Why your Data Science Teams need to build experiences – not models

Jorge Lozano | Steelcase

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About Steelcase...

“We know how many Lego pieces we sell but we don’t know what Lego sets our customers buy…”

Individual Products

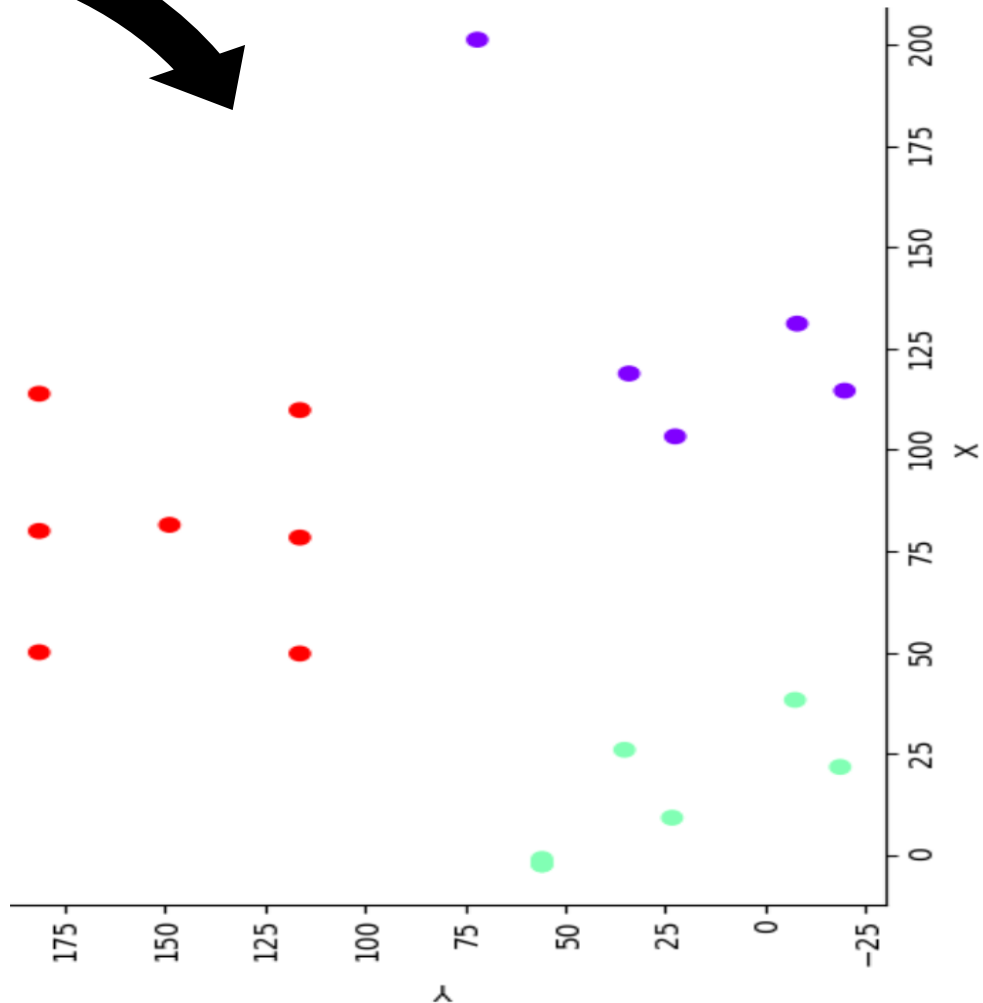
Product Application

Individual workstations – 6 pack.
Benching System designed for the open plan.

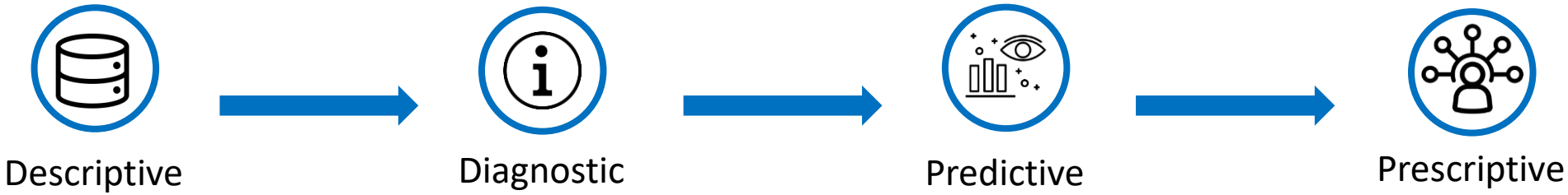
To tackle this problem, we needed to go after a different data source.

