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Shark Week Exhibit



Digital Communication LLC (DigiComm) creates world's first interactive digital Shark Cage through Discovery Channel's Shark Week exhibit at Dubai Aquarium & Underwater Zoo in The Dubai Mall.

It was Dubai Aquarium's initiative to educate the public on sharks -- the incredible yet often misunderstood creatures. The innovative technology allows guests to 'interact' with the sharks while simultaneously learning about their importance and their effect in the ecosystem.

"The visitors become the divers -- they experience the excitement of diving with real sharks in a cage," says Abdul Bakhrani, DigiComm CEO.

DigiComm took the shark cage and semi-tunnel concept from a pencil drawing and were responsible for the concept, design, and implementation. Every aspect of the technology was bespoke and had to be created from scratch.

There were 90 LG screens, driven by 42 BrightSign media players used in the project. Aside from creating the world's first digital shark cage, DigiComm also intended to prove the industry that all experiences can be achieved using only BrightSign players -- not a single PC has been used in the entire project.

Custom scripts for luma key masking feature were created, allowing graphics and other videos to display through transparencies in the video window. The 4K242 players have been used extensively for the Shark Cage, each driving 4 x LG 55" Full HD displays. The HD222 players provide the interactivity through large buttons connected on the GPIO interface. The XD232 players drive the large LED display at the back of the aquarium tunnel. The XD1132 players power the touch screens that provide interactivity for the LED displays. The LS422 players play the children's Shark Facts on LG 22" in portrait format -- the videos are



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triggered by Motion Sensors. The HD222 players play the video displayed on the roof of the shark cage through rear-projection using Casio lamp-free projectors mounted 8 meters above the cage.

With the implementation of the project, DigiComm has successfully accomplished another 'world's first' which is the videos overlay in 4K feature -- the first on BrightSign players.

The team also faced big challenges during the execution stage, and one of them was the specified time allowed to work at the venue. They were only permitted to work from midnight until 8 in the morning.

The timeline for the entire project from design to delivery was 8 weeks. The Shark Week exhibit still continues to run at Dubai Aquarium and Underwater Zoo in The Dubai Mall.