COMPANY
Interactive Realities International Pvt. Ltd.

LOCATION
Mumbai, Maharashtra

SOFTWARE
Autodesk ® Maya®

iRealities' Chaar Sahibzaade harnesses the power of Autodesk Maya for quality within budget

"Best thing about Maya is that it's not just a software but a whole platform by itself. The scripts on which the system is written is open to users, this helps to modify the required processes to fit our needs."

—Prasad Ajgaonkar
Managing Director
Interactive Realities International Pvt. Ltd.

Image courtesy of Interactive Realities International Pvt. Ltd.

Harry Baweja's Chaar Sahibzaade has taken the Indian animation industry to new heights with its stupendous success. One of the first ever animation movies from the Indian stables to cross INR 75 crores at the box office, has been animated by Mumbai based Interactive Realities (iRealities) and is produced by Baweja Movies. Completely animated on Autodesk Maya, this Indian blockbuster recently added another feather to its cap by sweeping the FICCI BAF (Best Animated Frames) Awards 2015' prestigious 'Special Case-Study Award'. Receiving the award, Prasad Ajgaonkar, MD iRealities said, "It is indeed an honour to be recognised by peers in the industry for our work. The film has not only done well commercially, but more importantly has won many hearts. I truly believe that this is an award for the whole industry."

Chaar Sahibzaade, the first stereoscopic 3D animated film on Sikh history, is based on the actual story of sacrifices of the four sons of Guru Gobind Singh (Spiritual leader of the Sikh community) Baba Ajit Singh, Baba Jujhar Singh, Baba Zorawar Singh and Baba Fateh Singh. Produced by Pammi Baweja and directed by Harry Baweja, the movie released on 6th November 2014 in Punjabi, Hindi and English in 400 screens across 31 countries, and has received an overwhelming response from the audience across the globe. The movie has been praised for its emotional and unbiased portrayal of one of the most important chapters in Sikh history.

Feature Film Production

With more than 15 years of experience in 3D animation and special effects, iRealities have innovated at every step of production of this feature. Made at a modest budget, the film heavily relied on the studio's technical expertise to manage the quality expectations that the makers had set out with. Talking about the scope of work Prasad shares, "Right from the design of the characters, care was taken that nothing looked artificial. More than a year went in studying the facial structures and behaviour of the communities we were to portray. The next challenge was the skin tone and texture. Earlier into the process, we realised that the standard methods are going to give some shine to the skin, which was not acceptable, hence we wrote our own codes to create the required shades."

The 120 minutes long movie has multiple battle scenes and consists of more than 200 characters.

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The studio had to also keep in mind that the skin tones of the characters were to undergo ageing and show wear and tear of wars as the film progressed. This added the demand of procedural textures, which can tan and age as needed. As the studio had no performance capture capability,

According to Prasad, filming these battle sequences was the most challenging part of the movie. "There are five elaborate war sequences, wherein we had to maintain the photo realism as well as the speed of the shots. Each scene had almost 1000 shots with quick cuts. There were no refererences

Technical Innovations

The film has been completely created on Autodesk solutions with Autodesk Maya at the heart of it all. The team has not only used the available features in Autodesk Maya, but have actually built on it in terms of writing and re-writing shaders, effects and scripts to ensure better output and time-efficient quality results. Prasad who himself is a programmer by qualification says, "Best thing about Maya is that it's not just a software but a whole platform by itself. The scripts on which the system is written is open to users, this helps us to modify the required processes to fit our needs. Also, it is an end-to-end solution for any animation production, one software that does it all."

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detailed study of facial anatomy was also done to get almost exact muscle movement. Specialized rigs were cre-ated to simulate the facial bone movement and secondary impact.

The 120 minutes long movie has multiple battle scenes consisting of more than 200 characters.

to work with for this. The task was to sync the director's vision, fight masters choreography and animation designer's visualization and I think we ended up doing a fine job of it," Prasad asserts.

About the team and workflow of iRealities, Prasad shares, "Most important aspect of any anima-tion feature film production is writing a project management pipeline which serves as the control-ler of the project flow. In our case, it was specially written to fit the needs of a small budget film. Many things like light placement and management were automated, so replicating shot to shot was easy and it reduced the process time by almost 60%. The automation of the repetitive tasks helped save and utilize resources for creative processes."

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Most important aspect of any animation feature film production is writing a project management pipeline which serves as the controller of the project flow.

According to Prasad, iRealities is not just an animation studio but a technology company. "If you ask me, I'll give the entire credit to the technical engineers in my studio for delivering the movie in the specified budget and on time. The creative guys ensured the quality, but it is the technicians that solved the problems at each step. And hats off to Autodesk Maya for being rock solid base for all our efforts."

Reception

Production was not the only area of challenge for this movie. As it was a retelling of a religious story, utmost care was taken to make sure that the storytelling did not hurt anyone's sentiments. The making of the film was co-ordinated with the team at the Shiromani Gurdwara Parbandhak Committee (SGPC) in order to depict the facts correctly. Chaar Sahibzaade took a staggering three and a half years to make, but the efforts finally paid off

when it released on 6th November 2014 and attained commercial success as well as touched the emotional chord with people.

"People cried after watching this film and that for us is success. To make a film that touches the heart of people watching it worldwide, is what every director, producer dreams of," Prasad adds.

Currently, Prasad and his team are busy writing and programming features to enable gravity for the animated characters. They're working on ways to attribute weight to characters that can decide time taken, and the angle of their jumps, falls and other movements. They are also prepping for the Chaar Sahibzaade sequel, while happily tinkering away on Autodesk Maya.

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