Exploring new valuable sources of data

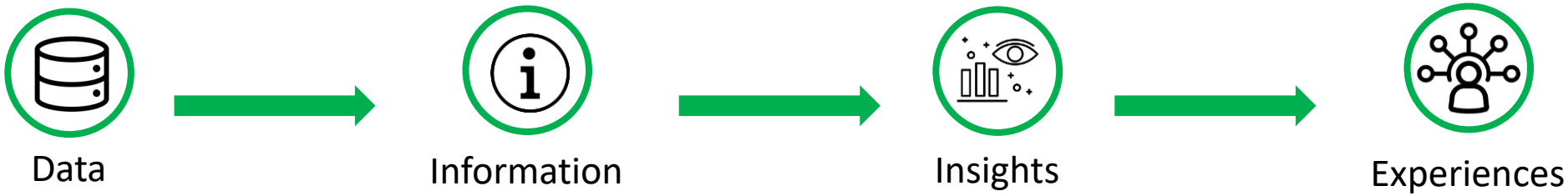
Can we extract the [X, Y, Z] coordinates of products in a drawing?

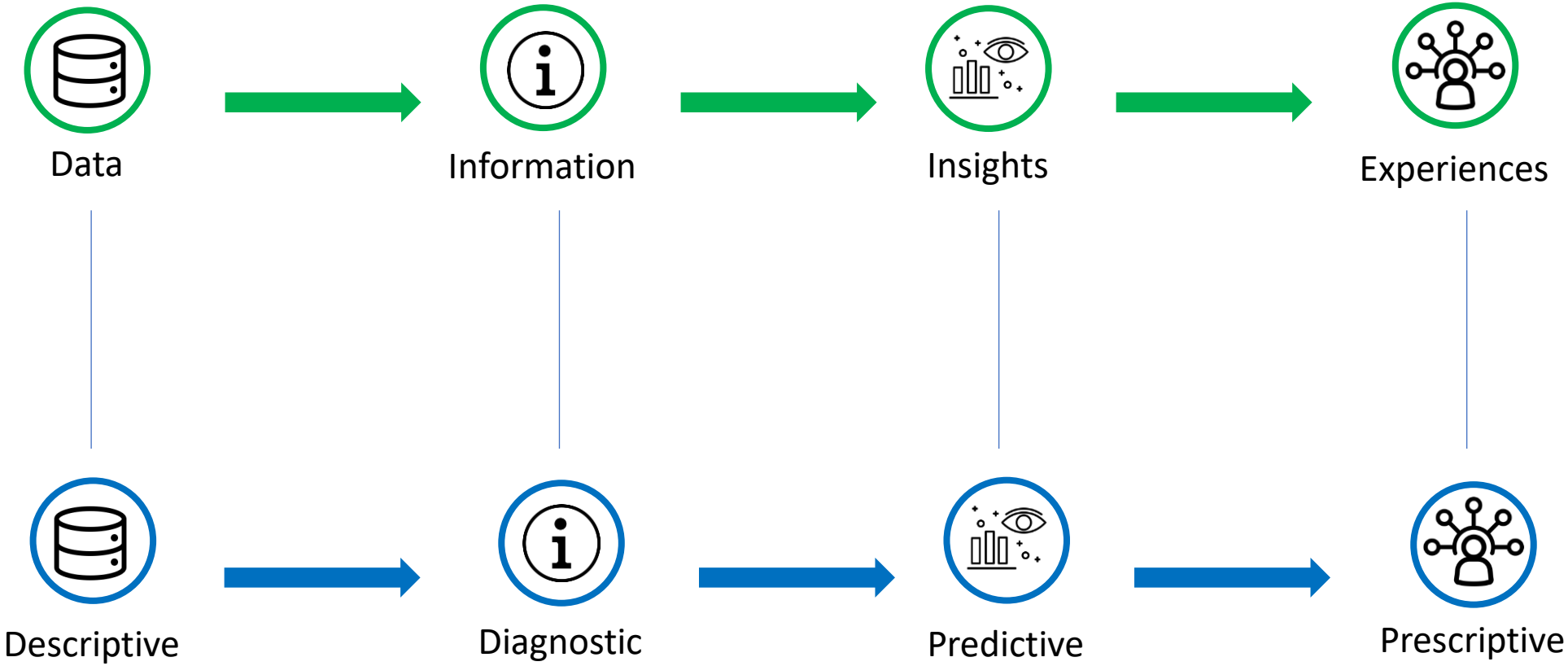


We need to be constantly pushing the value we get out of our information if we want to be transformational.



