

MEDTRONIC - WE Summit Interactive Installation Brief



Medtronic WE Summit Interactive Installation Brief

Project Overview

An interactive data visualization installation titled "The We Are Wall - A living snapshot of us" for the Medtronic WE Summit (July 8-9, 2025) that collects demographic and personal information from attendees via mobile survey and displays connections in a visually compelling way on an LED wall. The visualization will also be featured during key moments in the main ballroom presentations.

Client Information

• Client: Medtronic

• Agency: Full Swing Productions

• Event: WE Summit - DEI Conference

• Theme: "WE: Include, Inspire, Innovate"

 Location: Hyatt Regency Minneapolis, 1300 Nicollet Mall, Minneapolis, MN 55403

• **Dates**: July 8-9, 2025

• Estimated Attendance: 600 people

Project Goals

- Create an interactive experience that visually represents diversity and connections among attendees
- Demonstrate both unique differences and shared characteristics of participants (key message: "We are different, but we are also similar")
- Provide an engaging, accessible experience that all attendees can easily participate in
- Create a visual artifact that serves as a reminder of the event's message throughout the year
- Support the event theme: "WE: Include, Inspire, Innovate"

Survey Details

The mobile survey will collect the following data points:

- 1. Q1: How many years have you been in Medtronic? (Determines string color)
 - Data type: Integer ranges
 - Options: <3 years (150 expected), 3-5 years (150), 5-10 years (150), 10-20 years (100), 20+ years (50)

2. Q2: What's your preferred learning style?

- Data type: Categorical
- Options: Visual, Auditory, Reading/Writing, Kinesthetic (Doing), Interactive/Collaborative

3. Q3: What shaped you the most growing up?

- Data type: Categorical
- Options: Family Traditions, Community or Neighbors, Religion or Spiritual Practices, Education or School Environment, Sports or the Arts, Personal Challenges or Adversity, Travel or Exposure to Different Cultures

4. Q4: Based on your personality, when do you feel you're at your peak performance?

- Data type: Categorical with multiple dimensions (personality type × time of day)
- Options include:
 - Extrovert, Morning: "I enjoy collaborating and brainstorming early in the day"
 - Extrovert, Evening: "I find myself energized at night for group projects and social discussions"
 - Introvert, Morning: "I prefer to start my day quietly, focusing on tasks without distractions"
 - Introvert, Night: "I'm most productive at night, working independently on complex tasks"
 - Ambivert, Morning: "I thrive in the morning, balancing independent work and social interaction"
 - Ambivert, Night: "I work best at night when I can choose between focusing alone or collaborating"
- Includes definitions for personality types

5. Q5: What drives you or motivates you now?

- Data type: Categorical
- Options: Making a difference, Achieving personal goals, Learning and growth, Building strong relationships, Leading or mentoring others, Finding balance or peace, Exploring new possibilities

6. Open-ended question: What makes you unique?

- Full prompt: "There are all wonderful aspects of who you are What makes you unique? Or what skill or attribute do you admire most about yourself? Try to summarize in 1-2 sentences."
- Data type: Free text (1-2 sentences)
- Purpose: Will be used for Al-generated poems or stories at end of session

Data Visualization Concepts

To emphasize "We are different, but we are also similar":

1. Connected Constellations

- Individual nodes represent each attendee
- Lines connect people with similar responses in specific categories
- Clusters form naturally around common responses
- Color-coding by years at Medtronic (Q1)
- Visualization can be rotated to highlight different dimensions

2. Woven Tapestry

- Each response creates a thread in a larger fabric
- Individual threads show unique paths, but together create a cohesive pattern
- Thread thickness increases when multiple identical responses exist
- Different views can emphasize either individual stories or collective patterns

3. Dynamic Network

- Interactive web of connections that shifts based on which question is being highlighted
- Animations show how the same group reconfigures when viewing different dimensions
- Emphasizes that we group differently based on which aspect of identity is in focus

4. Flowing Rivers

- Sankey diagram-inspired visualization where participants flow through different response categories
- Shows how people with one commonality (e.g., similar motivation) might diverge in learning styles

Visually demonstrates both individual journeys and common pathways

Technical Specifications

User Experience Flow

- 1. Attendees scan QR code to access mobile form
- 2. Form collects information through 5 multiple-choice questions and 1 openended question
- 3. Submissions generate visualizations on the LED wall with animations
- 4. Different views of the data can be displayed at scheduled times
- 5. Aggregate visualizations exported for ballroom presentations
- 6. Open-ended responses collected for Al-generated content

