

BrightSign Ecosystem Retail Demonstration Kiosk



1. Scope

- a. BrightSign, Nexmosphere, Bluefin, Impact Displays, and Kollins Communications developed a mobile demonstration unit that can be used on tradeshows and dealer events to demonstrate a real-life application example of the integration of Nexmosphere sensors on the BrightSign platform as well as exhibit hardware, display design/fabrication and content/programming expertise by the Display Partners Team.
- b. The demonstration unit must be portable and durable; and easy to ship and set-up.
- c. Two units fabricated, Europe and United States.

2. Target Audience

- a. System integrators visiting tradeshow/ dealer events to be inspired by these application examples for the retail environment.
- b. Manufacturers, distributors interested in promoting products with a flair towards customer experience.
- c. The technology to be demonstrated in a clean and simple way so that non-retail users can also translate the possibilities to their specific (tangential) markets.



Front - Kersen Cosmetics



Back - Mako Coffee

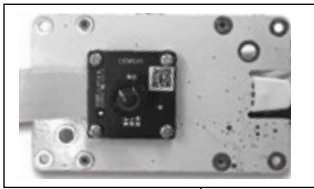
3. Concept

- a. Develop a two-sided display that features:
 - i. Front side: touch screen and user interaction with product.
 - ii. Back side: touch screen with user interaction with screen and active feedback to user.
- b. Front — 4 Kersen cosmetic products in tube format. These products need a little more information to tell a story. So, it needs to be more than “just a cream” This way the content can be a branded appealing video and not just a product information slide. A “lift & learn” application with storytelling, providing information about the product
- c. An additional, hidden demo, of gender recognition is on this side of the display, accessed by a touch on the screen (in a non-visible location).
- d. Back — 3 shelves with Mako Coffee as the featured product. When seeing a presentation of different coffees, it is always difficult to select the right taste. With this “menu” tool the shopper can find the right coffee with the selection tool on the screen. Once a “roast” is selected and a specific coffee product info sheet will display and the product (coffee tin) will be illuminated by an LED strip in the front of the shelf.

4. Treatment

a. Front — Kersen Cosmetics

- i. Video Attract Loop constantly plays while LED lights illuminating the 4-shelves will change to “attract” customers.
- ii. When customer is within a short distance to display, Motion Sensor technology triggers a Call to Action video along with a change in LED lighting.
- iii. The Call to Action video encourages the customer to Pick Up a cosmetic product tube.
- iv. When a product tube is lifted, using the RFID antenna and tag (to detect the pickup of the product) to trigger a video about that product along with a lighting variation. Lifting another product will produce a different video product video, lighting effect to appear.
- v. Replacing the product and/or a “time out” reactivates the Attract Loop, effectively “resetting the display” for the next customer.
- vi. Gender recognition, not a part of the cosmetics demo, is part of this side of the display, accessible by the touchscreen during the “call to action” video (in a non-visible location). The camera is to the left of the Kersen vertical logotype.



Nexmosphere XY-520
Gender Sensor

b. Back — Mako Coffee

- i. Video Attract Loop plays while LED lights illuminating the 3-shelves holding coffee tins change to “attract” customers.
- ii. When customer is within a short distance to display, Motion Sensor technology triggers a Call to Action video along with a change in LED lighting.
- iii. The Call to Action video encourages the customer to Learn about Light, Medium and Dark Coffee Roast Coffee selections.
- iv. When a “Roast” is selected, a video plays to inform about the selection and ends on a selection screen with 4-coffees to pick from by touching a tin image on the screen.
- v. When an image of a coffee tin is touched, a product information screen appears and corresponding LED lights beneath the selected coffee tin highlights. There is a strong link between the product on the screen and on the shelf.
- vi. Pressing a “back” button to navigate or allowing about 30-seconds of inactivity resets the display back to the Attract video loop with accompanying LED light show.