To transform our data into a competitive experience, we need to envision the experiences we may deliver and how that will set us apart.



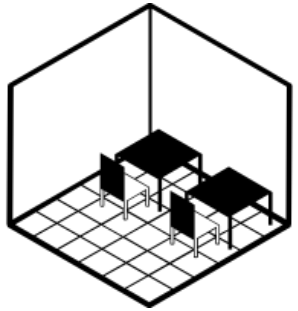

Data
Information
Insights
Experiences
Descriptive
Diagnostic
Predictive
Prescriptive

Data

Descriptive

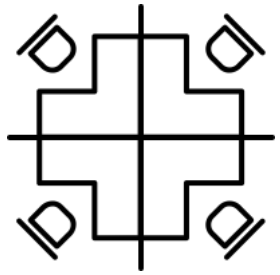
“In God we trust, all others must bring data.”

W. Edwards Deming



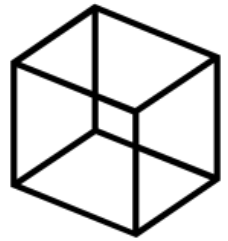
Layouts

Can be an entire floor or a simple application.



Settings

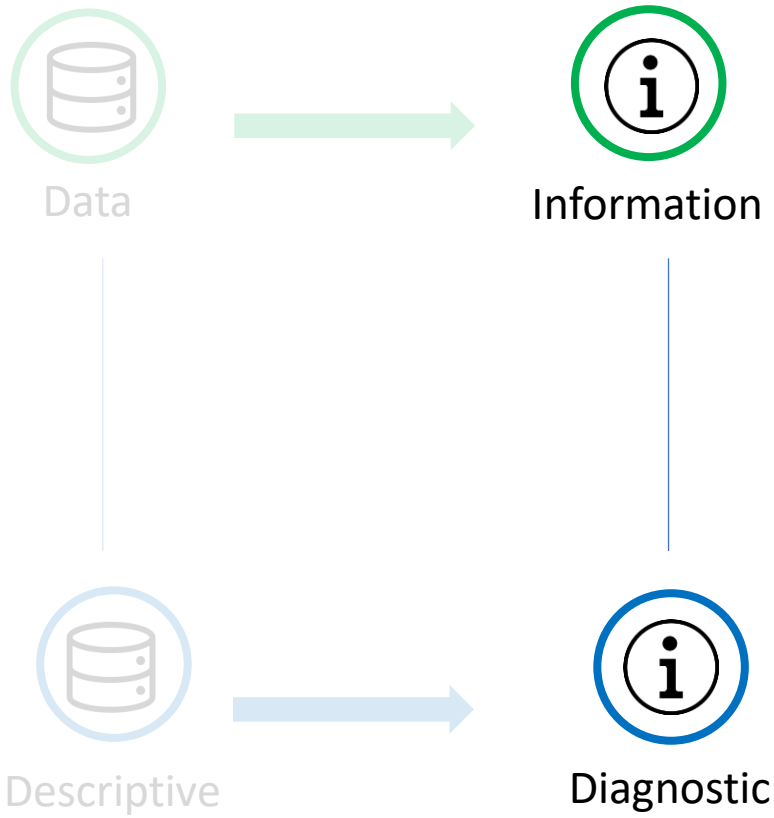
Workspaces, meeting spaces, classrooms, social spaces, etc. But also ‘noise’ that we’re learning how to filter out.



Objects

Individual components that make-up an application

*Data expected to grow 700% by end of 2021.



"As a general rule, the most successful person in life is the one who has the best information"

- Benjamin Disraeli

Data-driven starting point that best reflects the current state of the North American office to guide our design retrofitting strategies.

6ft /2m

What is the range of distances between workers?

What is the typical size of space divisions and level of enclosure for workstations?

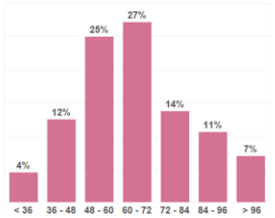
Can we provide a new way to think about "application level density"?

