

# *Visitor Interaction*

# Data

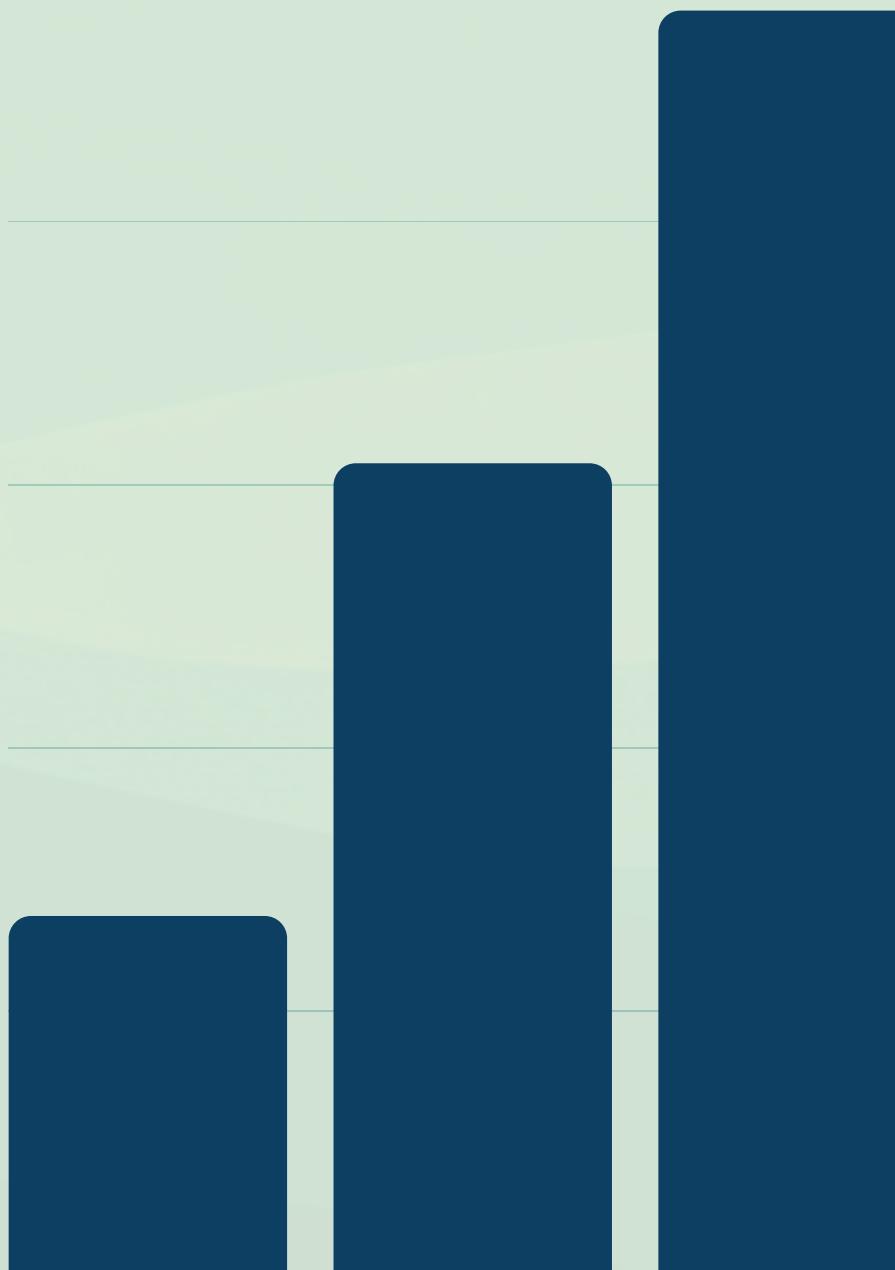
24 JULY, 2023

# Agenda

- How can data help us?
- Improving data processes
- Insight Exploration
- What's next?

# How can data help us?

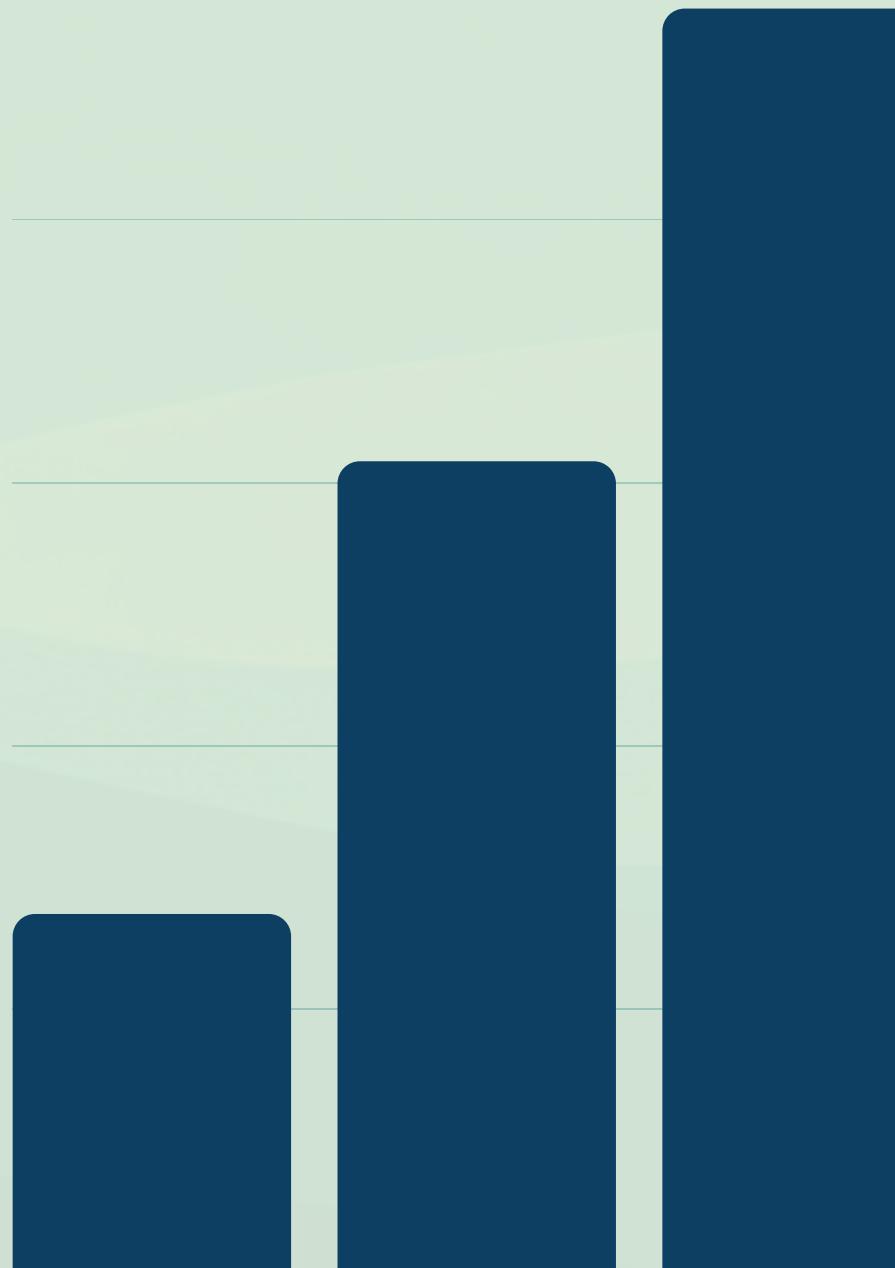
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- Improve data processes and enrich insights
- Measure success and make data-driven decisions

