



BRICS Film Technology Symposium

Concept Note

Technology plays an important role in all aspects of film making, be it shooting, editing, distribution, exhibition, or preservation. Now a days, film technologies are fast changing and affecting favourably to the time and cost of film making. It is also making film distribution easy and making it available to the remote areas to the larger audience, and also enhancing the viewing experience to the audience to a great extent. Technology has provided a tool to the film makers to tell stories more powerfully. Technology has become another character in film making. Use of animation and Visual effects have become a rule in film making and now immersive technologies like Augmented Reality (AR) and Virtual Reality (VR) are chaining the viewing experience to 360 degree. Due to fact changing nature of technology, it is imperative to keep pace with this change and discuss on the different use of technology in film making and share knowledge among the users.

Overview of Global Film Industry:

In 2018, the global box office was worth \$41.7 billion. When including box office and home entertainment revenue, the global film industry was worth \$136 billion in 2018. Hollywood is the world's oldest national film industry, and remains the largest in terms of box office gross revenue. Indian cinema is the largest national film industry in terms of the number of films produced and the number of tickets sold, with 3.5 billion tickets sold worldwide annually (compared to Hollywood's 2.6 billion tickets sold annually) and 1,813 feature films produced annually.

BRICS Film Industry:

BRICS, an association of Brazil, Russia, India, China, and South Africa has become one of the important regional organization in the world representing about 41 per cent of the world population and has significant influence in the world affairs. India is one of the pro-active members of this group and plays an important role bringing all the member countries at a same platform from time to time on mutually important issues.

In the films context, BRICS Countries shares the same degree of passion for film making and watching. All the countries have certain level of matured film industry and all are connected with each other in terms of sharing and cross boarder exchange of content, technology, shooting locations, etc.



Brazil:

The Brazilian film industry has shown increasing dynamism since the mid-90s. Brazilian cinema is only growing today thanks to public policies for the sector. The state plays a crucial role in the performance of film industry. The scenario of the film production is characterized by small production companies seeking funds to carry out long and short films.

Films are actively inserted in the cultural sector of the economy just like the music and literature industry. The film industry is comprised of companies that participate in four segments: production, infrastructure, distribution and exhibition. The film industry deals with a long productive process, films take an average period of three years from the beginning of production until the distribution to cinemas or to the commercialization in stores.

Russia:

Russia's cinema business is growing three times faster than the real economy. In 2018, Russian movie-goers set a new record with 56 million visits to a cinema to generate a box office take of 13.5 bln rubles (\$200mn). With one Russian in three having a night out in front of the silver screen, the growth of the business is fuelling a revival in the whole media sector where Russia has a long and prestigious pedigree. There is de-centralised development of film exhibition business in China. The top five cinema chains control 30 percent of the market and 70 percent of the market is made up of single cinemas or small chains scattered across the regions.

India:

Indian cinema which is represented by films made in over 20 different Indian languages, produces largest number of films in the world in a year. It underwent a significant journey from its beginnings to the Independence of the country. The early pioneering efforts of Dada Saheb Phalke and others during the silent era laid the foundations of Indian filmmaking. During the early era of filmmaking, the short films or 'topicals' served as important sources of education and documentation. The emergence and growth of film studios, which acted as huge magnates, attracted a horde of talented and promising filmmakers and technicians into the business of film making. The films of this period exhibit undercurrents of patriotism, zeal for social reform, advocacy of democracy, peasant and industrial concerns and desire to attain independence. The roots of the formula films of today can be traced back to the Second World War. The new class of capitalists and financiers hired big stars, directors and music directors and started making the formula film of song, dance and star-appeal that continues even today. As the years passed on, a large number of escapist entertainers and musicals started to flood the film theatres and continues to do so. This gave birth to the formula films which are primarily entertainers, even though some path-breaking films were also being made along its side.



China:

China's passion for movies, at home and abroad, follows a much more optimistic plotline. Its growth has been phenomenal, even outperforming China's traditional industries. Many experts believe China is on track to have the largest film audience in the world -- and by one estimate as early as 2020. Chinese movies are grossing big amounts. The record for an American film, Avatar, was \$760 million on Chinese screens. Movies also are underpenetrated in China. Extending movie runs to second, third and fourth-tier cities should further propel box office receipts. Big cities are very mature already. Now those smaller cities are becoming very important. Now the movie stars do promotional appearances in more than 20 cities, not just in major urban centres.

South Africa:

South Africa has a vibrant, growing film industry that is growing in reputation and is competitive internationally. Local and foreign filmmakers are taking advantage of the country's diverse, unique locations – as well as low production costs and favourable exchange rate, which make it cheaper to make a movie here than in Europe or the US. In 2010, District 9 – an action-packed science-fiction movie about a sub-class of aliens forced to live in the slums of Johannesburg – was nominated for four Academy Awards, including best picture. South Africa also has a growing reputation as a producer for award-winning local content. Building on South Africa's reputation for quality, creative film making, a string of successful big budget international productions have been filmed here, with Cape Town appearing in 57 different settings. Opportunities abound, with the makers of movies, commercials and other productions being attracted by South Africa's highly skilled film crews and technicians, excellent technical capacity and infrastructure – as well as the good weather.

