

A photograph of an astronaut in a white spacesuit standing on the moon's surface. The astronaut's helmet is reflective, showing the lunar landscape. The background is a dark, cratered lunar surface under a black sky.

Big Data Moonshots & Ground Control

Joe Hellerstein, CEO Trifacta
Tutti Taygerly, VP UX Trifacta

A photograph of two men in an office setting. The man on the left is wearing glasses and a dark hoodie, looking towards the right. The man on the right is bald and wearing a blue shirt, looking at a computer monitor. In the background, another monitor displays a dashboard with various charts and graphs. The text "Data People: This is our time" is overlaid in white on an orange background in the center of the image.

Data People:
This is our time

"All the News
That's Fit to Print"

The New York Times

LATE CITY EDITION

Weather: Partly sunny today; clear tonight. High: 85; low: 65. Tomorrow: Partly sunny; high: 85-90; low: 65-70. Tuesday: Partly sunny; high: 85-90; low: 65-70. Wednesday: Partly sunny; high: 85-90; low: 65-70. Thursday: Partly sunny; high: 85-90; low: 65-70. Friday: Partly sunny; high: 85-90; low: 65-70. Saturday: Partly sunny; high: 85-90; low: 65-70. Sunday: Partly sunny; high: 85-90; low: 65-70.

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NEW YORK, MONDAY, JULY 21, 1969

10 CENTS

MEN WALK ON MOON

ASTRONAUTS LAND ON PLAIN; COLLECT ROCKS, PLANT FLAG

Voice From Moon: 'Eagle Has Landed'

EAGLE (the lunar module) Houston, Tranquility base here. The Eagle has landed.

HOUSTON: Roger, Tranquility, we copy you on the ground. You're got a bunch of guys about to turn blue. We're breathing again. Thanks a lot.

TRANQUILITY BASE: Thank you.

HOUSTON: You're looking good here.

TRANQUILITY BASE: A very smooth touchdown.

HOUSTON: Roger, you are star for T1. (The first step in the lunar operation.) Over.

TRANQUILITY BASE: Roger. Star for T1.

HOUSTON: Roger and we see you venting 'em on.

TRANQUILITY BASE: Roger.

COLUMBIA (the command and service module) How do you read me?

HOUSTON: Columbia, we see landed Tranquility base. Eagle is at Tranquility. I read you five to. Over.

COLUMBIA: Yes, I heard the whole thing.

HOUSTON: Well, it's a good show.

COLUMBIA: Fantastic.

TRANQUILITY BASE: I2 second that.

APOLLO CONTROL: The next major stay-on stay will be for the T2 event. That is at 21 minutes 28 seconds after initiation of power descent.

COLUMBIA: Up telemetry command read to re-verify on high gain.



Neil A. Armstrong moves away from the leg of the landing craft after taking the first step on the surface of the moon.

A Powdery Surface Is Closely Explored

By JOHN HUBLE WELFORD

Special to The New York Times

HOUSTON, Monday, July 21—Men have landed and walked on the moon.

Two Americans, astronauts of Apollo 11, started their fragile four-legged lunar module softly and smoothly to the lunar landing yesterday at 4:17:40 P.M. Eastern daylight time.

Neil A. Armstrong, the 38-year-old civilian commander, walked to earth and the mission control room here.

"Houston, Tranquility base here. The Eagle has landed."

The first men to reach the moon—Mr. Armstrong and his captain, Col. Edwin S. Aldrin Jr. of the Air Force—brought their ship to rest on a level, rock-strewn plain near the southwestern shore of the old Sea of Tranquility.

About six and a half hours later, Mr. Armstrong opened the landing craft's hatch, stepped slowly down the ladder and declared as he planted the first human footprint on the lunar crust:

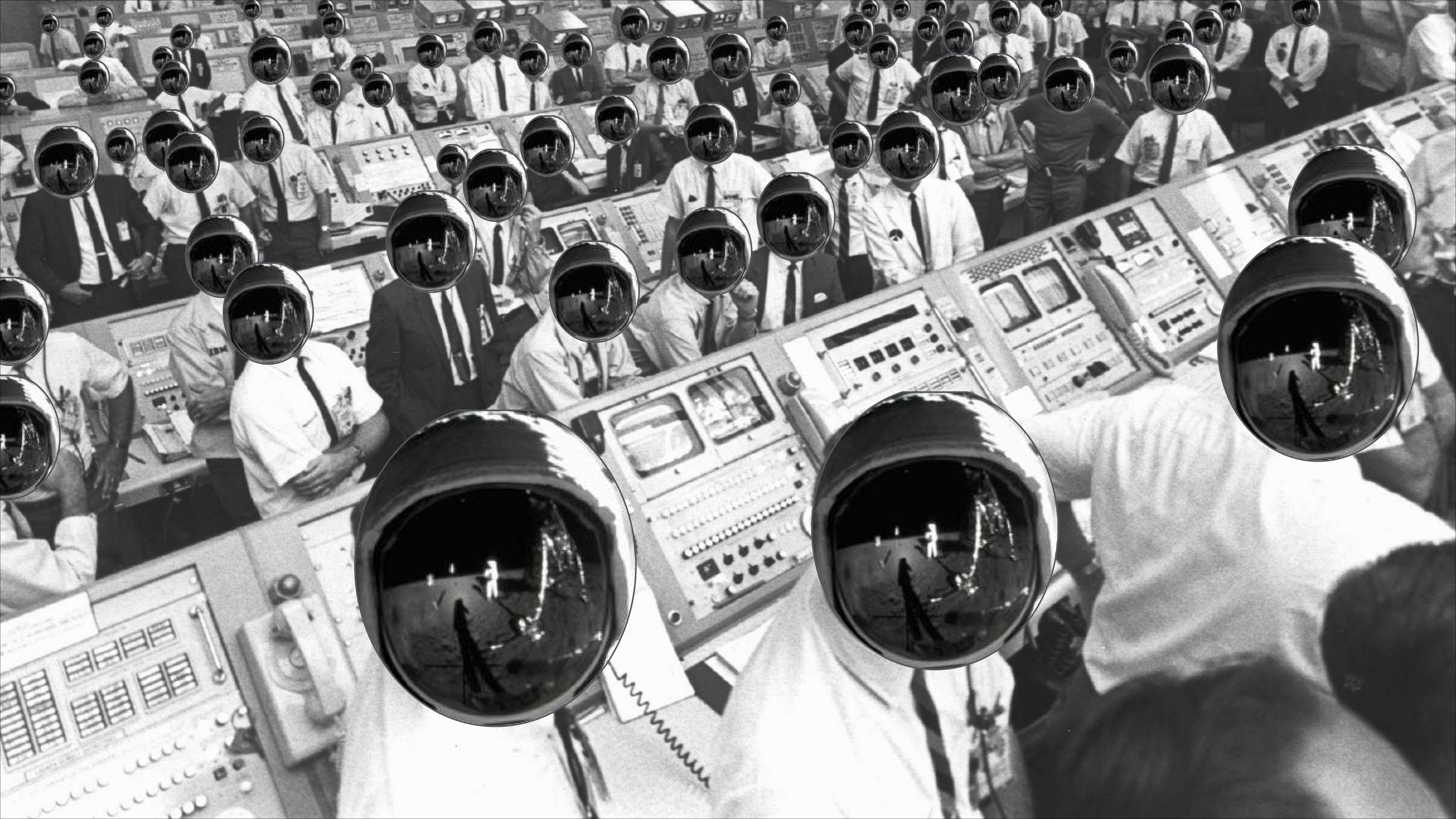
"That's one small step for man, one giant leap for mankind."