# How can data help us?

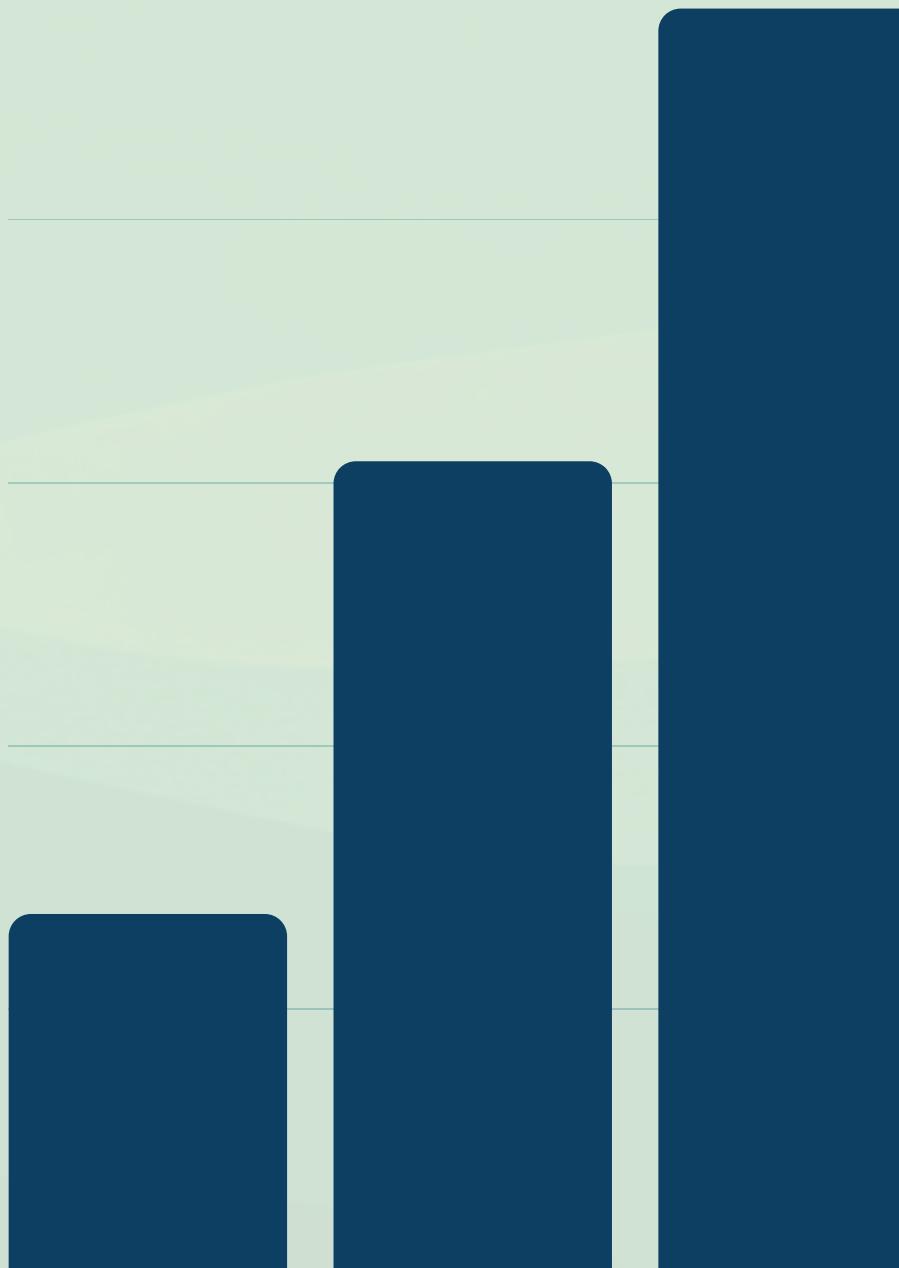
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- Improve data processes and enrich insights
  - Measure success and make data-driven decisions
- 
- Inform gallery attendants about high-touch objects
  - Report to the curatorial team on specific artworks
  - Learn what interventions are most effective
  - Prevent damage to artworks

# How can data help us?

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## Impact

- Improved stewardship & care of displayed artworks
- Improved guest experience
- Improved staff productivity
- Useful in grant-writing & reporting to stakeholders

