

### Game Changers introduced as a new genre of rides

## CAVU Designwerks, Framestore partner taking indoor attractions to next level

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VICTORIA, B.C., Canada — CAVU Designwerks, the Canadian-based provider of elaborately themed ride systems has partnered with Framestore, a world-renowned company known for visual effects.

“We were working with Framestore on a new attraction opening in China,” Mark Stepanian, vice president of innovation and engineering, CAVU, told *Amusement Today* at the November IAAPA Expo. “With that collaboration, we started talking about a new breed of theme park attraction — something that has never been seen before that blends creative storytelling with engineering expertise.”

From that point, Framestore approached CAVU with about 25 ride concepts, in which CAVU pared down the ideas they felt the most marketable to three ride systems which they have named Game Changers.

Framestore has been an established global visual effects company of 30 years with around 2,000 employees. The company’s work boasts five Oscars, including one for *Bladerunner 2049* in 2018. Their work also includes Marvel films. Working additionally in TV, advertising and music videos, Framestore has also moved into rides in recent years.

“We wanted to push rides further, make an adventure that you are in control of,” said Jason Fox, creative director.



Immersive theming, coupled with rider interaction takes a drop ride experience (left) into a different adventure. Spectators below (right) are captivated by coaster riders suspended from above. COURTESY CAVU DESIGNWERKS



Taking typical so-called “interactive rides” beyond merely shooting at targets and making the storyline much more immersive is the goal.

Interacting more socially through speech and gesturing takes Game Changers beyond simply shooting. This evolved thought process is being applied to a dark ride system, a tower system and a roller coaster.

Tower Battle pits riders on opposing drop tower rides. Storylines can involve competition against another team or combining forces to attack a common threat. A vast transparent screen between the two towers, physical show sets or a combination of the two engage the riders to interact through buttons, turning mirrors to reflect light, etc. “It is kind of like having a kit of [instruments],” said Jason Fox. “It’s very tactile, but it can also be sound based or body movement. There are many ways we can give our clients the

opportunity to design their own experience to fit their particular audience.”

Tyler Blankenship, mechanical engineer, CAVU, said, “We wanted to make Tower Battle unique. Not only is it a regular drop tower — which is intense for just a moment — but we work with vendors who can make towers go up and down and have a long experience with quick lifts and multiple drops. We can do different configurations — two, three, four or even six towers that might be facing an animatronic in the middle. The whole idea is to create different experiences and themes.”

One storyline provided by Framestore was an avalanche theme where two towers work together to climb their way out of a wintery chasm. Castle Battle can offer a four-tower combat to win control of the medieval castle.

Height, capacity and indoor/outdoor placement are options being engineered to make Tower Battle approachable by various parks.

Adventure Machine is a trackless vehicle that carries riders through various scenes, the path of which is determined by the decisions and actions of the guests. For instance, clearing a path to the left will cause the vehicle to veer through the event building that direction.

“Depending upon what you do, the way you go through the ride, riders may have different endings,” said Gavin Fox, creative director, Framestore. “Everything is aware where you came from, so your story is actually evolving on your journey.”

Reaction Coaster is the first roller coaster where riders’ interactions directly affect their ride experience. With this system, a suspended roller coaster will pass screens where the interactions via buttons or gestures will affect the vehicle, sound

and media. Linear induction motors can cause the vehicle to accelerate, decelerate or move in reverse. Some scenes can take place in enclosed rooms before moving out into main areas where the vehicles soar over other entertainment options (or mall corridors) giving spectators a chance to engage with riders flying above. Blankenship confirms that while primarily LIM powered, there are sections physically driven by gravity.

“Because we are using LIMs, we can still have people going through these fast-paced launches,” he said. “We conceived the ride with a shopping mall in mind. You can launch out into those mall areas.”

“It brings relevance to having a coaster in an enclosed environment. This brings an

excitement level to a coaster that doesn’t have the world’s biggest drop or most inversions. It’s not about that,” added Gavin Fox. “This is about ‘playing’ a roller coaster. We laugh that it is the first roller coaster you can dance to.”

With innovation engineering and design under its belt, CAVU’s mission is to create the most novel attractions in the industry. Patents are pending for all three attractions. This collaborative alliance with Framestore has started to take rides to the next level by intertwining storytelling with interaction.

“We think these ideas are the most viable, but there are plenty in the bank,” said Jason Fox.

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### CAVU Designwerks Flying Theatre opens in China

VICTORIA, B.C. — CAVU Designwerks Inc. (CAVU) an attractions provider that specializes in delivering media-based attractions to the themed entertainment industry, opened its Flying Theatre in Changsha, China.

Opening in October 2018, the turn-key attraction entitled “Beautiful Hunan” was delivered to the **Macrolink Group** as part of the **Tongguan Kiln International Cultural and Tourism Center** and is the leading attraction there.

During the six-minute journey, The Flying Theatre allows guests to visit locations in the Hunan province. The detailed media appears realistic, fully immersing guests within the region’s beauty.

As a turn-key provider, CAVU assembled all aspects of the project, including media, AV equipment, programming and attraction design.

“This was the highest of quality and executed in the shortest period of time, stated Manfred Meier, CEO of **Kraftwerk Living Technologies** who supplied the high-end audio/visual equipment and screen for the attraction.

“We’ve tried to create a new level of audience engagement and suspension of disbelief, through the combination of a smooth, silent and responsive ride system syncing with media weaving live-action imagery with visual effects sequences,” said Arish Fyzee, Creative Director at **PRANA Studios**.

The Tongguan Kiln Ancient Town is a large cultural complex with a total construction area of 1.1 million square meters. Expected to host more than five million tourists each year, the Town has eight museums, five performing centers, three luxury hotels, 18 cultural attractions and four children’s amusement parks.

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The path of the dark ride is determined by riders’ interactions, creating new storylines each ride. COURTESY CAVU DESIGNWERKS