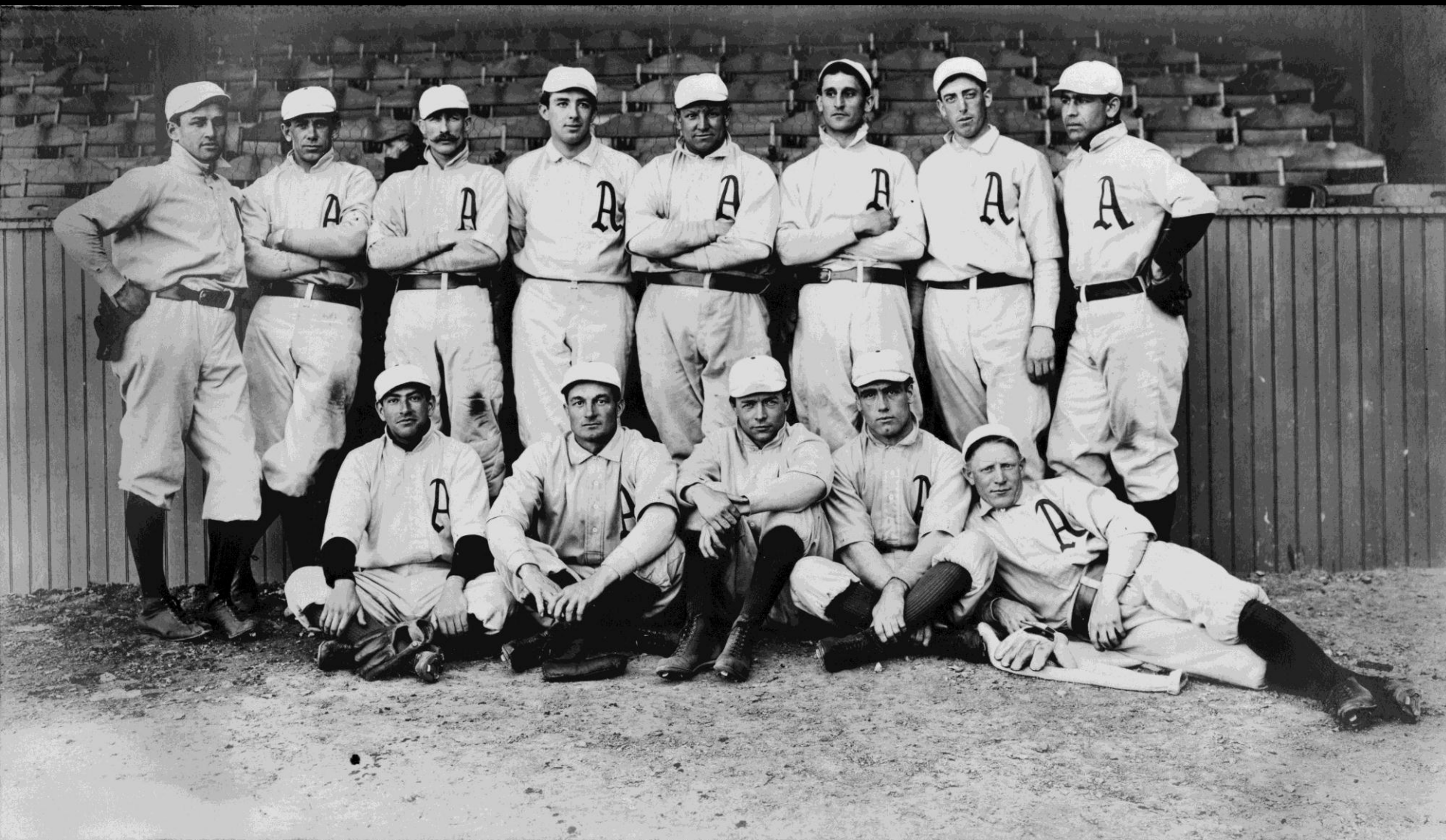


# Sociometric Badges

Using Wearable Sensors to Change Management

Ben Waber

sociometric  
solutions 









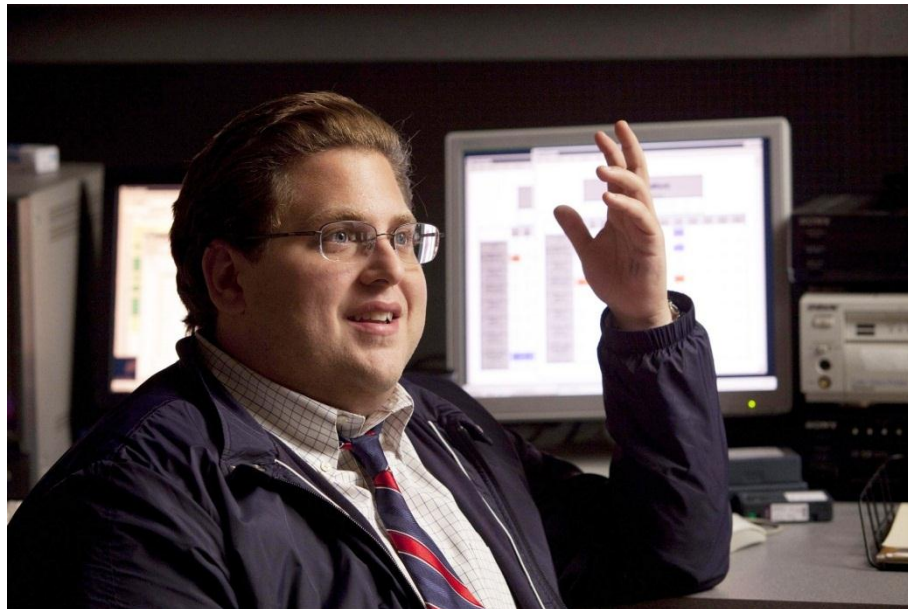


# MONEYBALL

IN THEATERS SEPTEMBER 23

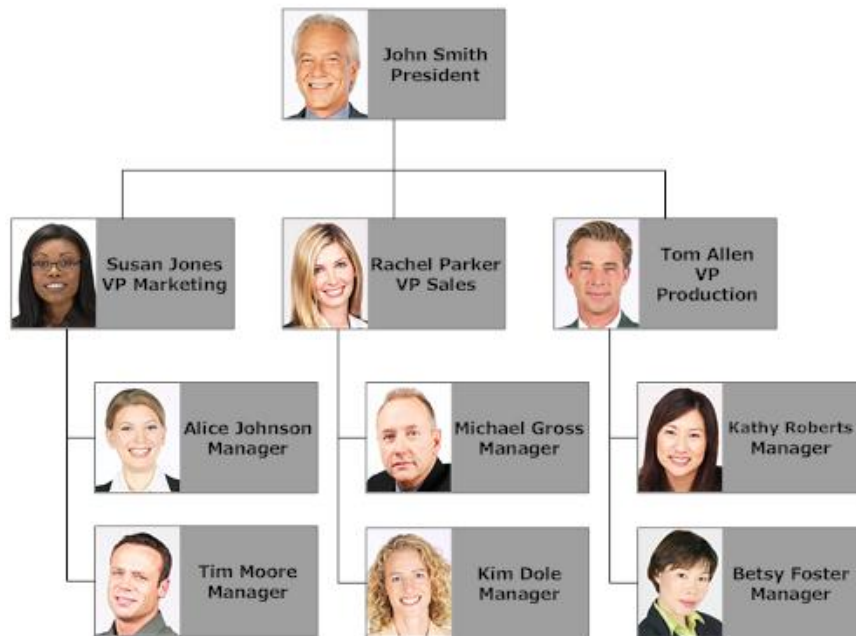


VS.