# Improving data processes

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*Data is messy*

# Improving data processes

*Data is messy*

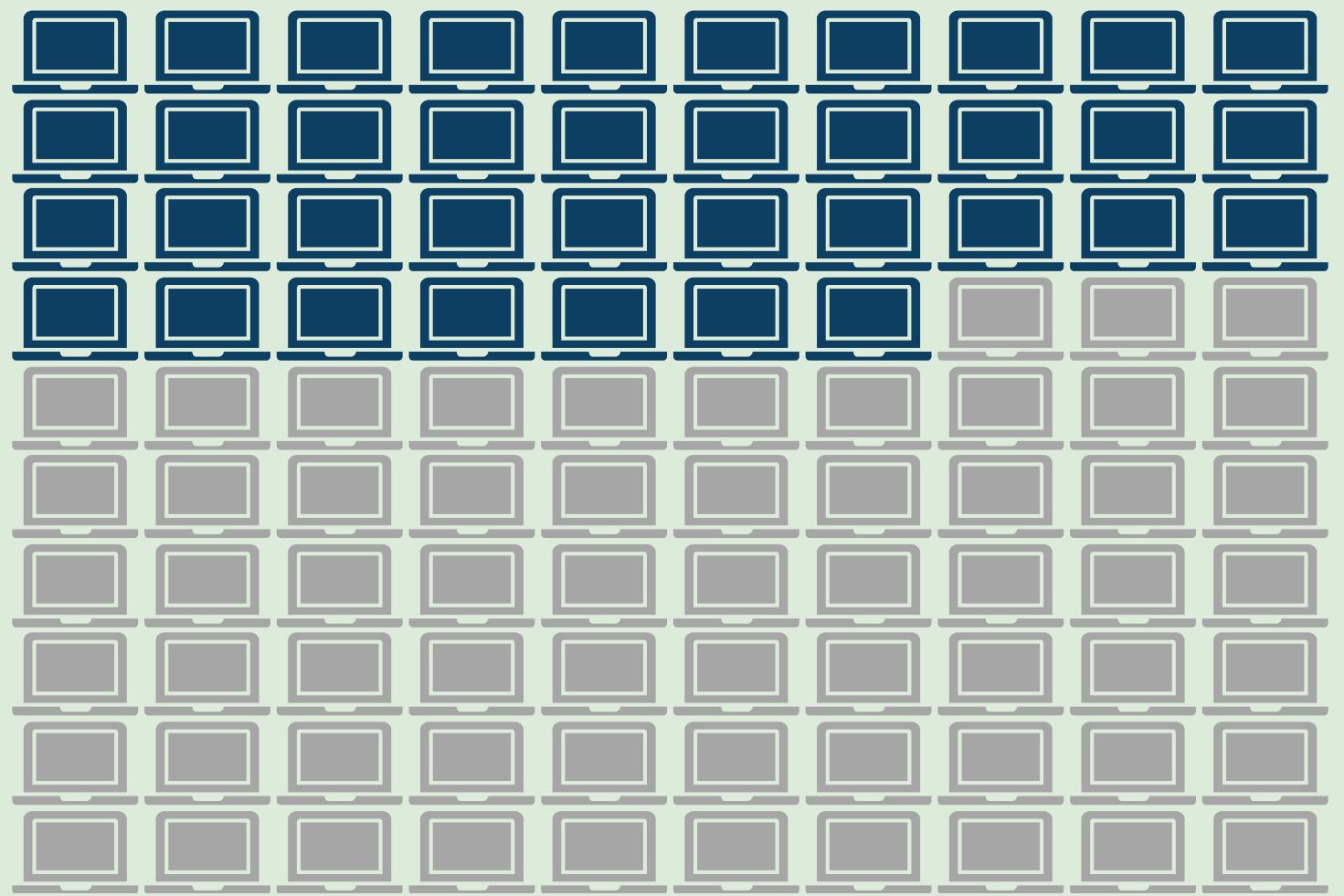
Casing, Typos, &  
Inconsistencies

ABC != abc  
abc != ab c

Duplicates  
Invalid Data  
Missing Data

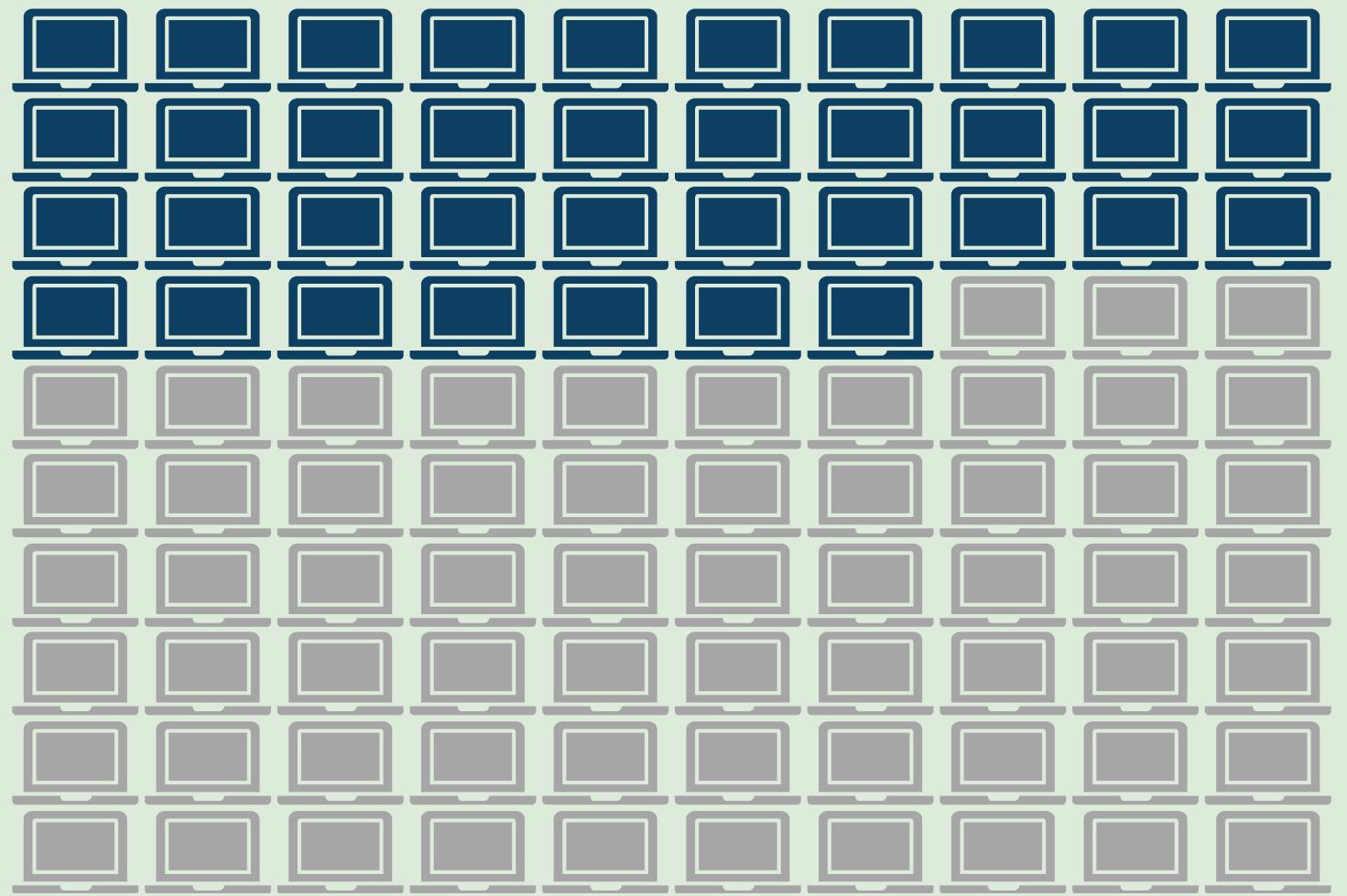
# *Data is messy*

**Using manual processes:**



# *Data is messy*

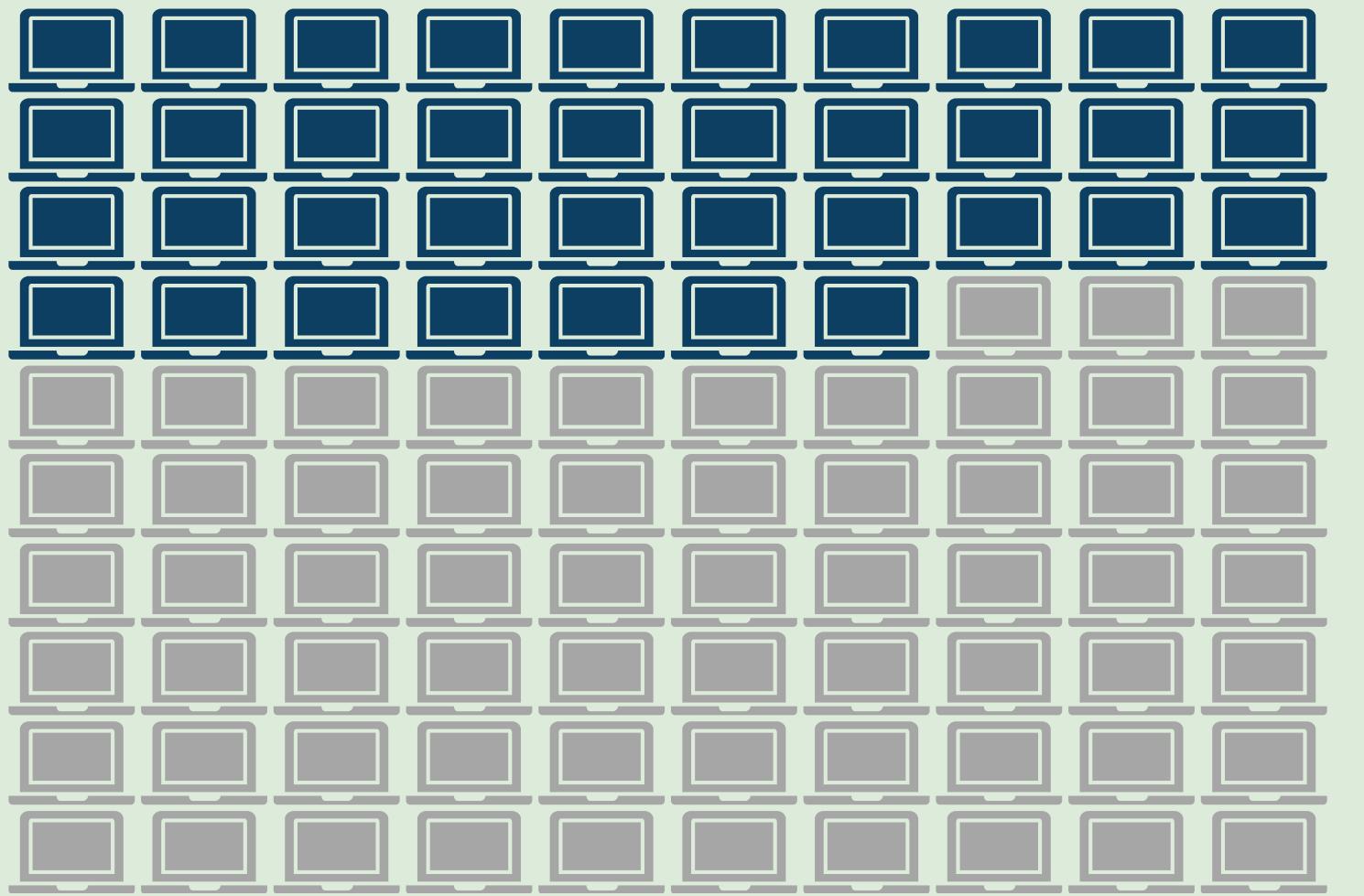
**Using manual processes:**



*63% data loss*

