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Redefining retail experiences through virtual reality in-stores with Intel® RealSense™ 3D technology

Chow Sang Sang is a major jewellery retailer, headquartered in Hong Kong. The company has an 80-year history and operates 420 stores across China, Hong Kong, Macau and Taiwan. To attract a younger audience, Chow Sang Sang looked to enhance its omni-channel strategy by integrating digital technology more deeply into the store experience. Working with the Mirum Hong Kong agency, Chow Sang Sang adopted a virtual fitting solution, incorporating Intel RealSense F200 3D camera technology and Samsung OLED mirror screens.

CHALLENGES

- **Improve the omni-channel shopping experience:** Chow Sang Sang looked to drive deeper engagement with customers across multiple touchpoints, including a roadshow in China.
- **Change brand perception among a younger audience:** The company wanted to retain its core values while repositioning the brand to appeal to digital natives.
- **Drive greater store efficiency:** The company looked to control stock management more effectively and maximize the use of space in outlets.

SOLUTIONS

- **Responsive store concept:** Customers share their in-store experiences with friends and send photos to their mobile phone while Chow Sang Sang captures data on each customer engagement through Internet of Things (IoT) connectivity.
- **Intel RealSense camera:** The Intel RealSense camera uses depth-sensing technology to enable the rendering of virtual necklaces that aligns on a customer's neck for a realistic experience.
- **Samsung OLED display:** The panel delivered much greater reflectance than competing mirror LCD currently available and created both an engaging digital display unit and virtual mirror, matching the design concept of a luxury retail store.

IMPACTS

- **100 percent increase in omni-channel sales:** Chow Sang Sang drives substantial increase in the omni-channel-based revenue from Magic Mirror 2.0, particularly during roadshows in China.
- **Improved staff efficiency:** Chow Sang Sang personnel report high rates of satisfaction as the solution allows them to offer greater customer service, being able to meet the needs of customers more effectively.
- **Greater customer engagement:** Data analysis from pop-up store roadshow in China highlights successful customer interactions. Key figures on store visitors include: 70 percent of visitors tried the Magic Mirror 2.0. Of that figure, 75 percent browsed the digital catalogue, 85 percent tried the photo option and 75 percent saved a photo to their smartphone.

"We are changing our brand perception among young audiences with the Mirum Magic Mirror 2.0 and Intel® RealSense™ technology. It's a central part of our strategy for bridging our digital channels to our physical stores. We believe this technology delivers real brand value, helping us engage more deeply with customers."

Cecilia Yim,
Marketing Director
Chow Sang Sang Jewellery Co., Ltd.

The evolution of anytime and anywhere shopping

Today shopping malls are thriving. Technology has transformed in-store engagements and retailers can seamlessly integrate shopping experiences across multiple channels. For the first time, consumers can browse and shop anytime and anywhere. Given these new possibilities, Chow Sang Sang was keen to enhance its omni-channel strategy. The goal was to connect more deeply with a younger audience and integrate the in-store and digital brand experience more tightly. Broadly speaking, it meant giving shoppers the same kind of personalized, fast and efficient encounter in-store as they found online. Plus, it was about enabling shoppers so they could share their experiences with friends and take away images of their brand engagements on their smartphones.

Cecilia Yim, Marketing Director of Chow Sang Sang Jewellery Co., Ltd. said, "We particularly wanted to leverage digital technology to create a more engaging shopping environment. However, in-store experience had to deliver more than just a wow factor. Given the cost of retail space in Hong Kong and other cities, we wanted the solution to help maximize sales. Our aim was to increase the efficiency of staff, especially in identifying the location of stock.

This was also an opportunity to employ Internet of Things (IoT) analytics to extract real value from each in-store engagement. The customer interaction data gathered from the Magic Mirror 2.0 solution helps Chow Sang Sang to understand customer preference towards different designs so they develop products that better target the taste of their customers.

Enhancing the omni-channel experience

Chow Sang Sang engaged with the Mirum Hong Kong agency to find a digital solution. The agency began designing an interactive display for use in Chow Sang Sang outlets as part of a responsive store concept. Win Mak, CEO of Mirum Hong Kong said, "We developed the idea of a digital installation that worked as a display device and a mirror. It not only presented Chow Sang Sang stock items, but worked as a mirror overlaying virtual necklaces around a customer's neck."

Mirum Hong Kong created its Magic Mirror solution with Intel RealSense technology and a Samsung display. The first version of Magic Mirror was an immediate success, and Mirum Hong Kong began work on Magic Mirror 2.0, which uses the Intel RealSense camera (F200), Intel NUC® with Intel® Core™ i5 or i7 processor, and a Samsung OLED display. With the Intel Core-based solution, the Magic Mirror 2.0 has the high performance for the depth-sensing technology of the Intel RealSense camera, and the computing power for in-store customer analytics. Finally, the Samsung OLED display panel gives a sharp and clear image of a customer wearing the jewellery item. Win Mak said, "Intel RealSense technology is unique in the marketplace. The quality and the responsiveness of the solution even at distance ensures a better customer interaction."

Through the display's internet connectivity, customers can share their images online or save them to their digital devices. A QR code is also created for each image, giving customers a record of the store items and sales assistants a convenient solution for stock checking. By scanning the code with handheld point-of-sale scanners, assistants get an instant picture of whether the item is in stock, or the location of the nearest branch where stock is held. It will also connect to the central stock control system to check for items if they are not available in-store. As well as the Magic Mirror 2.0, Mirum Hong Kong also created the Charme Table as part of its responsive store concept. This touchscreen display enables customers to explore the range of Charme bracelets at Chow Sang Sang and create their own designs.

Increasing sales and brand value

Today the Magic Mirror 2.0 is driving sales at the Chow Sang Sang flagship store in the Elements mall in Hong Kong. The solution is also supporting the Chow Sang Sang pop-up store as it visits 10 cities across China. Of the first version of the Magic Mirrors, some nine are supporting stores across China and Hong Kong. Cecilia Yim said, "We are changing our brand perception among young audiences with the Mirum Magic Mirror 2.0 and Intel RealSense technology. It's a central part of our strategy for bridging our digital channels to our physical stores. We believe this technology delivers real brand value, helping us engage more deeply with customers."

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