

ADIYOGI DIVYA DARSHANAM CONTINUES TO RAISE STANDARDS

24 Epson 15,000 lumen projectors and WATCHOUT multi-display software enables Award-winning 14-minute projection show

Since its unveiling in 2019 by the President of India Shri Ram Nath Kovind, the Adiyogi Divya Darshanam has enthralled spectators from across the globe. In May this year, this one of its kind projection mapping show won the Mondo dr EMEA & APAC Award for Technology in Entertainment in the category of House of Worship.

PT spoke to **Axis Three Dee Studios** who joined forces with market leading pro AV solution providers Epson and Dataton to produce and deliver a magnificent projection mapping show that lights up an iconic 112-foot towering statue at the Isha Yoga Centre in Coimbatore.

Mr. Avijit Samajdar, CEO & Founder, Axis Three Dee Studios, **Mr. Pravin Kumar A.**, Product Head, Epson India and **Mr. Ashok Sharma**, Regional Sales Manager, APAC, Dataton elaborate on how the team has ensured that the spectacular show continues to perform flawlessly with maximum impact.

Project of Magnitude

One hundred and twelve feet tall, the statue of Adiyogi, which is the largest bust in the world and has its place in the Guinness Book of World Record, rises from the foothills of the Velliangiri Mountains at the Isha Yoga Center in Coimbatore, Tamil Nadu.

The statue of **Adiyogi Divya Darshanam**, which roughly translates to "Adiyogi's Divine Appearance," is imbued with a series of images of how Adiyogi became Adiguru. The interpretation

was commissioned by the yoga center to provide the visitors and devotees with a visual experience the likes of which has never been seen before.

The center appointed Axis Three Dee Studios Pvt. Ltd to execute the entire project from start to finish, including the complete production of the visuals with CEO **Avijit Samajdar** taking the role of producer and director.

Axis Three Dee Studios brought this world record bust to life in a new projection mapping interpretation of the story of Adiyogi. It is a projection-map-

ping chronicle depicting how Adiyogi transmitted the ancient science of Yoga to his seven disciples (called the Saptrarishis), to his beloved wife Parvati and his constant companions, the formless Ganas.

Avijit Samajdar credits Isha foundation for their support in writing the script and the storyline which laid the foundation of the project. The vivid 4K content is complemented with a background narrative by the founder



Avijit Samajdar, CEO & Founder, Axis Three Dee Studios

Epson EB-L1755UNL projector



Pravin Kumar A., Product Head, Epson India

of Isha, Sadhguru Jaggi Vasudev.

The project took three months from December to February for its complete installation and was inaugurated in time for the Mahashivaratri festival in March 2019.

According to Avijit, what tipped the scale in their favor was the project itself. "Firstly, it was the beautiful story of how Adiyogi became Adiguru and the way the story flows. Secondly, the sheer size of the monument which is 8000 sq ft. to light it up and to unfold a story on to that itself was quite exciting," he says.

Conceptualization and Production

The treatment phase for this challenging and sacred project lasted from October to December, which included the writing of the concept, the scripting, and the entire building up of the project. The production started in the month of December and went into the post-production stage between mid-January till 20th of February.

Manish "Manu" Kadam, who is well-known in the industry as one of the best mapping professionals was in-charge of the projection mapping process.

The project became fast-paced after the 20th of January till the 04th of March where in the teams spent almost 20 to 25 nights at the ashram working through the night, setting up everything and testing the hardware and other equipment. "We would start at three in the afternoon, by five in the evening we would go full swing, and then we would keep time to when the sun would rise the next morning," says **Pravin Kumar A.**, Product Head, Epson India.

For the 112ft Adiyogi statue the content had to be created at the Axis Three Dee Studios in Kolkata. It was not possible for the team to create the entire content and test it on the real surface and keep going back and forth. Epson provided the team at Axis Three Dee some projectors that they installed in

their studio; Dataton provided them with the server and software for testing purposes. Every piece of content the team of Axis Three Dee Studios created was tested at every stage on a seven feet replica statue to check the outcome and the shortfalls.

Technology Rules

Since many factors like ambient lighting, distance and the black surface of the statue itself needed to be taken into account when designing the installation, Axis specified a higher number of projectors stacked in a set of six each to ensure illumination from all sides.

