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LET'S TALK 3D



GLOBAL VR's 3D arcade game, *The Swarm*, occupies a very unique space in the out-of-home entertainment market. Players can choose to play the game in either 2D or 3D. To the best of our knowledge, this player option is the first of its kind and has received rave reviews from distributors, operators, and most importantly players. To understand why this game has captured the imagination of players and has delighted operators, it would be helpful to understand 3D itself and why people have waited for its commercial success.

There always seems to be a lot of conversation about the benefits of a 3D entertainment experience but manufacturers and content creators have been reluctant to invest in the format. They have questioned whether people would agree to wear 3D glasses and pay a little more for the experience. That said, there is little doubt that 3D entertainment has been a source of intrigue. Many have spent decades trying to find the right combination of content and hardware in order to unequivocally demonstrate the value of this immersive platform.

In order to gain a clear perspective on the subject, a little 3D history might be in order. 3D is not a new platform; quite the contrary. 3D was first introduced in 1838 by Sir Charles Wheatstone who provided viewers the chance to see things in 3D by using a stereoscopic headset to see two images seated side by side. This technology was perfected by William Friese Green who filed for a U.S. patent in 1894.

In 1915 the first green/red glasses test was done which set the stage for the screening of the first 3D movie, *Power of Love* in 1920. Unfortunately, this is a lost movie but its screening was the beginning of commercial products being released in 3D, none of which had much success in the market.

1952 – 1955 saw a boom in 3D content. In fact, 3D aficionados refer to this time period as the "Golden Era" of 3D. Using mainly red/green glasses technology many 3D movies were produced and released. The first such movie was *Bwana Devil* from United Artists that could be seen all across the US in 1952. One year later, in 1953, came the 3D movie *House of Wax* which also featured stereophonic sound. Alfred Hitchcock produced his film *Dial M for Murder* in 3D, but for the purpose of maximizing profits the movie was released in 2D because not all cinemas were able to display 3D films.



1953 movie goers enjoy 3D

1960 – 1980's was dubbed the “**Revival Era**” for 3D. There were advancements made in technology however costs were still high. In fact, *Spacehunter: Adventures in the Forbidden Zone* released in the early 80's, was the most expensive 3D movie to be produced to that point. The cost equaled that of *Star Wars* but did not enjoy the same commercial success. Other notable releases were *Jaws 3D*, *Friday the 13th Part III*, and the movie that revived the craze, *Comin' At Ya*, a campy spaghetti western.

We are now in the era of “**Rebirth of 3D**” or “**Mainstream Resurgence**”. IMAX films made their way into main stream entertainment by producing non-fiction movies shown only in specific theaters. This impressive format catapulted audiences into 3D-worlds not accessible by most of us. The success of this format is largely due to IMAX technology that reduced eye fatigue sometimes experienced using other 3D formats. IMAX was embraced by Walt Disney who, in 1986, released *Captain EO*, the F. Coppola / Michael Jackson collaboration, which entertained viewers from around the world for many years. Canada also engaged viewers by producing an attraction at the 1986 World's Fair. This IMAX feature was the first to use polarized lens technology.

In 2003 The Academy Award winning director/producer, James Cameron, released a documentary called *Ghosts of the Abyss*, guiding viewers on a 3D tour of the Titanic. This technology became the foundation for the technology he used in the making of the 2009 blockbuster, *Avatar*.

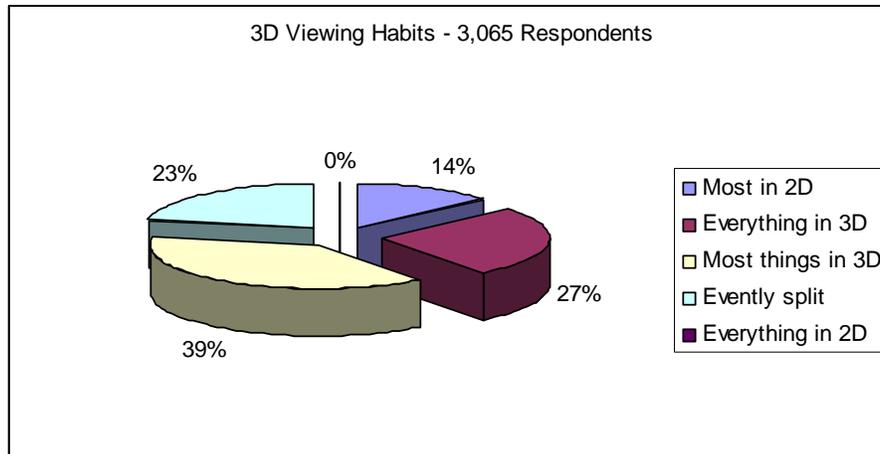


Scene from 2009, *Avatar*

This sensational production was the catalyst for the onslaught of 3D releases, products, and the move to broadcast 3D TV. In 2011 – 2012 more than 70 3D movies were released including *Life of Pi*, *Prometheus*, *The Hobbit*, and a remake of *Finding Nemo*. Direct TV, Comcast, and a host of TV Channels around the globe now provide 3D content which is seen on 3DHD TV's manufactured by Panasonic, Vizio, Philips, Sony, Samsung and others. 3D gaming systems are now front and center among the offerings of industry leaders such and Sony and Nintendo. Recent surveys by hardware manufacturers have revealed very interesting information which suggests that 3D is here to stay.



To understand a bit more about audiences and their viewing preferences, a U.S. survey of 3,065 participants was conducted. They were asked what their viewing preferences were, 3D or 2D. As you see there is 0% who wanted to only view entertainment in 2D.



Source: 2012 Strategy Analytics, PwC analysis

3D standards are now in place to help make developing 3D content quicker and easier. It is also easier for audiences to view their games, movies, and TV as 3D glasses are cheap and easy to get. Almost all movie theatre chains are able to provide 3D experiences to their audience. That's quite a change from the previous 10 years where less than 30% were able to advertise 3D. With the exception of IMAX, most 3D theaters and products use circular polarized lens technology such as RealD™. This makes it easy for people to watch movies, TV, and play games using the same pair of glasses.



Old technology red/green Lenses



Circular Polarized Lenses

Back to **The Swarm**. It would seem that GLOBAL VR is betting on the format to be successful BUT also understands that there are those, who for whatever reason do not prefer playing video games in 3D. That's OK ... This game allows players to choose their desired play mode; 3D or 2D. Modes are changed from one to the other with a simple touch of a button. Everyone gets what he wants. It's an obvious solution to an age old problem. But what's even better is that owners of this product do not have to pay more for the luxury of having this game in 3D. It is available out of the box. 3D technology has made major strides and is now a very affordable format which makes it easy to offer the game (and kits) at prices much less than people would expect.

It won't be long before there is a flood of 3D games making their way to family entertainment centers, arcades, and other places video games are found. What we know for sure is that people love **new** things that are fun. It gets them out of their house, sharing with friends and spending time and money on these entertainment opportunities. **The Swarm** is both of these and more.

We hope you will want to be a part of the sea-change in out-of-home entertainment. Make a call to find out more.