Why is  
organizational  
change hard?





VS.



# Solution





# A Regular Day









# Generating Data

# Speaking Time





# Turn Taking



# Interactivity





# Posture





# Energy Level



# Digital Data



9 AM



10 AM



11 AM



12 PM



1 PM



2 PM



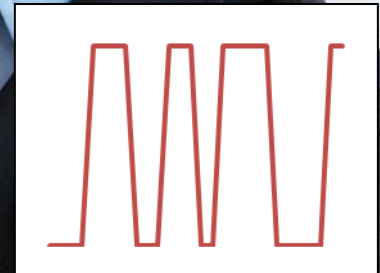
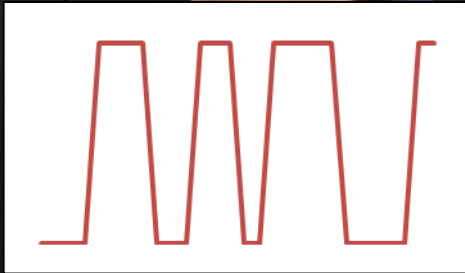
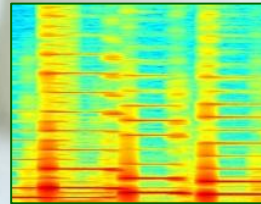
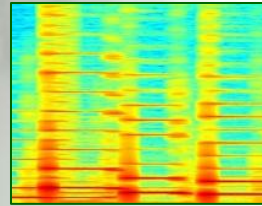


## Tone of Voice

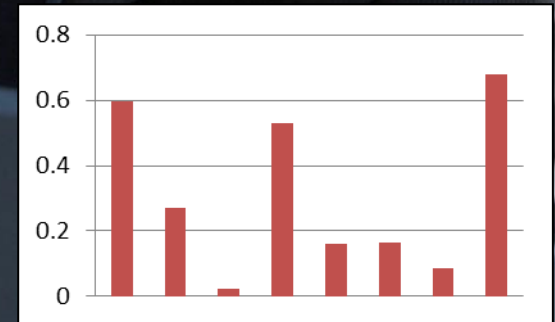
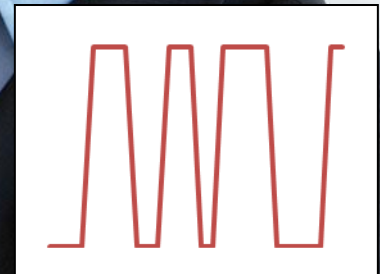
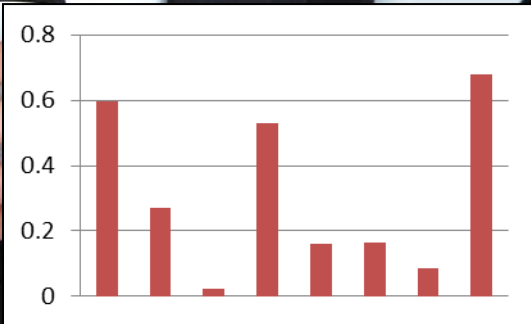
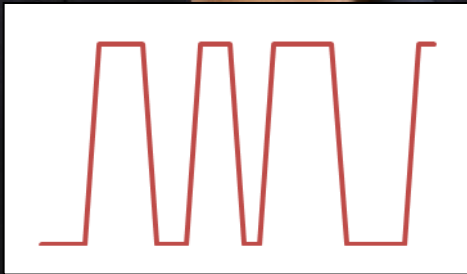