His first step on the moon came at 10:56:20 P.M. as a television camera outside the craft transmitted his every move to an awed and excited audience of hundreds of millions of people on earth.

Tentative Steps Test Fail

Mr. Armstrong's initial steps were tentative tests of the lunar soil's firmness and of his ability to move about







Moonshot. Grounded.

80%

of the work in
any data project
is cleaning the data.

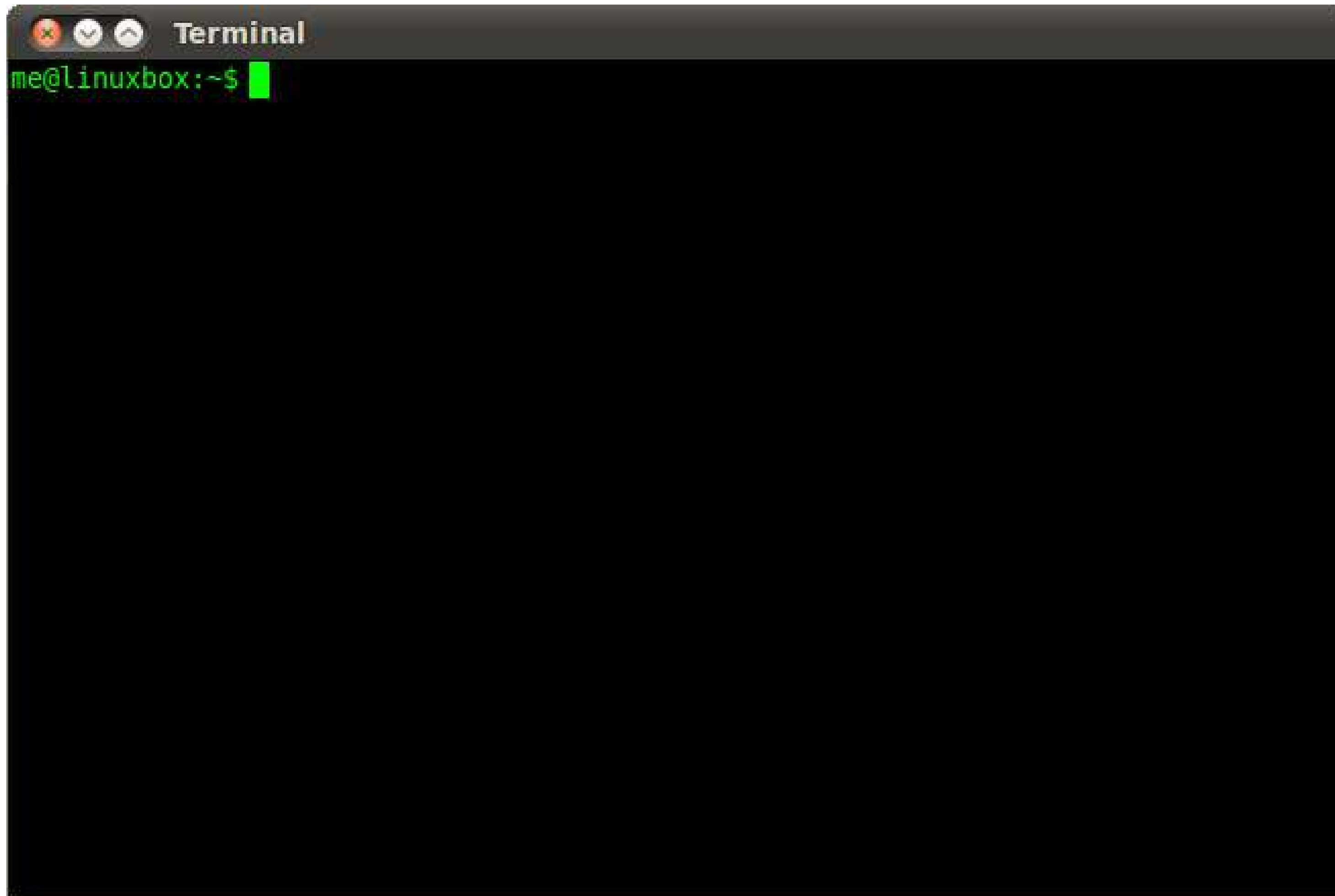
DJ PATIL

A black and white photograph of a complex, Rube Goldberg-style contraption. The scene is filled with various mechanical and everyday objects. On the left, a hand in a boxing glove is positioned as if to throw a bowling ball. A birdcage hangs from a pulley system. A large wooden lever is supported by a central post. To the right, a light bulb is suspended by a string, and a hand is seen pulling a lever. A clock is mounted on a wooden barrel. The overall composition is a chaotic yet intricate assembly of parts, symbolizing over-engineering or unnecessary complexity.