To light up and cover this huge surface the team used 24 hi-tech Epson projectors that were running on the Dataton WATCHOUT software and servers. These projectors were stacked in a unique configuration to ensure maximum optimization of lumens and angle of incidence of the projected light.

Projectors

Axis Three Dee Studios used the **Epson EB-L1755UNL projector** 15,000 lumen projector for the project. The black surface of Adiyogi needed 90,000 lumens of illumination, so the team decided to use a total of 24 projectors, stacked in a set of six to give maximum illumination and brightness to the

statue from all sides. The total brightness all the 24 projectors delivered was about 360,000 lumens on to the Adiyogi. The projectors were stacked on a custom-made mount made by **Sirvinder "Lucky" Singh** of Purple Vector. In terms of controlling the projectors, due to the fact that the surface was not a flat surface, and light travels a long distance, the pixels were getting deformed, and because there were six projectors on every quadrant, all the pixels had to fall precisely upon one another. Manu who was the projectionist for the project used some projector professional tools to align the projectors which were at a height of 30ft. The projectors were stacked on two towers which were erected on either side of the statute to provide an unobstructive view of the Adiyogi.

Servers and Software

WATCHOUT has been in the industry for almost 20 years. Though it was not a big challenge for the team of Dataton, the sheer size and scale of the project as well as the statue of Adiyogi had to be taken into consideration as well as the fact that the whole show had to be controlled simultaneously.



Ashok Sharma, Regional Sales Manager, APAC, Dataton

"WATCHOUT had made it quite simple for all of us; it helped us control the projectors, the laser and the lights all at one go. We could just sit near the monument and do the blending and warping of the colors in the projector. It became quite easy for us to handle," said **Ashok Sharma**, Regional Sales Manager, APAC, Dataton.

"Since the canvas was a huge one, the hardware had to work flawlessly every time; the data had to travel simultaneously across all the quadrants without any lag and without any hiccups. This is where the Dataton media server **WATCHMAX 9100** and mapping software **WATCHOUT** helped us a lot. This is one the most versatile software for mapping a surface which was absolutely not smooth anywhere," informed Avijit.

The topography of the statute was undulating all the time. All the geometric corrections, the blending, the color correction, and every last-minute add-ons were done by the **WATCHOUT** software.

"It's a coming together of all components but it is also a bit of art and science working together. There's a huge expectation from the client of how things are going to appear, how it is going to evolve. It boils down to the combination of all the factors, science, technical, art, visualization, creativity and the expectation of what it's going to be that will work in your favor at the end of the day," says Pravin.

Speaking about why he chose Epson and Dataton for this spellbinding projection mapping project on the 112ft statue of Adiyogi, Avijit says, "We wanted to work with the best. We have done many projects with Dataton servers and software. We were very clear of what we wanted."

The entire show is now run by the staff at the Isha Yoga Center who are technically sound to manage the show. "There was no specialized man-power needed as **WATCHOUT** is very simple



Epson projectors stacked at a height of 30ft.

to use. Even after the installation, ISHA Foundation is able to run the show themselves due to WATCHOUT's easy to use GUI," said Ashok.

Challenges

The 14-minute projection mapping brought with it challenges, particularly in relation to the size and scale of the project. The statue of Adiyogi is the largest bust in the world with a projection mapping area of 8000 sq. ft.

According to Pravin Kumar A, "It was indeed a tough project to be implemented considering the sheer scale and size of the project. It being a monumental piece of projection, the underlying components, complexity and coordination was challenging, nevertheless a combination of creativity, content, software, hardware, integration brought to life this mammoth project. The monument was not only huge but black in color which was another challenge."

Black Surface

One of the biggest challenges faced by the team was projection mapping on a black uneven surface. The projectors when showing the light on the statue, was creating a lot of interference hue, the challenge for the team was to find a solution around it. "We worked with a special color palette, which was developed by our studio in house. It is called 'real time color cancellation' (RTCC) wherein the interference hue gets cancelled out in real time," informs Avijit.

The unique color palette created by Axis Three Dee Studios was devised by creating three different color palettes that were used as first, second and third layers. The final layer was a combination of various color hues mixed together which were being reflected independently off the surface and were being cancelled off with other spectrum of colors.