# Speaking Speed

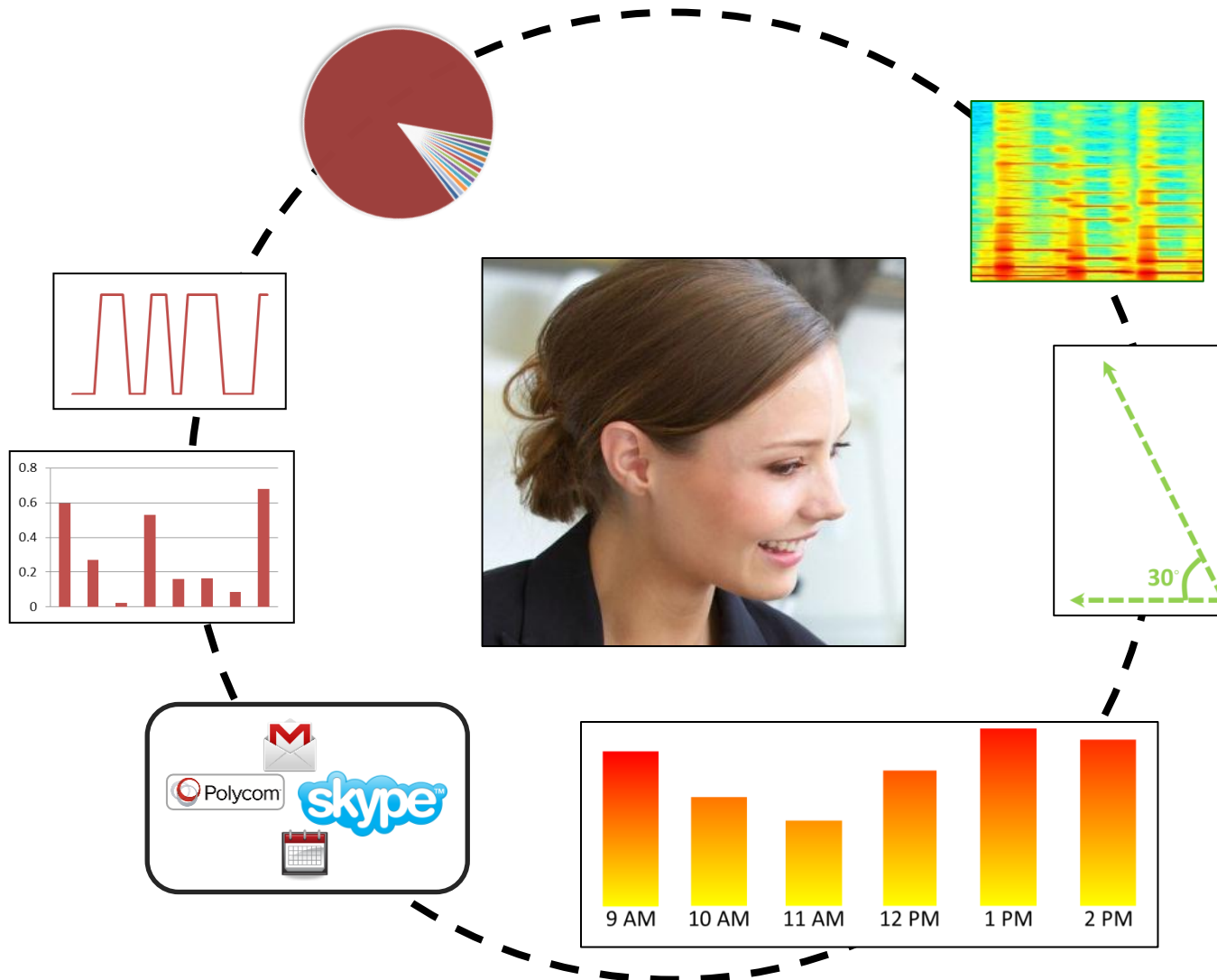


Volume





# Individuals

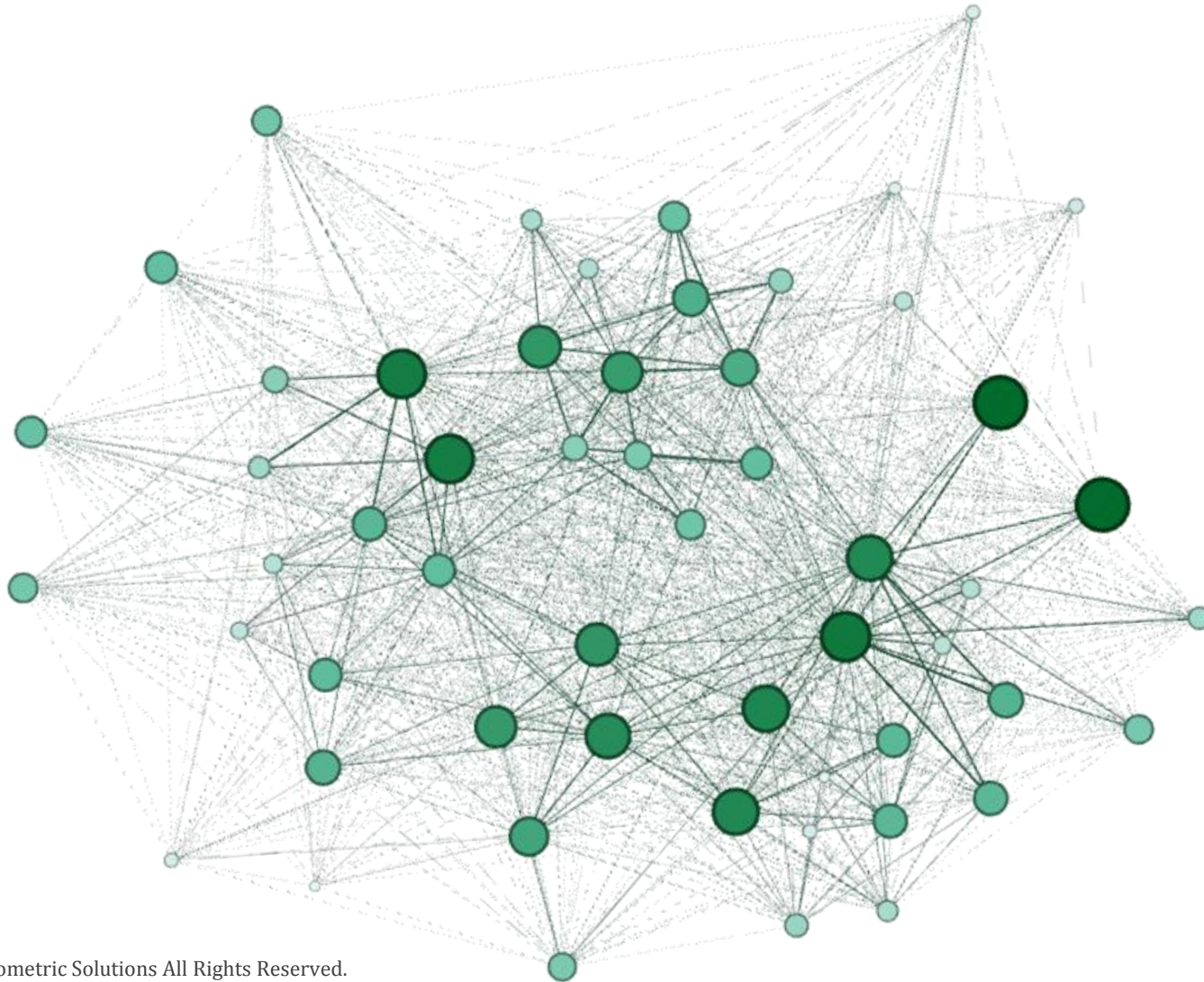




# Teams



# Organizations



# Sensing Technology



behavior

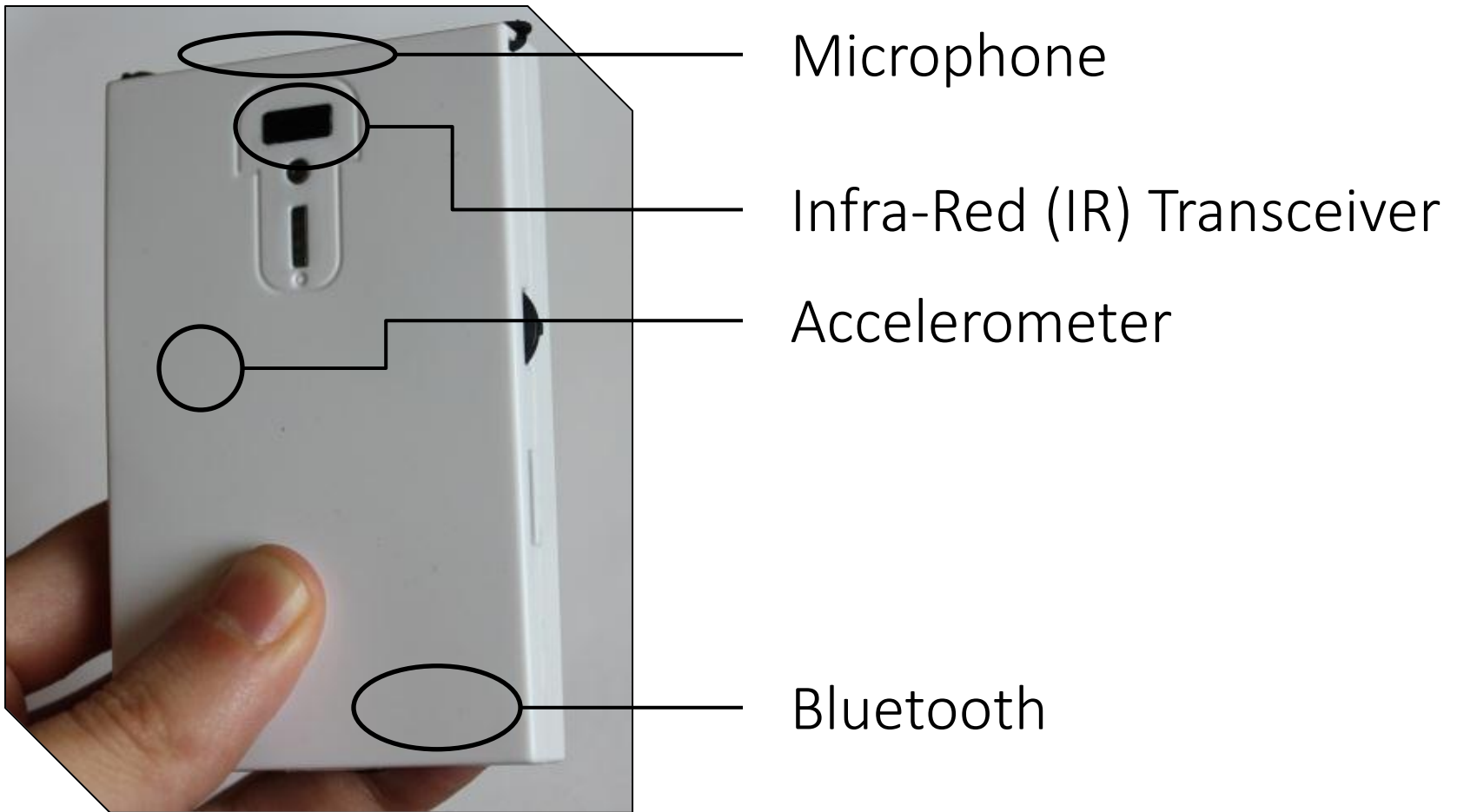
1997



2013



# Sociometric Badge



# Real Measures

## Engagement



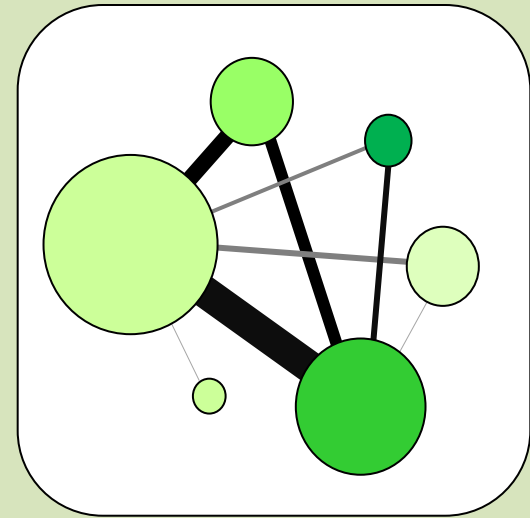
*Measure*

Network cohesion

*Use Case Example*

