

Idea Proposal:

“Tele White Boarding”: method for remotely interacting with distant colleagues on immersive screens

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Background / Premise

- Large flat-panel displays will be pervasive in work and home environments
- Large high-resolution displays will create an immersive environment for viewing video – and facilitate an illusion for a viewer to (want to) grab and touch objects on screen
- Natural human interface technologies (e.g., gesture and voice recognition) will be far advanced in the future
- Ultrasonic wave (touch-free) and camera sensors will be integrated with large display screens for gesture recognition applications

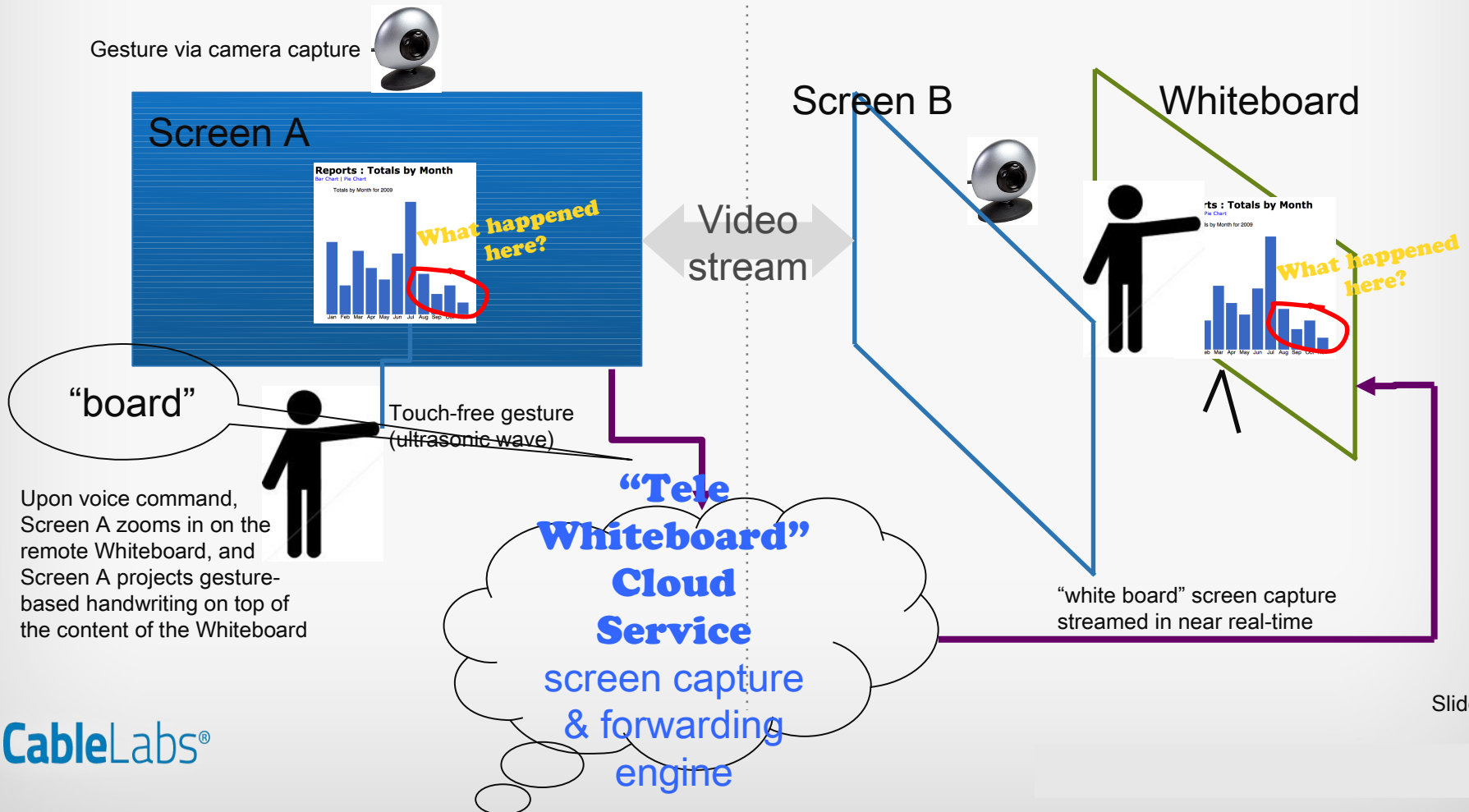
Problem Statement

- In large-screen environments, object images presented on large displays may seem “touchable” and “controllable” from the perspective of a viewer
- Interactivity with distant colleagues can be limited in traditional teleconferencing environments – i.e., can’t lively interact, on a white board setting for example, in an impromptu fashion
- Can high-speed networks and ubiquitous large displays remove the “distance” barrier and provide real-time interactivity for future workers?