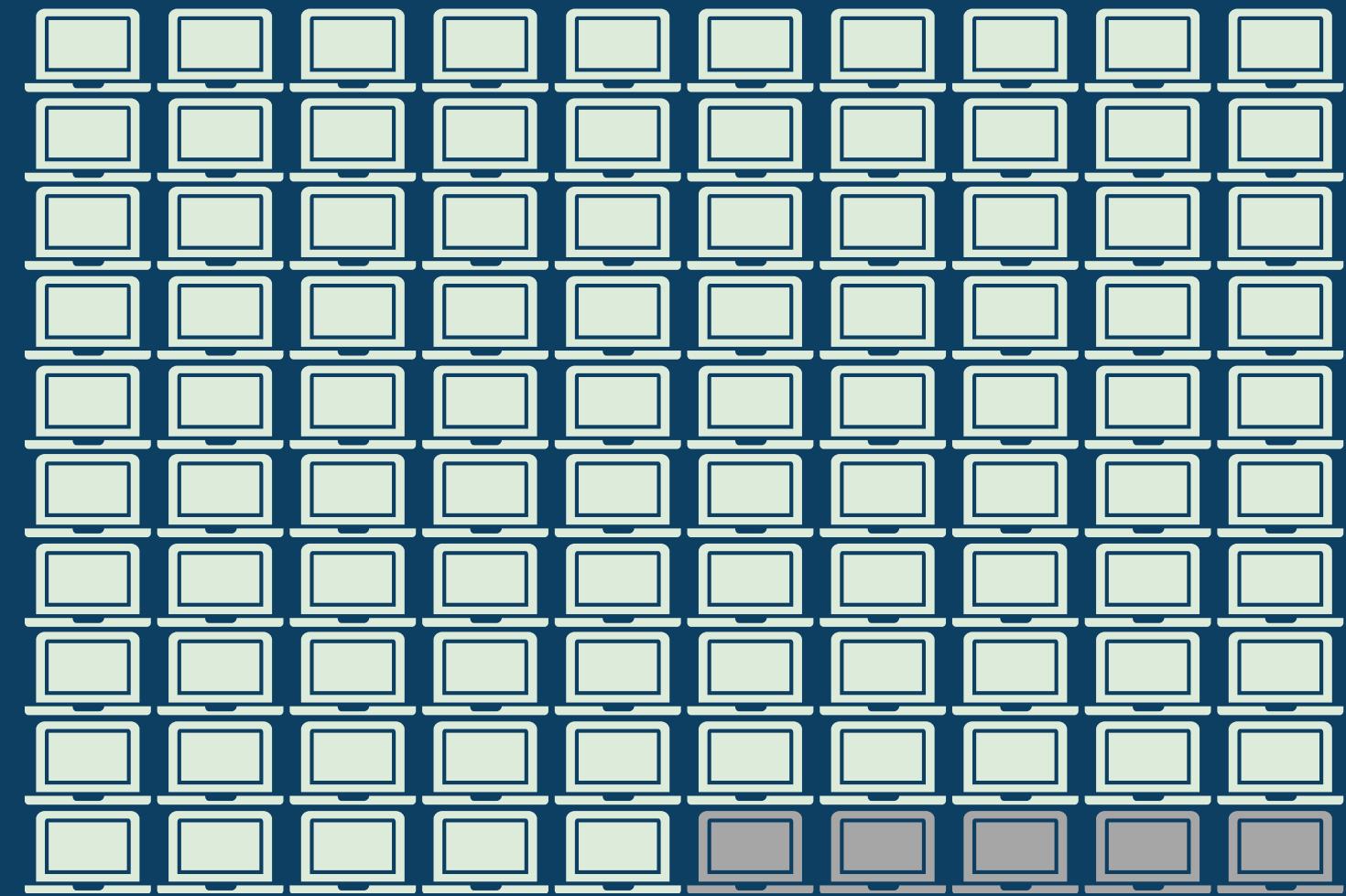
# *Data is messy*

**Manual processes:**



*63% data loss*

**New process:**



*< 5% data loss*

# *Data is messy*

## Manual process



Elterwater Stone  
Ring, Richard Long  
**101**



Tipi,  
Eero Aarnio  
**87**



Synthesa,  
Franz West  
**83**



Zombie VIII,  
Thomas Schutte  
**70**



Georgia Gate,  
Thaddeus Mosley  
**62**

## New process



Tipi,  
Eero Aarnio  
**152**



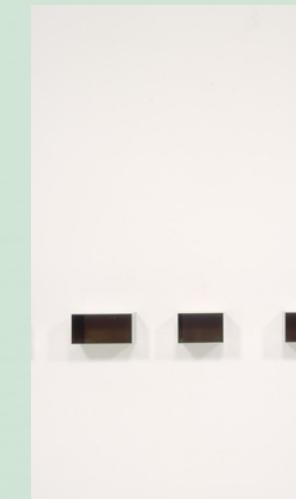
Elterwater Stone  
Ring, Richard Long  
**139**



