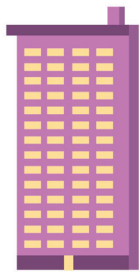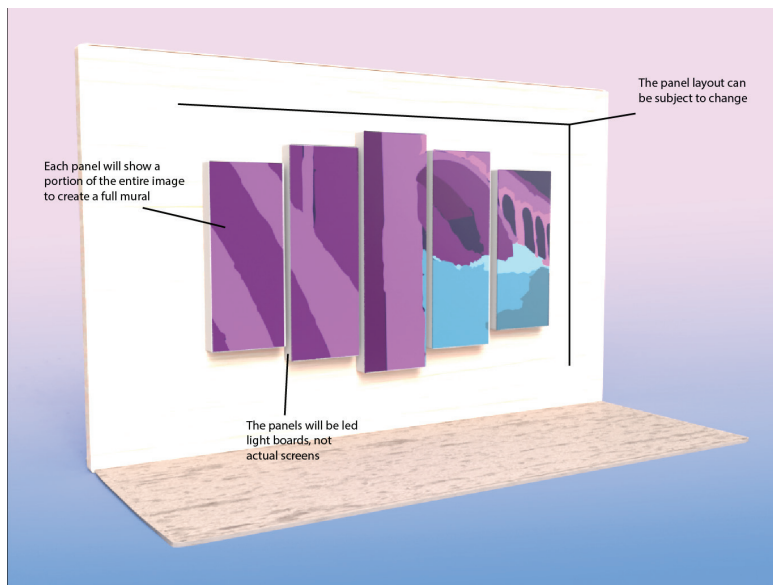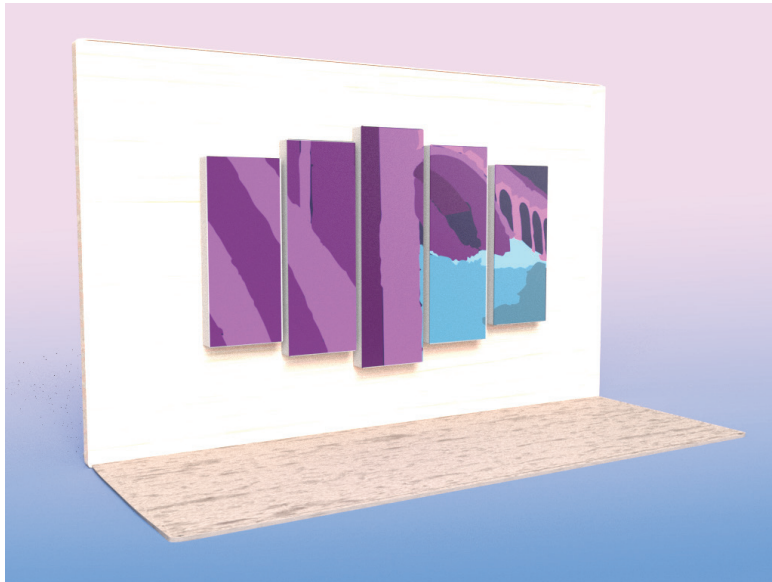South Landing
Catalyst Lobby Concepts

3 directions for the data driven display

Catalyst Lobby Concepts:
Living Mural

The panel layout can be subject to change

Each panel will show a portion of the entire image to create a full mural

The panels will be led light boards, not actual screens

Example acuity of mural building in high energy production

Example acuity of mural building in low energy production (less detail)

How it Works:

Each panel will be made up of LED pixel lights and display a pixel art image of the Spokane area (tbd what image it will be).

Visualizing Production Data:
The energy production of the different sites will be represented through the visual acuity of the mural–color depth/radiance. For example, low energy production would limit the color range of the mural to 2-3 colors, causing the mural to lack depth and seem flat. As energy production increases, so would the color range, which would introduce more depth, detail, and character to the mural.

Visualizing Usage Data:
For the energy usage there will be small animations (such as birds flying or clouds moving) to enhance the stylized landscape. When energy usage is low, the liveliness of the mural will increase as animations are triggered. When it is high, the mural will "die" as animations will cease.