Automation is not
the solution

Achieving Liftoff Takes People





Workbook1

Search in Sheet

Home Layout Tables Charts SmartArt Formulas Data Review

Edit Font Alignment Number Format Cells Themes

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Sheet1 +

Normal View Ready

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Designing For Humans



Not Designing for SciFi

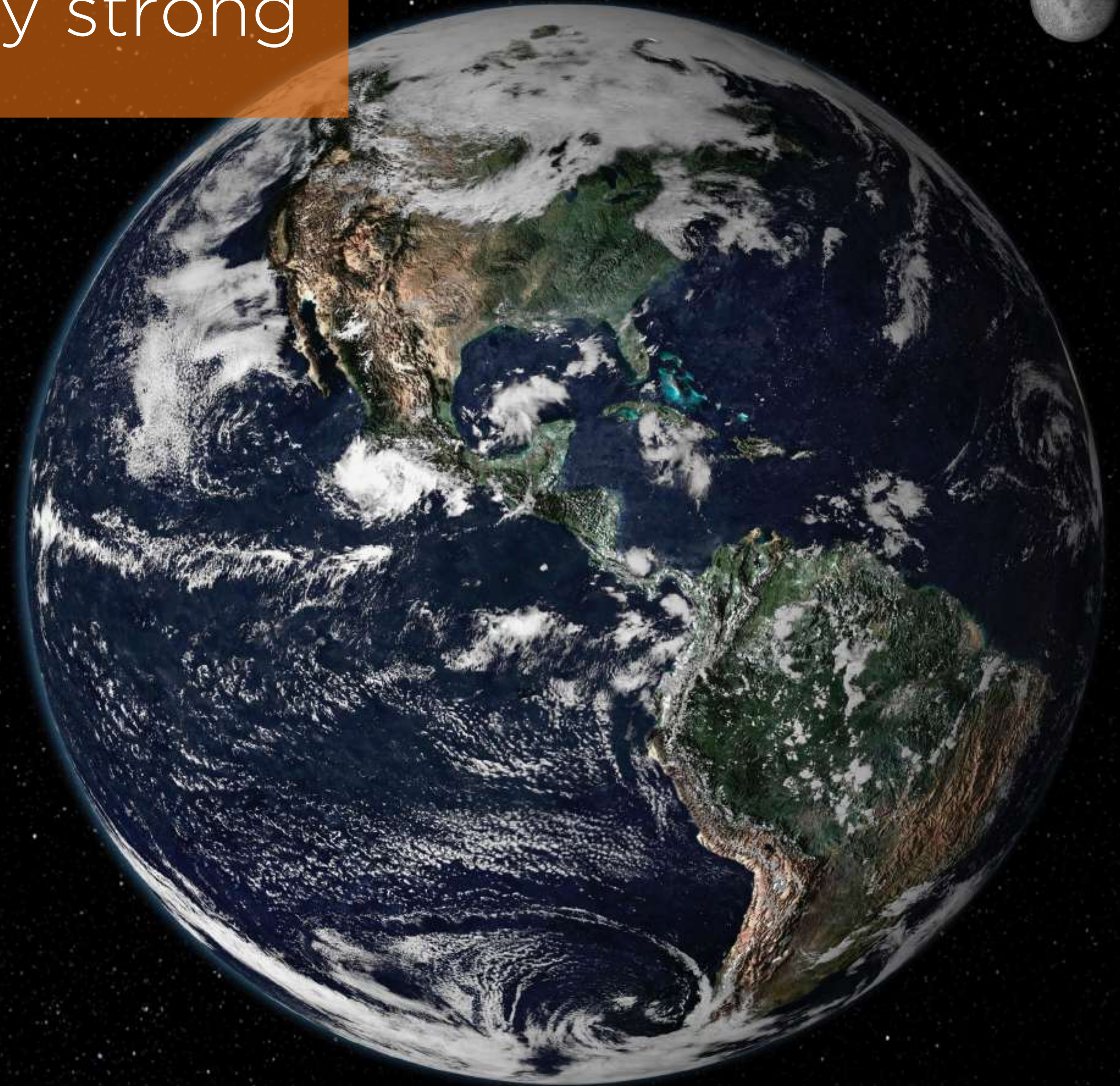
Design Principles

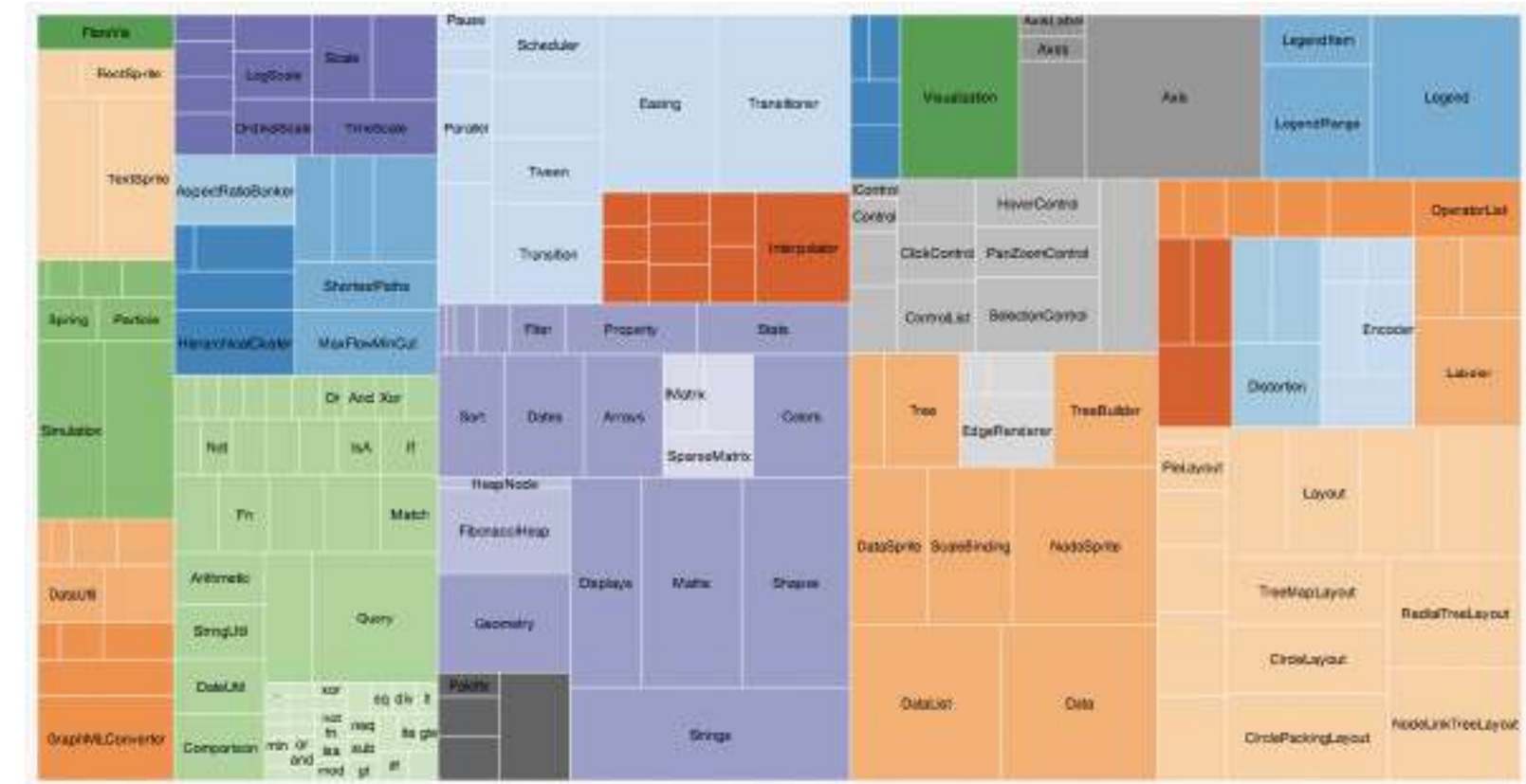
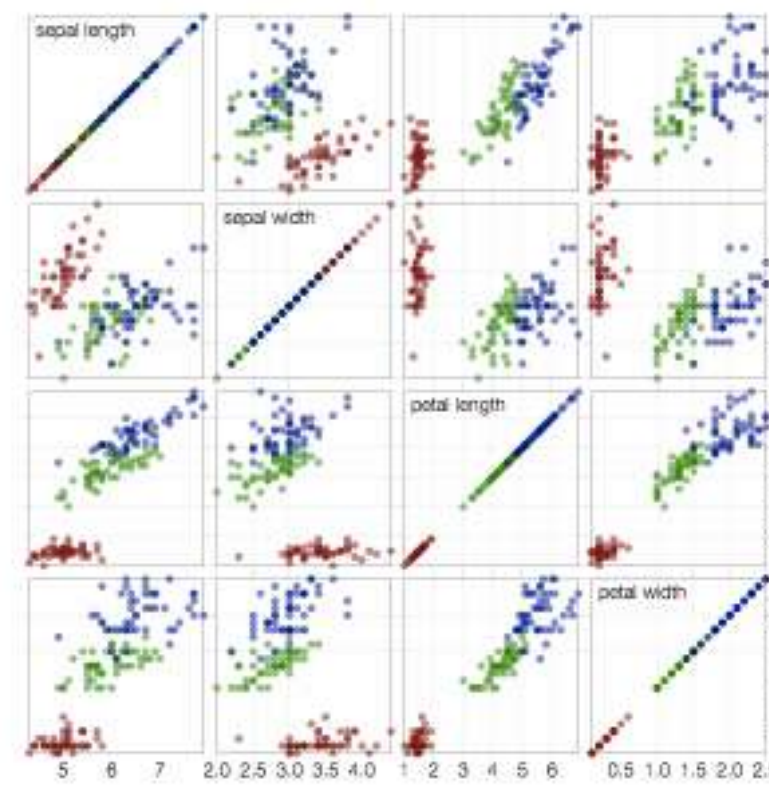
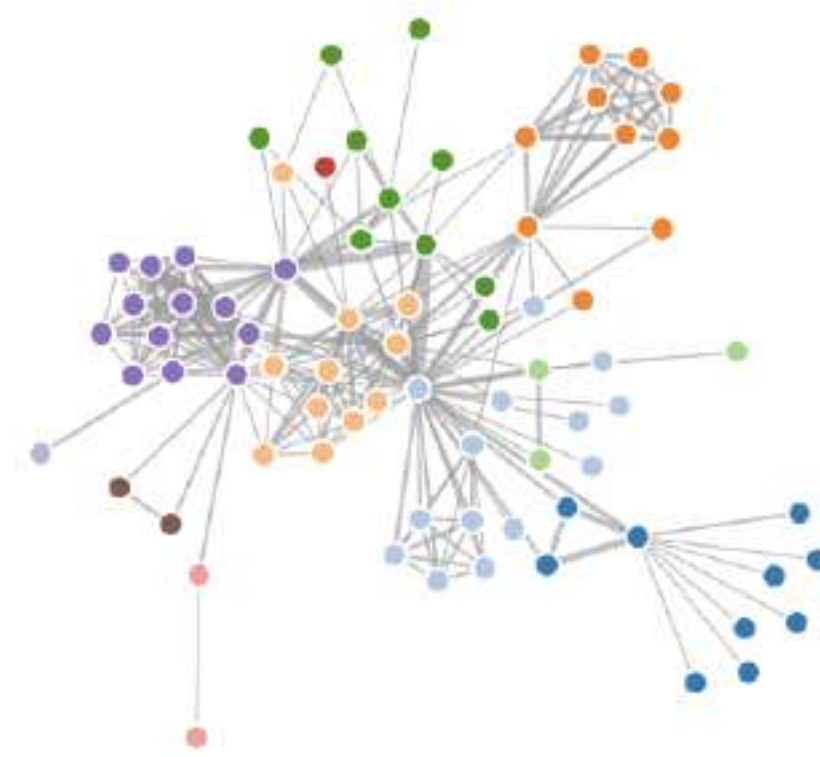
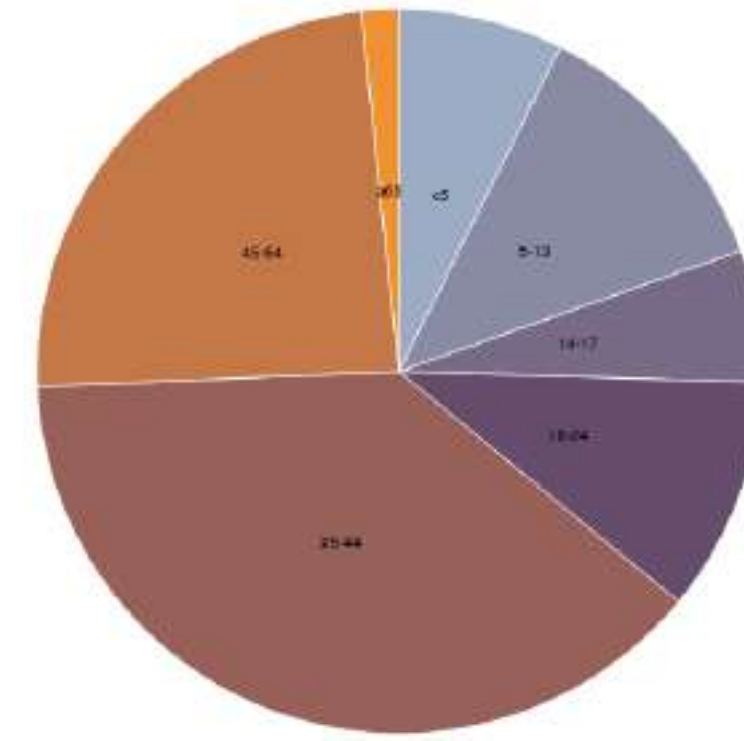
Visually
simple,
Functionally
strong