Major IT Firm

## Leadership



*Measure*

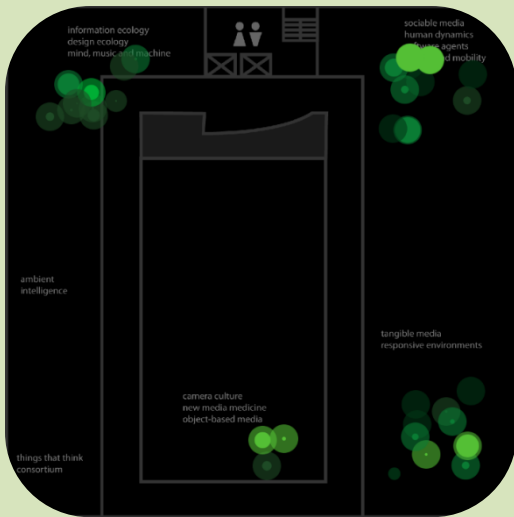
Communication diversity and style

*Use Case Example*

European Bank

# Real Measures

## Space Utilization



Measure

Location + communication

Use Case Example

Bank of America Call Center

## Creativity



Measure

Movement and communication

Use Case Example

R&D Laboratories



# Experience

- Deployed in dozens of companies in a variety of sectors
- Numerous awards



Technology Review Top 10  
Emerging Technologies



Harvard Business Review  
Top 10 Breakthrough Ideas

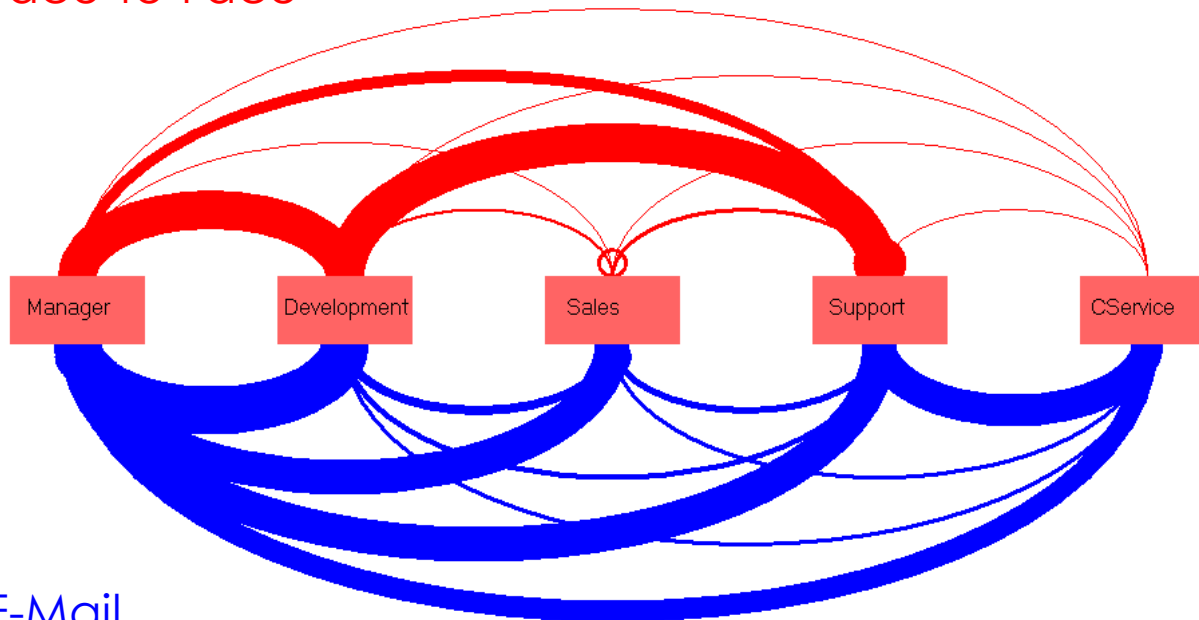
# Case Studies





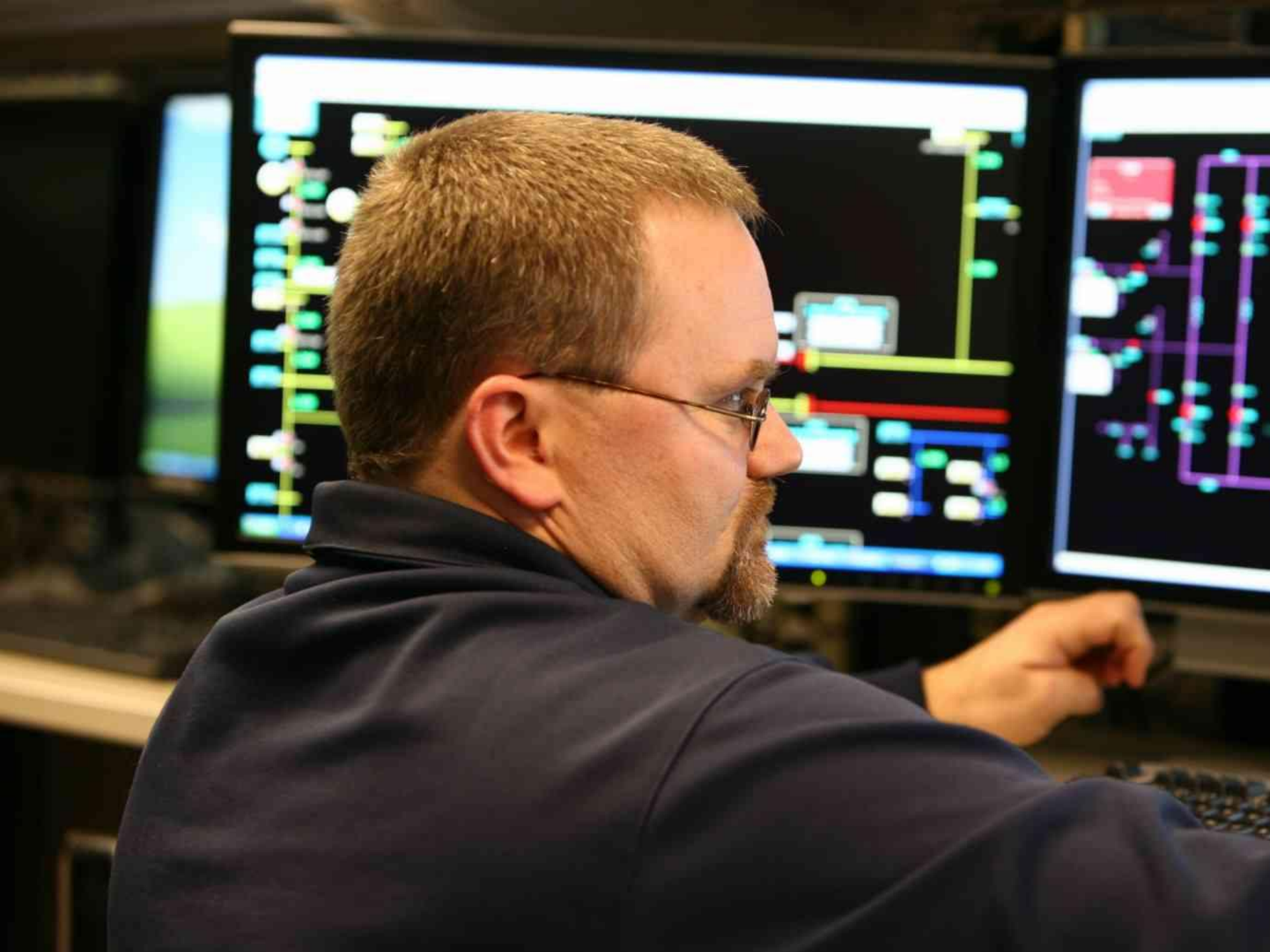
# German Bank

Face-to-Face



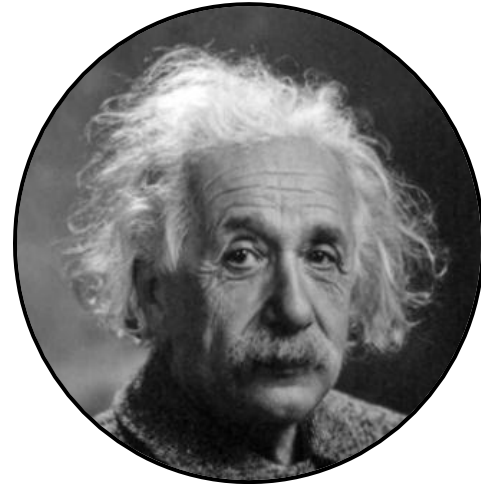
E-Mail

February 1



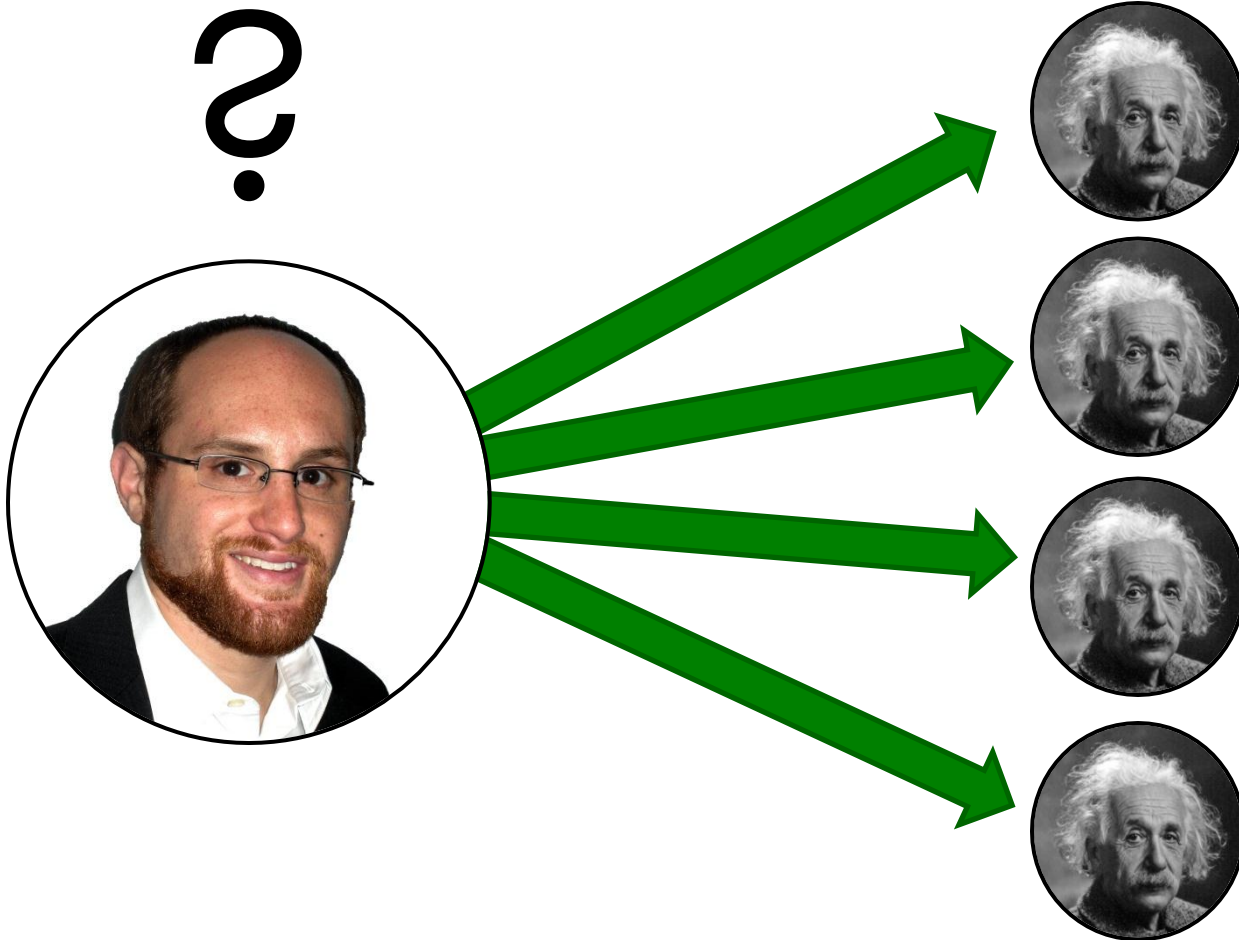
# Experts

?