5. Hardware Configuration



Cosmetics back view

a. Front — Kersen Cosmetics

- i. BrightSign HS123 Media Player integrated into monitor
- ii. Bluefin Technologies 15" Touchscreen in portrait orientation
- iii. Bluefin Technologies Dual Speakers
- iv. Nexmosphere Lift & Learn RFID XR-A50 antenna (4x)
- v. Nexmosphere L-X110424S RGBW LED lighting (4x)
- vi. Nexmosphere XDW-M44 Motion sensor (1x)
- vii. Nexmosphere XM-350 Controller (1x)
- viii. Nexmosphere XY-520 X-Eye Gender Sensor

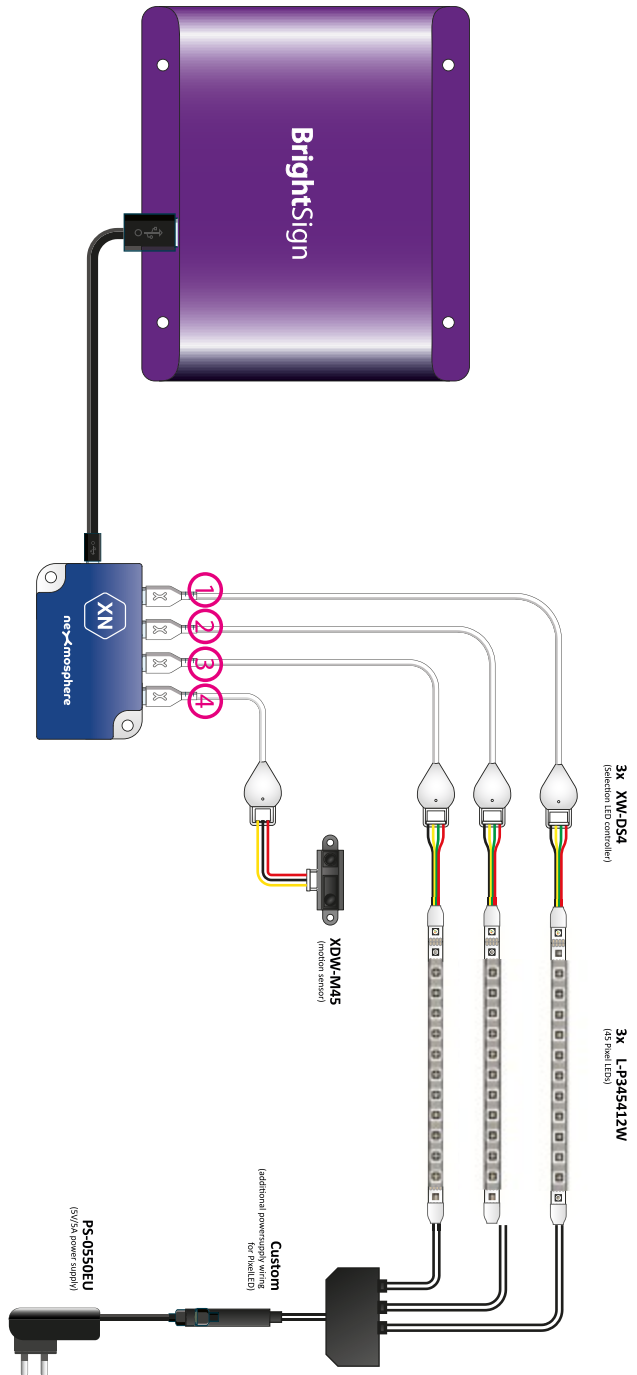
b. Back — Mako Coffee

- i. BrightSign HS123 Media Player integrated into monitor
- ii. Bluefin Technologies 21.5" Touchscreen in portrait orientation
- iii. Bluefin Technologies Dual Speakers
- iv. Nexmosphere L-P345412W Selection LED 144l/m (6 sections – 3x)
- v. Nexmosphere XDW-M44 Motion sensor (1x)
- vi. Nexmosphere XN-185 controller (1x)

