

Champion Services Sector Scheme: Audio Visual Services



Government of Karnataka



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Abbreviations

5G	5th Generation (wireless technology)
ABAI	Association of Bangalore Animation Industry
ASBAS	Australian Small Business Advisory Services
ASSOCHAM	Associated Chambers of Commerce and Industry
AVGC	Animation, Visual Effects, Gaming and Comics
AVOD	Advertisement based Video on Demand
CAGR	Compound Annual Growth Rate
CD	Compact Disc
CII	Confederation of Indian Industry
CoE	Centre of Excellence
CRM	Customer Relationship Management
CSSS	Champion Services Sector Scheme
DTH	Direct to Home
DVD	Digital Versatile Disc
EoDB	Ease of Doing Business
GAFx	Animation & Visual Effects Conference held in Bengaluru
GoK	Government of Karnataka
GSDP	Gross State Domestic Product
GVA	Gross Value Added
INSEAD	Institut Européen d'Administration des Affaires
IOT	Internet of Things
IT	Information Technology
ITV	The Independent Television service (British TV Channel)
KBITS	Karnataka Information Technology and Biotechnology Services
km	Kilometer
KPTCL	Karnataka Power Transmission Corporation Limited
MB	Megabyte
MBA	Master's in Business Administration
MIT	Massachusetts Institute of Technology
MSME	Micro, Small and Medium Enterprises
NTPC	National Thermal Power Corporation Limited
OOH	Out of Home
OTT	Over the Top
RVO.nl	Netherlands Enterprise Agency
SEO	Search Engine Optimization
SVOD	Subscription based Video on Demand
TSIIC	Telangana Industrial Infrastructure Corporation

TVOD	Transactional based Video on Demand
UAE	United Arab Emirates
UK	United Kingdom
USD, US \$	United States Dollar
VFX	Visual Effects

Preface

With the objective to make India a USD 5 trillion economy, Government of India, in year 2018 announced the Champion Services Sector Scheme (CSSS) with thrust to 12 identified sectors. Aligning with the objective, Government of Karnataka constituted a High-Power Committee for the promotion of Service activities in the State vide Govt. Order No.CI 159 SPI 2018, Bengaluru dated 05.09.2018. The 1st High Power Committee meeting under the Chief Secretary, identified Six (6) Champion Services for the the State and Sectoral expert groups were constituted with respective departments of Karnataka. Department of Commerce & Industries was nominated as the nodal department for coordinating the efforts of individual departments. Visvesvaraya Trade Promotion Centre (VTPC) under the aegis of the Department of Commerce & Industries, was identified to coordinate the formulation of the sector specific reports by engaging consultants. Price WaterHouseCoopers (PwC) was engaged as Knowledge Partners for the study and to draw up the action plan and coordinate with respective line departments for the exercise.

The following Sectoral expert groups, along with the respective nodal departments were formulated vide the G.O pertaining to the subject:

	Sectoral Expert Group	Chairperson	Nodal Department
1.	Health & Wellness Services	Additional Chief Secretary to Govt., Medical Education Department	Medical Education
2.	Education Services	Principal Secretary to Govt., Higher Education Department	Higher Education
3.	Media & Entertainment Services	Secretary to Govt., Information and Publicity	Information and Publicity Dept.
4.	Remittances & Emigration Services	Secretary to Govt., Skill Development Department	Skill development
5.	Construction & Related Engineering Services	Additional Chief Secretary to Govt., Urban Development Department, Co-chaired by Secretary to Govt., Housing Department	Urban Development Department
6.	Transport & Logistics Services	Principal Secretary to Govt., Commerce & Industries Department	Commerce & Industries Department

This Report is a culmination of the efforts in charting a sector specific Strategy/Scheme for the Audio-Visual Services (Media and Entertainment) Sector in the State. The report has taken into consideration inputs and feedback from stakeholders in the sector space besides, the views of nodal department.

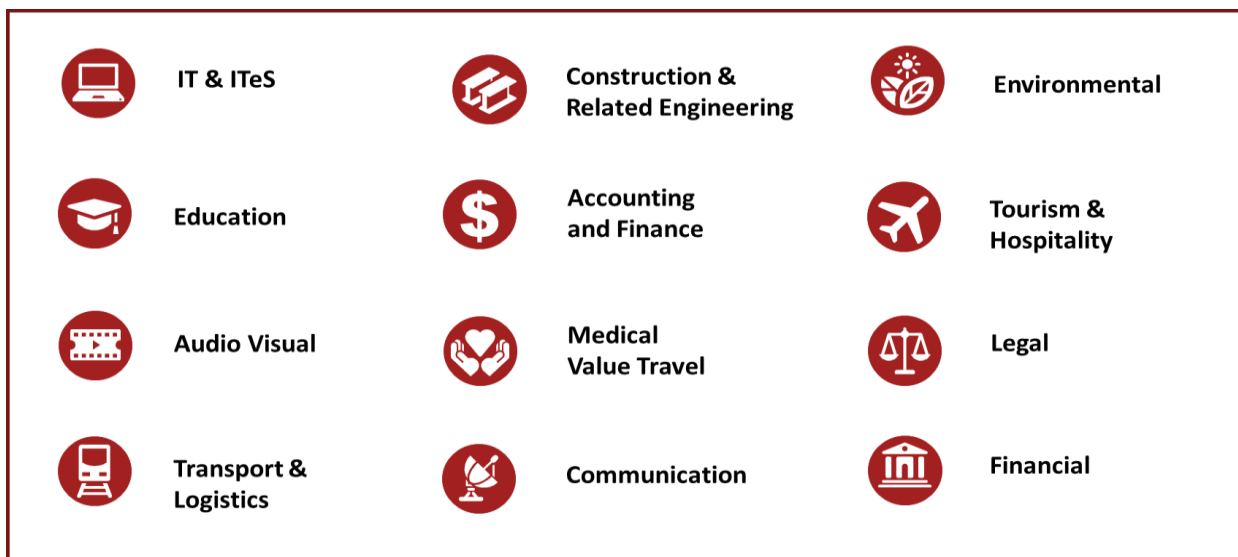


1. Executive Summary

Services Sector's Role in India's economy

The services sector had contributed about 54% of India's Gross Value Added (GVA) in 2018-19¹. The sector has been instrumental in job creation and as India works towards a USD 5 Trillion economy, the services sector is expected to play a major role in achieving this goal. With this in mind, the Department of Commerce, Government of India has proposed to identify and focus on 12 services sectors, under the Champion Services Sector Scheme (CSSS), with the intention of promoting their growth and development. The sectors are as shown in **Figure 1**.

Figure 1: Champion Services Sectors



Source: Press Information Bureau, Government of India, Ministry of Commerce & Industry 02/2018

For each of the sectors mentioned above, a nodal Ministry/ Department has been identified for the implementation of the CSSS in the respective sectors. The objective of the CSSS is to increase the competitiveness of the identified service sectors in India thereby promoting the Gross Domestic Product (GDP) growth, employment generation and exports. The following list depicts the 5 pillars of the Champion Services Sector Scheme. The CSSS will focus on implementing reforms in each of these sectors based on the following pillars:

1. **New Processes:** to improve Ease of Doing Business (EoDB)
2. **New Infrastructure:** To strengthen physical and digital connectivity
3. **New Sector:** To identify untapped sectors for value addition
4. **New Mindset:** To change the official mindset from issuing/approving authority to partnering in business
5. **New Standards:** To strengthen export competitiveness of various service sectors

¹ Indiabudget.gov.in

The Champion Services Sector Scheme entails the implementation of a focussed action plan for each of the identified sectors to promote its growth. A dedicated fund of Rs. 5000 Crores has been approved under the CSSS for implementing the recommendations approved under the program.

The Government of Karnataka has identified six focus sectors as part of the Champion Services Sector Scheme with the goal to boost the state's position in these sectors. The six sectors identified are Medical Value Travel, Transport & Logistics Services, Audio Visual Services (Media & Entertainment), Education Services, Infrastructure & Construction and Remittances & Immigration. This document pertains to the sector development strategy for Audio Visual Services also referred to as the Media and Entertainment sector.

Karnataka accounts for more than one third of Information Technology (IT) and Electronics exports from India. Bengaluru has a thriving startup ecosystem and counts among the largest ecosystems for tech startups globally. Recently, NITI Aayog (National Institution for Transforming India) ranked Karnataka as the 'most innovative major state' in India. The Media and Entertainment sector is one with great potential. Newer devices, changing viewership habits and new modes of media delivery and publishing have made the Media and Entertainment sector a very promising sector. Media and Entertainment broadly comprises of Television (TV), Cinema, Print Media, Advertising (Traditional and Digital), Animation Visual Effects and Gaming, Esports, Live events, Out of Home Advertising and Radio, Music & Podcasts. The Global Media and Entertainment industry is expected to reach USD 2.6 Trillion in revenue by 2023².

In this report, three subsegments within Media and Entertainment have been identified to boost the services sector within the state. They are, Animation Visuals Effects & Gaming, Digital Advertising (Internet advertising) and OTT (Over the Top) Media. The report details the various subsegments, their growth potential globally and in India and what Karnataka can do to improve services in this sector. Various reports, market studies, expert consultations and stakeholder recommendations were factored in creating a strategy that will drive growth within the Media and Entertainment space in Karnataka.

Recommendations proposed for the Animation Visual effects and gaming sector revolve around emphasis on shared infrastructure and creation of a dedicated space for Media and Entertainment such as a media city that will be a hub for all major media and entertainment related activity in the state. There is also an emphasis on creation of a comprehensive vision group dedicated to driving sector specific strategies in Animation Visual Effects and Gaming. Digital Advertising is one of the largest sectors globally and is fast growing. The sector has great untapped potential and India has a long way to go in terms of developing a market on par with the US and China. With respect to Digital Advertising emphasis was placed on organizing the sector by means of developing a formal curriculum in Digital Advertising with the goal to train quality talent in this area. Additionally, emphasis was placed on identifying Digital Marketing as an effective tool for Indian businesses to expand their reach and targetting a focussed demographic. OTT is a small but growing sub segment in the Media and Entertainment sector. The rising trend of on-demand media has led to OTT becoming a popular platform for media consumption. Large players in this space such as Amazon Prime, Netflix, Hotstar

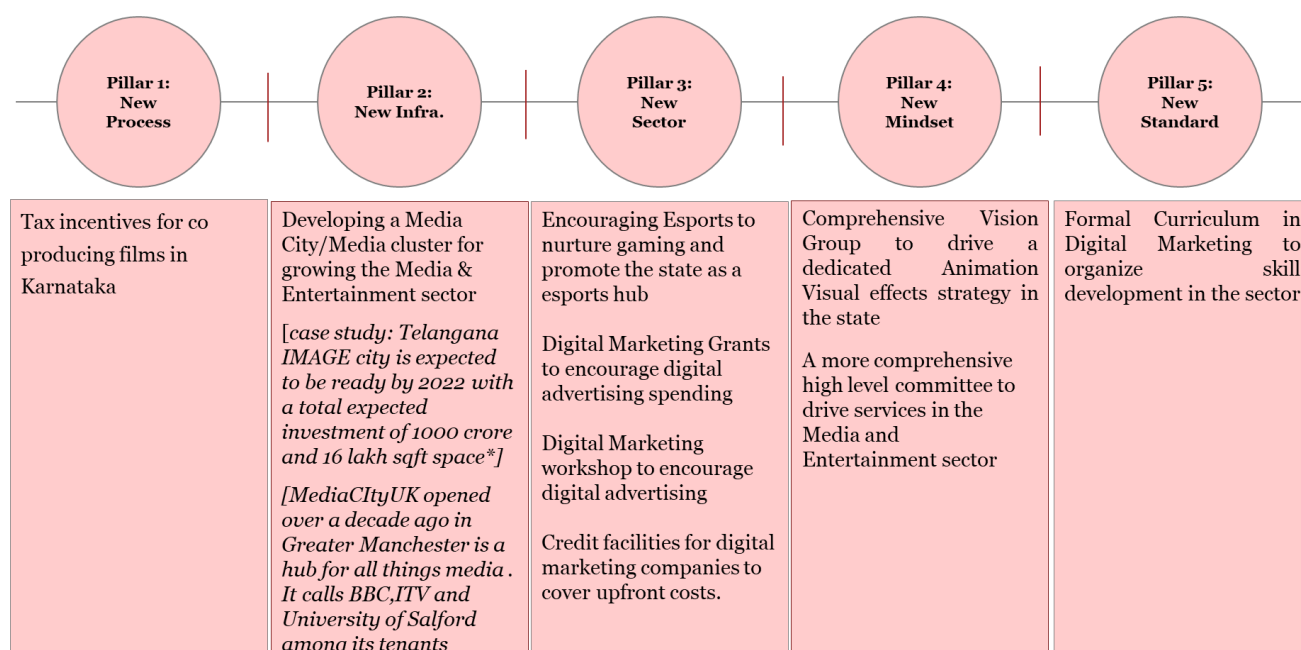
² PwC Global Entertainment and Media Outlook

and Zee5 have led the market with curated content of movies, documentaries, TV shows and Original content. The strategy to develop the OTT sector in the state should start with recognition of the sector as a launching platform for high quality film or television content that may not find its way into cinema screens. It is recommended that the current high -level committee on Media and Entertainment be made more comprehensive and include executives within the OTT sector. Kannada cinema has recently been lauded for the high-quality content it produces and OTT remains a very popular means of promoting regional cinema throughout the globe.