Image:
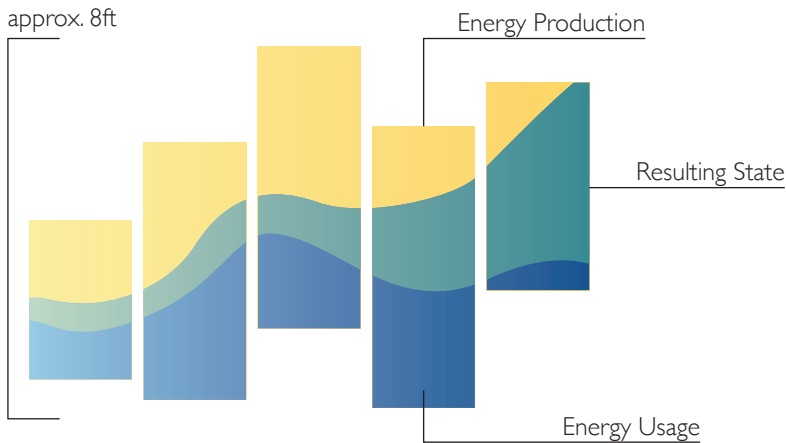The underlaying image of the Spokane area will be stylized in an abstract pixel art.

Result
Building occupants will be curious about the installation and the different moving aspects. And because the motion aspects are only triggered if usage is good, occupants will be motivated to join conservation efforts. The use of a local image will also help viewers empathize with the mission and see how the Catalyst is connected to the surrounding community.
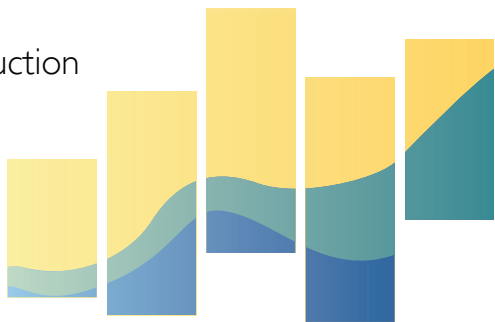
More details:
https://projects.invisionapp.com/boards/PT3Y 22DWJHB/

Dynamic Lights

approx. 8ft

Energy Production

Resulting State

Energy Usage

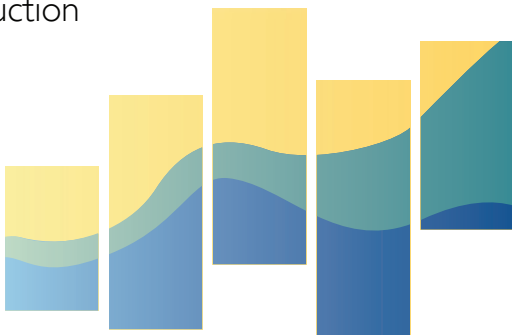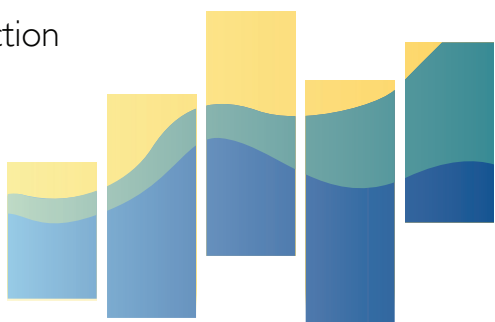## EXAMPLE STATES

Usage < Production

Usage = Production

Usage > Production

How it Works:

Five LED panels arranged in a uniquely aesthetic way will present the real time energy data through color and motion. Yellow and blue represent production and usage, and the resulting middle (green) changes dynamically with data refreshes approx. every 5 minutes.

Energy Usage
Energy usage data (blue) will push the green section up as more energy is used, showing that energy usage consumes the yellow energy production.

Energy Production
Energy production data (yellow) will push the center green "line" down as more energy is produced, showing that energy production can help offset energy usage.

