

# Using Healthcare and Environmental Services Data Analytics for Infection Prevention



# Using your ES data as an infection prevention tool...

- improves patient safety
- aids in modeling improvement impact on HAC scoring
- decreases or eliminates reimbursement penalties
- protects your staff



**Healthcare-  
related data is  
exploding.**



With pressures like...

*Value-based Purchasing*


*Staff Training*

*HAIs (Healthcare-Associated  
Infections)*

*Rising Costs*

*Government Requirements*

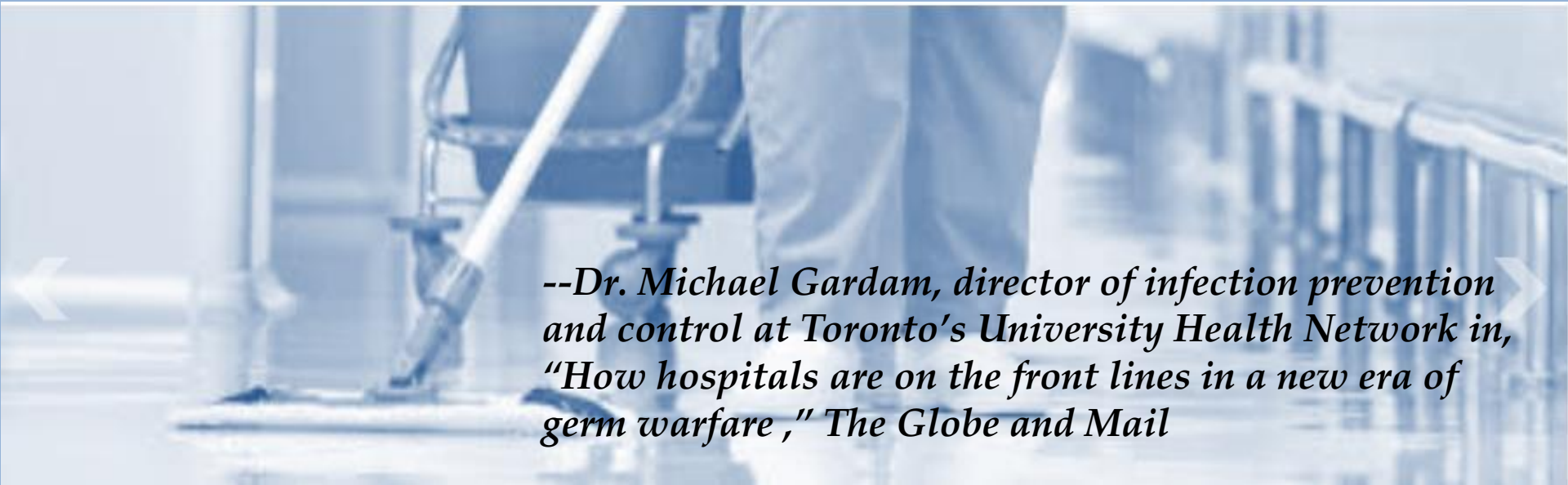
unlocking this  
data is more  
critical than ever.

A healthcare worker, likely a janitor or environmental services staff member, is shown in profile, mopping a highly reflective floor in a hospital corridor. She is wearing teal scrubs, a white hairnet, and white shoes. A blue bucket and a red bucket are on a cart behind her. The hallway is long and brightly lit, with railings visible on the right side. The text is overlaid on the right side of the image.