What do we know about the orientation of workspaces?

Distance between workers

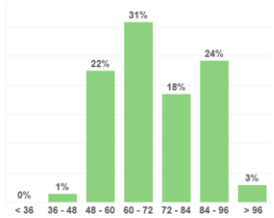
Measured as the minimum distance between the center of one seat and the center of the next closest seat in the specified direction.

Side-to-Side distance



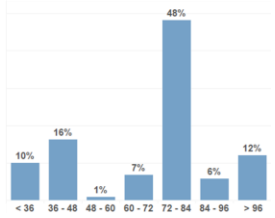
68 % of Seats are within 6 feet

Face-to-Face distance



54 % of Seats are within 6 feet

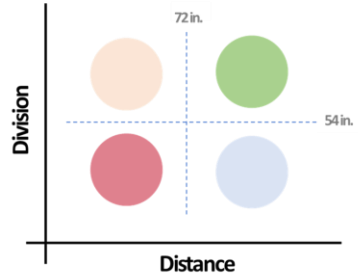
Front-to-Back distance



44 % of Seats are within 6 feet

*Only possible if we have a Steelcase Seating product specified
*Algorithm looks for seats in front, to the sides and back in straight directions. Radial analysis is possible, but can take a little more time to develop.

We developed frameworks that helped us prioritize the needs of our customers.



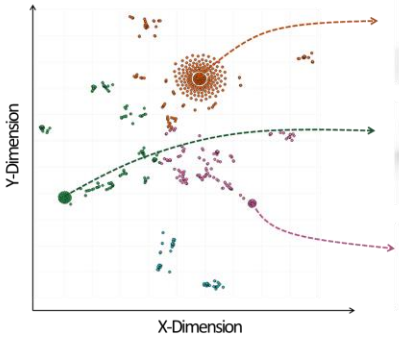
Distance = Minimum distance between seats
Division = Height of Space Division elements

We use standard social-distancing guidelines to categorize workspaces.

- More than 6ft distance and division higher than 54 in.
- More than 6ft distance but division lower than 54 in. (Often including no division at all)
- Distance smaller than 6ft but division higher than 54 in. (Often distance can be as close as 3 ft)
- Workstations in this quadrant do not meet any of the standard social-distancing guidelines.

We developed models to group applications that are similar. This allows us to obtain relevant samples to use as starting points.

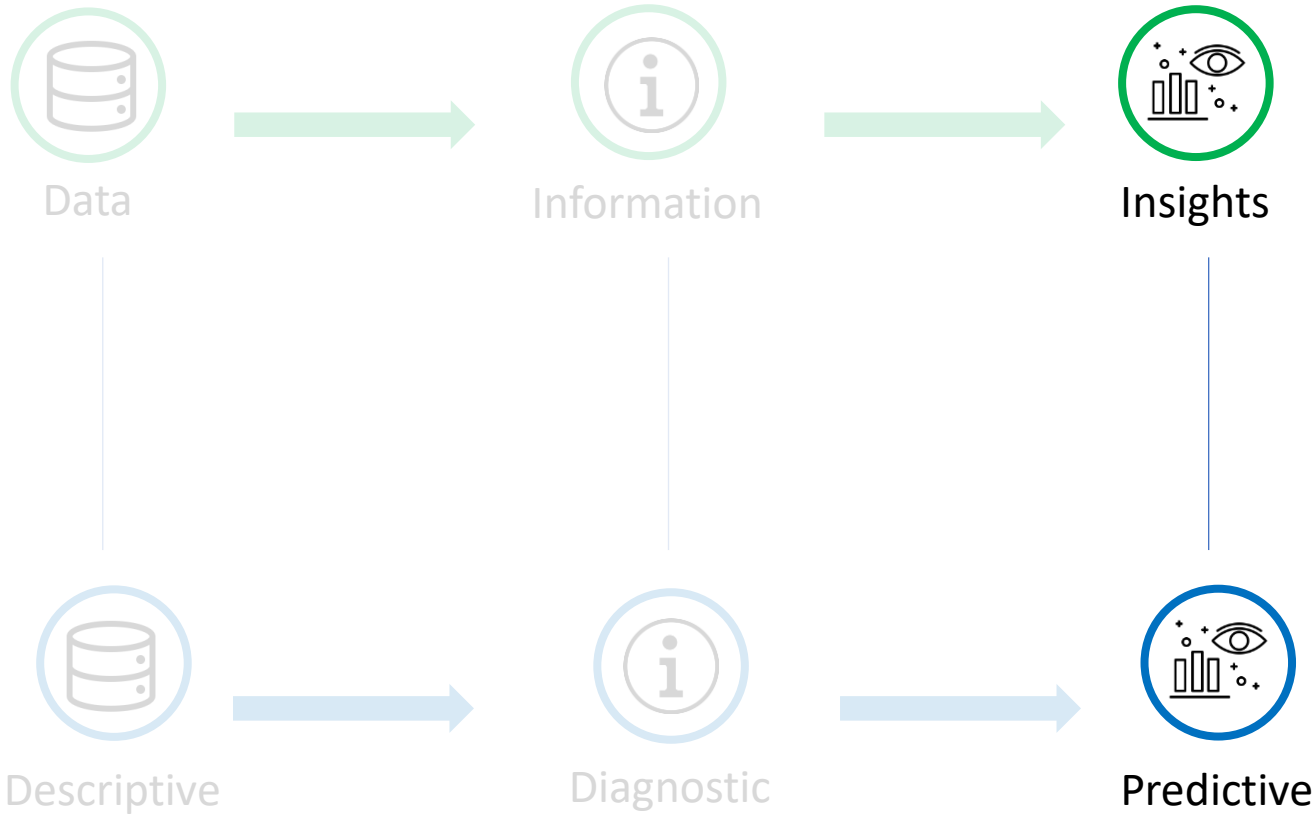
2-Dimensional representation of applications
Color represents similarity group.