Power Challenges

"In the initial stages of testing, the projectors were mounted on temporary scaffoldings with cables and switches all over the place. The ashram quickly constructed two 40ft towers and these towers would occasionally run on generators as there used to be a lot of power cuts at the location. On the eve of the inauguration on 4th March one of the generators blew and shorted one of the projectors and the team had to get a replacement projector at the last minute," recalls Pravin. He further added that there were times during the testing phase when there were power outages and something would fall apart and the team would have to start from scratch and there were times when there was no signal coming from some cables and somebody had to go and fix the cables.



Dataton WATCHOUT software and WATCHMAX server deployed for flaw less mapping

"A project like this has its own pace and time this was the challenge for us especially when we have a deadline and no room for error," adds Ashok.

In Conclusion

Adiyogi Divya Darshanam is a permanent show at the Isha Yoga Center, open to all visitors free of charge. It plays from 8pm on every Saturday and Sunday. The show also runs on other auspicious days such as Amavasya (New Moon) and Purnima (Full Moon).

About three and a half lakhs people witnessed this extravagant 14-minute show live at the ashram and another 10 lakhs audience live streamed the show on the day of the inauguration.

"I believe it is a one of kind immersive storytelling that brings together a unique story which is relevant to all our lives even now and in the future also," says Avijit. "At every stage we felt Sadhguru's blessings, at every stage we felt Adiyogi's blessings because hurdles did come, obstacles did come, but to the

extent which made us strong," he adds.

"What I feel is each one of us put in a lot of effort in putting all of these together to deliver, but, I think Adiyogi is beyond all this. Of course the high expectations of the client and the personality of Sadhguru, his expectation of what he wanted to communicate, for him I think I would suspect that Adiyogi was a medium to communicate this message. What we all finally did was, we delivered a visual experience. A visual experience when the lights went out and the first wave of projection hit the Adiyogi and the sound that went up from the audience. We knew at that time that every single bit of effort that went into this was acknowledged in that one moment when the audience erupted into applause, I think the whole thing translated into a huge big scale visual experience," concluded Pravin.

Mondo Award for Technology

The Adiyogi Divya Darshanam project had already received a lot of press coverage around the world and Avijit was approached by Mondo to nominate the project for the awards, which the team eventually won in the category of House of Worship.

The worldwide shortlisted entries besides the Adiyogi project were from UK (St. Joseph's College Chapel, York Minister) and France (Eglise Saint Denis Sainte Foy). The jury panel included, Andy Taylor from Gasoline Design, Ben M Rogers from Ardent, Scott Willsallen from Auditoria, Emma Bigg from Octavius Re, Kapil Thirwani from Munro Acoustics, Bas Scheij from Basz Design & Live Operating, Mogzi from Disguise, Philip Heselton from Signify, Simon Austin from Schuler Shook, Gareth Collyer from Nexo and John Hughes from Adlib.

Commenting on the win, Avijit says, "From a creative point of view, when we create something, we always want people to like it, to feel a part of it and remember it. For that to be recognized all over the world and to be appreciated and awarded by experts who understand the technicalities behind a project of this magnitude, is immensely satisfying and gratifying".

According to Ashok Sharma, the project was worth the award because the team was efficient and understanding in what they were doing. "The project in itself has a great touch and was a story in itself which in its own space has won many hearts both in India and internationally. Thank you to the Team and Jury of Mondo*Dr 2020" to have considered us and awarded us with this prestigious award," quoted Ashok.

The equipment list

- Epson EB-1755U Projector – 24 nos
- Dataton WatchMax, WX9100 and WATCHOUT6 – 2 units

Crew list

• Axis Three Dee Studios

- Background Original Music : **Sounds of Isha**
- AVSI Supervision : **Sirvinder Pal (Lucky) Singh**
- Projectionist & Mapping : **Manesh (Manu) Kadam**
- VFX, CG & Render Supervision : **Arijit Halder**
- Art Direction : **Priyam Modak**
- Sound Designer : **Dipankar (Jojo) Chaki**
- IT & Networking Supervision : **Gautam Mondal**
- Project Creative Lead : **Mayuri Dutta**
- Overseas Producer : **Sangman Lee**

• Dataton

- Installation Crew : **Manu Kadam**
- Installation Crew : **Lucky Singh**
- Installation Crew : **Alok Rai**

• Epson India

- Projector Hardware testing, set-up & installation: **Pravin Kumar A**
- Projector Hardware testing, set-up & installation: **Anand Kumar**