Elegance
at
Scale

User
Empowerment

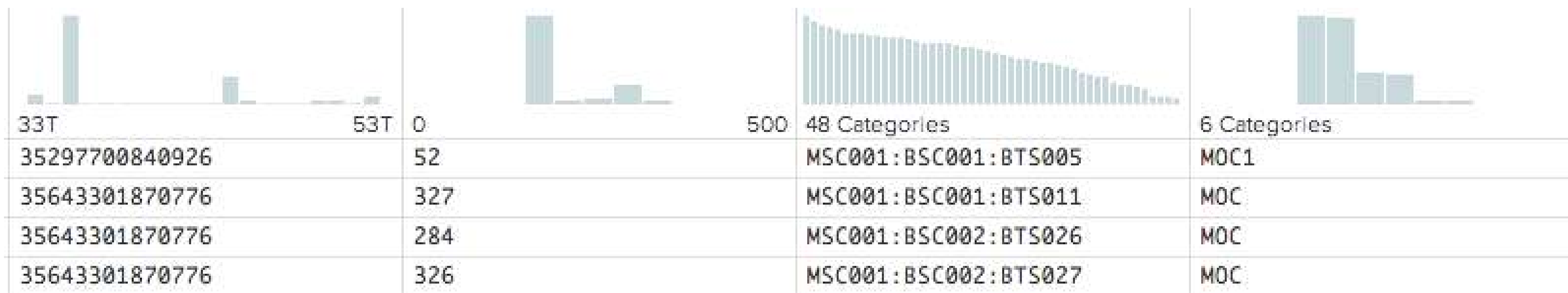
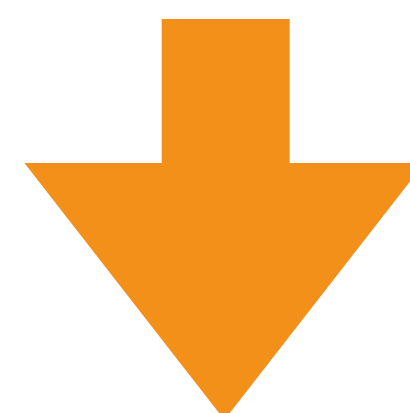
Visually simple, functionally strong