Rendered sample applications

These examples will be an accurate reflection of the most common type of applications being used.

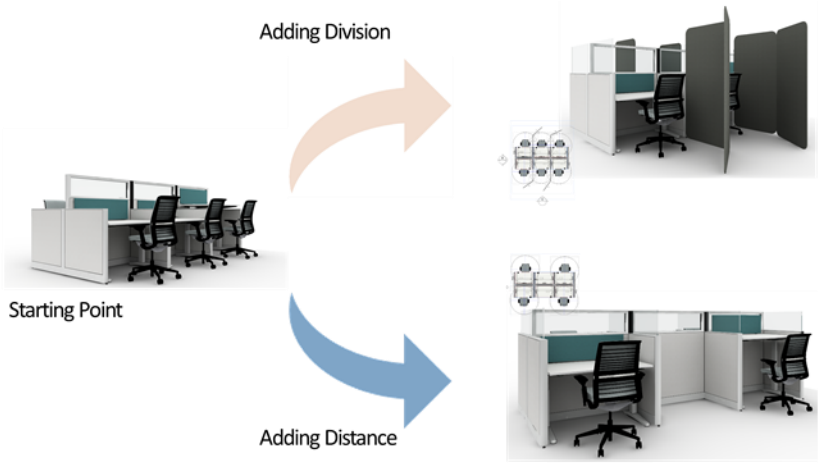
We focus our retrofitting strategies around these type of settings to reach a large share of our customers.



"We are drowning in information but starved for knowledge"

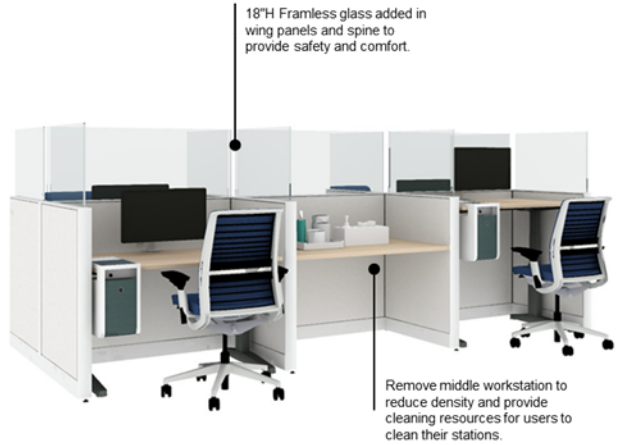
- John Naisbitt

Goal: Data-driven and scientifically tested solutions.
Each optimized for safety, product compatibility and price.



Data-driven starting point

State-of-the-art scientific testing performed by renowned experts.