The internet will continue to drive Media consumption with growing internet access and falling rates set to boost data consumption via the internet. Global data consumption is set to grow at 26.4% with the US and China together accounting for 60% of the data consumed. Data consumption in India is said to grow at 40% Compound Annual Growth Rate (CAGR) with video consumption expected to grow by 44.4%. More than 50% of the data consumed in India flows through smartphones with social media, video consumption and business applications expected to drive media consumption in the future.

The Champion Services Sector Scheme envisions development of the Services Sector through 5 pillars that champion growth in the service sector. Recommendations made in this report have been kept in line with the goals of the Champion Services Sector Scheme. **Figure 2** provides a snapshot of the pillars that form the basis of strategic interventions³. In the chapters to follow, each focus sector is introduced, and recommendations are elaborated.

Figure 2: Snapshot of Champion Services Sector pillars and recommendations



Source: Study team analysis

³Pillar 2: Hyderabad Image Tower Delayed to 2022-Deccan Chronicle (21/11/2019)



The Media and Entertainment Industry

2. Media and Entertainment , a \$ 2.3 Trillion industry

The Media and Entertainment industry is a USD 2.3 Trillion industry globally⁴ having constantly evolved over decades. Today, it comprises everything from TV and Films to Gaming and Live events. Various segments of the Media and Entertainment industry are depicted in **Figure 3**.

Figure 3: Sub Segments of the Media and Entertainment sector

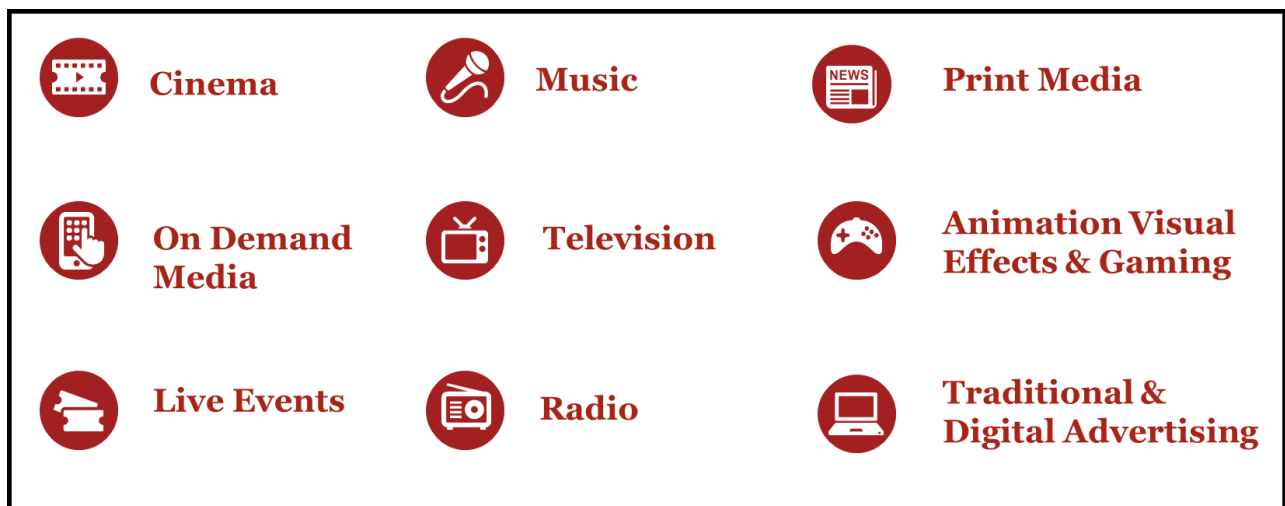
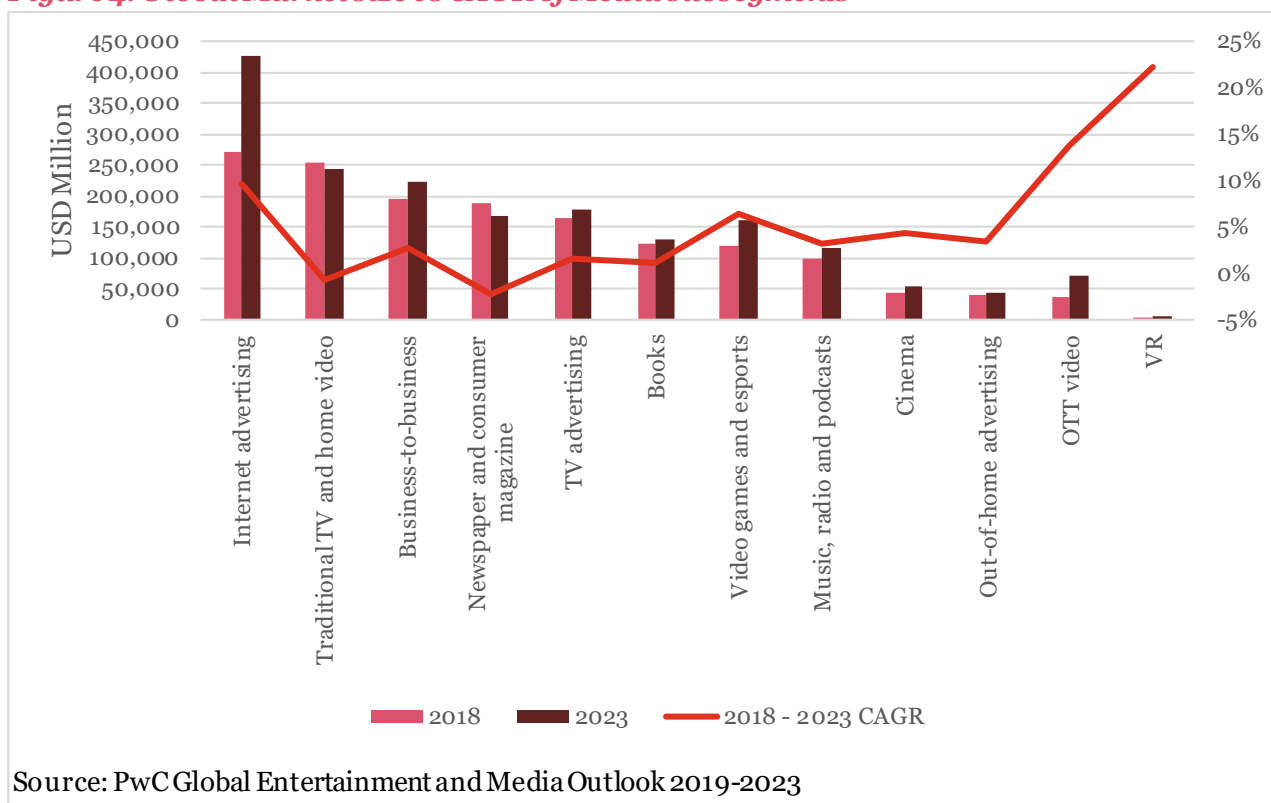


Figure 4 highlights the current and future size of the various segments comprising the media and entertainment industry globally, along with predicted growth rates until 2023. Globally, Digital advertising (Internet advertising), Traditional TV /Home video and Business to Business media are some of the largest markets within the Media and Entertainment sector and will continue to remain so in the near future. Segments such as Virtual Reality, Internet advertising, OTT (Over the Top) video and Video Games/Esports are amongst the fastest growing segments.

⁴ The figure includes Internet access which is a US \$871.3 Million industry (PwC Entertainment and Media Outlook)

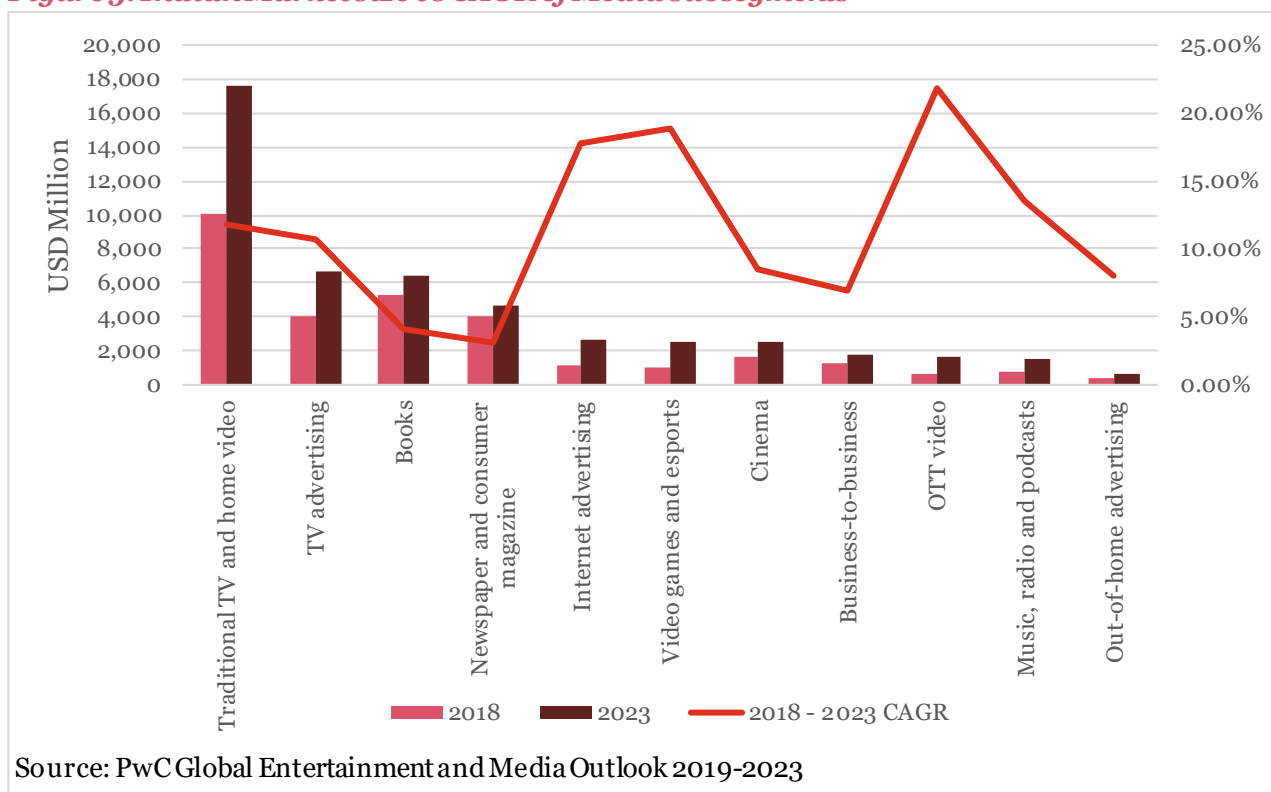
Figure 4: Global Market size vs CAGR of Media subsegments



The Indian Media and Entertainment industry is broad and varied. It is one of the largest in Asia backed by a large population, increase in disposable income, growing penetration of the internet, digitization and an increased appetite for media consumption. Sectors such as Internet advertising (Digital advertising), Animation Visual effects & Gaming and OTT (Over The Top – Media) show great promise in India. India is poised to be the tenth-largest market for OTT in terms of revenue in 2022, with mobile internet subscribers set to double from 406 million in 2017 to 805 Million in 2022. The OTT market is driven by increased internet penetration, consumer demand and lower internet prices.

Figure 5 represents the current market size, the projected future market and the projected growth of various sectors of the Indian Media and Entertainment Industry. Traditional TV and Home Video still constitutes a large chunk of the sector with a projected market size of 17.5 Billion by 2023 while TV Advertising is expected to touch 6.7 Billion by 2023 with a CAGR (2018-23) of 10.71%. Sectors such as internet advertising (~18%), Gaming and Esports (~19%) and OTT (~22%) are the fastest growing whereas sectors such as Books and Newspapers & Consumer Magazines were the slowest. Sectors such as Traditional TV & Home Video, TV Advertising, Cinema, Business-to-Business Media and Out of Home Advertising are expected to grow between 7% and 12%.

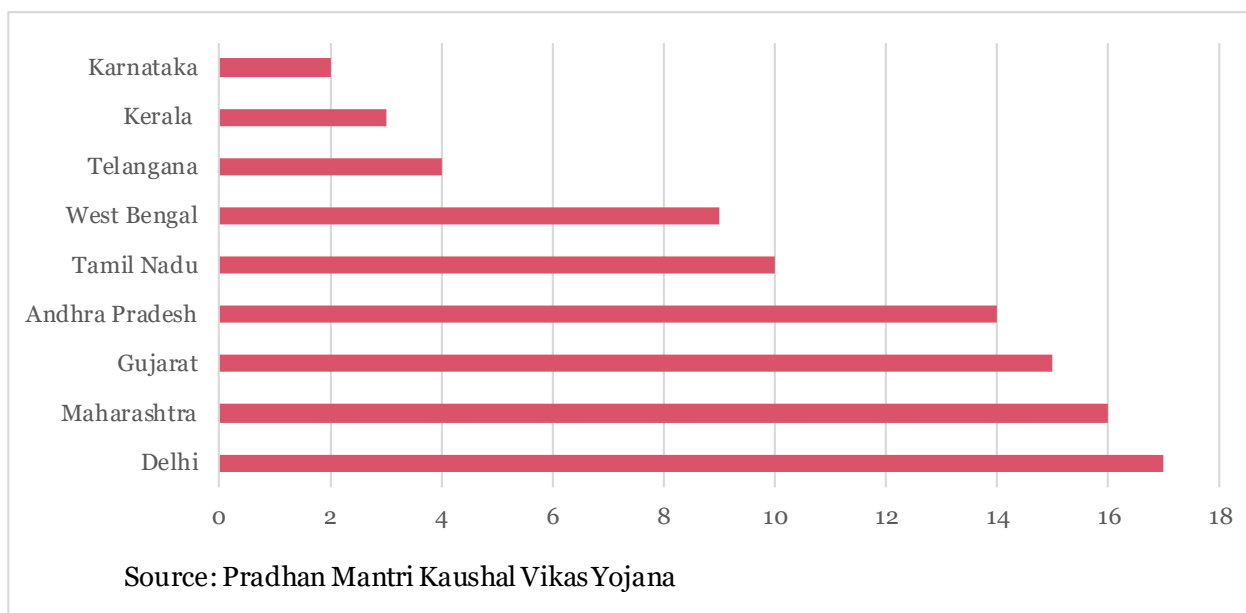
Figure 5: Indian Market size vs CAGR of Media subsegments



The internet will continue to drive Media consumption with growing internet access and falling rates set to boost data consumption via the internet. Global data consumption is set to grow at 26.4% with the United States (US) and China together accounting for 60% of the data consumed. Data consumption in India is said to grow at 40% CAGR with video consumption expected to grow by 44.4%. More than 50% of the data consumed in India flows through smartphones. With the growing impact of social media, video consumption and business applications are expected to drive media consumption in the future.