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7	<603159798/208106585213952/35643301870776>	2013-12-24T7:50:56/302/11	MSC001:BSC002:BTS025	MOC BOY/6003164921 /
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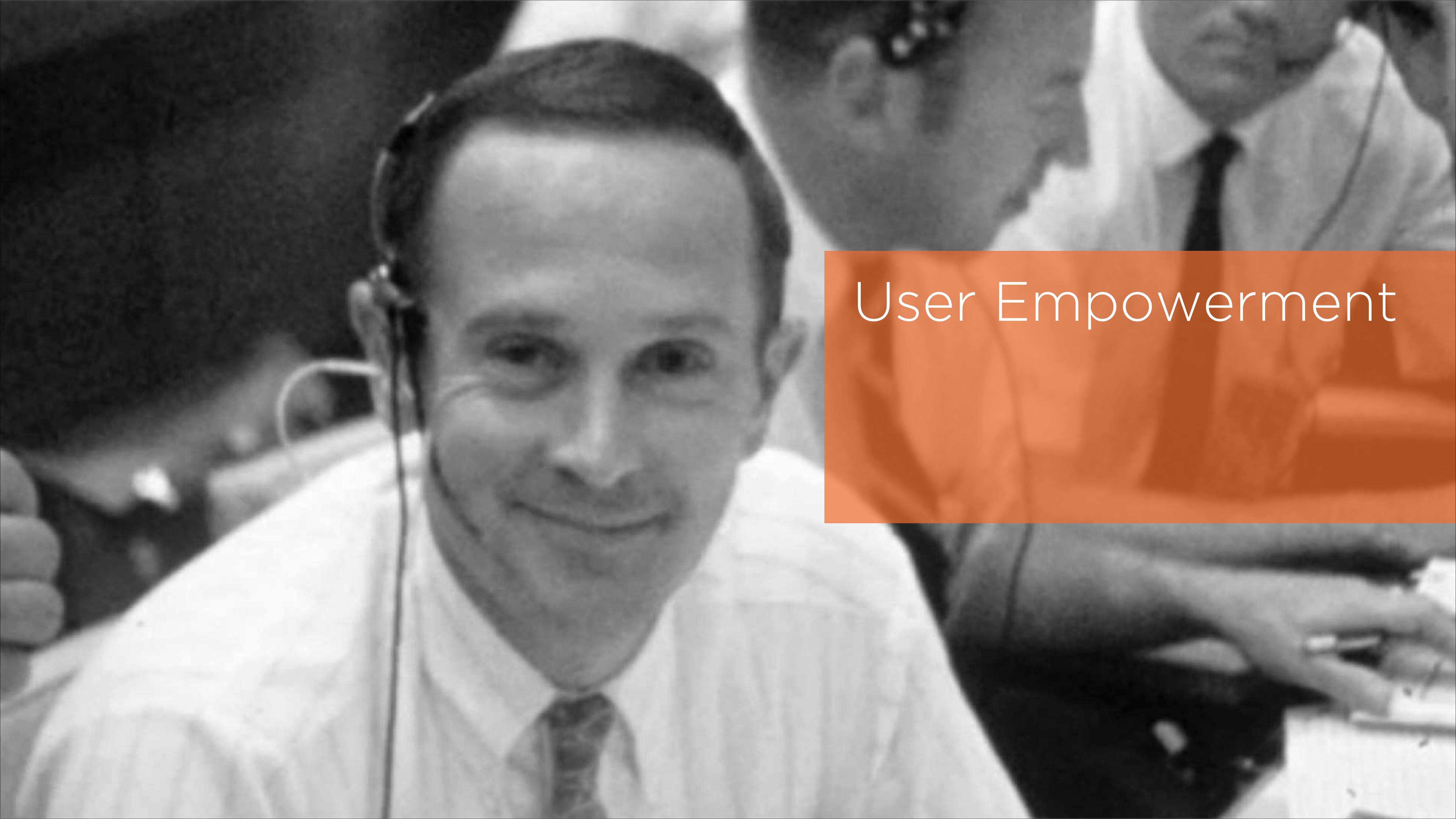
Elegance at Scale





Elegance at Scale

Design for micro and macro



User Empowerment



User Empowerment Exploration



User Empowerment

Exploration

Mistakes/Failure/Iteration

Celebrate Success



LIANN

DATA SCIENTIST



“ I want to work on predictive analytics to solve fraud and customer retention problems for the bank and not **waste my time** with data prep.”

JOHN

BUSINESS ANALYST



“ I need **direct access** to all the data so I can rapidly turn around **data-driven insights** to inform business decisions.”

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LIANN

DATA SCIENTIST



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BEN

IT PROGRAMMER



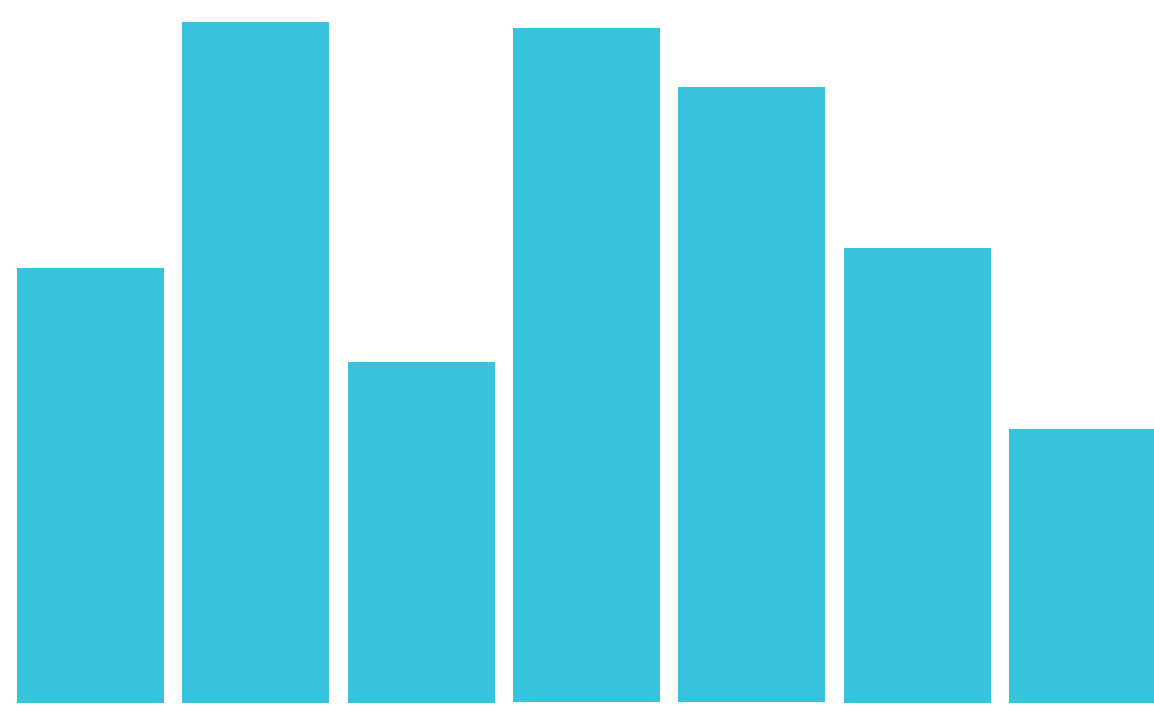
“ I am here to help the organization. I can help pull data and setup data marts. Overall I'd love to see processes become more **efficient and self-service.**”