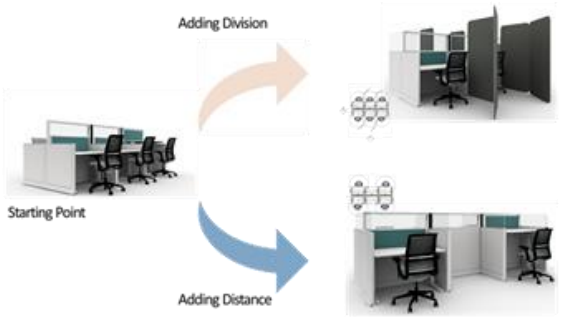


Optimized retrofitting strategies.

"Nothing ever becomes real until we experience it"

- John Keats

Success comes from building experiences, not models.



Data-driven starting point

State-of-the-art scientific testing performed by renowned experts.

Optimized retrofitting strategies.

Digital experience that becomes a competitive advantage

A strategic return-to-office for the world's workforce will require a change in mindset, approach, behavior, and space. Despite a flurry of ever-changing rules and regulations, employees are ready to get back into the workplace. Business leaders are seeking best practices. And we're uniquely equipped to help.

INTRODUCING SPACE SCAN BY STEELCASE

Space Scan is a diagnostic service for existing Steelcase customers that leverages advanced analytical floorplan **scanning** to identify vulnerabilities in office densification and division. Its science-based **analysis** generates space-specific **action steps and strategic solutions**, laying the foundation for a confident return to the office.

SCAN: Existing customer floorplan data is scanned for analysis based on current guidelines and best practices for **distance**, **division**, and **geometry**.

ASSESS: Input data is measured against distance, division, and geometry criteria based on known COVID-19 best practices. Each floorplan is graded and problem areas identified. Workspace modification options are generated, giving space-specific recommendations.

ACT: The Space Scan report acts as a roadmap for your customer, allowing them to pivot as needed and confidently invite their employees back to office.

*Note: Space Scan requires applications that are designed with Steelcase furniture within SmartTools.

SPACE SCAN IS RIGHT FOR CUSTOMERS WHO...

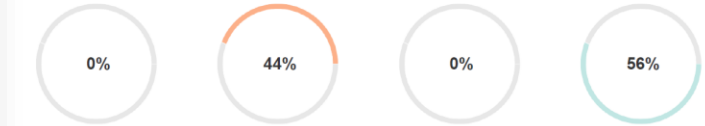
- are an existing Steelcase customer and currently have Steelcase product (i.e. workstations).
- want to see their employees back in the office by summer 2021.
- have a dense floorplan (i.e. less than 6' distance; lower than 54"H division).
- have worked with a Steelcase dealer and their floorplan is available in SmartTools/CET.

Steelcase

Project:

Distance/Division Analysis

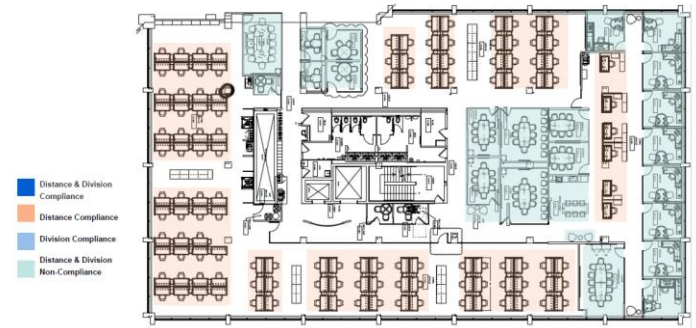
1 44% of seats of all settings scanned comply with standard social distancing measures in the office.



Distance & Division Compliance	Distance Compliance	Division Compliance	Distance & Division Non-Compliance
0% of seats support the recommended 6 feet of distance and support the recommended minimum 54-inch height of division.	44% of seats support the recommended 6 feet of distance.	0% of seats support the recommended minimum 54-inch height of division.	56% of seats don't support the recommended 6 feet of distance or the minimum 54-inch height of division.

Project:

Workstation 1 Location



Project:

Workstation 1

Current

Capacity	6

Design Considerations

Division Compliance At least one side with peers has either no division or division less than 54 inches.	1
Distance Compliance At least one side has peers close than 6 feet.	1

* Physical Distancing: Circles indicate the 6ft/2m distance recommended to maintain desired distancing in learning spaces.