The Government of India has put across various initiatives to help build skill and generate employment in the Media and Entertainment sector. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is a scheme from the Ministry of Skill Development & Entrepreneurship (MSDE) implemented by the National Skill Development Corporation. The scheme endeavours to build skills across various trades in the country through sector specific skill councils including the Media and Entertainment sector. In this regard the program has partnered with various training centres in the country to develop these relevant skills. Currently, in the Media and Entertainment sector, training centres are registered under skills such as Modeller, Sound Editor, Animator, hairdresser and Editor. **Figure 6** lists the number of training centres in a few selected states. It can be observed that Karnataka has only 2 listings for training partners, which include training for the job role of Editor and Make Up Artist respectively.

Figure 6: Training centres for the Media sector in select states under PMKVY



In terms of employment growth, the Television and Films sector is expected to have the most growth with a combined total of 380000 jobs expected to be added between 2017 and 2022. The Radio subsector is expected to grow by about 10000 jobs in the same time period. From an industry growth and employment standpoint the Media and Entertainment sector differs from the traditional subsectors in many ways. Although there are several media schools in the country there is a need to update quality and curriculum at these schools to stay more relevant and better equip them to supply the skills and manpower that the industry demands. Currently, the industry prefers to train employees on the job, and this leads to circumstances where graduates trained in the Media and Entertainment sector are pooled with graduates in other general streams when hiring. Furthermore, compared to more mature industries such as IT, Manufacturing, Engineering and Pharmaceuticals, the Media and Entertainment industry banks on the utilization of freelancers as opposed to other industries that have full time employees, leading to a different perception of job security in the industry⁵.

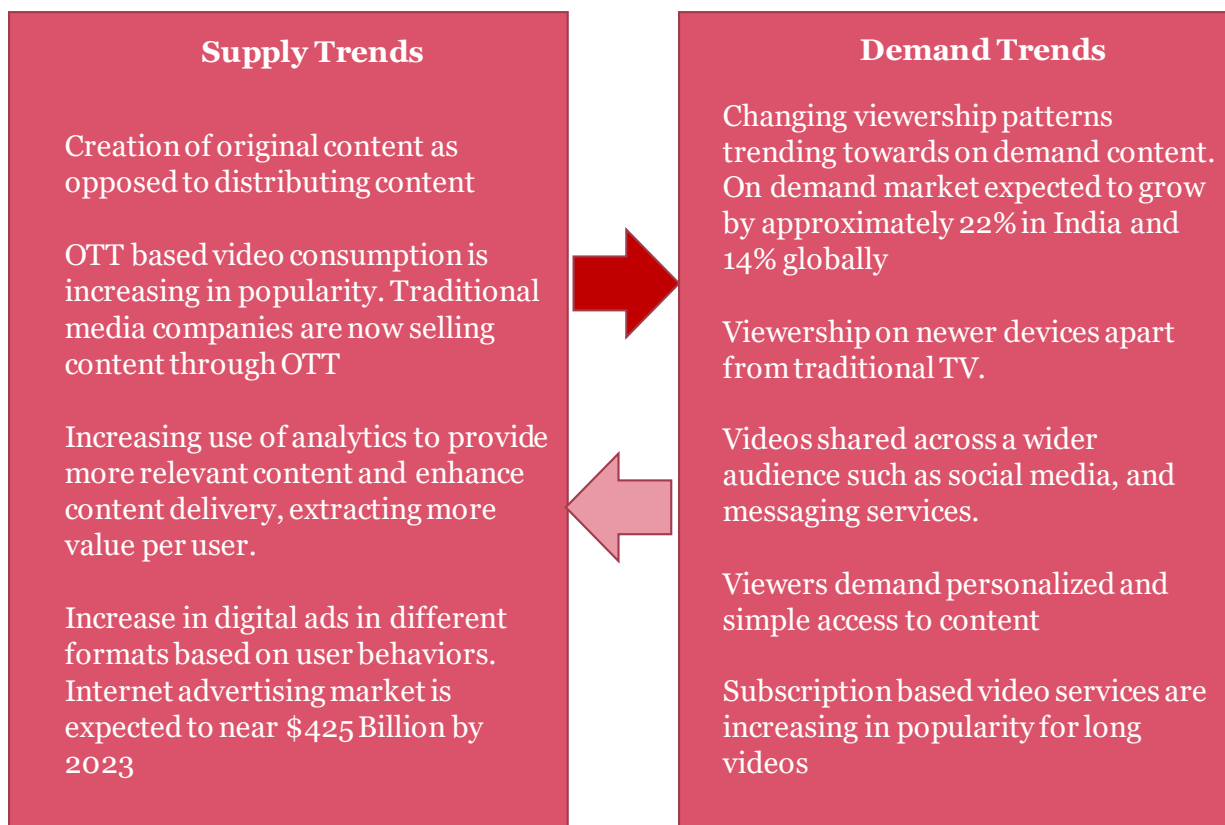
1.1 Current trends in Media and Entertainment

Although traditional TV /Home Video and Newspapers/Consumer Magazines are one of the largest markets in the Media and Entertainment industry and will continue to remain so, the segment is expected to record negative growth at -0.7% and -2.3% CAGR respectively by 2023. On the contrary, Over-the-top (OTT) is fast growing and is expected to gain momentum with the advent of higher internet speeds and adaption of newer technologies⁶.

⁵ Human Resource and Skill Requirements in the Media and Entertainment Sector (2013-17, 2017-22)- KPMG, National Skill Development Corporation, Ministry of Skill Development and Entrepreneurship

⁶ PwC Entertainment and Media Outlook

The Current trends that are driving the demand and supply in the Media and entertainment industry are as below^{7 8 9}.



1.2 Focus sectors for the Champion Services Sector Scheme

Various factors were considered in analyzing the media and entertainment sector. The goals of the Champion Services Sector such as New processes, New infrastructure, sectors with untapped potential and sectors that could boost the country and the state's export competitiveness were given priority. Factors such as segment growth rate, segment size, government policies/incentives and current & future trends were considered in analyzing the sector. Three major focus sectors were identified for the Champion Services Sector Scheme where Karnataka can leverage its existing strengths. The segments are

- ▶ **Animation, Visual Effects and Gaming**
- ▶ **Internet Advertising/ Digital Marketing**
- ▶ **OTT media.**

⁷ Adobe: 5 Trends Shaping The Future Of Media And Entertainment

⁸ Deloitte :2020 Media and Entertainment Industry Outlook

⁹ PwC Entertainment and Media Outlook (2019-23)



Animation Visual Effects and Gaming

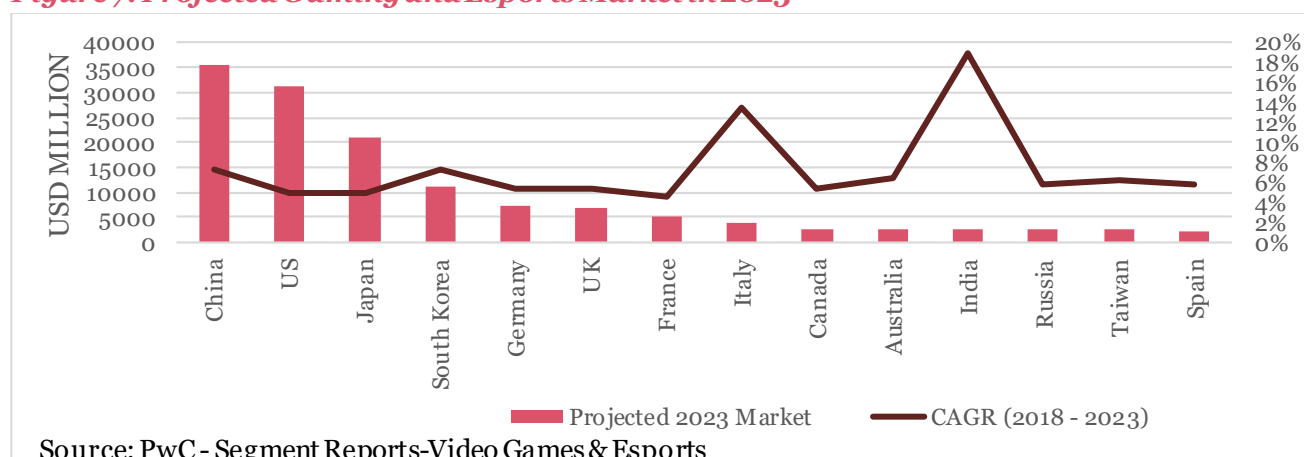
3. Animation Visual Effects and Gaming

A promising sector with great potential

Animation refers to the manipulation of images to create the illusion of movement. Today animation is performed using software and computer technologies to create multimedia and gaming products. The Animation, Postproduction and Visual Effects (VFX) sector in India is poised to grow at a CAGR of 20% until 2020, driven by a growth in animation within Film, TV and Digital platforms. There is also an increase in the production of action and animation content globally and this, coupled with international studios leveraging India's skillset in these areas, is set to contribute to the growth of this sector in India ¹⁰. Networks oriented towards children such as Cartoon Network, Nickelodeon, Hungama, Pogo and Disney Channel and sonic provide significant animation content. Furthermore, the amount of regional content provided in these channels are opening up opportunities for local animation productions to flourish and boost local Intellectual Property (IP) creation.

Gaming refers to games played online, on a videogame console, on a mobile phone or on a PC. Esports refers to professional tournaments with professionals competing against each other using a video game. Global Gaming and Esports is projected to touch USD 162 Billion with China and the United States being the largest markets for gaming. With a projected market size of 2.6 Billion by 2023, the Indian market is small in comparison to the United States and China. However, given the growing market for gaming and the availability of low cost and highly skilled labor, the gaming industry displays great potential for exports. **Figure 6** refers to the projected Gaming and Esports market by 2023 along with the projected growth rates for the same time period. It may be observed from the graph that Gaming and Esports, although a small market compared to China, US, Japan and South Korea, is one of the fastest growing markets in the world.

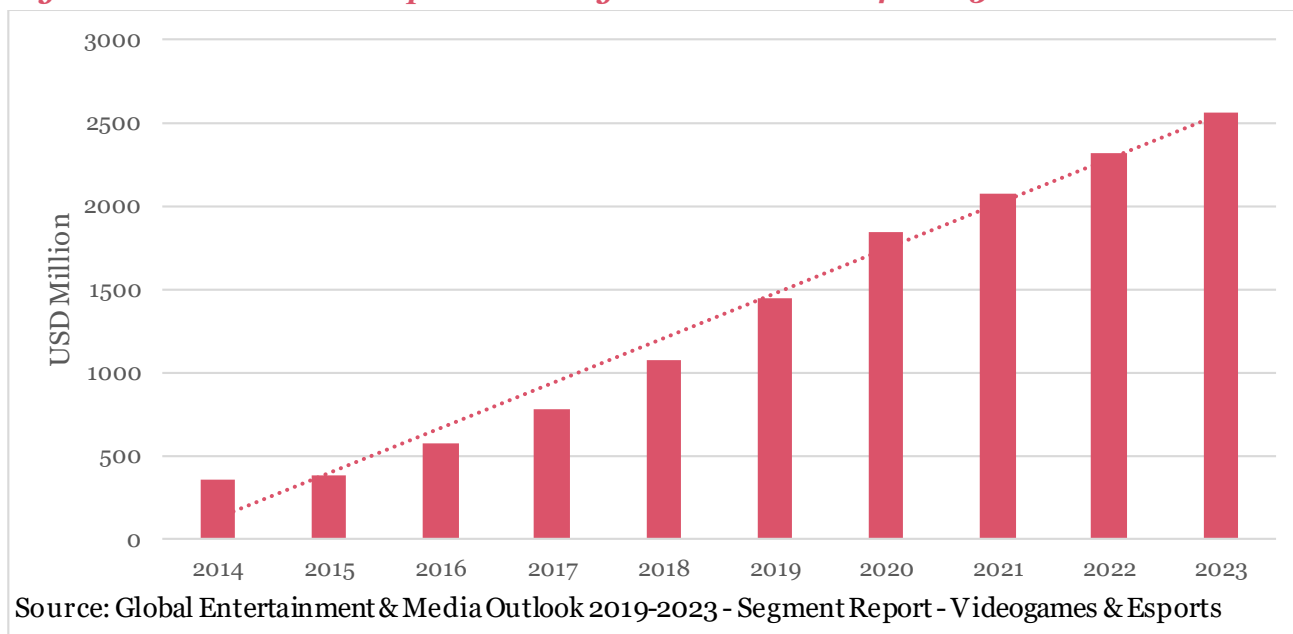
Figure 7: Projected Gaming and Esports Market in 2023



¹⁰ EY/FICCI: Re-imagining India's M&E sector -March 2018

While Globally the Video games and Esports market is expected to grow by 6.48% CAGR, the Indian market in Gaming and Esports is expected to double by 2023 with a projected CAGR of 18.89%. **Figure 7** shows the steady growth in the Indian Gaming and Esports market from 2018 with the trend expected to continue in the near future.