Pictures of Women  
Working, Carmen  
Winant **133**



Cabinet with  
Mirror, Gustave  
Herter **130**



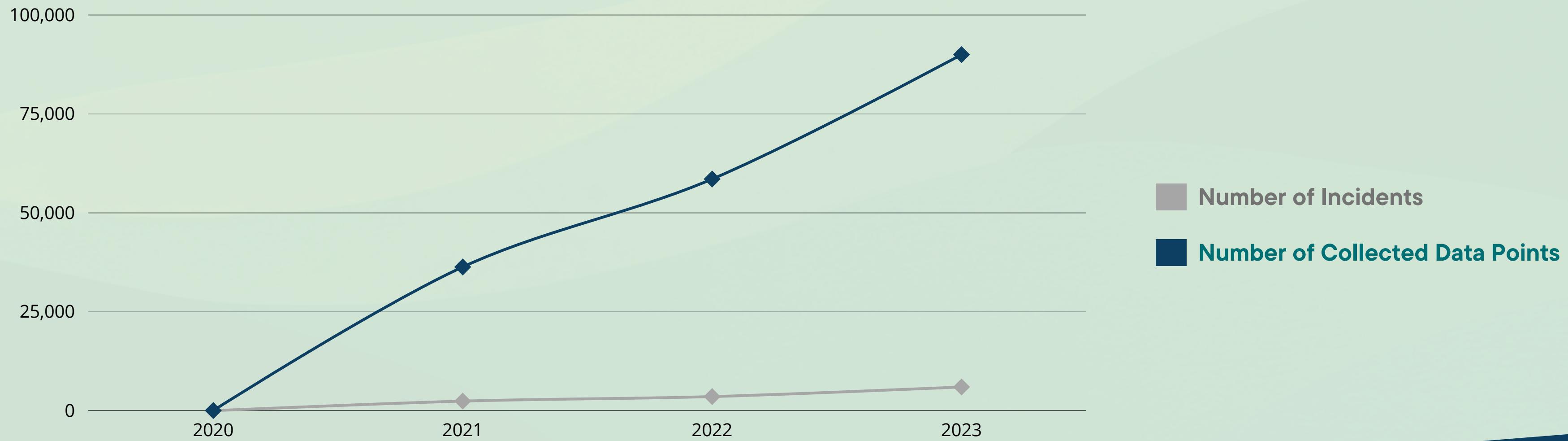
Untitled,  
Donald Judd  
**117**

# Improving data processes

*Data only grows bigger*

# Improving data processes

*Data only grows bigger*



# Improving data processes

*Data requires time*

# Improving data processes

*Data requires time*

Collection

Management

Analysis

# Improving data processes

*Data requires time*

Collection

Management

Analysis



## Human Effort & Time

- Time Consuming, Manual, & Costly
- Requires the same effort every time
- Prone to human error

# Improving data processes

*Data requires time*

## Collection



## Human Effort & Time

- Time Consuming, Manual, & Costly
- Requires the same effort every time
- Prone to human error

## Management



## Machine Effort & Time

- Automatable & Customizable
- Repeatable & Consistent
- Reliable

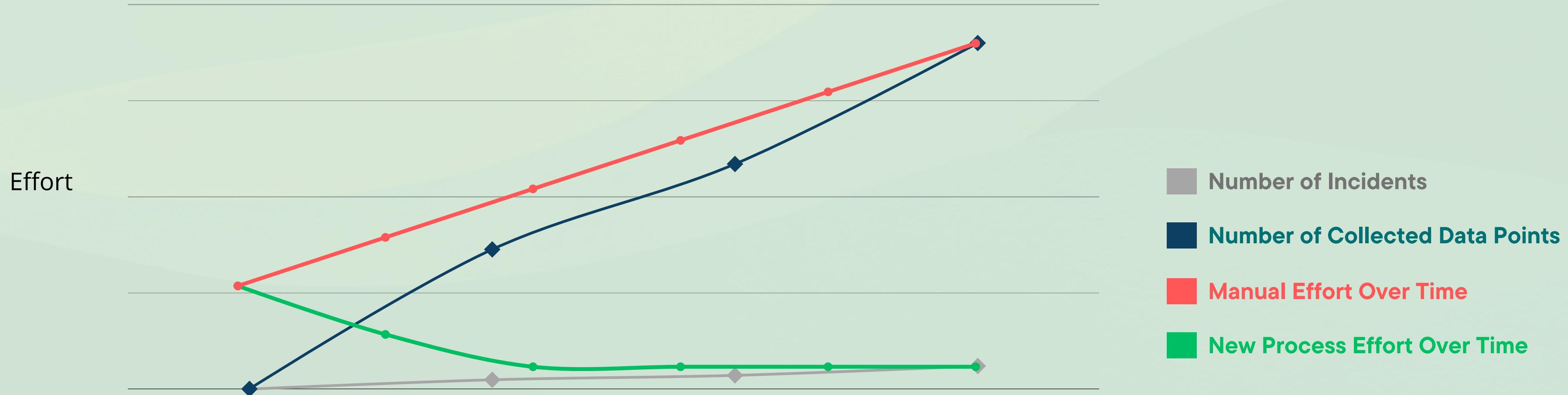
# Improving data processes

*Data requires time*



# Improving data processes

*Data requires time*



# Case Studies

*Vinyl Intervention*

*Signage Intervention*

*Stanchion Intervention*

# Case Studies

*Vinyl Intervention*

# Elterwater Stone Ring, 1985

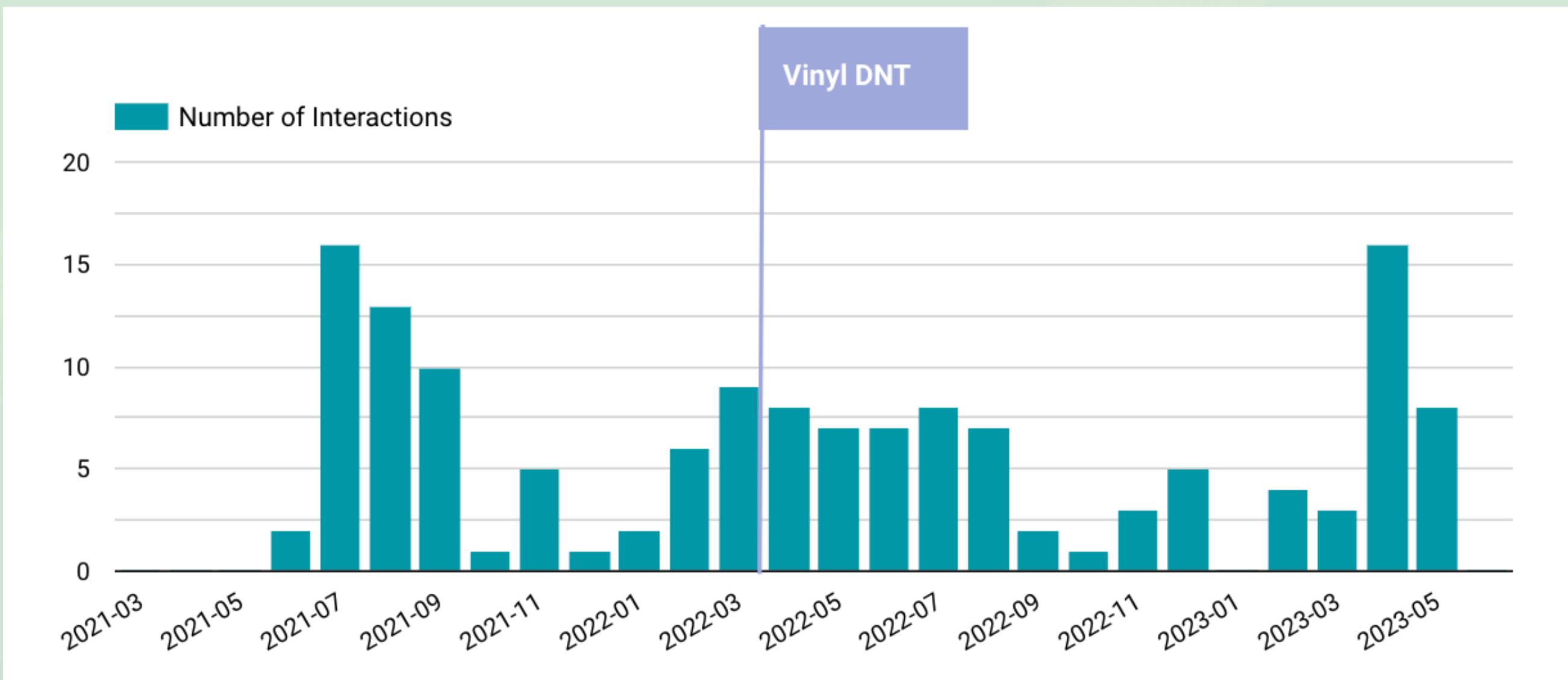
*Richard Long, Accession No. 86.4, Scaife Gallery 2*