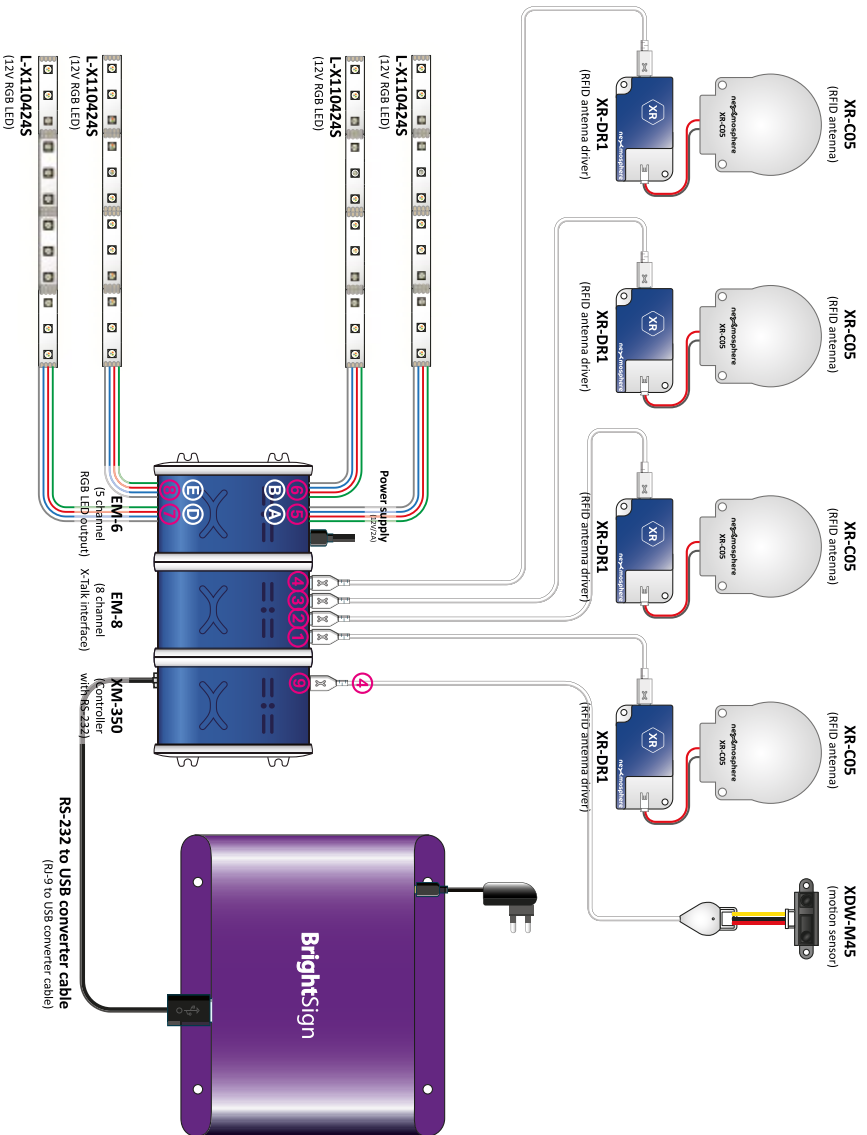


Coffee back view

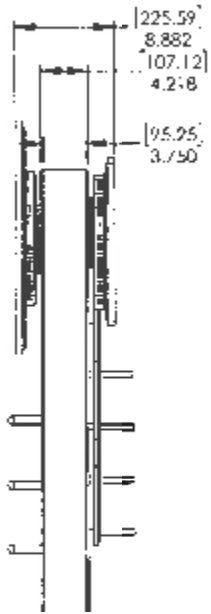
Coffee hardware connection diagram



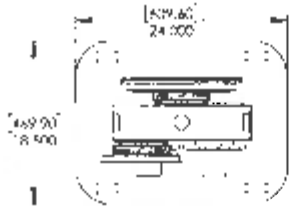
Cosmetics hardware connection diagram



6. Display — Impact Displays



Display side view



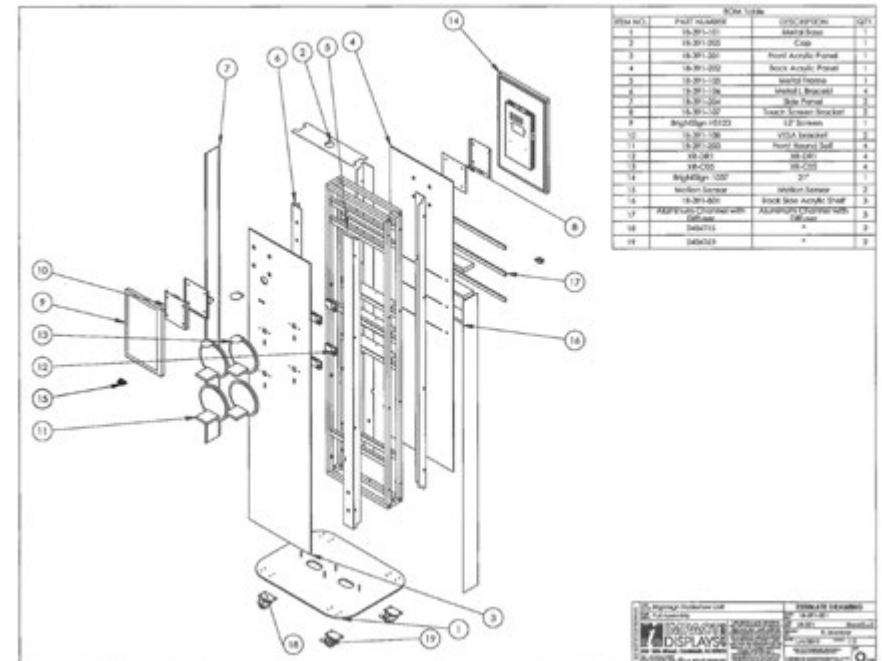
Display overhead view

- a. The overall guideline for the display was developed by Nexmosphere and enhanced by Impact Displays who designed, engineered and fabricated the display.
- b. Dual-sided portable display, approx. 183cm x 38.1cm (72 inches x 15 inches) (without speaker module).
- c. Construction — welded metal tube/U-channel frame with steel support for shelving and fascia of Acrylic 0.25-in material.
- d. Easily removable side flanges contain the front/back display boards to the display for convenient removal for servicing/maintenance.
- e. Stained wood, CNC routed for LED technology is employed in the Coffee side shelves.
- f. Translucent Acrylic, CNC routed, is the base material for the circular cosmetic tube shelves. Slot routing path allows LED technology to provide light dispersion through the translucent shelf backing to afford back glow illumination as well as light transmission through the shelf to back-light the products.



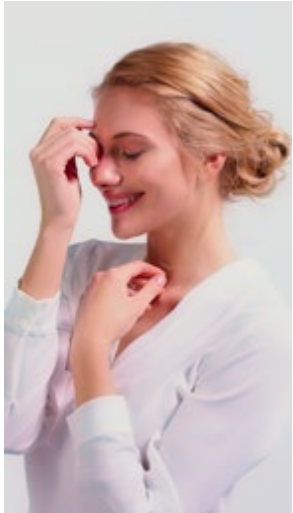
Display front view,
Kersen Cosmetics side

- g. Video monitors engage on easy-on/off steel mounts for ease of display set-up/tear-down.
- h. Speaker module mounts to top of display. Wiring is fed internally and connects to both monitors on 3.5mm plugs/inline jacks.
- i. Custom shipping case(s), designed to protect the display, fit on an oversize pallet, ready for deployment anywhere.
- j. Electrical distribution power strips, both European and U.S. iterations, afford power distribution to display from the bottom of the display.

