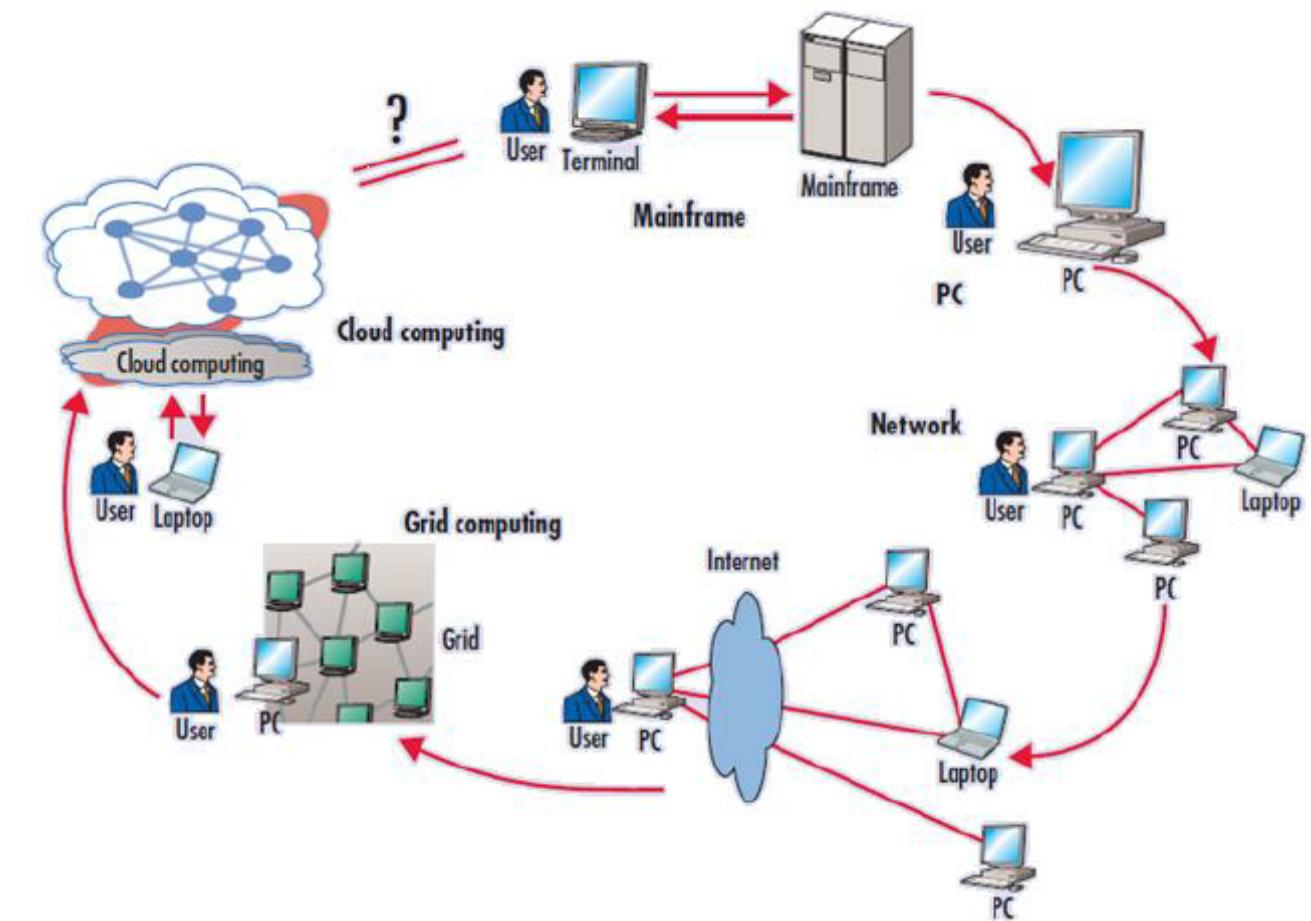
NOT ONLY DISRUPTIVE BUT CYCLICAL

The Pendulum

- Mainframes > PCs > Cloud > Table (college freshman talked into tablet rather than a laptop)