Figure 8: Video Game and Esports market growth in India 2014 – 2023



Esports forms a tiny but very important segment of the Gaming industry. This sub-segment is growing at 18.33% CAGR (2018-2023) and is expected to reach USD 1.8 Billion worldwide. South Korea, China and the United states of America are some of the largest and most popular markets for Esports with China and the United states projected to grow at more than 18% CAGR by 2023. The sector is now gradually moving into organized territory with government support and proliferation of more established companies in this segment. Several major game publishers and PC components manufacturers have taken a keen interest associating with the sector as a way to promote and market their products.

Karnataka: A very attractive AVGC destination

Karnataka is one of the preferred destinations for Animation Visual Effects and Gaming. In addition to various small and mid-sized companies in the Animation, Visual Effects and Gaming space, Karnataka is also home to India operations of major global studios such as Technicolor India and Zynga India. The Technicolor India team has been behind some of the major Hollywood blockbusters such as Skyfall, Harry Potter franchise, Madagascar franchise and Life of Pi. In the field of animation Videogyan studios has made a name for itself with its popular kids themed animated video channels that have accumulated over 1 Billion views¹¹. On the mobile game side of things, 99 games, based out of Udupi in

¹¹ Forbes: New Additions To The Ranks Of India's Highest-Revenue YouTube Channels

Karnataka has proven that smaller cities can prove equally competitive in acting as a launch pads for valuable companies. The company has developed games that have proved to be quite popular in the app store. The company also partnered with Yash Raj films to develop games for the launch of Dhoom 3, with about 25 Million downloads in total.

The Karnataka Animation, Visual Effects, Gaming and Comics (AVGC) policy 2017-22 enlists various incentives to boost this sector with an estimated budget of 78 crores over the policy period of 5 years. The policy is a successor to the AVGC policy of 2012 and aims to boost the Animation Visual effects and Gaming industry through financial support, incentives, infrastructure development and skill development. To avail incentives offered through the policy, a company in the field of Animation Visual Effects Gaming and Comics should be registered with KBITS (Karnataka Biotechnology and Information Technology Services), a registered government society. A Center of Excellence is being set up by the Government of Karnataka in association with ABAI (Association of Bangalore Animation industry). Key incentives offered as part of the policy are as follows:

- ▶ Digital Art centers across Karnataka to boost digital skills along with strong art fundamentals
- ▶ Proposal to set up AVGC finishing school in collaboration with industry associations.
- ▶ Centre of Excellence for Animation, Visual Effects and Gaming at a cost of 48.85 crores for which funds are expected to be released over a 3-year time period.
- ▶ Digital Post-production AVGC Lab as part of a shared infrastructure set up with state-of-the-art infrastructure
- ▶ Incubators for startups in Animation Visual Effects, Gaming and Comics sector
- ▶ Incentives such as Patent registration incentive, Power tariff concession, marketing incentives and Production grants

Making good, better: Proposed Interventions

Bengaluru, Mumbai and Hyderabad are fast growing animation hubs. These cities are also well-known hubs for IT and IT enabled services. Telangana has been aggressively working towards developing the AVGC sector in the state. In 2016 the state came up with an “IMAGE Policy” which is aimed at developing the AVGC sector in the state. The Telangana Government is now in the process of creating an “IMAGE city” that will be a Center of Excellence and a hub for Animation and Gaming related activity in the state. With the recent success of the Bahubali franchise, Hyderabad based studios’ movies are attracting praise for the high-quality visual effects and so are the studios that were behind some of the major scenes in the movie. The following recommendations are proposed to enhance the competitiveness of the AVGC sector in Karnataka.

Vision Group to drive AVGC strategy in the state

Short term 0-1 year

It is recommended that the state form a Vision Group in Animation Visual Effects and Gaming. Currently, the Department of Information Technology, Biotechnology and Science and Technology in association with The Association of Bangalore Animation industry (ABAI) is spearheading growth in

the AVGC sector through creation of the Centre of Excellence (COE) in Bengaluru and through hosting Technology and Animation related conferences.

We recommend creating a Vision Group that will be comprehensive in its representation of the AVGC sector. The Vision Group will include executives from all aspects of Animation visual effects gaming such as policy makers, educators, heads of large and small companies and startups in the Animation VFX and Gaming sector. The learnings from various centres of excellence such as that of the state and that of CII can be leveraged by the vision group to drive growth. A recommended composition of Vision Group members is presented in **Table-1**.

Table 1: Suggested Vision Group for AVGC

SI No	Member	Title
1	Minister for IT, BT and ST, GoK	Chairman of the committee
2	Additional Chief Secretary, IT, BT & ST- GoK	Member Secretary
3	Director, KBITS, GoK	Member Convener
4	Head of a large multinational AVGC studio in Karnataka (Example: Technicolor)	Executive Director
5	Head of a small to mid-sized animation studio in Karnataka (Example: Videogyan Studios)	Member
6	Head of a large gaming studio based in Karnataka (Example: Zynga, Rockstar games)	Member
7	Head of a mobile gaming company/social games/app development company in Karnataka (Example: 99Games)	Member
8	Head of major Esports organizer/organization in Karnataka	Member
9	Educator in Animation Visual Effects and Gaming	Member
10	Representative of an AVGC industry body in the state	Member

Karnataka Media city

Long term 0- 5 years

The option to create a Media City in Animation Visual effects and Gaming through public private partnerships needs to be assessed. A Media City's success depends on how it will boost the media and entertainment ecosystem in the city, how keen investors are to move or open new locations at the Media City and how well does the media city cater to the needs of the Media and Entertainment sector. The success also depends on how well startups and related educational/training centres are incentivized to move to the Media City. The media city, although an animation hub, will also integrate dedicated blocks for TV, Film, Advertising, Live events, Esports and other media. The media city will provide incentives for media companies to set up offices in its premises. The Media City shall be located within a 50 km Radius of Central Bengaluru and will be well connected by public transit ¹². It will house a dedicated Center of Excellence for Animation Visual Effects and Gaming and will aim to accommodate the majority of AVGC studios in the country. The services in Media City will include services such as:

¹² Estimate based on distance of existing software technology parks from central Bengaluru and that of other media cities globally

- ▶ Animation Visual Effects and Gaming related production & distribution, Media Content Management, Film Content Rights Management, Production, sound and video editing, video still photography and motion capture
- ▶ Services that focus on renting of media equipment, services on Digital Media Management
- ▶ Web design, interactive services such as casting/streaming, multimedia software development Games, Internet Gaming Broadcasting Hardware & Equipment
- ▶ Incubation Centre for AVGC¹³ Industry
- ▶ The Media City will house an AVGC Academy by encouraging public-private partnership to set up colleges and training centers.
- ▶ High-speed telecommunication link will be made available as a high volume of data is transmitted in case of AVGC companies.
- ▶ Digital media services including Digital advertising such as advertising, branding, content creation, marketing, OTT – media
- ▶ TV and Radio studios/offices

A brief case study of Government of Telangana's efforts to promote the Animation Visual effects and Gaming sector in the state is described below.

Telangana Image City

The Government of Telangana plans to set up an IMAGE tower to boost the AVGC sector. The Telangana State Industrial Infrastructure Corporation (TSIIC) will be the nodal agency for this and will be responsible for allotment and management of land for this purpose.

- ▶ The IMAGE tower is expected to be complete by 2022.
- ▶ The IMAGE tower is expected to cost approximately 1000 Crore and will have about 16 Lakh Square feet of leasable area¹⁴.
- ▶ Telangana Animation and Gaming (IMAGE) City will be set up in Hyderabad through the Telangana Industrial Infrastructure Corporation (TSIIC) with an option to develop their facilities outside the assigned clusters.
- ▶ The conditions for setting up facilities in IMAGE include fulfillment of certain criteria such as employment (Example: Minimum 100 employees as of set up date- for Tier II city) and minimum turnover (Example: Minimum of 15 crores turnover during last two years for Tier II cities).
- ▶ The IMAGE city is expected to house all the facilities for the development of the AVGC sector such as incubators, advertising and marketing services for AVGC companies, software development centers for gaming and multimedia, equipment rentals, shared infrastructure and high-speed internet connectivity to name a few.
- ▶ The IMAGE city also envisions setting up an Animation, Visual effects, Gaming & Comics Academy in collaboration with educational institutions/universities

Karnataka Media City will be a hub for all types of media and not just Animation, Visual effects and gaming. Apart from having a dedicated center for Animation visual effects and gaming, the Media city

¹³ AVGC: Animation Visual Effects and Gaming

¹⁴ Deccan Chronicle - Hyderabad: Image tower delayed to 2022 (21/11/2019)

will house various offices in other sectors of media such as Radio, TV, Live Events, Esports, Educational institutions and training centers related to Media and Entertainment. The Media City shall be envisioned as a recreational center with theatres, dedicated spaces for live events, restaurants, hotels and shopping centers. A case in point of one such successful media city is the MediaCityUK located at the city of Salford in Greater Manchester, England.

United Kingdom: MediaCityUK

MediaCityUK is based in Salford, Greater Manchester. It is spread over 200 acres of land and is well connected via bus and tram facilities. The city is home to many facilities from media and technology companies to universities and incubators. It is home to more than 250 businesses and provides employment to more than 8000 people¹⁵. Some of the highlights of MediaCityUK are as below.

- ▶ MediaCityUK is a joint venture between Peel Land & Property Group and Legal & General Capital (An Investment company).
- ▶ MediaCityUK contains a mix of office spaces, retail spaces, event venues, theaters, hotels, serviced apartments and restaurants.
- ▶ Some of the more notable tenants in MediaCityUK are BBC (British Broadcasting Corporation), ITV (Independent Television), dock 10 (audio studios, digital post-production, cloud media management services), SIS (Television broadcasting firm) and Ericsson.
- ▶ The University of Salford has one of its centers at MediaCityUK
- ▶ The Media City has different Office spaces catering to different budgets and requirements
- ▶ The Media City is well connected via public transport with a travel time of 15 minutes from Manchester city center via tram

United Arab Emirates: Dubai Media City

The Dubai Media City is based in Dubai, UAE. It was established in the year 2001 and employs about 25000 people spread over 1500 companies.

- ▶ Notable tenants include CNN (Cable News Network), Thomson Reuters, BBC, Omnicom Media Group and Leo Burnett.
- ▶ DMC is a free zone with a 50-year tax exemption and does not require financial Investment from a local sponsor
- ▶ Other benefits include exemption from customs duty for goods and services and a fast track immigration process
- ▶ Facilities include commercial units and boutique villas

¹⁵ <http://www.mediacityuk.co.uk/>

Encouraging Esports in India and Karnataka

Short term 0- 3 years

Esports is an organized gaming event where players from different teams compete against each other on popular games. Esports are commonly held as tournaments with individual players or professional teams. Some of the popular games in Esports include Fortnite, Counterstrike, Call of Duty, Dota and League of Legends to name a few. Esports games are held in large arenas and are sometimes streamed via the internet to fans, sometimes numbering in the millions. Broadcasters such as ESPN and Disney, Professional leagues such as the NBA and colleges in the USA have all made inroads in recognizing Esports as a growing phenomenon. Just as in other sports Esports players can earn money from sponsorships, league fees and endorsements¹⁶.

Esports is a relatively new concept in the Indian Gaming sector. Esports is a USD 775 Million market and is projected to become a USD 1.8 Billion market by 2023 with a growth rate of 18.33% CAGR (2018-2023)¹⁷. American multinational Intel is partnering with ESL (Electronic Sports League), a large organization involved in competitive gaming to develop and promote Esports globally. The company also announced hosting an “Intel world open” just before the 2020 summer Olympics in Japan giving a boost to the Esports sector¹⁸ (Tokyo Olympics has been postponed to 2021¹⁹). Although India has a very minor presence in this segment, Esports is expected to grow at about twice the global growth rate with a CAGR of 36.81% (2018-23).

Bengaluru has a dedicated Esports following. The city has seen many Esports lounges mushroom over the past few years with a number of small Esports events hosted in the city. The Esports sector in Bengaluru has an important role to play in branding the city as a gaming hub. Recognizing Esports as a sport growing in popularity is the first step in the long process of bringing organization and structure into the sport. An official government recognized body at the center and at the state level will help provide credibility to the sport and help grow the sport. Investor summits and Technology summits held in Bengaluru such as the GAFx and Bengaluru Tech Summit can be ideal platforms to introduce the sport officially in the state. It is imperative for Karnataka to take a lead in developing Esports as part of its overall agenda of developing the Animation, Visual Effects and Gaming sector in the state.

Globally, countries, states, educational institutions and professional leagues are taking action to incorporate Esports as part of their agenda. **Table-2** highlights some of the countries that have officially recognized or officially supported and nurtured Esports and related activities.