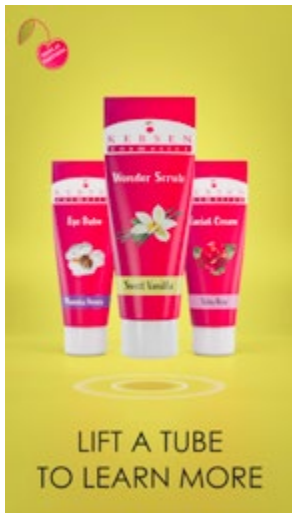


Display full assembly

7. Content



Cosmetics Attract Loop
Frame Grab



Cosmetics Call to Action
Frame Grab

a. For both Kersen Cosmetics and Mako Coffee, Video, Display Graphics, and dummy products were designed and produced to simulate actual goods to provide a convincing experience for envisioning real-world applications.

b. Front — Kersen Cosmetics

i. Kollins researched possible conflicts with the use of many names for our fictitious cosmetics company and arrived at the Dutch word for the fruit cherry as being neutral and not having a nefarious meaning in another language.

ii. Developing the four cosmetics along with the videos that tell a story of their heritage and usefulness made for some good humor in developing the descriptions for the products.

iii. The videos contribute to the viewer experience and essentially draw the attention to the product and encourage the consumer to interact by Nexmosphere's Lift-and-Learn technology with hands-on the product.

iv. Lighting effects add substantially to the display by highlighting an individual product and giving the whole display some



Coffee Attract Loop
Frame Grab



Coffee Call to Action
Frame Grab

“energy” that complements the video yet makes the product stand out.

v. Design, Graphics, Scripting, Video Footage, 3D Motion Graphics, Music, Voice-Over, and Post-Production all combine to provide a slick, professional communication to the consumer with the display.

c. Back — Mako Coffee

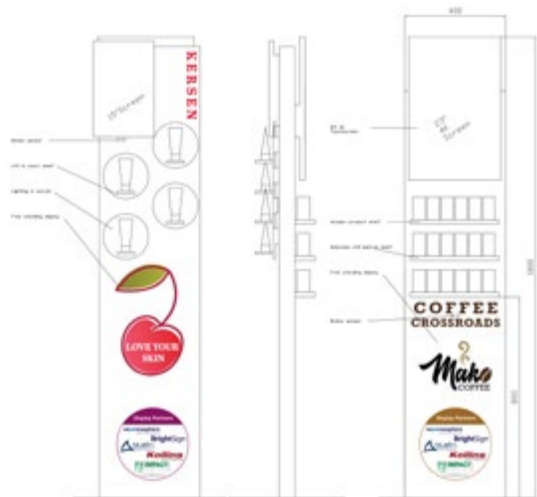
i. Kollins also researched possible conflicts with the use of many names for our fictitious coffee company and arrived at an innocuous word, Mako, after the species of shark. We couldn't find another coffee company with a shark name and a negative meaning in other languages.

ii. Developing the 12-coffees along with the product info sheets gave us an education in coffee and some more fun in our made-up roasts. But they are believable!

iii. As in the cosmetics videos, the navigation to learn about coffee roasts and particular coffees contribute to the viewer experience and encourage the consumer to interact with the display.