*Vinyl Intervention*

# Elterwater Stone Ring, 1985

*Richard Long, Accession No. 86.4, Scaife Gallery 2*



Average Monthly  
Interactions

↓ 27%

Interaction Severity

↓ 9%

# Cell II, 1991

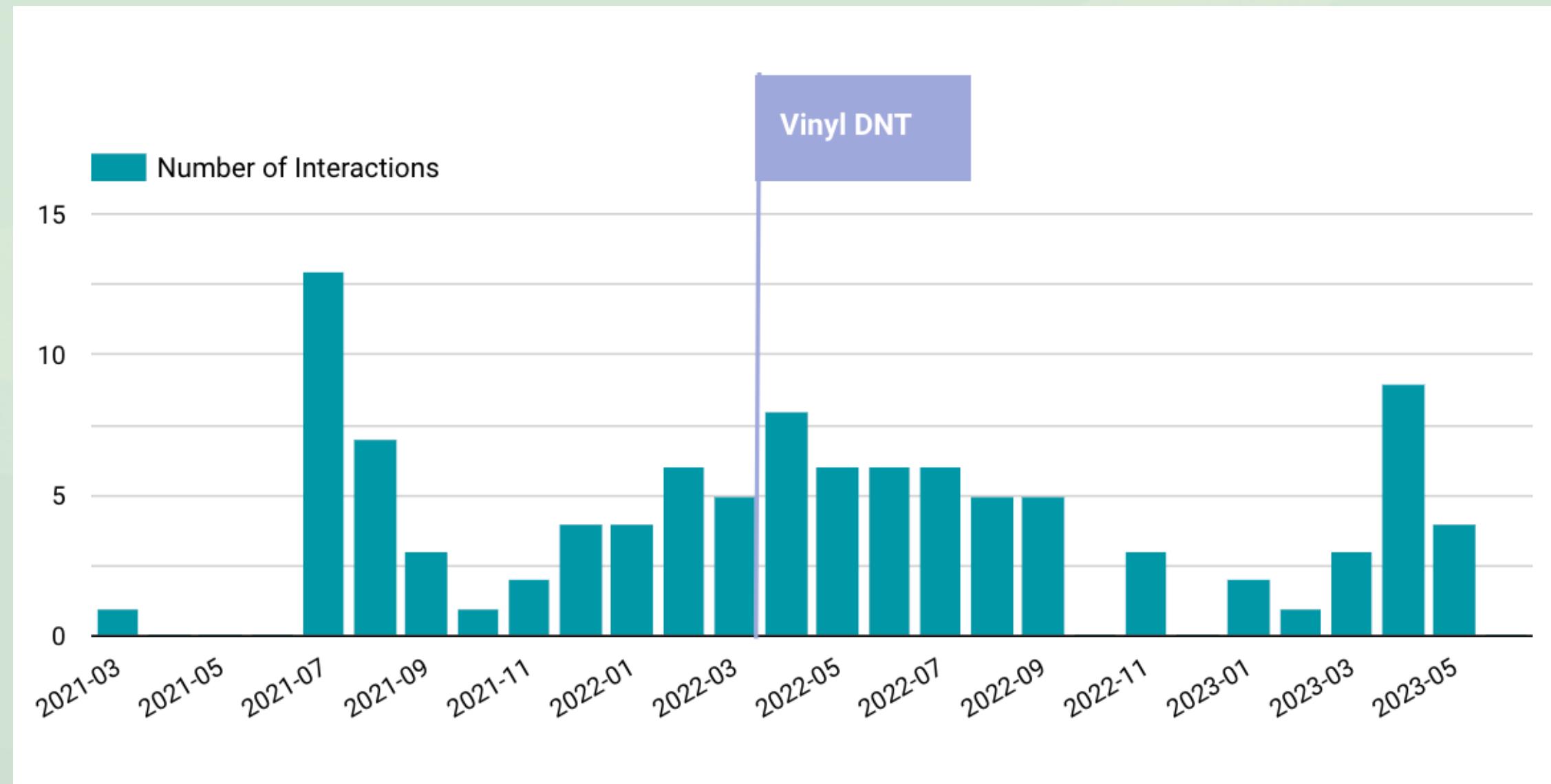
*Louise Bourgeois, Accession No. 91.24, Scaife Gallery 14*