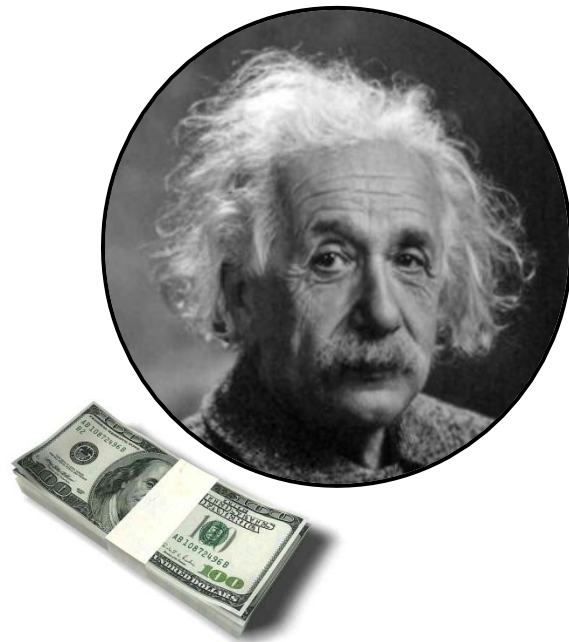
# Experts



# All About AI

- **Talk to AI**  
66% Reduction in Completion Time
- **AI's Productivity**  
About Average

# Expert Solution





# Expert Solution







# Phase 1 Results

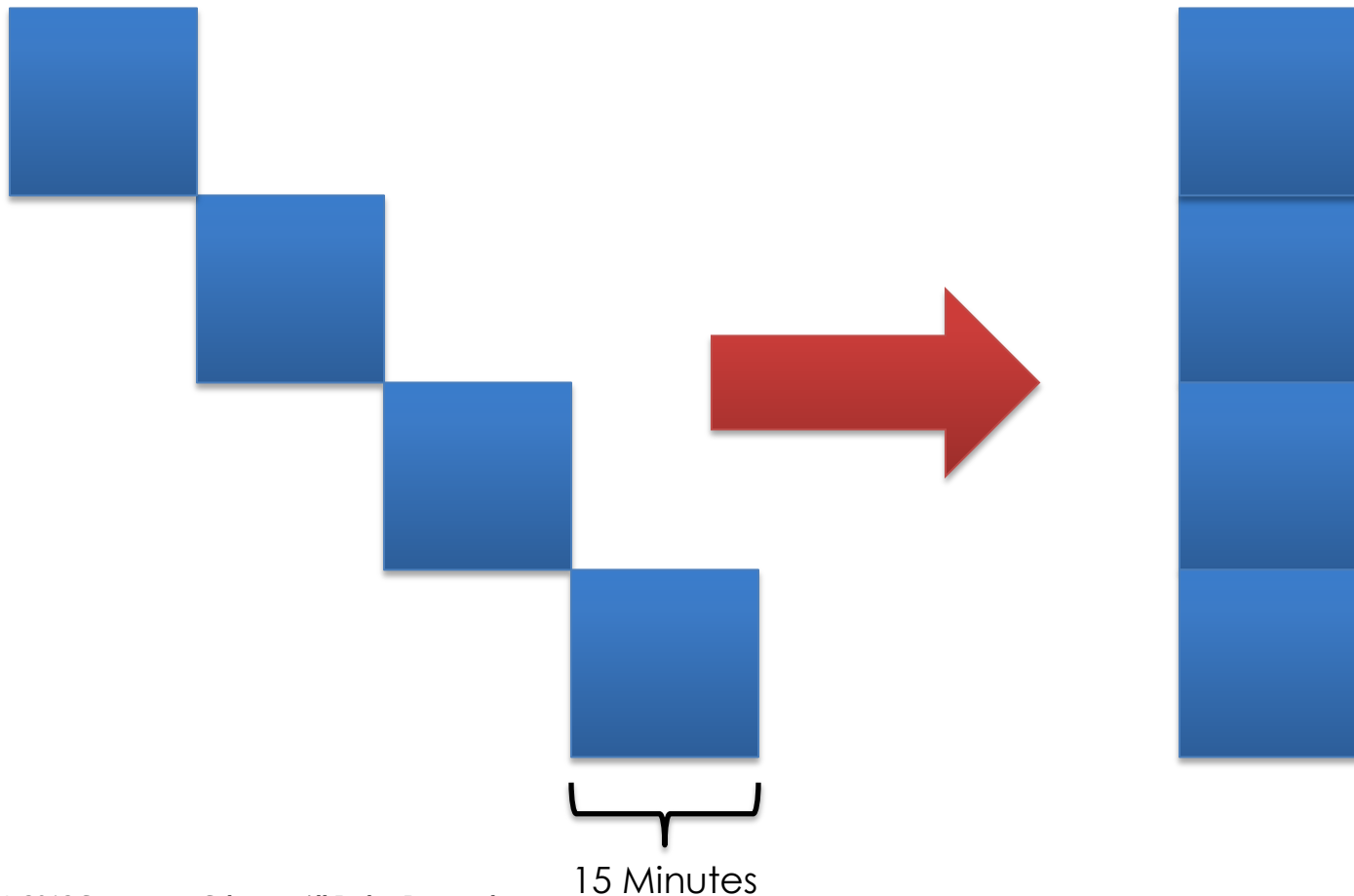
- Cohesion predicted productivity
  - The *opposite* of how call centers are managed
  - Engagement was unrelated to tenure and gender
- Engagement reduces stress
- Solution: change break structure