COFFEE CROSSROADS

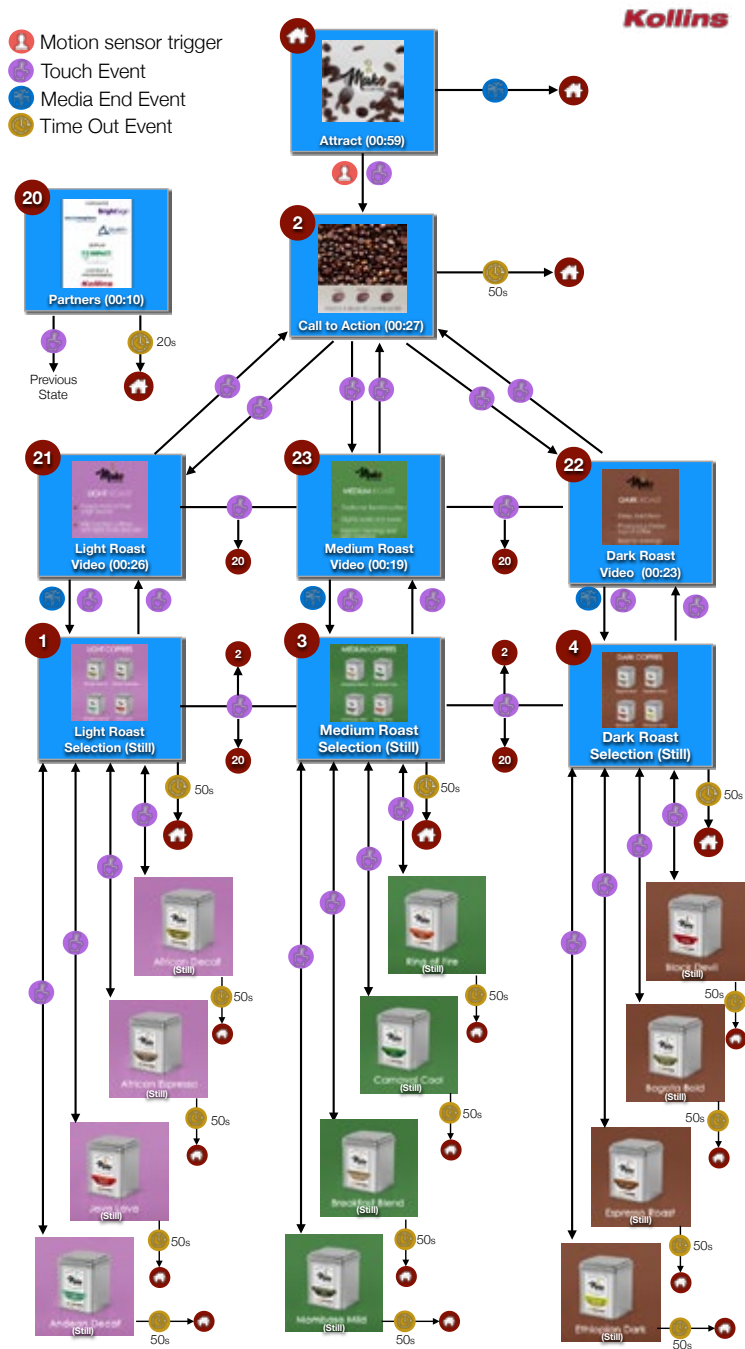


- iv. Lighting effects beneath the coffee tins add a flair to the display by highlighting a group and specific coffees while enlivening the static display of coffee tins.
- v. Design, Graphics, Scripting, Video Footage, 3D Motion Graphics, Music, Voice-Over, and Post-Production all combine to provide a slick, professional communication to the consumer with branded products shown prominently on the large 21.5-in diagonal touch screen display.
- d. Display graphics are minimal yet supplement the video attract loops by reinforcing the nature of the display, i.e., “skin to love” with the cherry icon, and “coffee crossroads” to suggest activity.