“Tele White Boarding” Context Diagram

West Coast

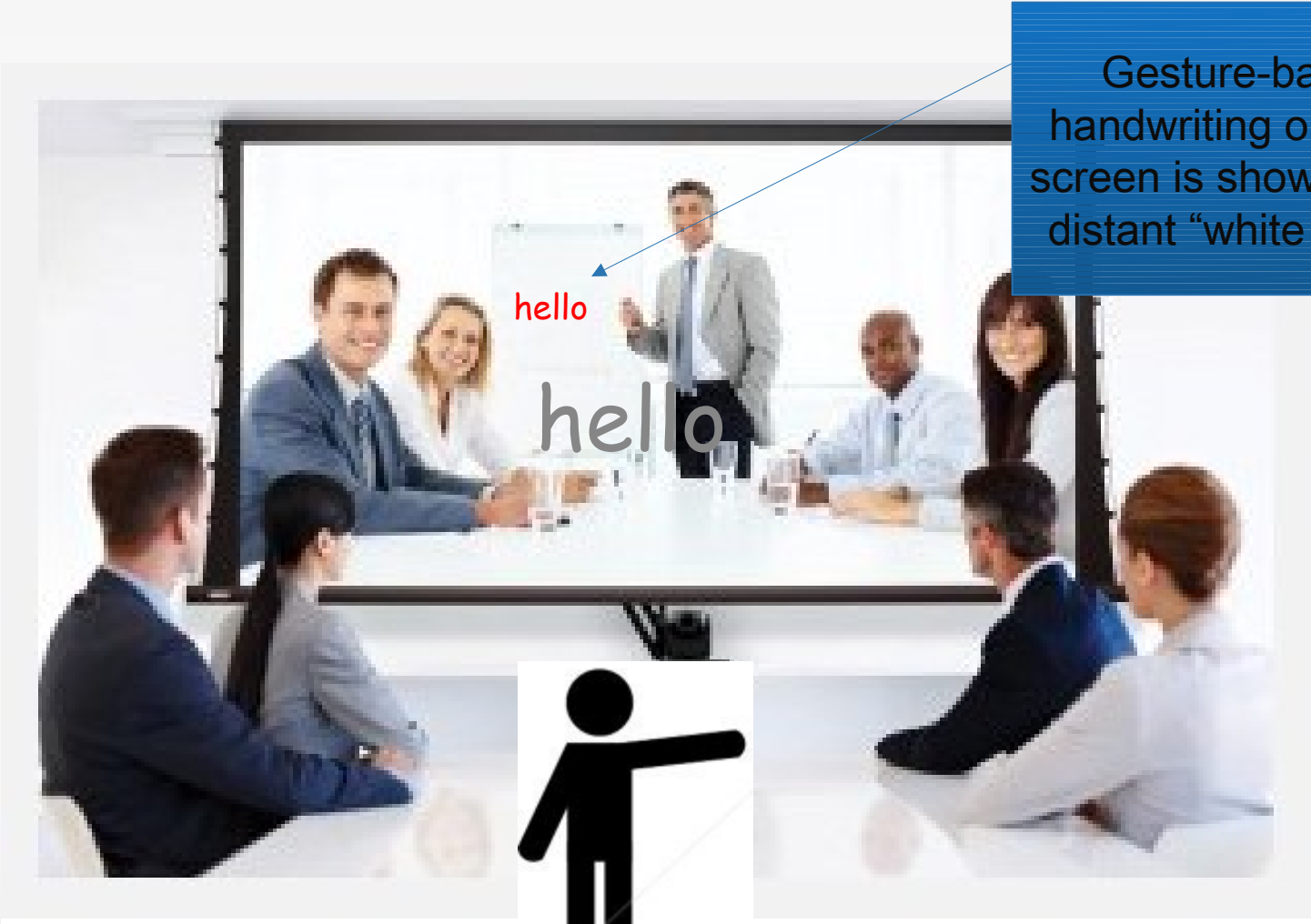
East Coast



“Tele White Boarding” Description

- System is comprised of:
 - 1) camera sensors on large displays
 - 2) large displays with touch-free gesture recognition capabilities
 - 3) digital “white board” as a common collaborative screen (on either end of remote sites)
 - 4) “Tele whiteboard” cloud service
- “Tele whiteboard” cloud service provides:
 - › voice recognition (e.g., “board”, “zoom”, “pan”, “capture”, “archive”)
 - › gesture recognition
 - › screen capture of gesture overlay and forward to remote screen
 - › interactive session capture/archival/retrieval and remote access

Customer Experience



Gesture-based handwriting on large screen is shown in the distant "white board"