¹⁶ CNN- What is eSports? A look at an explosive billion-dollar industry 08/2018

¹⁷ PwC Global Entertainment & Media Outlook 2019-23- Videogames and Esports

¹⁸ Forbes.com: Intel's Olympic Esports Event Offers an All-New Experience For 'Rocket League' Fans (18/09/2019)

¹⁹ Hindustan Times- Tokyo Olympic venues lined up, schedule remains the same 07/2020

Table 2: Government support, globally, towards recognizing Esports

Country	Recognition
Indonesia	Recognizes Indonesia Esports Association (IeSPA) under the Ministry of Youth and Sports Affairs ²⁰
Philippines	Department of Information and Communications Technology (DICT), Republic of the Philippines hosts the Kalasag Esports Tournament. Gaming and Amusements Board (GAB) issues athletic licences to professional Esports players ²¹ .
Malaysia	RM20 million allocated to support Esports in the country in 2020 ²²
South Korea	Korea e-Sports Association (KeSPA) has seen government intervention and regulation in its activities.
China	Recognition of Esports athlete as a profession ²³
United States of America	Provides an Esports visa for competitions ²⁴

Republic of Philippines' Initiative for Esports

High level professional Esports players will now officially be recognized in the Philippines. These Esports players will be recognized as professional athletes and will be granted athletic licenses under Philippines law. The Games and Amusement Board which is the official Government body to oversee professional sports in the country requires all the athletes to undergo drug testing in order to secure licenses.

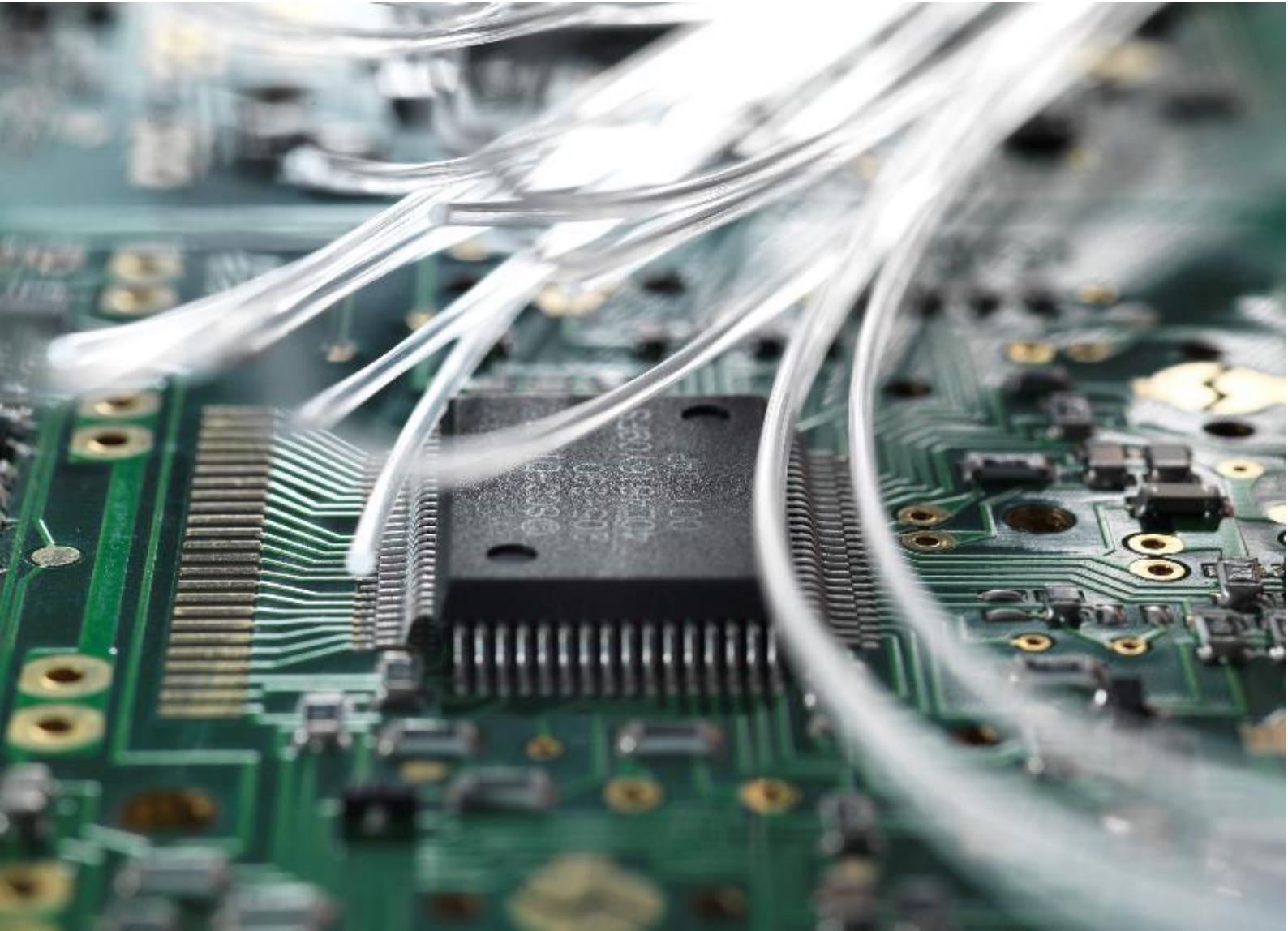
²⁰ sg.news.yahoo.com: Gamers, rejoice: the Indonesian government officially supports eSports (01/07/2014)

²¹ news.abs-cbn.com: The Philippines' new athletes: eSports gamers (10/10/2017)

²² MalayMail: Budget 2020: eSports to get RM20m allocation next year (11/10/2019)

²³ Fox sports: www.foxsportsasia.com: China to recognize esports athletes as new profession (31/01/2019)

²⁴ Forbes.com: The U.S. Now Recognizes eSports Players as Professional Athletes (14/07/2013)



Internet Advertising/ Digital Advertising

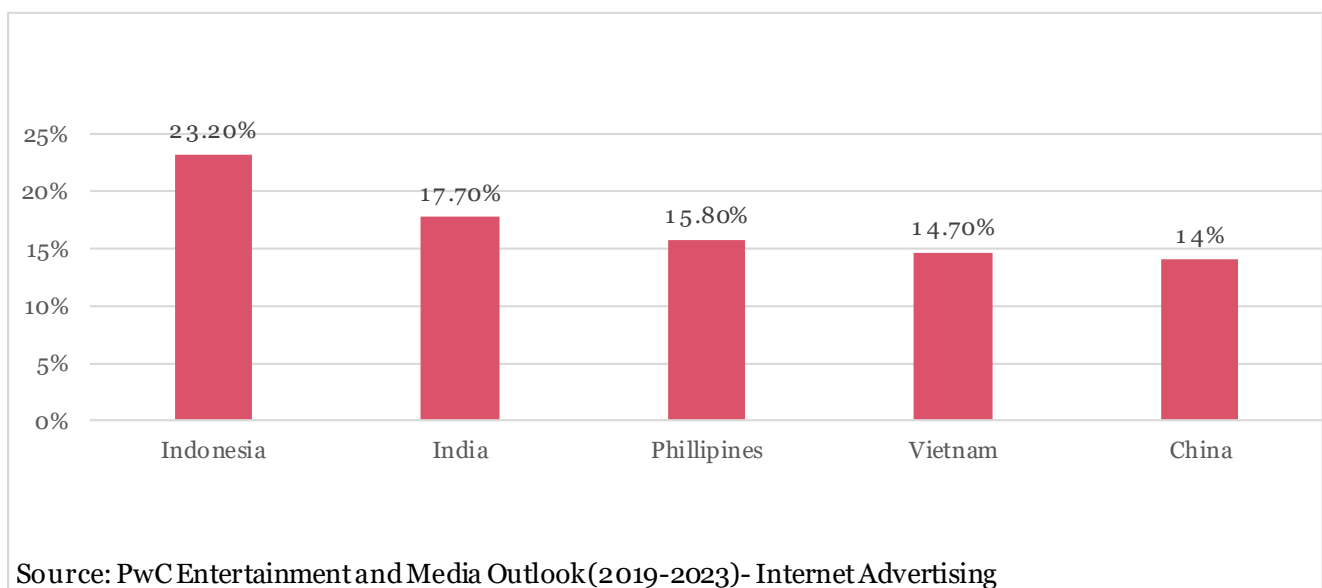
4. Digital Advertising

Digital Advertising, an untapped market

Digital Advertising or Internet Advertising refers to advertising via the internet or in other words the use of online media to promote a product or service to its target consumers. The advertising can be promoted through various ad sellers such as social media, search engines and mobile apps. Ads are commonly seen on emails, websites, mobile applications and videos. Internet Ads are targetted and relevant to a user's needs and websites sell advertising space to monetize their content. Some of the most popular ad platforms are Google's AdSense, Facebook advertising, Instagram advertising and LinkedIn. The impact of these ads is measurable by identifying user behavior by way of clicks and site visits.

The Internet advertising market is dominated by the US, China, UK, Japan and Germany, accounting for about 3/4th of the global market²⁵. This trend is expected to remain so in the near future. The internet infrastructure in these markets coupled with extensive use of the internet for various activities has increased data consumption, leading to proliferation of a well-established Digital Advertising market. US based companies remain the largest platforms for selling digital ads with Google, Facebook, and now, Amazon emerging as major players in this field. Asian countries remain some of the fastest growing markets in the world with Indonesia growing at approximately 23% followed by India, Philippines, Vietnam and China. **Figure 8** displays the growth rate of top countries in Asia in Internet Advertising.

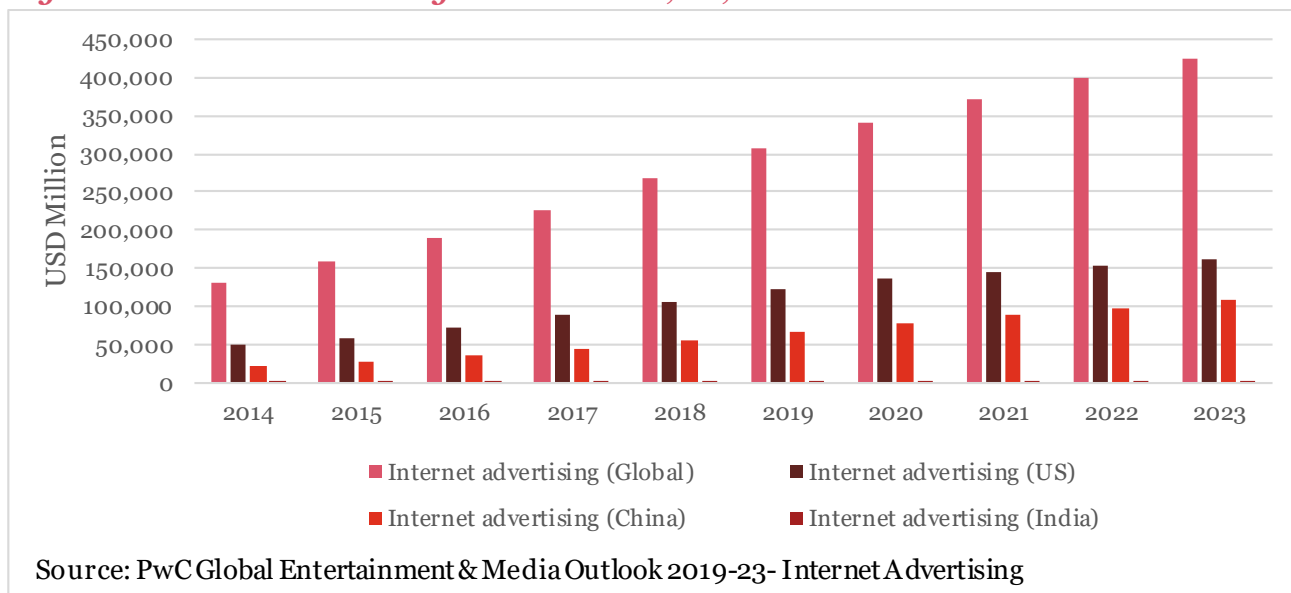
Figure 9: Internet Advertising Growthrate- Asian countries



²⁵ PwC - Global Entertainment & Media Outlook 2019-2023

Figure 9 compares the Digital Advertising market in India against that of the US and China. It can be observed that India, although, a populous country with a huge Media and Entertainment market has a very small market in Digital Advertising.

Figure 10: Internet Advertising: Global Market, US, China and India



Karnataka: A technology hub with great creative talent

Karnataka has a fairly large number of Digital Advertising companies. They exist either as standalone companies in Digital Marketing or are part of a larger advertising agency. Digital advertising falls under the larger umbrella of Digital marketing which includes services such as Search Engine Optimization (SEO), Content Marketing, Social Media Marketing, Affiliate Marketing, Native Advertising, Marketing Automation and Email Marketing.

Prominent English and Kannada newspapers such as Times of India, Vijaya Karnataka and Vijayavani that cater to readers across Karnataka have launched digital versions of their newspapers alongside traditional print versions. The trend has resulted in a demand for Digital Marketing executives hired to drive advertising revenues. Marketing executives are now seeking additional training in Digital Marketing to boost their skills. Bengaluru based companies such as Flipkart, Redbus and Cult Fitness have made significant investments in Digital Advertising. Political parties have seen an increase in advertising spending in the months leading up to elections and digital spending has now become an integral part of their advertising campaigns²⁶.

The very nature of Digital Advertising training has enabled many online and onsite training institutes to mushroom in the state. Digital marketing currently exists more as a certification than a full-fledged degree course, with numerous training institutes set up in the state claiming to impart high quality

²⁶ The economic Times: BJP top spender on political ads on digital platforms (16/05/2019)

training in this area. This notwithstanding the fact that there are some Master's degree programs in Karnataka that offer Digital Marketing as part of their curriculum. Among some of the well-known institutes in the state JSS Centre for Management Studies in Mysuru (JSSCMS) offers a Master's program in Digital Marketing while Manipal Academy of Higher Education offers a certificate program and a professional program in Digital Marketing. The Indian Institute of Management, Bangalore also has a program called 'Digital & Social Media Marketing and Analytics' which is aimed at marketing executives looking to develop their expertise in Digital Marketing.