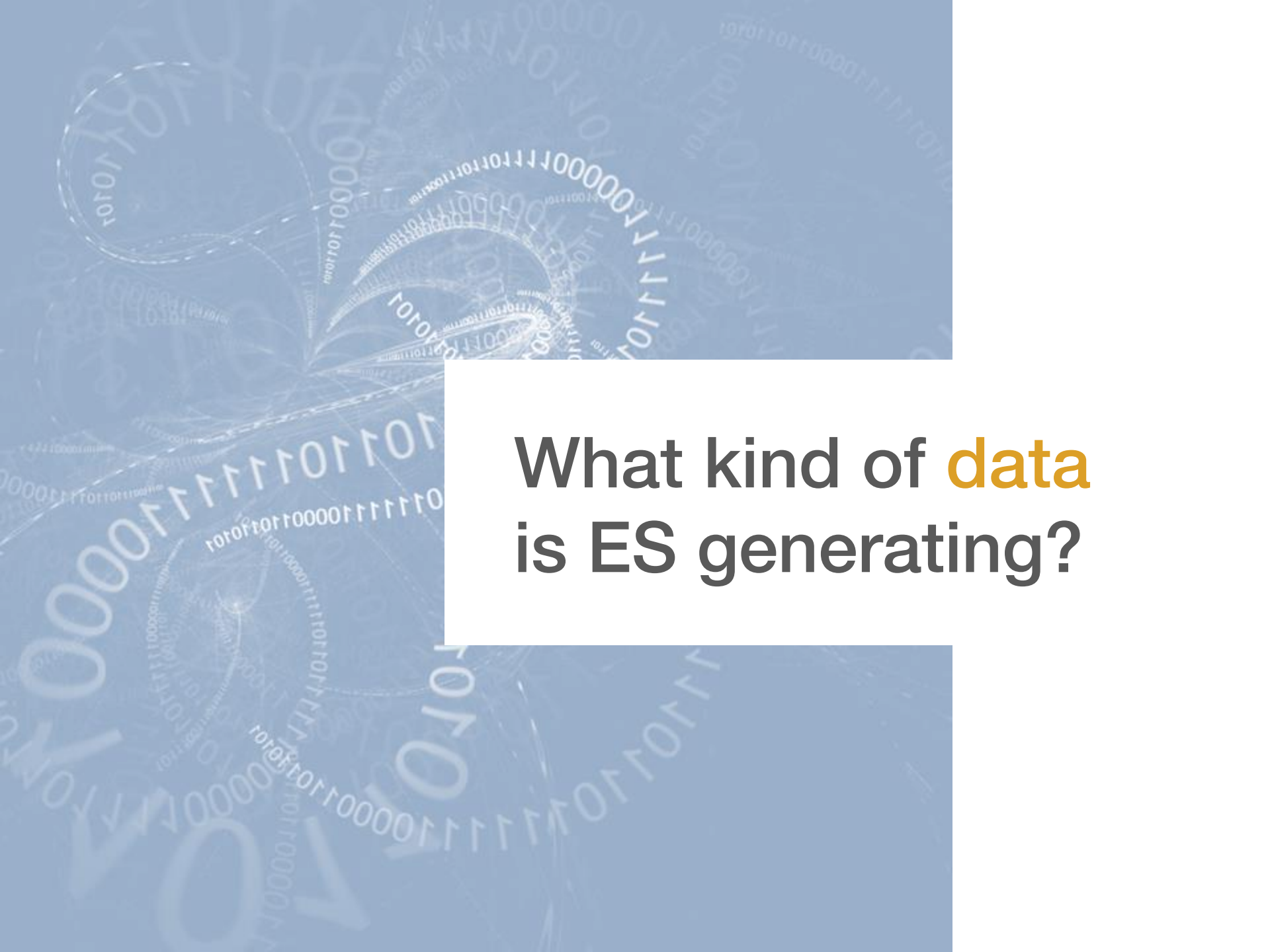
**Just like other  
aspects of today's  
healthcare,  
Environmental  
Services (ES) is  
generating more  
and more data.**

*And ES is key to infection prevention*

**“Environmental services is not being recognized as the incredibly important patient safety initiative it is.”**

A blurred background image showing a person in a hospital hallway using a floor cleaning machine. The person is wearing a light-colored uniform and is positioned in the center-left of the frame. The hallway has a metal railing on the right side. The overall image has a blue tint.

*--Dr. Michael Gardam, director of infection prevention and control at Toronto's University Health Network in, "How hospitals are on the front lines in a new era of germ warfare," The Globe and Mail*

The background of the slide is a blue-toned abstract image. It features a dense pattern of binary code (0s and 1s) in various sizes and orientations. Overlaid on this are several glowing, white, curved lines that resemble orbits or data paths, creating a sense of dynamic movement and digital complexity.

What kind of **data**  
is ES generating?