Various Stages of Film making:

Film making goes through various components such as *Development, Pre-Production, Production, Principal Photography, Wrap, Post-Production and Distribution*. In the context of film making, technology has revolutionised the all the stages and components mentioned above and with the onslaught of technological march film making is bound to become more creative, efficient and simultaneously may see newer forms of disruptions.



Potential of BRICS countries in Film technology:

All the BRICS countries are using technologies in film making to a great extent; there is great potential for collaborating with each other to enhance the film making and viewing experiences. While India is leading in using VFX, and animation technologies in film making, China has advantage in

setting up world class theatres at rapid pace, Russia has shown the capability of producing world's first stereoscopic film. Brazil and South Africa have also increasingly used technologies in their film production, distribution and exhibition. Brazil has gone all digital film production fifteen years back and South Africa produces the best example of filming its beautiful locations.

BRICS Film Technology Symposium

In this effort of bringing together the member countries, it is proposed to organize a symposium on film technologies, i.e. Animation, Visual Effects, and Film shooting technologies, Film exhibition technologies, use of Augmented Reality and Virtual Reality, Editing, Dubbing and other pre-production, production, and Post production technologies in film making. As BRICS countries are a significant player in the world in this field, it is an opportune moment for India to take a leadership position and organize a symposium on this subject for knowledge sharing, technology showcase, and business networking.

Objectives of BRICS Film Technology Symposium:

- To provide a platform to discuss cutting edge technologies and their application in film production, distribution, and exhibition.
- To showcase cutting edge film technologies
- To develop business collaboration among BRICS countries by exploring complementarity in the field of film technology.
- To broaden the areas of collaboration among BRICS countries and further strengthen India's relation with the other BRICS Countries
- To boost intra BRICS trade in creative content and technologies.
- To connect BRICS countries with the stakeholders from other countries who are using and providing latest technologies in film making.

Expected Outcome:

- Enhanced co-operation among BRICS Countries in terms of using film technologies.
- Increase in cross boarder flows of Audio-Visual Content, ideas, technologies, capital, and human resources among BRICS Countries



- Greater Audio-Visual Co-production between BRICS Countries
- Pooled innovation in film technology development and application
- Establishment of India's leading position in collaboration in Audio-Visual activities.

Suggested topics of discussion:

- Film production incentives for shooting in BRIC nations
- Cross border talent
- Content licensing and dubbing in local languages
- Cutting edge technologies in film exhibition
- Enhancing film experience using technologies like VFX/animation/AR & VR
- VFX and animation creative hub in collaboration with Russia
- Gaming hub / gaming city in collaboration with China
- Digital start-ups / Media tech companies – Market access, transfer of knowledge
- Media process outsourcing – India as a media process outsourcing hub
- Content search
- Meta tagging
- Ad networks and platforms
- Recommendation engines
- OTT analytics
- Ad fraud tech
- Common interfaces for smart TVs
- AI based customer segmentation and targeting
- Content streaming efficiency

Some of the companies in Film Technologies:

1. 3D printing
 - Divide By Zero Technologie
 - Brahma3
 - Imaginarium
 - JGroup Robotics
 - Stratasys India
 - Altem
 - Novabeans
 - Think3D
2. Virtual reality
 - Facebook/Oculus VR
 - Magic Leap
 - HTC Vive
 - Samsung Gear VR



- WorldViz
- Bricks & Goggles
- Marxent Labs
- Unity Technologies
- Snap
- Firsthand Technology
- Wevr
- Retinad Analytics
- Mechdyne
- NextVR
- Virtualis
- AMD
- Osterhout Design Group
- Nvidia
- Prenav

3. Camera

- Ilford
- Kodak
- Fujifilm
- Leica Camera
- CineStill
- Film Ferrania
- Red Camera

4. Dubbing

- 3Cycle

5. Exhibition

- PVR
- IMAX
- Samsung
- Barco
- Cinapolis

6. Cloud Computing

- Intel
- Accenture



BRICS Film Technology Symposium

Tentative Programme

1030-1130 hrs	Inaugural
1130 – 1230 hrs	Cutting edge technologies in film exhibition. <ul style="list-style-type: none">• PVR• IMAX• Samsung• BARCO• Cinepolis
1230-1330 hrs	Managing Cross boarded talents, content licensing and dubbing in local languages.
1330 hrs-1430 hrs	Lunch
1430 hrs-15:30 hrs	Enhancing film experience using technologies like VFX/animation/AR & VR <ul style="list-style-type: none">• Intel• Deluxe• Green Gold• Prime Focus
1530 hrs -1630 Hrs	Digital start-ups / Media tech companies – Market access and transfer of knowledge <ul style="list-style-type: none">• Accenture• AMD
1630 hrs- 16:45 Hrs	Tea break
16:45 Hrs-1745 Hrs	Media process outsourcing – India as a media process outsourcing hub
17:45 Hrs-18:30 Hrs	Valedictory session