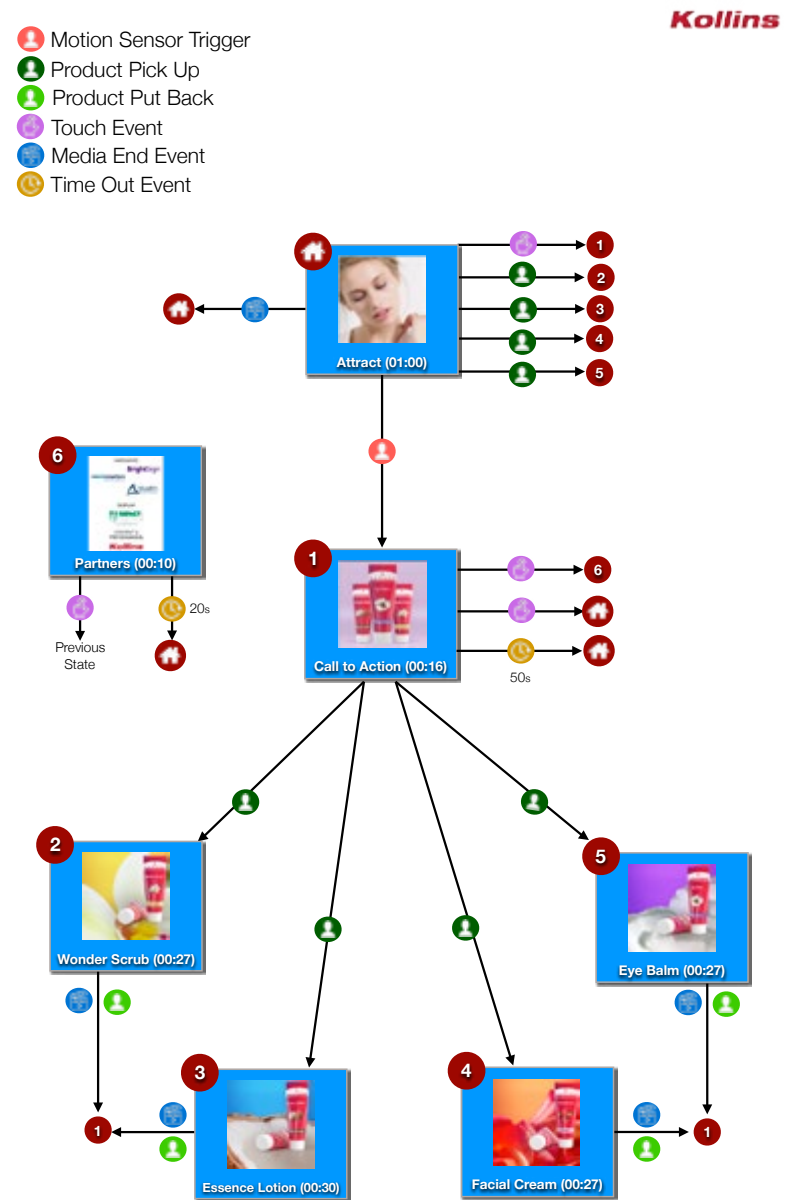
8. Programming

- a. Overall programming was accomplished by Kollins in BrightSign’s BrightAuthor application to the on-board BrightSign HS123 media player with interface to Nexmosphere’s sensors, antennas, lights, camera and accessories as well as implementation of Industrial Image’s Bluefin touch-screen monitor to activate the user interface and provide image/video display along with audio speakers.
- b. In both the cosmetics and the coffee displays, a functional flow was established to aid programming development. Placeholder images and videos were incorporated in preliminary program testing and later replaced with work-in-progress videos until the experiential objective was attained with the correlation of content and interactive accessories.
- c. A rhythm was developed with the content and programming teams to arrive at a relationship between content, technology (LEDs and sensors), audio and timing. This engaging meld of a team approach is quite apparent in the display’s ability to achieve its goal.

Functional Flow - Mako Coffee



Functional Flow - Kersen Cosmetics



9. Metrics

Cosmetics Metrics	
Product	P/U Count
Wonder Scrub	42
Essence Lotion	49
Facial Cream	44
Eye Balm	37
<hr/>	
Female Detected	11
Male Detected	42
Video	Play Count
Attract	356
CTA	203
CTA Timed Out No P/U	79
Wonder Scrub	42
Essence Lotion	49
Facial Cream	44
Eye Balm	37
Partners	27
EXIT	