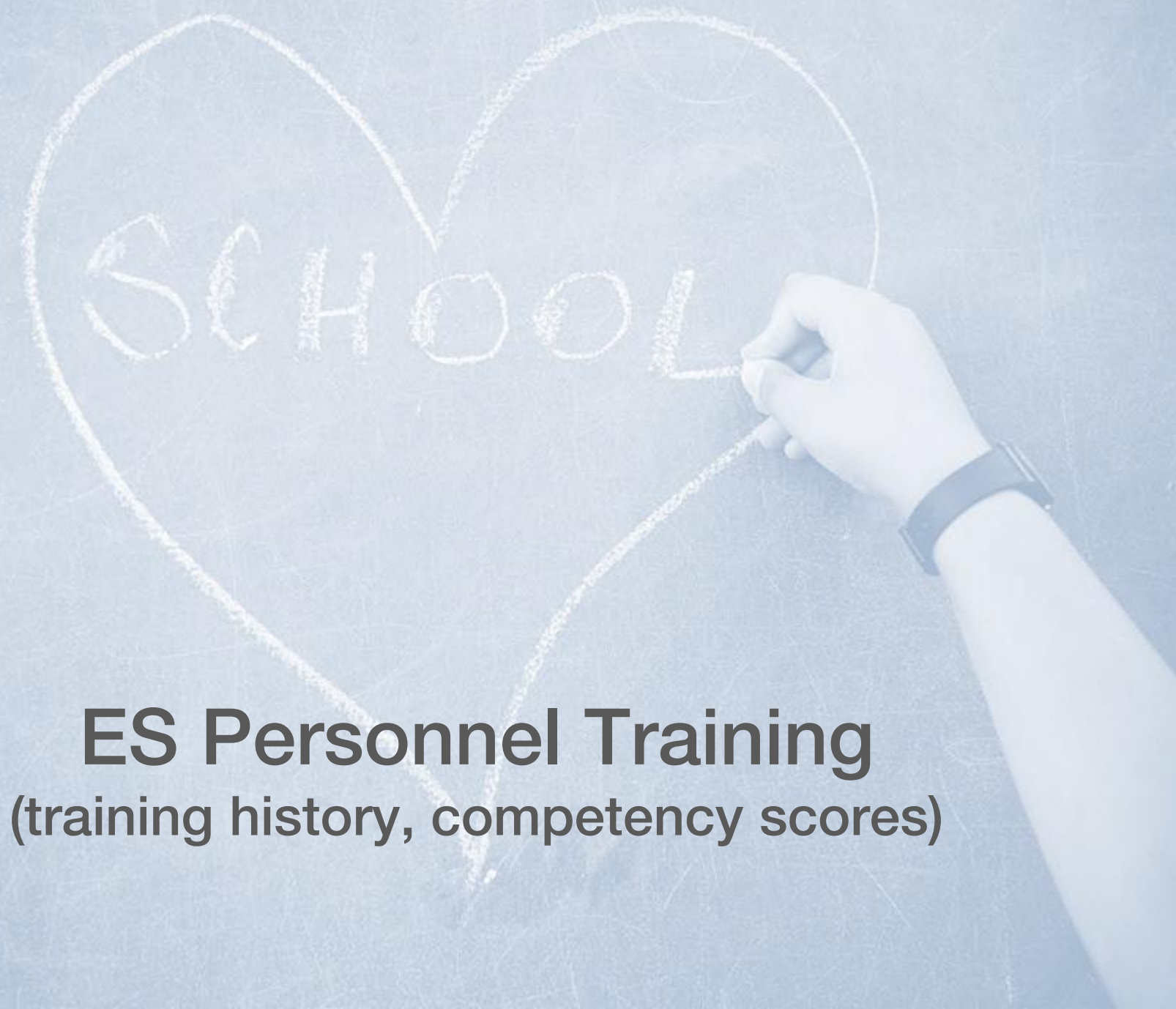
# Disinfectant and Cleaning Product Usage





# Disinfection Device Events

(UV emission and aerosol/misting devices)