Interventions to boost the sector: Awareness is key

Digital marketing is a service that relies on businesses investing in strategies to market their products through digital channels to reach a wider audience or a targetted demographic. Companies either have a dedicated Digital Marketing team or outsource the activity to Digital Marketing agencies. The proposal to boost the sector will revolve around encouraging businesses to develop a strong digital strategy. Specific programs in this area have generally encouraged Digital Marketing as part of an overall digital development strategy that also involves investments in data security and other digital technologies. The sector development strategy below is based on inputs from stakeholders in the sector and best practices followed worldwide in the sector.

Digital marketing workshops for MSMEs

Short term 0- 2 years

Given the increasing use of the internet to conduct business, coupled with innovation in payments and money transfer, businesses and customers alike are increasingly looking to the internet for business development and improving operational efficiency. If local businesses are to reach a wider audience, they require a bigger online presence. Businesses can benefit greatly by having a strong online marketing strategy thereby targetting a specific demography or a specific geography. This backed by a well-developed and well-maintained website can greatly enhance the credibility of the business. In this regard it is proposed to have a workshop to introduce online marketing tools to entrepreneurs looking to grow their business. The highlights of the workshop are as follows:

- ▶ The workshop will aim to Introduce MSMEs (Micro, Small & Medium Enterprises) to the various resources and tools to build an effective online presence. This will include conducting workshops on topics such as website building, ecommerce, social media, Digital Marketing and data security.
- ▶ The workshop will be conducted over a period of one day in cities all over Karnataka (Ex: Bengaluru, Mysuru, Mangaluru, Shivamogga, Hubballi (Hubli), Belagavi, Kalaburagi (Gulbarga), Ballari).
- ▶ The workshop will be conducted by a team experienced in the field of Digital Marketing, web development and cyber security. The workshop can be held through local training centers identified in each city.
- ▶ It is recommended that the responsibility for undertaking interventions related to Digital Marketing fall under the purview of either the Department of Information Technology, Biotechnology and Science & Technology or under the purview of Department of Information and Public Relations, Government of Karnataka.

- ▶ The workshop will be conducted twice a year and will be specifically aimed at MSMEs looking to increase their visibility.

The Australian Government has recognized the importance of such a workshop to help the country's businesses flourish in the current global business landscape. A brief case study of one such initiative is presented below²⁷.

Case Study: Australian Small Business Advisory Services (ASBAS)

Australian Small Business Advisory Services (ASBAS) Digital Solutions is a Government of Australia initiative to provide high quality digital solutions to small businesses at an affordable price. The service is provided through a network of training centers spread across the country and covers topics such as Website Building, Ecommerce, Social Media Marketing, Digital Marketing, Software for small businesses, Online security and Data Privacy. Some of the features of the ASBAS are below:

- ▶ The workshops are administered across Victoria, South Australia and Tasmania with an enrollment fee of \$55 AUD.
- ▶ The training includes a combination of group workshops, interactive webinars and online learning.
- ▶ The businesses seeking to enroll in the workshop must have 19 or less full-time employees.
- ▶ ASBAS advisors have at least 2 years' experience in providing advice to small and medium sized businesses with respect to digital growth strategies.

Digital marketing grants for MSMEs

Short term 0- 3 years

It is recommended that there be a dedicated digital grant allocated for the purpose of Digital Marketing and related services. The digital grant shall be accessed solely for the purpose of Digital Marketing. This will allow businesses to focus on strategies for digital development. The Digital Marketing workshops mentioned in the previous section shall assist entrepreneurs understand how to avail such grants. Suggested grant details are as follow:

- ▶ The business should be headquartered in Karnataka and the Digital Marketing, if outsourced, should be spent on hiring Digital Marketing firms based in Karnataka.
- ▶ A dedicated amount may be budgeted for the purpose of providing such a grant. Approximation for a budget can be arrived at by evaluating budgets for other similar policies against the market size.
- ▶ The companies may be reimbursed 50% of their total Digital Advertising expenditure up to a predetermined amount. The business should meet the criteria of an MSME at the time of claiming reimbursement for the expense.
- ▶ The business shall submit an application to detail how the advertising budget will be spent and how it will aid in expanding the company's business.

²⁷ Australian Government: business.gov.au

A case study of a Queensland Government initiative to provide grants for the purpose of digital development is provided below²⁸.

Case study: Queensland Government - Small Business Digital Grants Program

The Small business digital grants program aims to boost the competitiveness of small business through encouraging investment in digital technologies. The grant will assist companies in accessing digital technologies and related services to make them competitive in a global marketplace. The details of the grant program are as follow:

- ▶ 50% of the costs are provided by the government up to a maximum of \$10,000 with a minimum amount of \$1000.
- ▶ The business should have no more than 20 employees at the time of applying for the grant. It shall be headquartered in Queensland and have a turnover of no more than \$2 Million in the previous financial year
- ▶ An applicant if successful cannot reapply for future funding under the same program.
- ▶ Applications are assessed based on the overall impact the investment will have on the company such as competitiveness, revenue, employment, job growth and operational efficiency.

Formal curriculum in Digital Advertising

Short term 0- 3 years

A Digital Advertising team normally comprises of roles such as copy writing, content development, Marketing Information Technology development, Ad sales and support roles such as Finance, Human Resource (HR) and Administration. Currently Digital Advertising training is offered by many training institutes and certain degree programs in the state. Stakeholder consultations have revealed that many prospective candidates claim to have an in-depth understanding of Digital Marketing with limited knowledge on the same. Most new recruits are trained on the job and high attrition makes it a challenge to constantly recruit new candidates. There is a need to structure and formalize a curriculum on Digital Marketing and related services. In this regard it is recommended that the government create a framework to establish a comprehensive Digital Marketing curriculum to be offered by universities within the state. The curriculum will be jointly developed with inputs from educational institutions and industry. The curriculum shall also provide opportunities for existing employees in the sector to upskill themselves with respect to digital marketing and the emerging trends in the industry.

Many prominent universities in the world have recognized the importance of programs in Digital Marketing and have developed dedicated programs for this sector. A brief description of some of the prominent courses offered globally is as per **Table-3** ²⁹.

²⁸ Queensland Government: Business Queensland - Small Business Digital Grants Program

²⁹ Data obtained from respective university course pages.

Table 3: Prominent Digital Marketing programs offered around the world

Course	Description
Digital Marketing Analytics - MIT Sloan School of Management	<ul style="list-style-type: none"> ▶ Self-paced Online course in Digital marketing Analytics ▶ Program cost of \$2,800 ▶ 6 to 8 hours per week ▶ Certificate of completion
Digital Marketing and Social Media Analytics – MIT	<ul style="list-style-type: none"> ▶ 2-day course with a course fee of \$4100. ▶ Best suited for executives such as Chief Marketing Officers, product managers, Data scientists
Harvard Extension School - Marketing Management and Digital Strategy Certificate	<ul style="list-style-type: none"> ▶ Marketing fundamentals and market research ▶ Digital marketing, SEO and CRM analytics ▶ Strategies in social media
Leading Digital Marketing Strategy – INSEAD, France	<ul style="list-style-type: none"> ▶ Five-day program on Digital marketing ▶ In class sessions at Fontainebleau, France ▶ Program with a focus on trends driving the digital mart ▶ Program designed for senior managers and digital marketers ▶ Course fee of €9500
Oxford Digital Marketing: Disruptive Strategy Program- University of Oxford	<ul style="list-style-type: none"> ▶ 8-week program at a cost of £ 2200 ▶ Online method of program delivery ▶ Program developed in coordination with industry experts ▶ Program delivered through ‘get smarter’, an online learning provider.
Digital marketing – Indian Institute of Management, Indore	<ul style="list-style-type: none"> ▶ 3-day course in Digital Marketing ▶ Course fee of Rupees 42000

Short term credit facility

Short term 0- 3 years

Digital marketing campaigns involve upfront payment of costs to advertising platforms. However, these businesses are only paid after completion of the campaign, normally after 2 to 3 months or more depending on the duration of each campaign. As such Digital Marketing firms can benefit from short term low interest credit facilities that are backed by the government. A revolving loan facility to Digital Marketing agencies to cover the costs until they are paid by the customer to advertising agencies should be explored.

Assistance with international expansion

Short term 0- 3 years

Many small Digital Advertising agencies based out of Bengaluru cater to clients from India. In order to attract potential customers from overseas markets, these small businesses require exposure and support to promote their services to clients abroad. Since Digital Advertising comprises of a lot of different creative skillsets such as content creation, animation, development and marketing it is imperative to understand consumer behavior in the geography the company wishes to expand. It is recommended that the Government of India provide support to local businesses looking to set up sales offices abroad. The sales offices will work on securing prospective clients while the Karnataka based office will deliver the service. This will help increase employment in the region and will assist businesses gain exposure to international markets.

A case in point is the Dutch Government's support for its business looking to expand internationally. Dutch companies looking to set up offices abroad can benefit with advice from the Dutch Government in terms of understanding the markets and how to avail appropriate support. The Netherlands Enterprise Agency (RVO.nl) helps Dutch businesses through its network of Dutch Embassies, consulates, business support offices and Regional Business Developers around the world. The government offers coaching to companies with limited or no knowledge of internal business while the support offices help companies in locations that have great potential for investment but lack a Dutch embassy or Consulate. For potential business opportunities in Southeast Asia, Gulf Region, West Africa, Latin America, Scandinavia and the Baltic States, Regional Business Developers assist companies with information on trade and investment opportunities in the region.

Digital Marketing recommendations in a nutshell (Table-4)

Table 4: Summary of recommendations for Digital Advertising

Recommendations	Details
Digital marketing workshops for MSMEs	Periodic workshops to educate entrepreneurs on the importance of digital channels for marketing
Digital marketing Grants for MSMEs	Dedicate grants provided solely for the purpose of building a digital strategy
Formal curriculum in Digital Advertising	Well-structured curriculum developed by universities to formalize Digital Marketing training
Short term credit facility	Revolving credit facilities to Digital Marketing companies to cover upfront advertising costs
Assistance in targetting international markets	Assistance in opening sales offices or similar support for Digital Marketing companies to expand abroad

The recommendations in Digital Marketing can be incorporated into the development of the SARTHAK Scheme as part of the Industrial Policy (2020-2025). The Scheme aims to ensure that the state's MSMEs remain globally competitive, by developing an ecosystem that will help them to thrive and succeed.



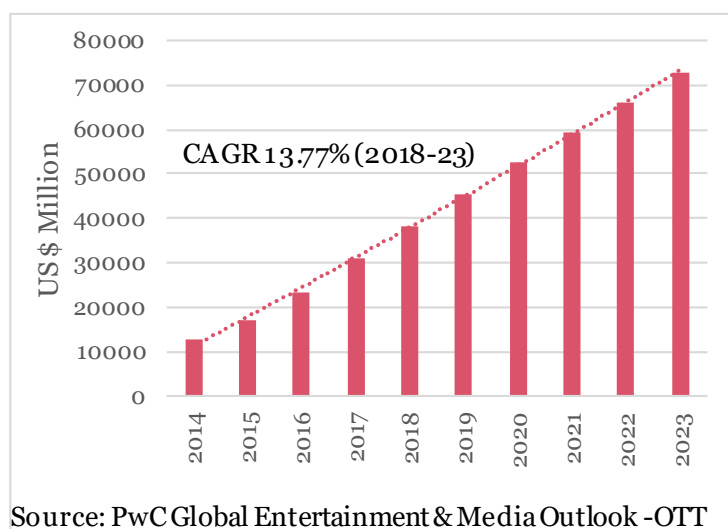
OTT (Over The Top) Media

5. Over the Top (OTT) Media

The rise of On-Demand Media

Media Consumption patterns are changing. People are now consuming media on –demand and across

Figure 11: Projected Global OTT Video market



Source: PwC Global Entertainment & Media Outlook -OTT

divided into two major categories namely OTT video/audio (Example: Netflix, Hotstar, Prime video etc.) and OTT messaging/calling (Ex: WhatsApp, Skype, Viber etc.). These platforms can also be classified based on the way they are monetized such as:

- ▶ Subscription Video on Demand (SVoD) - Example: Amazon, Netflix
- ▶ Transaction Video on Demand (TVoD) - Example: Pay per view
- ▶ Advertising Video on Demand (AVoD) - Example: YouTube

Figure 10 shows the projected growth of Global OTT sector. The rise of OTT platforms has ushered in a new era of media and with it many new regulatory challenges and opportunities. OTT has given rise to many new Indian Original series that release directly on these platforms. Series such as Inside edge (Amazon Prime), Mirzapur (Amazon Prime), Sacred Games (Netflix) and The family man (Amazon Prime) have had great success and have helped grow their respective OTT platforms. OTT platforms are now being used to view everything from Film and TV shows to Sports and Live events. The rise of OTT has made industry rethink well established business models. Small budget films need to make a lot more than their production budget to recover costs. OTT is seen as an alternative where such film producers can sell exclusive rights to an OTT service for a profit³⁰. Estimates indicate that, by 2020, about 50 percent of internet users in India will be from rural areas in the country ³¹.

³⁰ Economic Times- will over-the-top streaming services hit multiplexes 06/10/2019

³¹ Boston Consulting Group-Entertainment Goes Online

Karnataka: The way forward

Karnataka has a vibrant film and entertainment sector. The state has a rich and diverse culture and a well-established regional language film industry. Major television players are looking to boost offerings in Kannada Cinema due to recent high-quality movies released in the language. In 2018 colors forayed into the Kannada market with Colors Kannada and currently Tata sky has partnered with Colors Kannada to boost its offerings of Kannada cinema via its DTH service³². Kannada language userbase is expected to be one of the fastest growing in terms of digital entertainment³³.