Center
The center shows a timeline of usage and production throughout the day, moving up and down dynamically as usage and production data change. The goal would be for the center section to remain in the center of the display or in the lower half (more energy production than usage).
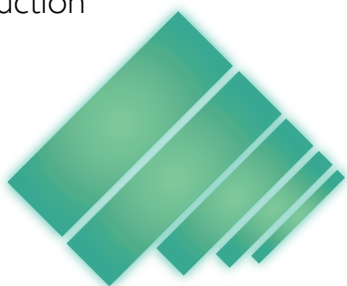
Result

Building occupants will be intrigued by Dynamic Lights because it is simple enough to walk by and understand the current state of the building's energy efficiency. And the consistent motion will keep occupants interested in a mesmerizing way through the smooth fluid-like motion of the data changes.

Modern Light
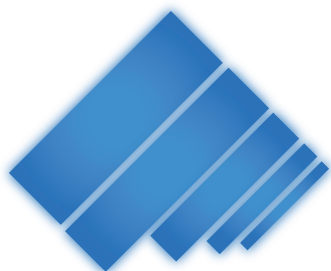

EXAMPLE STATES

Usage < Production

Usage = Production

Usage > Production

How it Works:

Inspired by James Turrell and Dan Flavin, the Modern Light display will feature an arrangement of 5 large panels that fluctuate between 3 colored states as energy data changes throughout the day.

Usage > Production
The least optimal state will be represented by a orange/red tint to communicate caution.

Usage = Production
The goal state will be represented by a blue tint to communicate we are reaching our energy goals.

Usage < Production
The most optimal state will be represented by a green tint to communicate we are being as "green" as possible.

Result

Building occupants will be intrigued by the Modern Light display, as they will easily be able to glance at the installation while walking by or from the levels above, and notice how well the building is doing at conserving energy as a whole. It will be hard not to notice what state the building is in and react accordingly as you go throughout your day.

Catalyst Lobby Concepts:
Interactivity

Current Direction
We are exploring ways we can possibly make the installation interactive using motion sensors or video to allow the viewer to see how their actions impact the installation.

Examples:
A viewer could walk up to the installment, the motion tracker would capture their silhouette and transfer the data to the display. This data would be prioritized over the energy data usually displayed. Thus the silhouette is overpowering the LED lights causing the image to distort, showing the viewer their "impact" on the building. Once the person steps away, the display returns to the live visual of production and usage data.
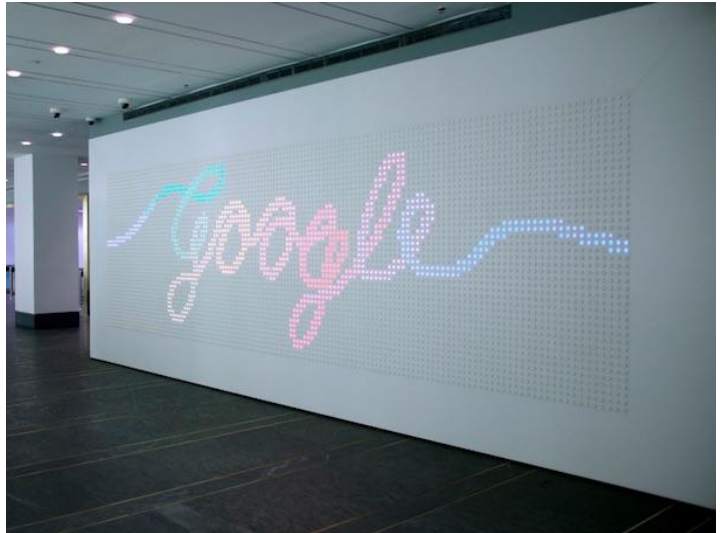
A second thought, we could implement buttons the user could press to trigger events such as, "unplug projectors" or "charged 10 laptops" these impact of these "events" would then be displayed on the installation to show how these types of events effect the overall usage and production data.

Result
Our hope is this layer of interactivity would help the viewer stop and think that their actions involving energy impact the building (and our community) overall. Thus, encouraging them to be more energy conscious.

Inspiration
(Click images to launch videos)

Anypixel.js by Google

Lobby Canvas by ESI Design