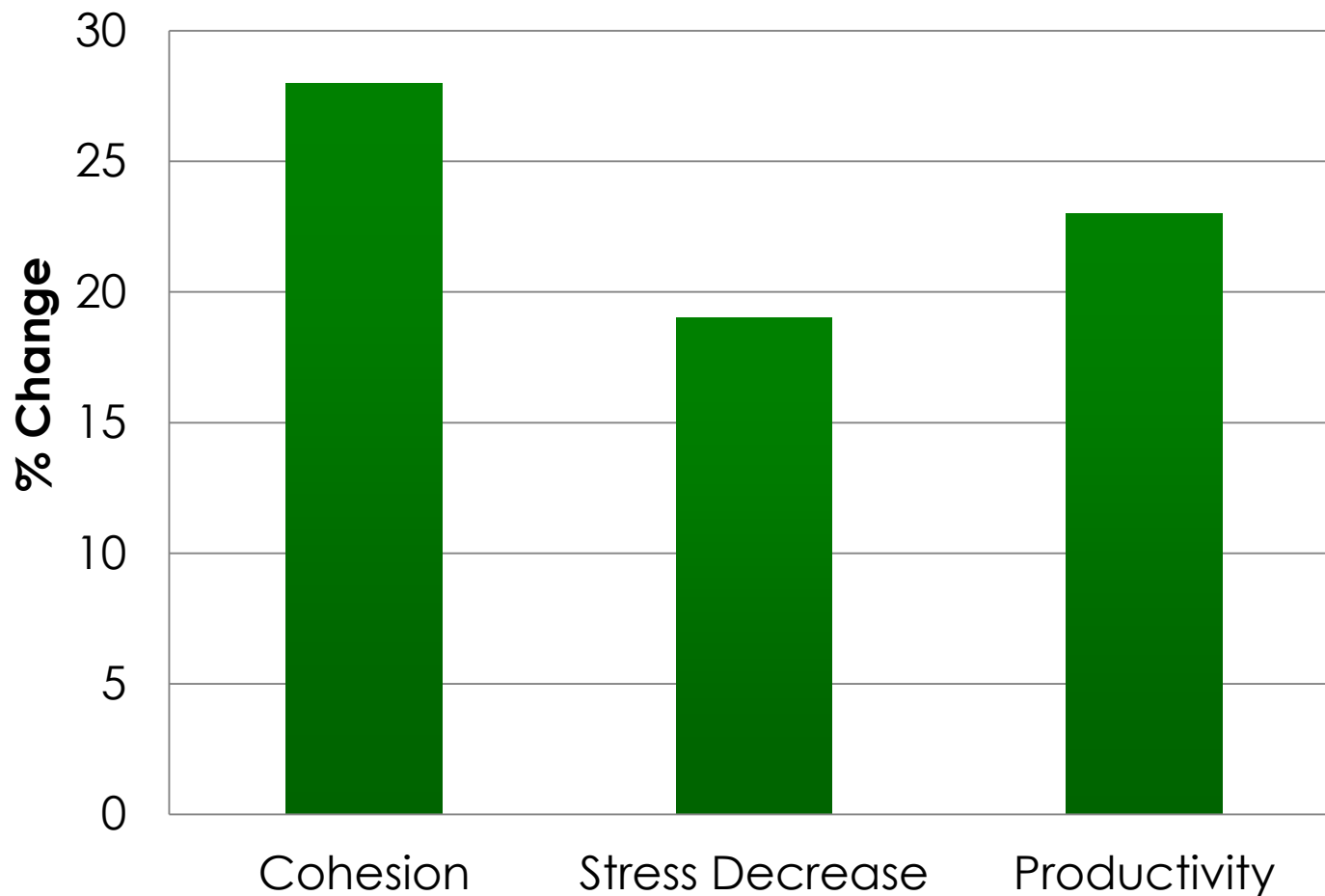
# Bank Call Center

Phase 1 Break Structure

Phase 2 Break Structure



# Phase 2 Results

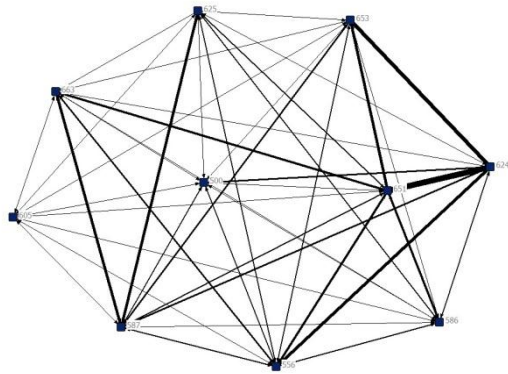


**\$15M/year**

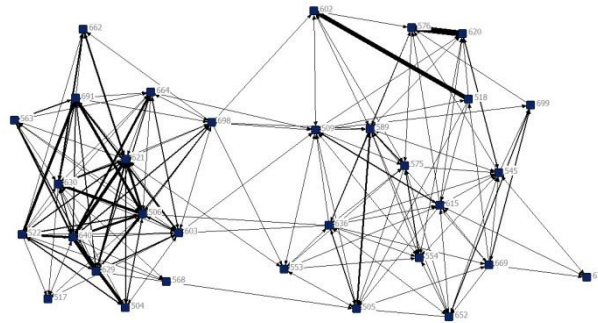




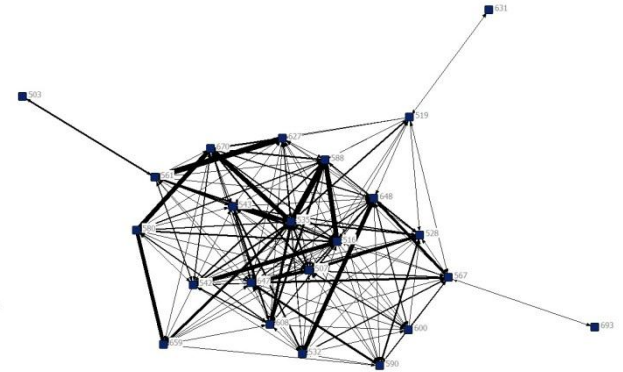
# Czech Bank



Branch 1



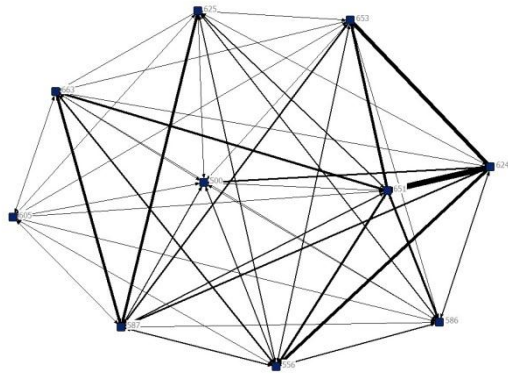
Branch 2



Branch 3

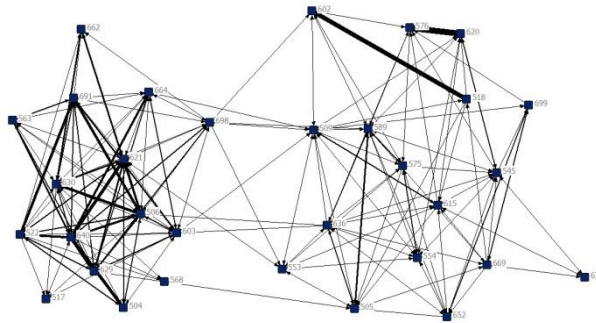
# Performance?

# Czech Bank



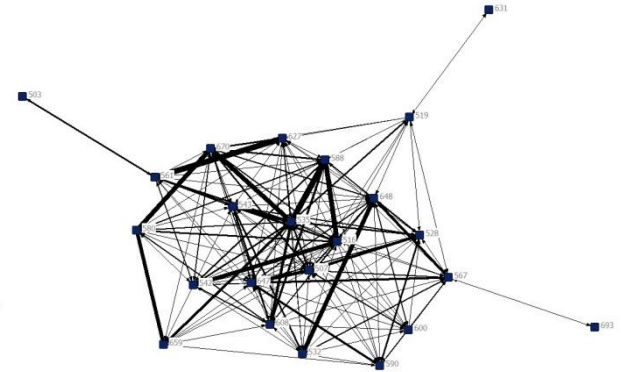
Branch 1

1



Branch 2

3



Branch 3

2



# Data and Disease

If you're sick, do  
you go to work?

A close-up portrait of actress Kate Winslet. She is holding a black mobile phone to her ear with her right hand. Her expression is one of intense focus or concern, with her eyes looking slightly off-camera. The lighting is dramatic, with strong highlights on her face and hand, and deep shadows elsewhere. The background is dark and textured.