Kannada movies are now making their way into major OTT platforms such as Amazon prime and Netflix and with such growing interest in Kannada cinema it is important to note that OTT Video platforms provide an opportunity for small budget films to launch and cater to the right demographic. The theatre screen space is dominated by films from other languages or films with established Kannada actors and hence OTT is a great opportunity for independent regional filmmakers or talented filmmakers with lower budgets looking to enter the highly competitive Kannada film industry³⁴. Recommendations in this regard will also involve incentivizing film production in the state.

Comprehensive High-level Committee on Media and Entertainment:

OTT subscriptions have increased in 2020 with platforms such as Netflix, Amazon Prime, ALTBalaji and Zee5 seeing increased subscription. Production houses are looking at OTT platforms as an alternative to theatrical releases and at the centre, there is a proposal to include digital OTT platforms under the Ministry of Information and Broadcasting³⁵. OTT media has the potential to reach numerous people in various parts of Karnataka that have convenient access to a smartphone or laptop, and a reliable internet connection.

A high-level committee has already been set up for Media and Entertainment services. Meetings set up by this committee have included representatives from the Media and Entertainment sector in the state and have been chaired by the Department of Information and Public Relations, details of which can be obtained in the appendix of this document. It is recommended that the High-level Committee be represented by the Secretary, Information and Public Relations Department. Furthermore, it is important that the committee also consist of executives from new and emerging sectors and Industry bodies. Given that major Indian OTT participants are increasingly investing in the regional language market, it is important that executives of OTT platforms, content creators for OTT platforms and independent artists be invited to be part of the committee. Additionally, industry bodies such as CII, with a dedicated Media and Entertainment sector can provide exposure to best practices, success stories and advice that will help boost the Media and Entertainment profile of the state. This will allow a more inclusive conversation on how high-quality media content and regional cinema can be promoted within OTT platforms with a goal to reach a wider audience and boost the segment.

³² The Hindu Businessline -Tata Sky to showcase Kannada blockbuster movies -13/12/2019

³³ KPMG/Google -Indian Languages-Defining India's Internet 04/2017

³⁴ Deccan Herald- Kannada cinema takes a digital leap 4/10/2019

³⁵ The Hindu- I&B Ministry wants OTT platform content under its purview 07/2020

Incentives for co-production of film/video production in Karnataka:

Karnataka is home to a wide variety of landscapes, flora, fauna and heritage structures. As such the state can showcase itself as an attractive destination for film producers looking to film in the state. To enable the state, attract increased film tourism there are a multitude of incentives the state can undertake in this regard. Karnataka is already working on an incentive structure as part of its new Tourism Policy with incentives provided to films showcasing Karnataka's heritage, geography and wildlife³⁶. The following recommendations can complement incentives already planned:

- ▶ Ease of obtaining permits or approvals for filming in Karnataka. It is understood that the Government of Karnataka has been taking appropriate steps in this direction and the process of easing approvals and permits is being implemented.

Maharashtra Film Cell, under the Maharashtra Film, Stage & Cultural Development Corporation has been established to facilitate permissions for film shooting. The goal of the initiative is to provide permissions for film shooting within 7 working days. Maharashtra Film, Stage & Cultural Development Corporation (MFSCDC) shall be the Nodal agency and the permissions issued cover areas of Media and Entertainment such as Films, TV serials, commercials, web series, travelogues, short films, documentaries, music albums and corporate films³⁷.

- ▶ Tax incentives for large projects co-produced with companies in Karnataka.

The Canadian Film or Video Production Tax Credit (CPTC) provides eligible productions a fully refundable tax credit, available at a rate of 25 per cent of the qualified labor expenditure. The CPTC program is administered by the Canadian Audio-Visual Certification Office (CAVCO) in conjunction with Canada Revenue Agency. To avail benefits of the program, the production company must be a qualified corporation as per Canadian income tax regulations.

³⁶ Times of India – Will Incentives for Film shoots boost tourism? -12/2018

³⁷ Maharashtra Film Cell - <https://www.filmcell.maharashtra.gov.in/sws/maharashtra-film-cell.html>



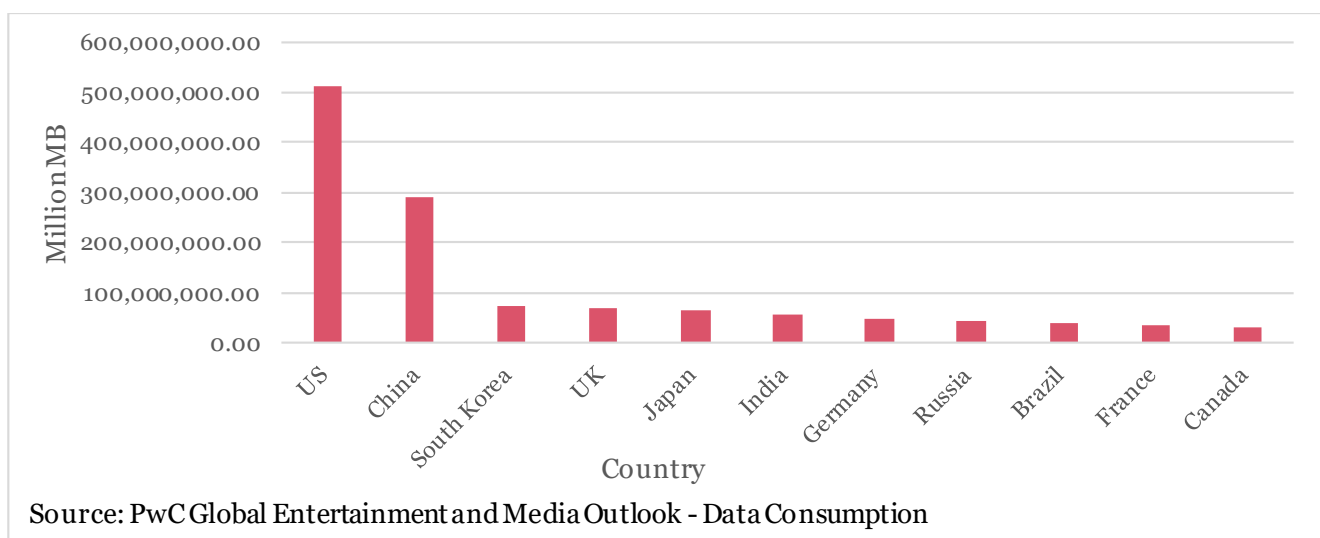
Conclusion

6. Conclusion

Internet penetration – A key focus area

Global data consumed is expected to grow rapidly with a projected CAGR of 26.43% (2018-23). India is responsible for about 5% of current global data consumption and is projected to account for about 7% of global data consumption by 2023 with a projected CAGR of 40.89%³⁸. Events such as sports and political events are set to boost video consumption via the internet. **Figure 11** gives an overview of who the major consumers of data are and where India stands in relation to the rest of the major economies. Although data in India is getting cheaper the country is nowhere close to China and the US in terms of data consumed.

Figure 12: Major consumers of data (2018)



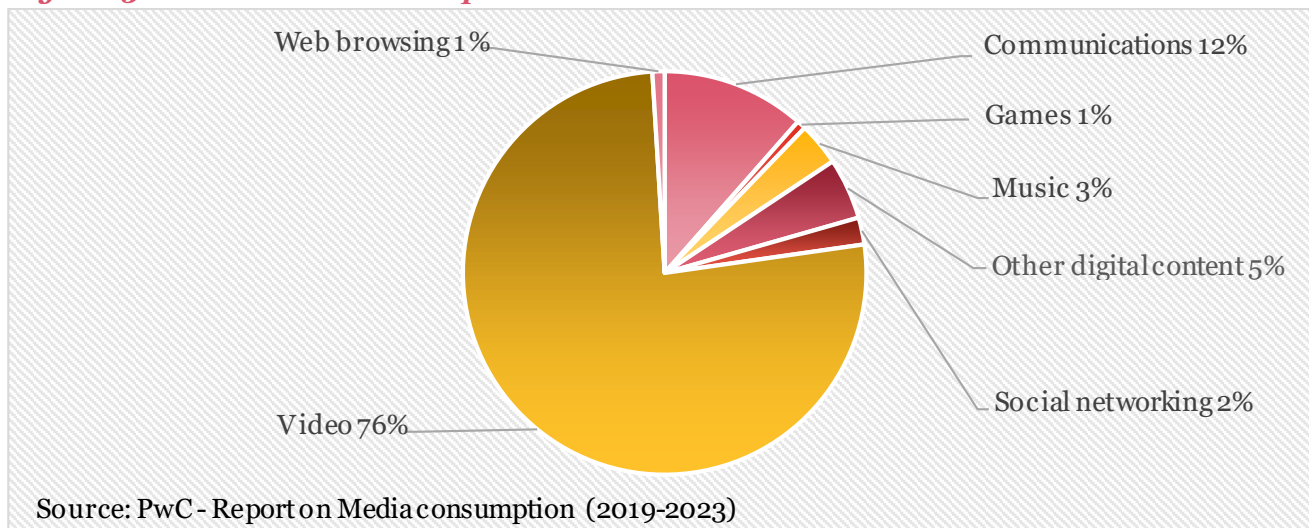
The National Digital Communications Policy 2018 aims to provide a boost to internet connectivity, data consumption and security with a goal of attracting investments, improving connectivity and developing skilled manpower by 2022³⁹. Although about 61% of Karnataka's population resides in rural areas, internet connectivity in rural areas accounts for less than 21% of total internet subscriptions in the state, leaving ample scope for rural internet penetration. Neighboring state of Andhra Pradesh has about 34% of rural internet connections while rural Maharashtra and rural Tamil Nadu account for 32.4% and 23.5% of their total internet subscriptions respectively⁴⁰. Videos will continue to dominate data consumption and thus will play a major role in affecting data speeds. Furthermore, the COVID-19 pandemic has influenced a significant change in lifestyles with online schools and work from home approaches gaining prominence. There is an increased demand in internet-based media streaming services and online conferencing services resulting from this shift in lifestyle. **Figure 12** represents the data consumption by various forms of media.

³⁸ PwC Entertainment and Media outlook 2019-2023

³⁹ The National Digital Communications Policy, 2018

⁴⁰ Computed from data obtained from the Department of Telecommunications - Telecom Statistics India-2018

Figure 13: Global Media consumption

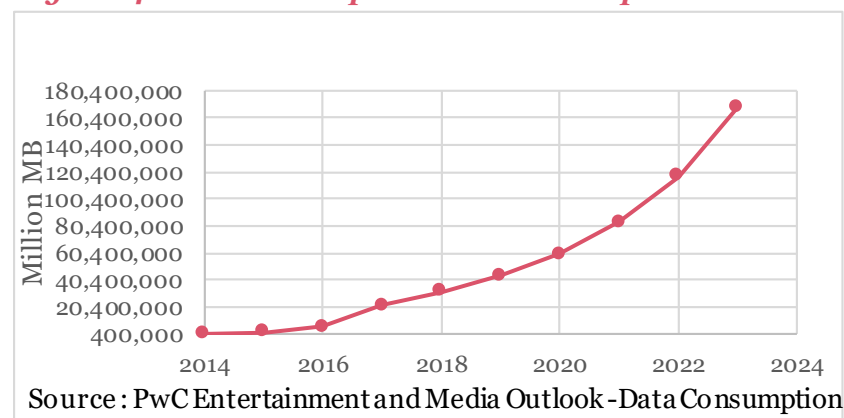


Video remains the largest consumer of data on all platforms. With the advent of OTT platforms catering to on demand video entertainment, global video consumption is expected to grow at about 20% CAGR (2018-23). Indian fixed broadband video consumption is expected to grow at 37.07% CAGR. In India smartphone data consumed is going to increase by about 40% with Smartphone based video consumption expected to grow by 44%.

Smartphones and Mobile internet, key drivers

Mobile internet plays an important part in geographies where conventional fixed line internet penetration is a challenge. By 2023 it is predicted that more than 66% of the global population will

Figure 14: Global smartphone data consumption trend



have a mobile internet subscription⁴¹. Less than 10% of the 268 Million households in India have fixed broadband which paves way for growth in data consumption via mobile internet. **Figure 13** shows smartphone data is expected to increase 9-fold between 2015 and 2023. The number of smartphones in India have almost quadrupled from 157 Million units in 2014 to close to 600 million in 2018. This is further

expected to grow to approximately 859 Million by 2022⁴². Aggressively priced mobile data services are boosting data consumption, coupled with increased competition in the telecom sector. 5G networks are being tested in many parts of the world with the promise to boost data speeds manifold. It is predicted

⁴¹ PwC Entertainment and Media Outlook (2019-2023)-Internet access

⁴² Video on demand: Entertainment reimagined (PwC-ASSOCHAM)

that by 2025 close to half of the world's mobile data traffic will be through 5G networks⁴³. India has a growing and diverse smartphone market with phones now available at many different price points catering to a wide audience. It is clear that mobile data will play a huge part in the world's consumption of media and there is tremendous potential in developing the smartphone driven media economy.