Cosmetics Metrics sample

Coffee Metrics	
Selected Light Roast	118
African Espr.	35
African Decaf	22
Andean Decaf	22
Java Lava	29
<hr/>	
Selected Medium Roast	120
Mombasa Mild	23
Carnaval Cool	27
Ring of Fire	28
Breakfast Blend	42
<hr/>	
Selected Dark Roast	137
Espresso Roast	32
Bogota Bold	33
Ethiopian Dark	19
Black Devil	53
Video	Play Count
Attract	453
CTA	265
CTA Timed Out No Input	114
Light Roast	118
Medium Roast	120
Dark Roast	137
Partners	53
EXIT	

Coffee Metrics sample

- Definition — Metrics are parameters or measures of quantitative assessment used for measurement, comparison, or to track, in this application, customer participation.
- These displays, featuring BrightSign media players and Nexmosphere sensors have the capability to enable the collection of data i.e., button/screen touches, Lift-and-Learn pick-ups, etc., that can be used to measure frequency of selection and to compare different products and their popularity.
- Data can be collected on a designated schedule and collected by the CMS (Content Management System) for processing into intelligent, decision making information with customer-centric software.
- On both the Cosmetics and the Coffee displays, there is a sample screen that reflects data collection from the BrightSign players during the period the display is energized. This is for demonstration purposes but is indicative of some of the opportunities available for making marketing and forecasting decisions.

10. Execution

- With all display partners contributing to the final demo display, BrightSign was the overall coordinator and conducted organizational meetings.
- Nexmosphere provided concept and preliminary diagrams that, when given to Impact Displays and Kollins Communications, were flushed out and developed into a functional display and a programmed user experience with content and product mock-ups.
- Kollins assumed responsibility for finalization, debugging and presentation at initial trade shows in Amsterdam (ISE) and Las Vegas (DSE).



The display at the BrightSign booth, 2019 ISE, Amsterdam



Call to Action Non-visible Touchscreen Map

Partners
Touch to display the video highlighting the companies that collaborated to create this demo

Display Strategy and Build
Touch to display a presentation detailing the design process, why this was built and who contributed

Gender Detection
Touch to activate the event handler for the Nexmosphere X-Eye gender detection camera

Metrics
Touch to display a list of the pick up count for the products and the play count for the videos

Gender Detection
Touch to activate the event handler for the Nexmosphere X-Eye gender detection camera

Mute Audio
Touch to mute

Resume Audio
Touch to resume

Attract Video Loop
Touch to return to the attract video loop



Call to Action Non-visible Touchscreen map

Attract Video Loop
Touch to return to the attract video loop

Display Strategy and Build
Touch to display a presentation detailing the design process, why this was built and who contributed

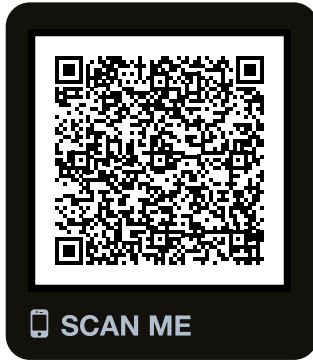
Metrics
Touch to display a list of the play count for the videos and a how many times a roast has been selected

Mute Audio
Touch to mute

Resume Audio
Touch to resume

LIGHT MEDIUM DARK

TOUCH A BEAN TO LEARN MORE



BrightSign®
BrightSign.biz

nexmosphere
elements for experience
nexmosphere.com

 **bluefin.**
Custom LCD Solutions
thebluefin.com

 **IMPACT** GROUP
DISPLAYS
www.impactpop.com

Kollins
Kollins.com

© 2019, Kollins Communications, Inc. All Rights Reserved. Mako Coffee, KERSEN Cosmetics are fictitious product names and have no relevance to existing manufacturers or brands and any similarity is purely coincidental. Images product names, and graphics are licensed to, or are the intellectual property of Kollins Communications, Inc. BrightSign LLC, Bluefin International, Inc., Nexmosphere B.V., Impact Displays Group LLC, and Kollins Communications, Inc. are the registered trademarks or marks of their respective owners.

18-0315 2019.06 v07