Project:

Workstation 1

Solution by Geometry

Capacity	6
List price per user*	$1,131
Effort	Professional Installation (Easy)

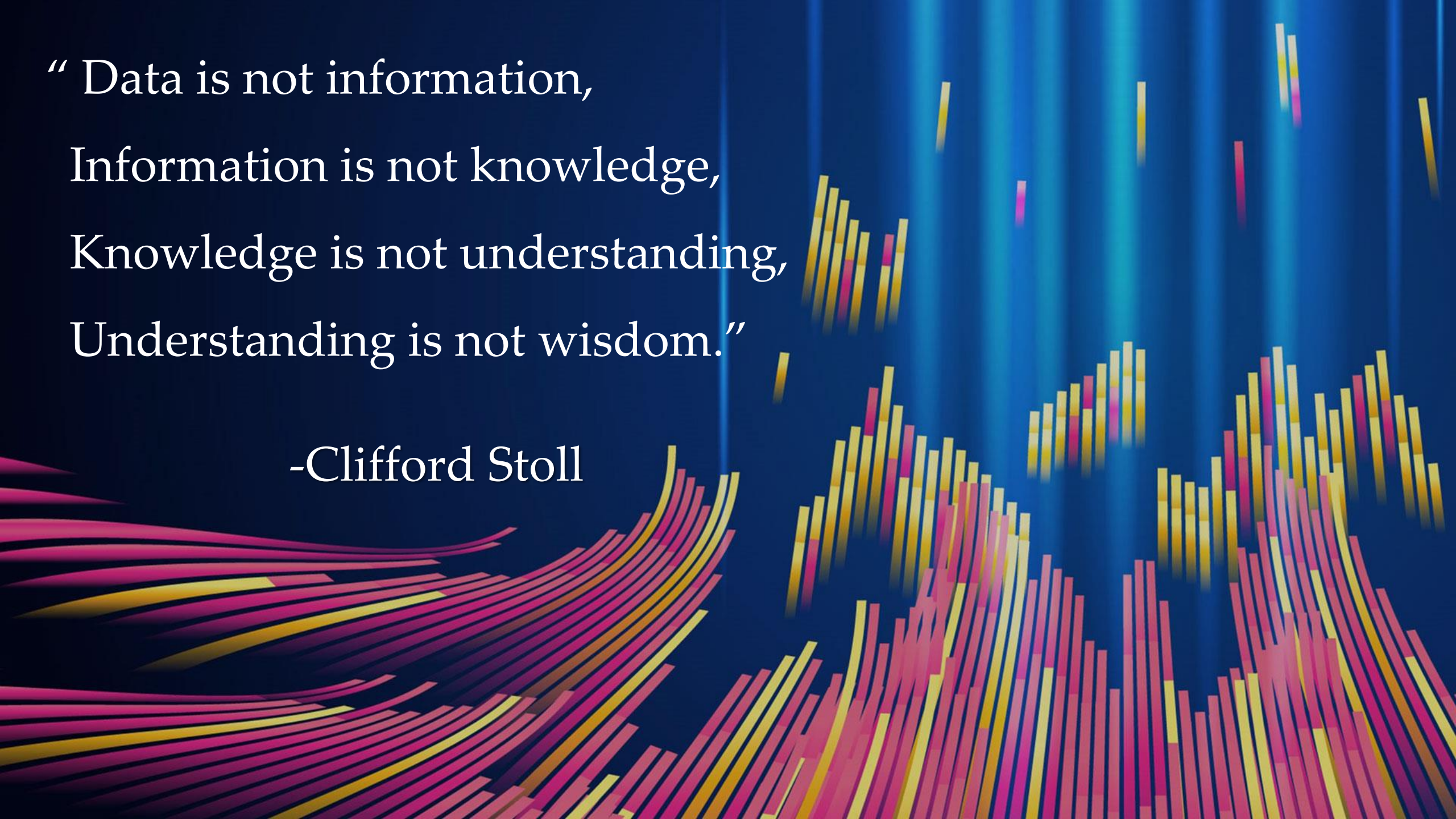
Recommendations

Division Compliance At least one side with peers has either no division or division less than 54 inches.	✓
Distance Compliance At least one side has peers close than 6 feet.	✓

Updates

1. Reconfiguring workstations so users are back-to-back can provide even more privacy and safety
2. Added Acrylic Privacy and Side Screens *(Using Existing Brackets from Cableway for Privacy Screen)*

* More details in appendix.


“ Data is not information,
Information is not knowledge,
Knowledge is not understanding,
Understanding is not wisdom.”
-Clifford Stoll

Thanks!

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