Predictive Interaction

VISUALIZATION

Predictive Interaction

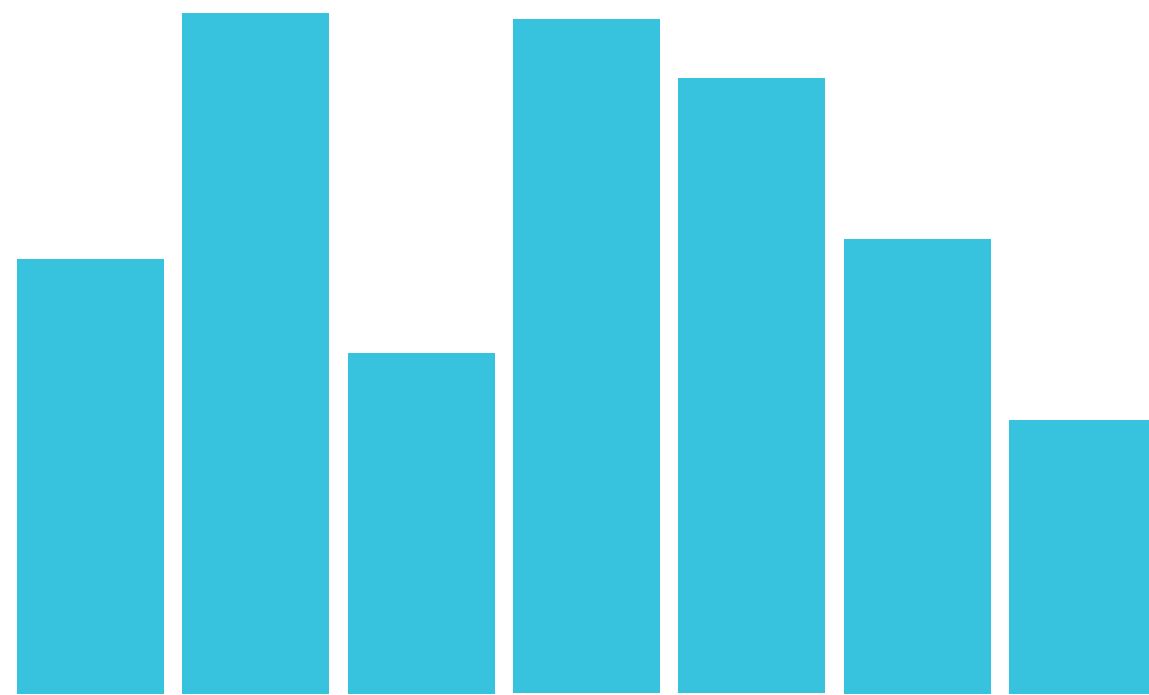
VISUALIZATION



User interacts with data visualizations

Predictive Interaction

VISUALIZATION



User interacts with data visualizations



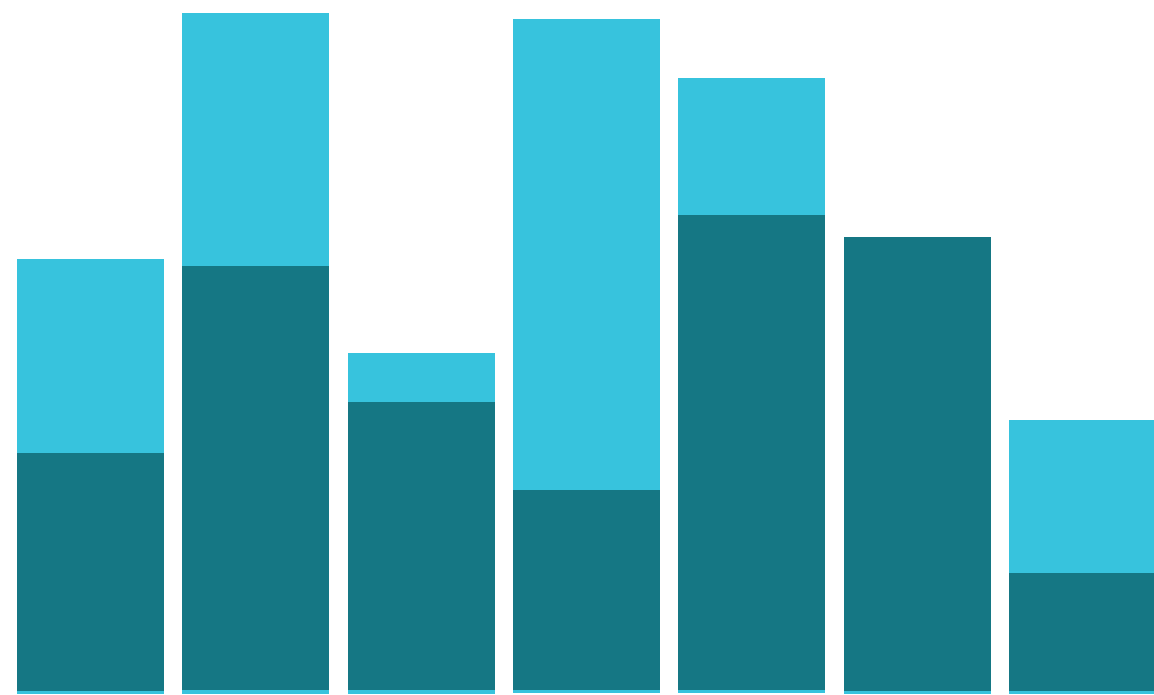
PREDICTION



Algorithms predict desired action based on data + context

Predictive Interaction

VISUALIZATION



Data previews allow user to choose, adjust and ratify



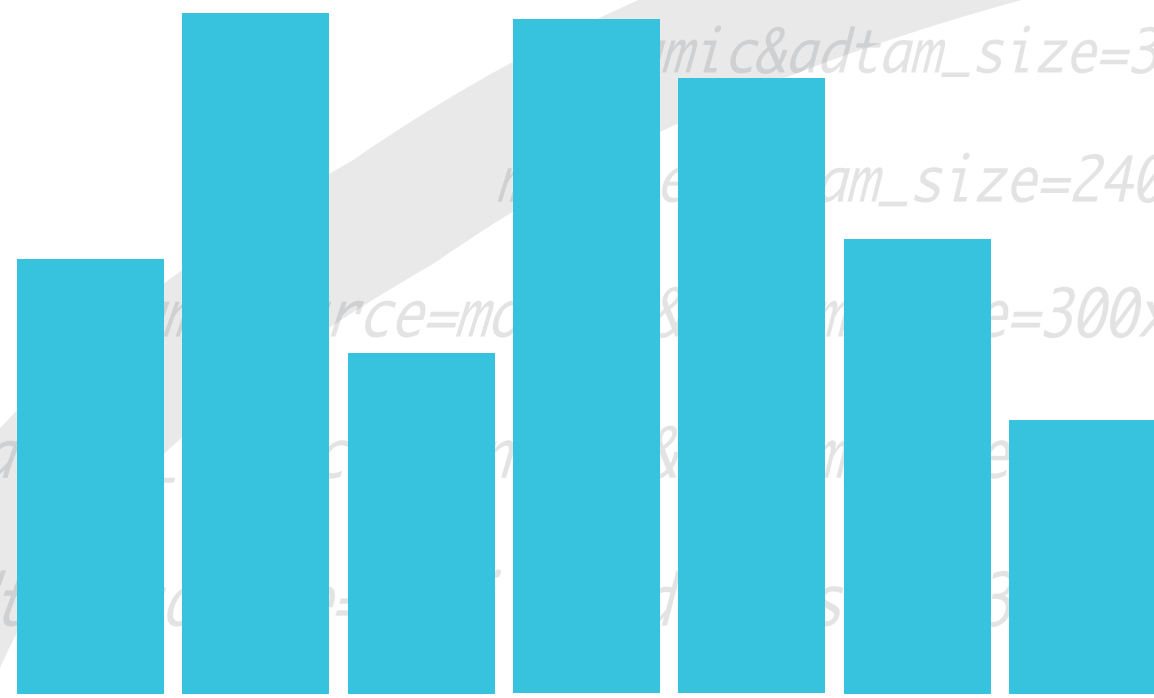
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Algorithms predict desired action based on data + context