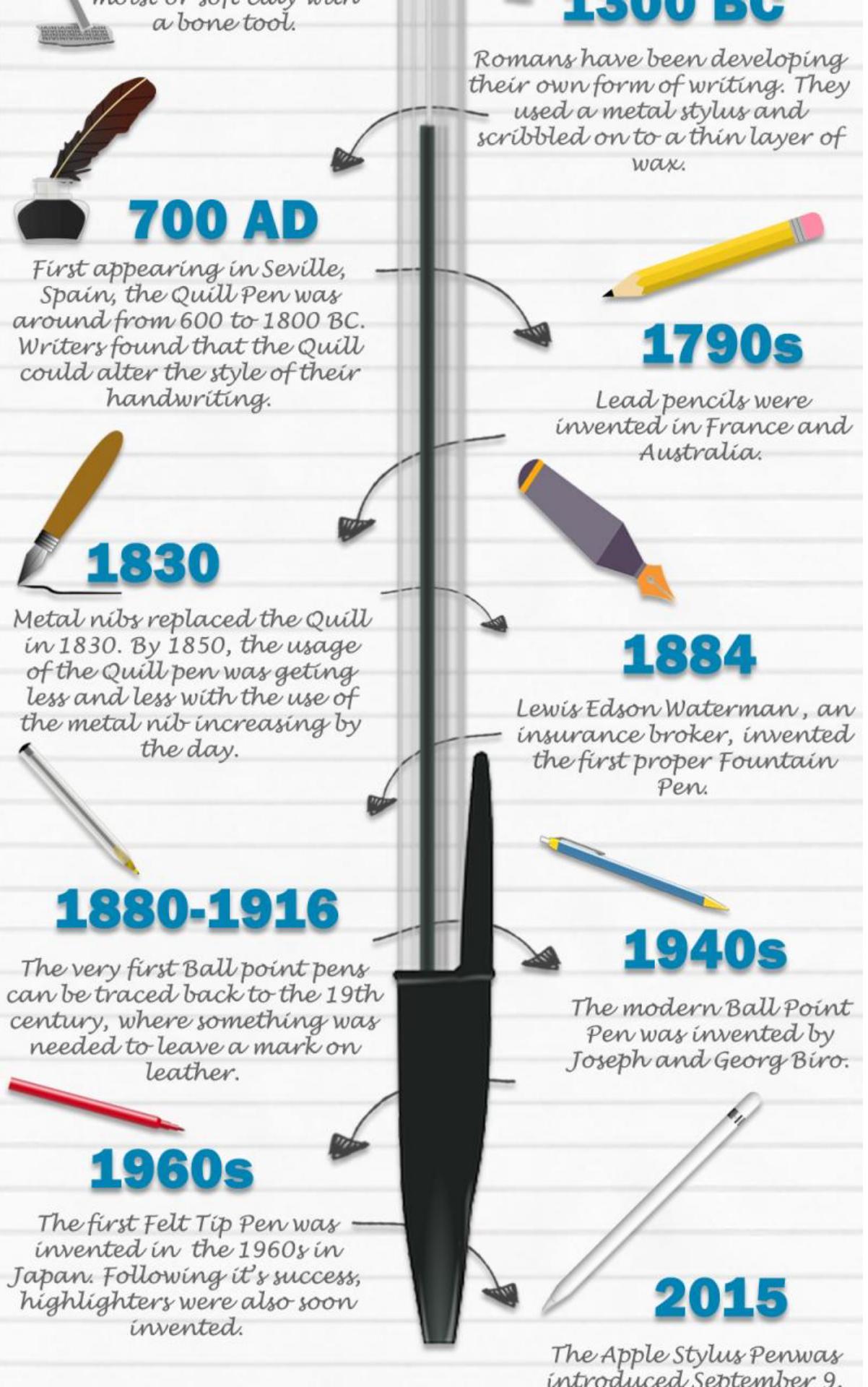
Centralized/distributed

- LateX Word Markdown



MANAGING CHANGE & ADOPTION

In your career this will be a challenge both as an individual and very likely in your chosen field.



TOOLS

THE BIGGER PICTURE

- ▶ These are tools and they can't substitute excellence in your discipline...they can help tremendously
 - ▶ Be open to technical change
 - ▶ Up to you to use them to make your life easier or not

Be open to it, see if it makes your job easier, is it its time?

DISCUSSION