# **ES Personnel Training**

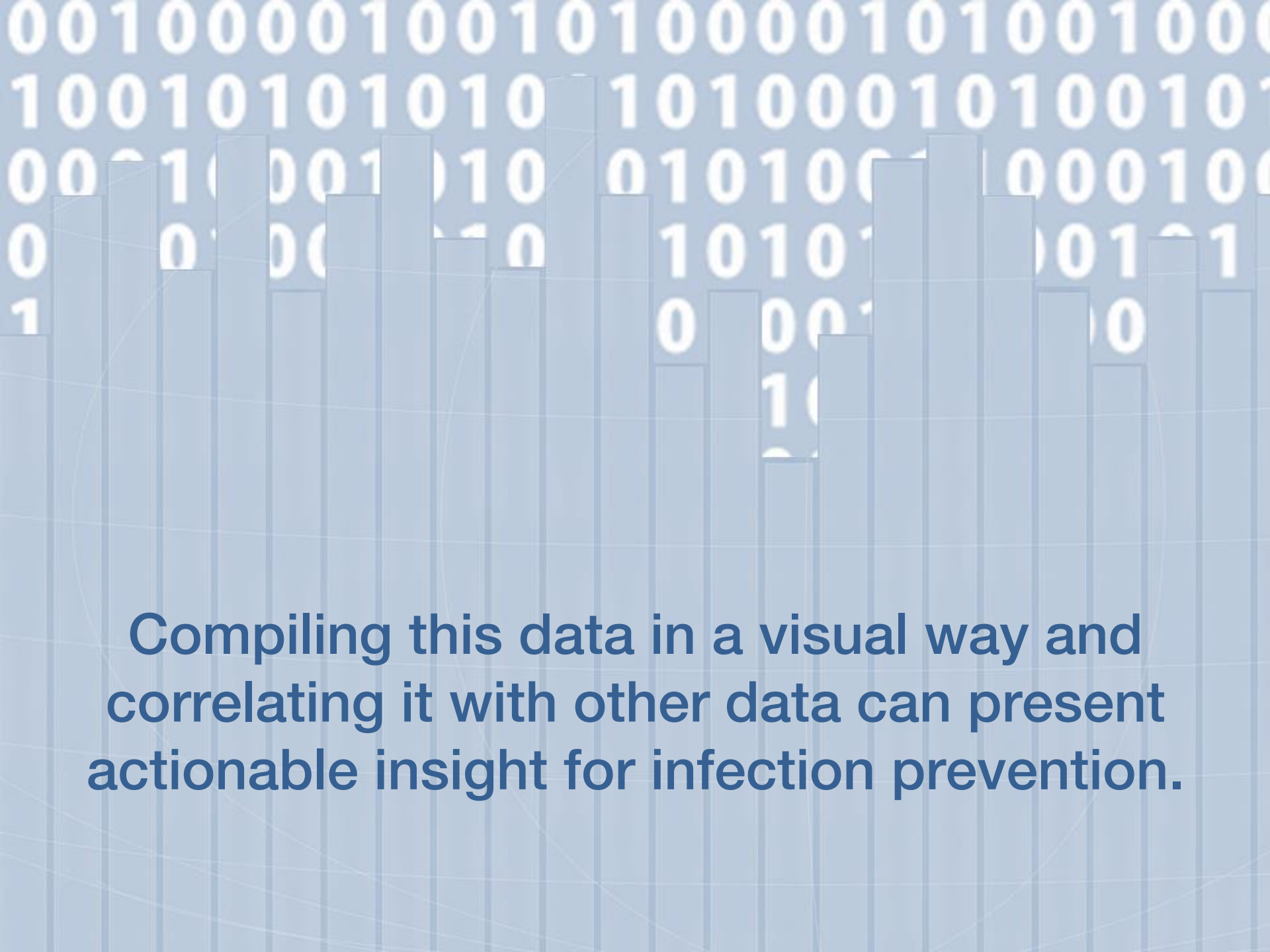
**(training history, competency scores)**



# **Cleaning Staff Inspection Results**

**(black light inspections, CDC checklist etc.)**





**Compiling this data in a visual way and correlating it with other data can present actionable insight for infection prevention.**

Quality Control:  
Infection Data

Facilities:  
Room Mapping

Human Resources:  
Cleaning Personnel

# Turning the Data into Action

Spot infection control problems with rooms or environmental services personnel or procedures quickly.

# Turning the Data into Action

The background of the slide features a soft-focus photograph of three apples resting on a desk. Behind the apples are several books, and in the foreground, a white marker and a pen are visible. The entire image is overlaid with a semi-transparent blue layer, through which the text and geometric shapes are placed.

Quality Control:  
Room Inspection Data

Quickly detect  
employees  
needing training  
and assign it  
automatically.

Training

Human Resources:  
Cleaning Personnel



Quality Control:  
Infection Data

Facilities:  
Room Mapping

ES:  
Disinfectant Device  
Event

# Turning the Data into Action

Determine optimization  
and efficacy of  
disinfectant device use.