Predictive Interaction

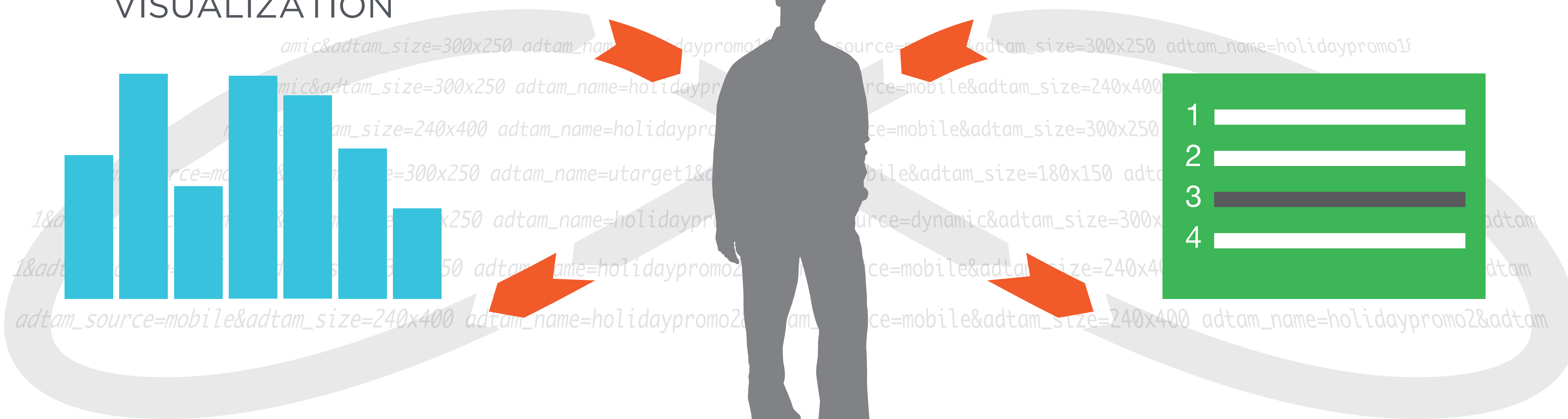
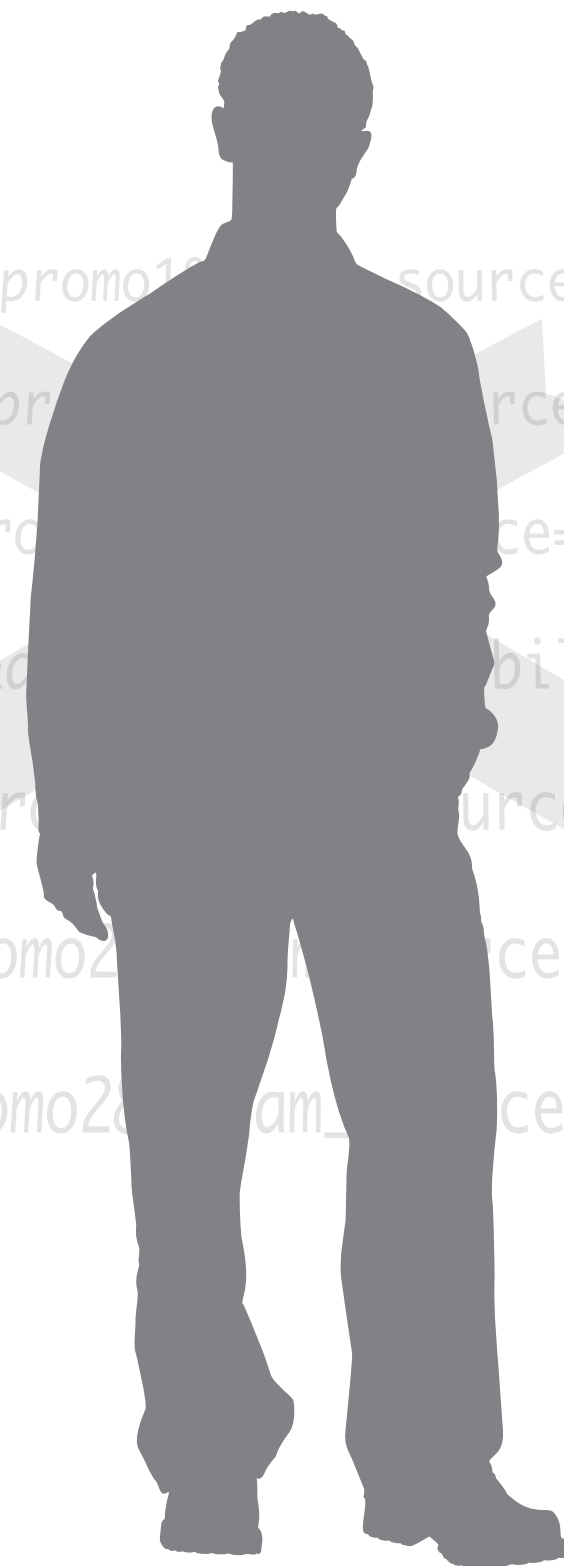
VISUALIZATION