*Vinyl Intervention*

# Cell II, 1991

*Louise Bourgeois, Accession No. 91.24, Scaife Gallery 14*



Average Monthly  
Interactions

↓ 25%

Interaction Severity

↓ 5%

# Case Studies

*Signage Intervention*

# Tipi, 2005

*Eero Aarnio, Accession No. 2005.28, Bruce Gallery 18*



*Signage Intervention*

# Tipi, 2005

*Eero Aarnio, Accession No. 2005.28, Bruce Gallery 18*



Average Monthly  
Interactions



3%

Interaction Severity  
*No change*

*Signage Intervention*

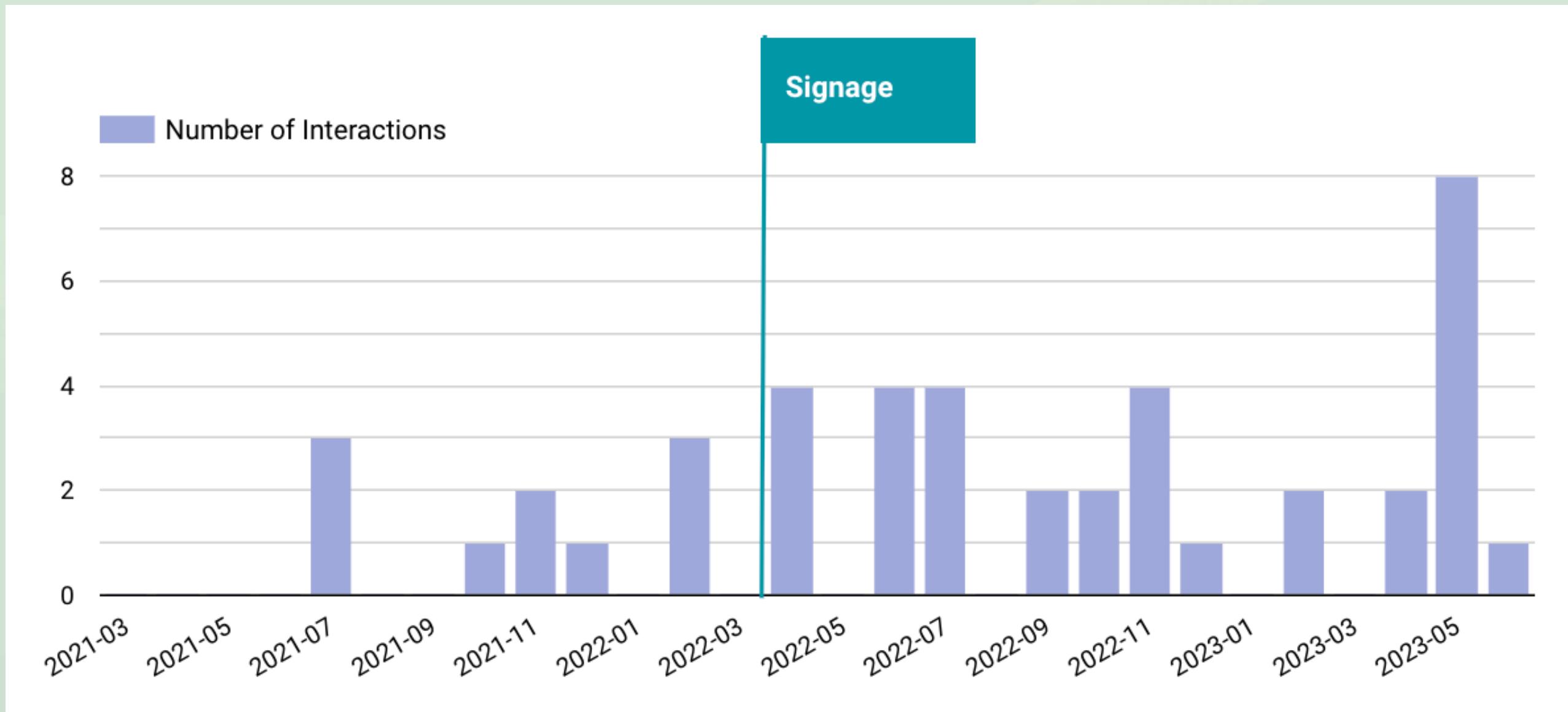
# Cabbage Chair, 2008

*Oki Sato (nendo), Accession No. 2017.18, Bruce Gallery 20*



# Cabbage Chair, 2008

*Oki Sato (nendo), Accession No. 2017.18, Bruce Gallery 20*



Average Monthly  
Interactions

↑ 103%

Interaction Severity

↓ 4%

# Case Studies

*Stanchion Intervention*

# Untitled, 2012

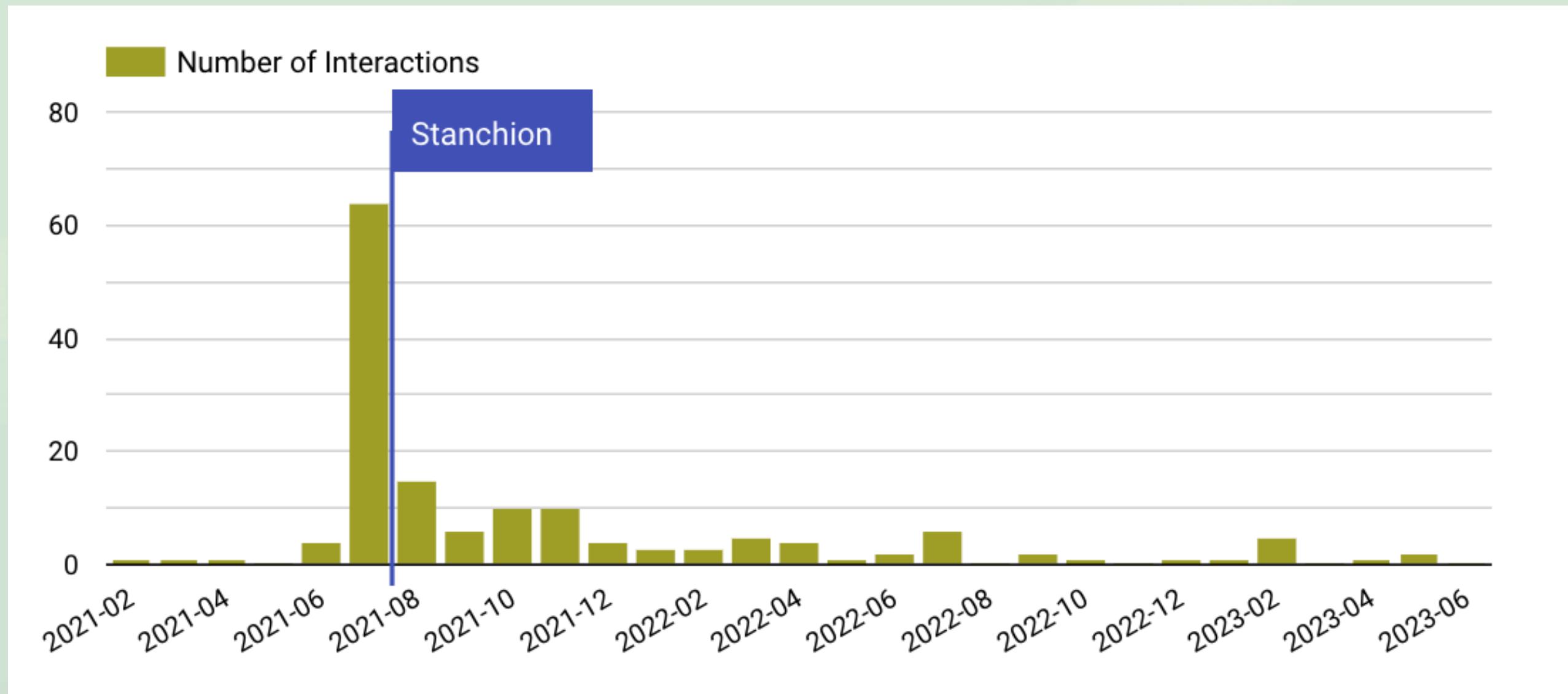
*Vincent Fecteau, Accession No. 2013.1, Scaife Gallery 16*