Installation Components

1. Mobile Survey

- QR code access
- Multiple-choice questions with clear definitions
- First name input (with anonymous option)
- Terms acceptance with privacy notice
- Welcome message upon submission
- Accessible, user-friendly interface following Medtronic branding

2. Main LED Wall Visualization (16:9 ratio)

- Live, continuous display throughout the event
- Color-coded by years at Medtronic
- Multiple visualization modes that can be switched manually or on schedule
- Animated appearance for new submissions
- Thicker connections for identical responses
- Background graphics and quotes when inactive

3. Ballroom Presentation Visualizations

- Format: Screen captures or exported videos from main visualization
- Timing:
 - Day 1: After first keynote (approx. 10:00 AM)
 - Day 1: End of day before panel (approx. 4:00 PM)
 - Day 2: Before Geoff's presentation (8:30 AM)
 - Day 2: After lunch, before TED Talks (approx. 11:30 AM)

Technical Approach Options (Discovery Phase)

Option 1: TouchDesigner-Centered Approach

- **Frontend**: React web app for survey
- Backend: Node.js/Express for API and data management
- Visualization Engine: TouchDesigner for real-time data visualization
- Pros: Powerful real-time graphics, excellent for LED wall, highly customizable animations
- Cons: Requires specific hardware, less portable for future use
- Best for: Creating stunning visual impact, real-time transitions, complex animations

Option 2: Full Web Stack Approach

- Frontend: React with D3.js/Three.js for visualization
- Backend: Node.js/Express with MongoDB
- Visualization Engine: WebGL for graphics rendering
- Pros: Fully web-based, more portable, easier to repurpose
- Cons: May have limitations in animation complexity
- Best for: Future reusability, deployment flexibility, lower hardware requirements

Option 3: Hybrid Application Approach

- Frontend: React Native for cross-platform survey
- **Backend**: Firebase for real-time data synchronization
- Visualization Engine: Unity for visualization with WebGL export
- Pros: Strong performance, excellent for data persistence, good animation capabilities
- Cons: More complex integration points
- Best for: Balancing visual quality with future extensibility

Option 4: Low-Code Approach

- Frontend: Webflow or similar for survey
- **Backend**: Airtable or similar for data management
- Visualization Engine: Observable with D3.js for visualization
- Pros: Rapid development, easier client handoff, lower technical barriers
- Cons: Limited customization, potential scalability issues
- Best for: Quick turnaround, client editability, simpler visualizations

Detailed Workback Schedule

Phase 1: Discovery & Design (April 17-30)

- April 17-19: Technical assessment and approach selection
- April 20-23: UX/UI design for mobile survey
- April 24-26: Visualization concept design and mockups
- April 27-30: Client review and approval of approach

Phase 2: Development (May 1-31)

- May 1-7: Survey application development
- May 8-14: Backend and data storage setup

- May 15-21: Initial visualization development
- May 22-28: Integration of all components
- May 29-31: Internal testing and bug fixes

Phase 3: Refinement (June 1-27)

- June 1-12: Optimization and feature completion
- June 13: First client review
- June 14-17: Revisions based on feedback
- June 18: Feedback due back
- June 19-24: Final adjustments and polishing
- June 25: Final client review
- June 26-27: Final revisions and approval

Phase 4: Deployment & Event (June 28-July 9)

- June 28-July 1: System packaging and deployment preparation
- July 2: Final build goes live
- July 3-7: Pre-event testing and contingency planning
- July 8-9: On-site support during event

Budget

\$6,500 for development

Deliverables

- 1. Mobile survey application accessible via QR code
- 2. LED wall visualization system with multiple views/modes
- 3. Exported visualization videos for ballroom presentation (4 times)
- 4. Documentation for operating the system
- 5. Data collection mechanism for open-ended responses

6. Technical handoff for potential future reuse

Technical Considerations

- Ensuring smooth real-time data flow from submissions to visualization
- Creating a system that can handle 600 submissions over 2 days
- Developing engaging visuals that work well both as always-on display and as presentation moments
- Building in flexibility to sort and filter the visualization by different categories
- Ensuring the system can operate reliably throughout the entire event
- Creating a data export mechanism for the client to retain insights after the event

Open Questions

- 1. Are there specific Medtronic design elements that should be incorporated into the visualizations?
- 2. How to handle moderation etc.

Medtronic Tech Stack