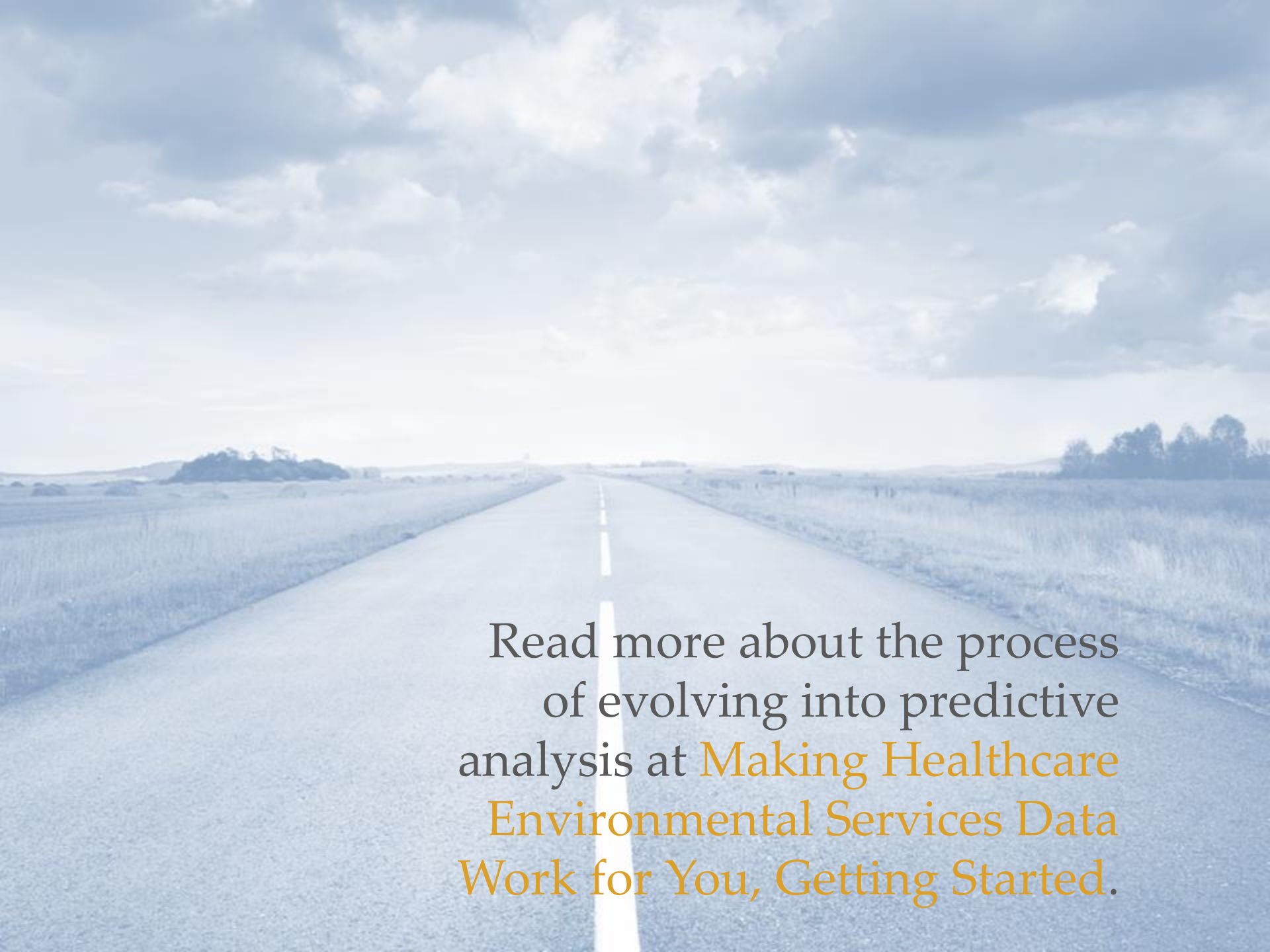
A scenic landscape featuring a winding asphalt road that curves through a valley. The road is flanked by green hills and mountains in the background. The sky is filled with soft, white clouds, and the overall lighting is bright and airy. The text "So How Do You Get Started?" is overlaid in a bold, dark blue font on the left side of the image.

**So How Do You Get Started?**

# So How Do You Get Started?

The road from  
**data capture**  
to **data presentation**  
to **data insight**  
is often not a straight line.



A blue-tinted photograph of a long, straight road stretching into the distance under a cloudy sky. The road has a white dashed line down the center and is flanked by grassy fields. In the background, there are some trees and hills. The sky is filled with large, white clouds.

Read more about the process  
of evolving into predictive  
analysis at [Making Healthcare  
Environmental Services Data  
Work for You, Getting Started.](#)



## *Visualizing and Managing Infection Prevention for Environmental Services in over 500 hospitals*



*Increase your value-based payments,  
call for a demonstration.*



*Email the author*

DocuFi is a data analytics and  
capture application provider  
and developer.

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