*Stanchion Intervention*

# Untitled, 2012

*Vincent Fecteau, Accession No. 2013.1, Scaife Gallery 16*



Average Monthly  
Interactions

↓ 95%

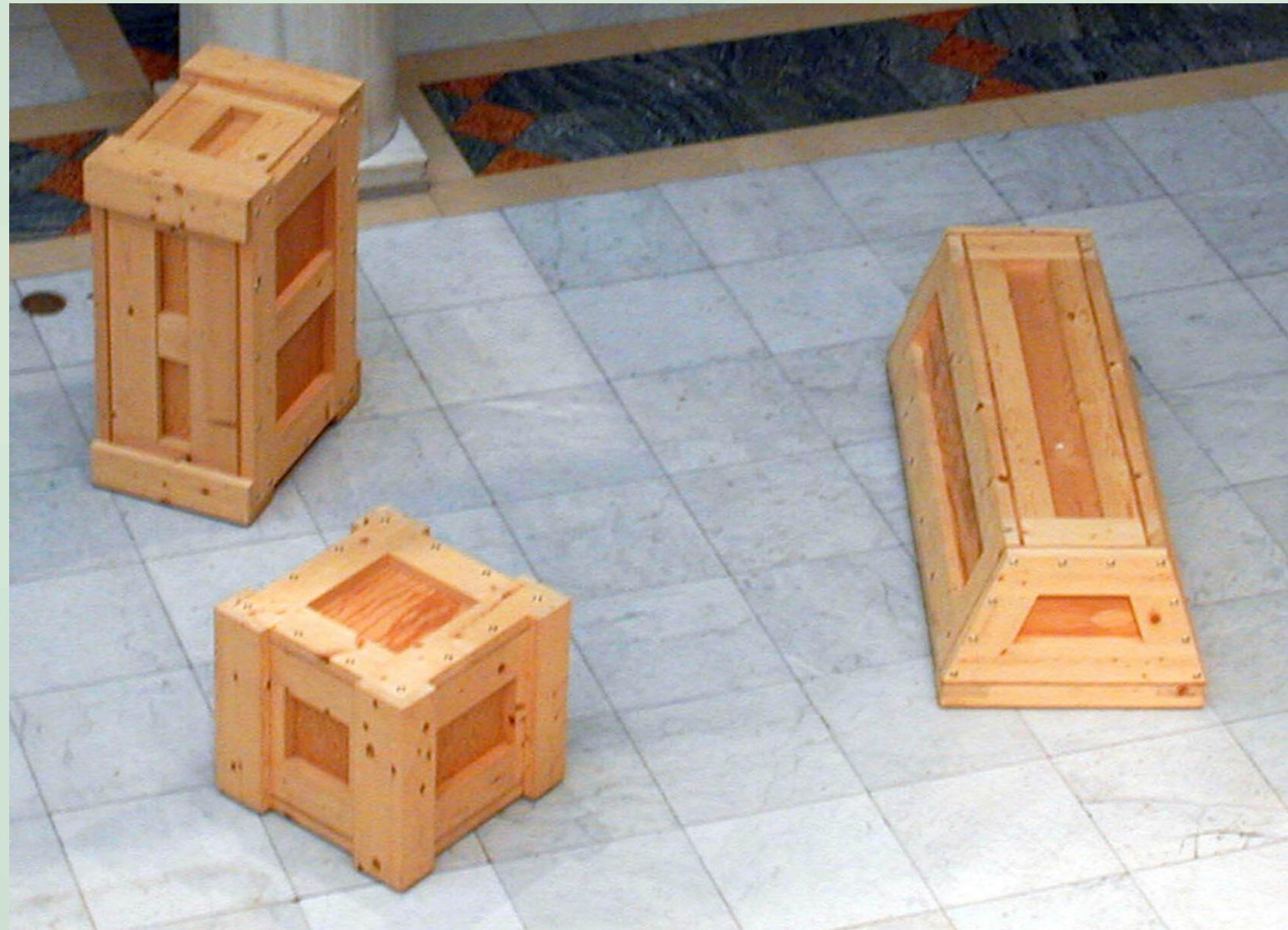
Interaction Severity

↓ 4%

*Stanchion Intervention*

# D.W. VI, D.W. VII, D.W. VIII, 1994

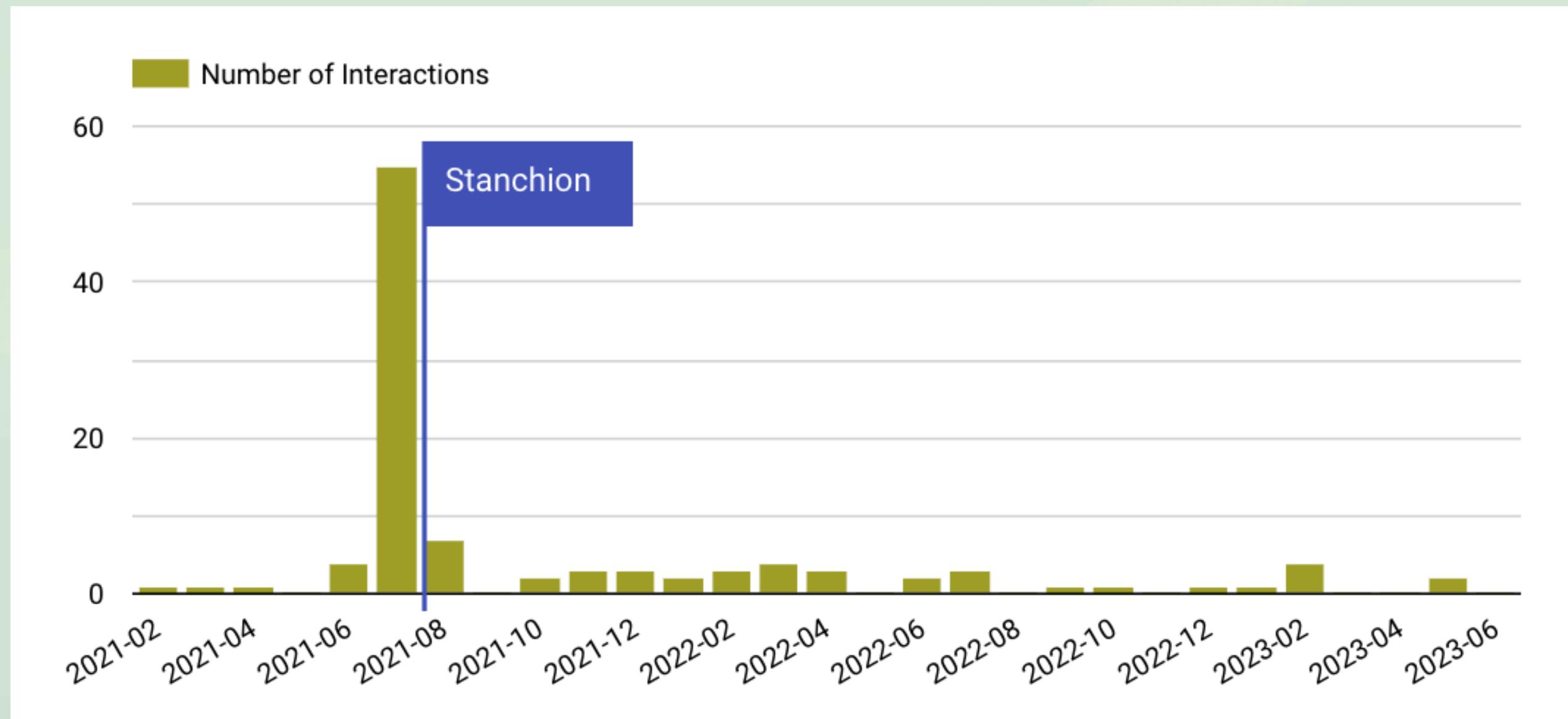
*Richard Artswager, Accession No. 2001.56.2, off-view*



*Stanchion Intervention*

# D.W. VI, D.W. VII, D.W. VIII, 1994

*Richard Artswager, Accession No. 2001.56.2, off-view*



Average Monthly  
Interactions

↓ 96%

Interaction Severity

↓ 7%

*Stanchion Intervention*

# Preliminary Conclusions

*Severity*

*Vinyl*



7%

*on average*

*Stanchions*



5.5%

*on average*

*Signage*



2%

*on average*

# Preliminary Conclusions

## *Interaction Count*

*Stanchions*

↓ 95%

*on average*

*Vinyl*

↓ 26%

*on average*

*Signage*

↑ 100%

*on average*

# What's next?

## *Housekeeping*

- **Finalize report structure and complete automation**
  - **Facilitates Quarterly Updates**
- **Improvements to data intake procedures**

# What's next?

*Improve on this proof-of-concept & incorporate into practice*

- **Test intervention types & track success over time**
- **Track gallery location & include location analysis**
- **Include visitor service data like visitor counts & holidays**
  - **Temporal information can enable incident forecasting**

# What's next?

*Ask new questions & Solve new problems*

- **What patterns can we find in interactions?**
- **What age groups are most likely to interact & under what conditions?**
  - **What interventions work best for different age groups?**
- **Does artwork medium correlate interaction patterns?**
- **How does artwork size or location correlate incidents?**
- **How does the calendar and holidays correlate to incident rates?**

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*If you have a question or a hypothesis, we can try to find an answer!*

# Thanks!