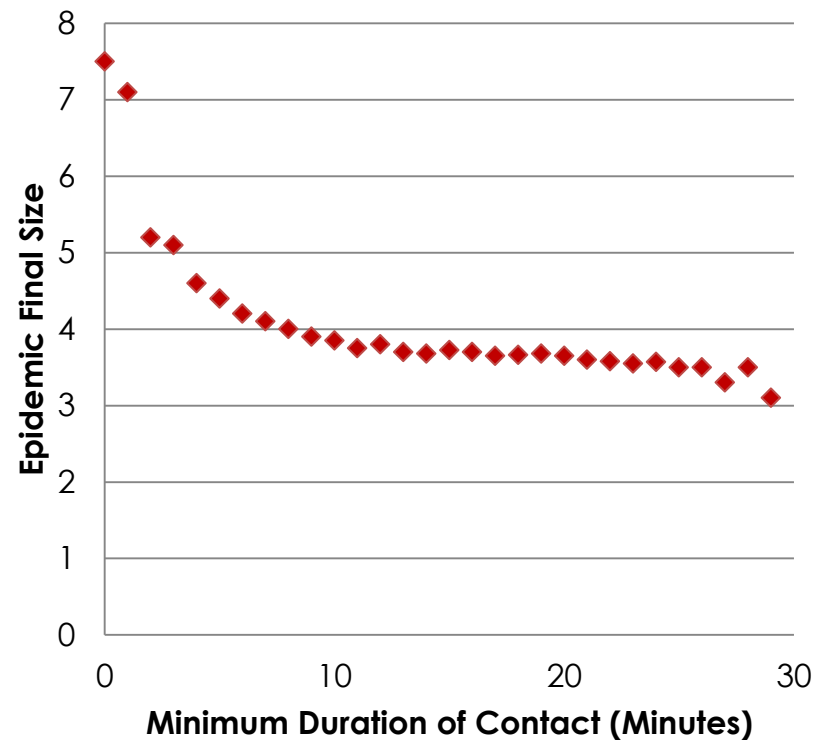
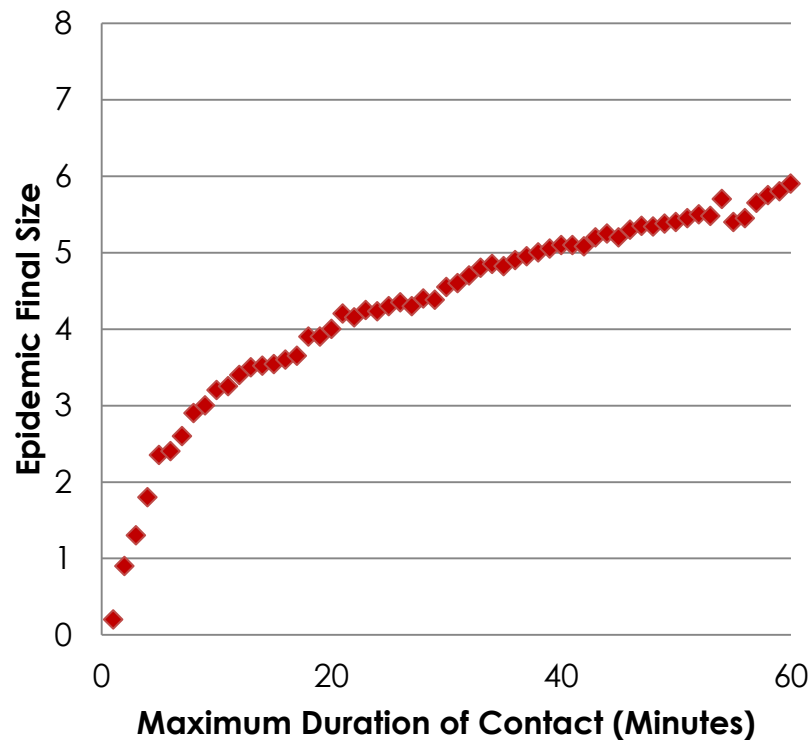
**DON'T TALK TO ANYONE.  
DON'T TOUCH ANYONE.**

**KATE WINSLET**  
**CONTAGION**

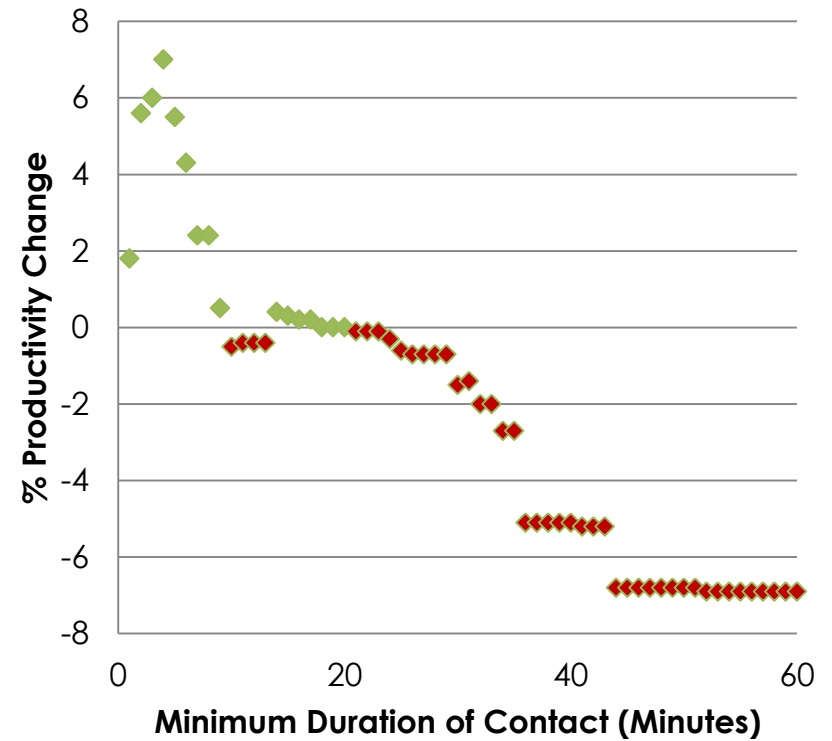
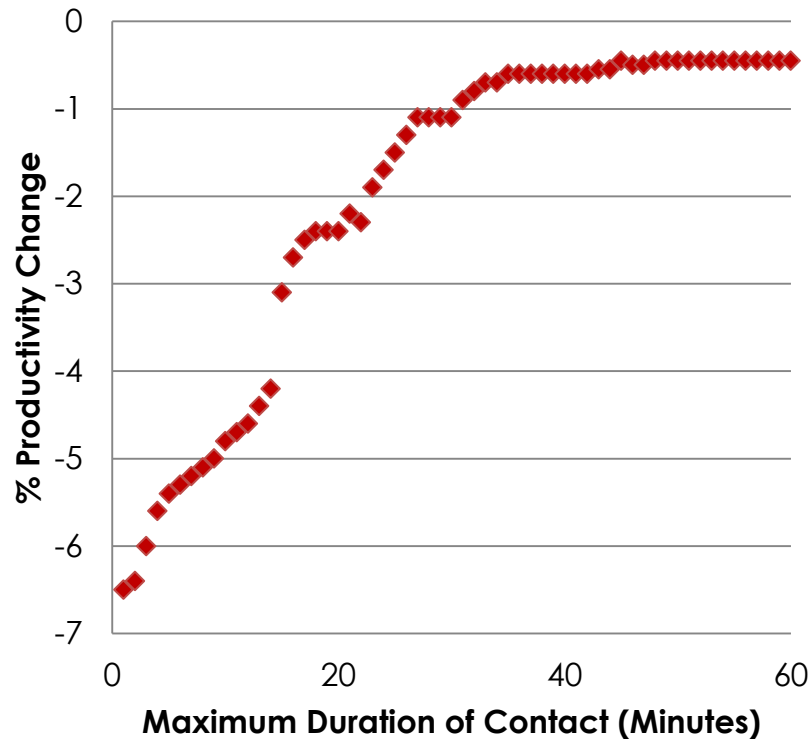


**\$30B/year**

# Epidemic Final Size



# Productivity





# Corporate Epidemiology

- Implications
  - Close office doors
  - Eliminate meetings?
  - Meeting days?
- New Interventions
  - Change seating arrangements

# Wrapping Up



















# Questions?

ben@socio-metric.com