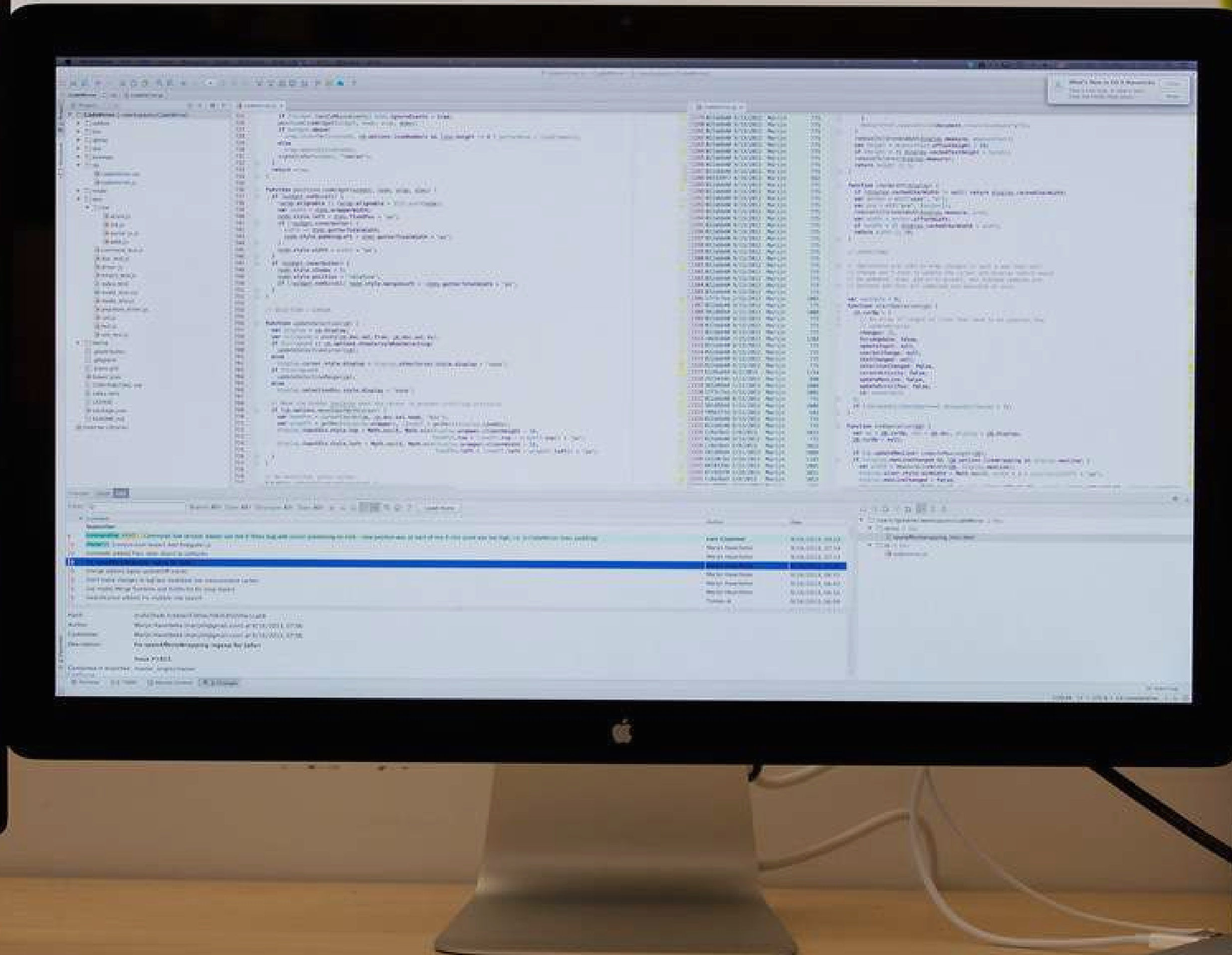
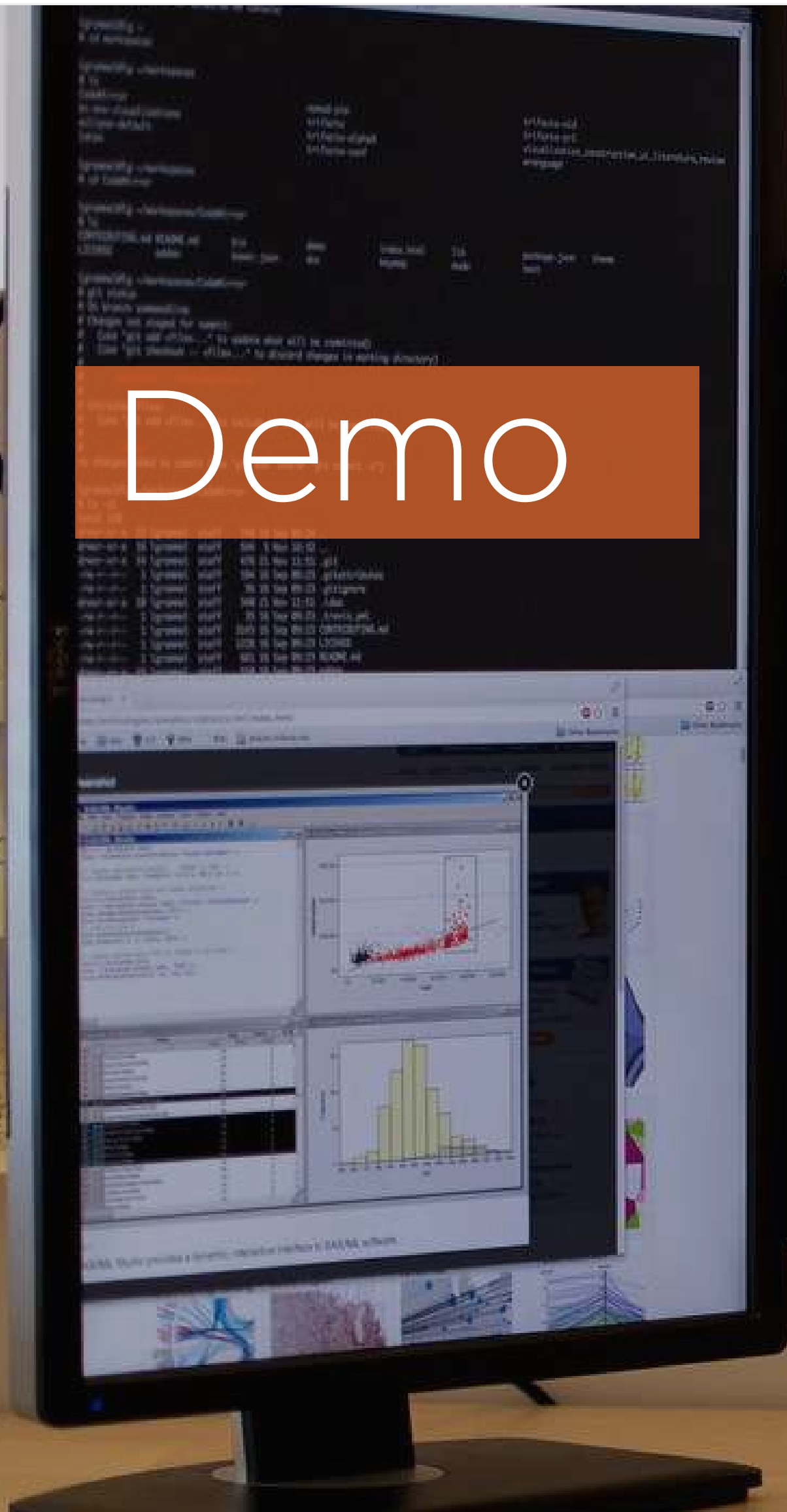
PREDICTION

A green rectangular box containing a table with four rows. Each row has a number on the left and a white horizontal bar on the right. The third row's bar is highlighted in black.

1	_____
2	_____
3	_____
4	_____



Demo



People Transforming Data



@trifacta
@joe_hellerstein
@tuttitaygerly