Digital Economy

We have already begun to notice the increasing ease of using smart devices in assisting us with certain

Figure 15: Internet of Things (IoT)



everyday activities. Devices have increasingly become interconnectable as the Internet of Things (IoT) develops. Smart home devices such as Amazon Echo, Google Home, Apple homepod and Google nest, to name a few, have changed the way we interact with devices. Users now frequently use such smart devices to play music, ask questions from the internet, check weather updates and even operate other home devices such as lights and locks. Houses can now be monitored from the comfort of offices via smartphones or tablets. Devices such as smart bulbs, smart plugs which are connected to Wifi and operated by smartphones/tablets are gaining popularity. There is a constant need to stay connected and this has given rise to innovation in hardware and software to support the digital

lifestyle. Payment systems are undergoing innovations with companies making it increasingly easy to transact online. This, backed by big data and advanced analytics, has enabled businesses to increase efficiency and target customers with content based on the customer behaviour. Increased consumption of media also results in a massive amount of data that is being transferred, stored and analyzed. Companies use metadata to profile and identify usage patterns and trends for the purpose of marketing and other analytics. Without strong security and data regulations a user's data can become vulnerable to individuals looking to misuse such data. The future will see a much higher emphasis on regulations involving privacy, data protection, sharing of data and advertising.

Countries are increasingly crafting laws around privacy and data protection. The European Union (EU) is at the forefront of this exercise with the General Data Protection Regulation (GDPR). GDPR provides guidelines on how companies in the European Union and companies processing data of Individuals in the EU need to abide by certain rules and regulations that provide transparency and certain rights to its residents. The ensuring regulations require companies to have more oversight on how consumer data is processed. This includes data that may be transferred/accessed from vendors and data that is stored on the cloud. The Government of India's push towards the Personal Data Protection Bill-2019, highlights the importance of data security and governance in a country that is experiencing tremendous digital growth. Well defined regulations around privacy data collection, storage and processing will play a crucial role in Media and Entertainment service exports going forward.

⁴³ Ericsson Mobility Report November 2019



Implementation and Funding

7. Implementation and Funding Plan

The objective of this report is to understand the various trends that drive the Media and Entertainment industry and identify sectors which have potential to grow and boost services in the state. In previous chapters the global and local scenarios in the chosen focus segments were identified along with the trends that are driving growth in these subsectors. Various interventions were also recommended in each of the chapters. The following table summarizes the various interventions and the responsible departments that may drive these interventions. For a more detailed description on the action plan please refer to the individual chapters. The recommendations are also categorized based on the Pillars of the Champion Services Sector Scheme along with an approximate funding as shown in **Table-5**.

Table 5: Summary of recommendations

Action Plan	Champion Services Pillars	Proposed Funding	Implementing Agency
Comprehensive Vision Group	New Mindset	--	Department of Electronics, IT, BT and S&T
AVGC Media City cluster	New Infrastructure	INR 500-1000 Crore ⁴⁴	Department of Electronics, IT, BT and S&T, KIADB
Encourage Esports	New Sector	INR 2 Crore (5 years)	Department of Electronics, IT, BT and S&T
Digital Marketing Workshops	New Standards	INR 60 Lakh/Year	Department of Information and Public Relations
Digital Marketing Grants+Credit Facility	New Sector	INR 2 Crore for the first year	Department of Information and Public Relations
Formal curriculum in Digital Marketing	New Mindset	--	Higher Education Department, Department of Technical Education
Comprehensive High-level committee	New Mindset	--	Department of Information and Public Relations
Tax incentives for co-production	New Processes	--	Department of Information and Public Relations

⁴⁴ Based on proposed expenditure on comparable projects

Going forward, a proposal for the Champion Services Sector Scheme -Media and Entertainment Sector needs to be formulated by the State Nodal Department in the prescribed format mentioned in the Champion Service Sector Guidelines issued by the Government of India. It is suggested that the Department of Commerce & Industries, Government of Karnataka engage a Project Monitoring Unit (PMU) to provide support for executing the select proposed interventions. This will ensure strategic interventions proposed are implemented in a timely and orderly manner.

8. Appendix

Animation Visual Effects and Gaming

Proposed Telangana Image tower



Image Source: Sattvagroup.in (12/2019)

MediaCityUK and Dubai Media City



Image Source: mediacityuk.co.uk



Image Source: Gulfnews.com (17/07/2019)

Karnataka Media City Concept Note

The Media and Entertainment industry is a USD 2.1 Trillion Industry globally and is set to reach \$2.6 Trillion in 2023. The industry comprises of segments such as Radio, Traditional TV, Cinema, OTT, Animation Visual Effects and Gaming, Digital Marketing and Print Media. World over Media cities are being developed as a Media ecosystem to boost media productivity and attract investment. Countries such as the UK, UAE, Jordan, Egypt and South Korea have developed their own versions of the Media City. UK Media City and Dubai Media City have been two of the most successful examples in terms of attracting investment and developing the economy in the region. In India the Telangana Government is expected to complete the IMAGE city by 2022 at an expected cost of 1000 crores⁴⁵. The need for shared infrastructure to help promising companies leverage high end infrastructure and equipment has taken center stage when envisioning development of the Media and Entertainment sector.

Karnataka Media City can be developed as a Media ecosystem/cluster in line with the likes of ESDM cluster and Health cluster envisioned by the Government of Karnataka. The cluster will be of approximately 200 acres and will be designed to accommodate everything media related such as offices for Animation Visual Effects and Gaming, News broadcasters, Cinema, Radio stations, print media, Digital Media and Advertising. The following services are to be offered by the Media City

- ▶ Facilities for High Speed Internet as Media & Entertainment sector is data intensive
- ▶ Incentives offered on the lines of current cluster development programs
- ▶ Provide Plug and Play infrastructure facilities such as sound stages, studios and coworking spaces
- ▶ House Amphitheatre's, Auditoriums and conference facilities for common use.
- ▶ House Retail outlets, theatres and open-air spaces for live events
- ▶ Support Media and Entertainment related Skill development centers
- ▶ Can accommodate branches of Universities offering Media related courses
- ▶ House a Health center for the community
- ▶ Connectivity by Road, Train or Metro station
- ▶ Office to facilitate single window clearance to set up business in the Media City
- ▶ Residential spaces shall be developed around the Media City to support growth of the cluster

Location: The Media City shall be located within 30 km from a major city in the state

Connectivity: The Media city shall have good road connectivity and have convenient access to a major international airport.

⁴⁵ Deccan Chronicle: Hyderabad: Image tower delayed to 2022 - 21/11/2019



The Media City in Karnataka will be a complete media ecosystem. It will be a cluster that will be a mix of everything from Office spaces for Media companies to theatres, retail outlets for shopping and restaurants. The Media City will be a leisure destination that will boost the local economy.

The Government of Karnataka has evinced interest in developing the film sector through allocating INR 500 crore for a film city in the 2020 Karnataka Budget. The Film city will be developed through Public Private Partnership (PPP). Building on this momentum the Media City cluster can be developed through Public Private Partnership that can serve the interests of a wider Media & Entertainment sector.

Snapshot: Media Cities in UK, Dubai and Seoul

Table-6 gives a quick overview of key features of Media Cities in the UAE, UK and South Korea. A detailed description of Dubai and UK Media Cities will follow.

Table 6: Snapshot of Media Cities in the UK, Dubai and Seoul

	Dubai Media City	UK Media City	Digital Media City-Seoul
Location	Dubai, UAE	Salford, Greater Manchester	Seoul, South Korea
Inception	2001	2011	2006
Area	--	~200 acres ⁴⁶	140 Acres
Companies	1500+	200+	47
Employees ⁴⁸	24000+	7000+	--
Distance from the City	20 Km	8 km	8 Km
Connectivity	Road	Road, Air, Train, Tram	Road, Subway, Air

⁴⁶ <http://www.bbc.co.uk/jobs/north/our-location.shtml>

⁴⁷ <https://dmc.ae/discover/about-us>

⁴⁸ <https://dmc.ae/>

Media City UK

Media City UK is developed by the Peel group and is located in Salford, Greater Manchester UK. It was formerly part of the port of Manchester and was built on a former dockyard. Media City UK offers various types of commercial space for tenants such as coworking spaces, ready to move spaces and professionally serviced office spaces for hosting business meetings and conferences. The Media City has also been envisioned as a leisure destination with ample spaces for dining, shopping, accommodation, leisure and entertainment. The Media City is set to expand to twice its size within the next 5 years and is set to attract a lot more companies in the years to follow⁴⁹.

Notable tenants: BBC, ITV, Kellogg's, Ericsson and SIS. MediaCityUK is a mix of Commercial office spaces, retail space, event venues, restaurants, cafes, hotels and theatres.

Connectivity: MediaCityUK is well connected via Car, Tram, Bus, Train and Air. Manchester Airport serves the region and is well connected to MediaCityUK via road.



Dubai Media City

Dubai Media City is built and operated by Tecom Group, a unit of Dubai Investment holding. It emphasizes creating sector focussed communities in Dubai. Dubai Media City is part of a larger community of purpose-built ecosystems such as Dubai Internet City, Dubai Outsource City, Dubai Studio City, Dubai Production City, Dubai Knowledge Park, Dubai Industrial city Etc. DMC (Dubai Media City) offers facilities such as commercial spaces, warehouses, sound stages, boutique studios and retail outlets. It also provides facilities such as amphitheatres, auditorium and conference facilities and plays host to a large number of events round the year.

Notable tenants: Regional Headquarters of Thomson Reuters, BBC and CNN are located at Dubai Media City

Connectivity: Dubai Media City is well connected by Metro Rail, shuttle services, bus and taxi. Dubai International Airport is approximately 30 km from Dubai Media City.



⁴⁹ <https://www.theguardian.com/media/2016/sep/01/salfords-mediacityuk-gets-1bn-expansion>

Top popular animation content produced in India

Table 7: Top popular animation content produced in India

Show	Production Studio
Chhota Bheem	GreenGold Entertainment Pvt Ltd, Telangana
Motu Patlu	Cosmos Maya, Mumbai, Hyderabad
The Adventures of Tenali Raman	Toonz Media, Kerala
Andy & Pirki	AUM Animation Studios, Mangaluru , Karnataka
Baahubali: The Lost Legends	Arka Media Works, Hyderabad, Telangana
Bandbudh Aur Budbak	Paperboat Studios, Mumbai, Hyderabad, Kolkata
Lamput	Vaibhav Studios, Mumbai
Adventures of Chhota Birbal	Climb Media, Mumbai
Zool Babies, Too Boy, Timboo & Tuskar	Videogyan Studios, Bengaluru

Digital Advertising

Example of Digital Advertising: Healthcare related ads on a 'Medical tourism' article

The screenshot shows a news article titled "Medical tourism MoU at global expo" by Subhash Mishra for TNN, dated Nov 29, 2019. The article text mentions a deal for 50 acres of land. The page is overlaid with several digital advertisements:

- Top Banner:** Aegon Life iTerm Insurance Plan. Text: "TERM PLAN THAT PAYS YOU BACK!". Includes a "BUY NOW" button and an image of a man with a blue umbrella.
- Right Sidebar:** Aegon Life iTerm Insurance Plan. Text: "TERM PLAN THAT PAYS YOU BACK!". Includes a "BUY NOW" button and an image of a man with a blue umbrella.
- Bottom Right:** Zebra advertisement. Text: "Your staff is ready to prevent the preventable". Includes a "LEARN HOW >" link and an image of a doctor.

STAFFING SHORTAGES CAN'T BE CORRECTED IN SURGERY. Solve them with a stronger HR strategy.

Maritz MOTIVATION

WE CAN HELP

TheJakartaPost

NEWS BUSINESS SEASIA OPINION LIFESTYLE TRAVEL MULTIMEDIA DEEP LOOK PAPER EDITION MORE

PREMIUM SUBSCRIPTION

LOG IN / REGISTER

Taiwan makes its way up the medical tourism ladder

The Jakarta Post

/ Wed, December 18 2019 / 02:18 am

OTT

Top OTT platforms in India are per **Table-8** below

Table 8: Popular OTT platforms in India

Video	Music
YouTube	Gaana
Netflix	JioSaavn
Amazon Prime	Wynk
Hotstar	Spotify
Zee5	Amazon Prime Music
Voot	YouTube Music
SonyLiv	
ALTBalaji	

List of Stakeholders and Committees

Table 9: High-Level Committee Meeting on Media and Entertainment- 05/02/2019

Name	Title
Sri Pankaj Kumar Pandey , IAS	Chairman of the Committee
Sri MB Jayaram	Retired. Director KPTCL, Advisor to NTPC
Sri Rajendra Singh Babu	Senior film Producer and Director
Sri NR Vishukumar	Retired Director, Information and Public Relations
Sri Gangadhar Mudaliar	Senior Journalist
Srimati Mayachandra	Advertising and Documentary Director
Sri Shashidhar Adapa	Artistic Director
Sri Suresh Aras	Senior Editor
Sri V Manohar	Senior Music Director
Sri Deepak Thimmaiah	TV Director
Sri M Ravikumar	Director, Information and Public Relations

Source: Proceedings of meeting on 05/02/2019

Table 10: Members of High-Level Committee Meeting -Media and Entertainment- 09/05/2019

Name	Title
Sri Pankaj Kumar Pandey , IAS	Chairman of the Committee
Sri MB Jayaram	Retired. Director KPTCL, Advisor to NTPC
Sri NR Vishukumar	Retired Director, Information and Public Relations
Sri Gangadhar Mudaliar	Senior Journalist
Srimati Mayachandra	Advertising and Documentary Director
Sri V Manohar	Senior Music Director
Sri Deepak Thimmaiah	TV Director
Sri N Brungeesh	Director, Information and Public Relations

Source: Proceedings of meeting on 09/05/2019

Table 11: Stakeholders consulted⁵⁰

Name	Organization	Designation
Mr. B.S Srinivas	ABAI, Arena Animation	Secretary, ABAI
Mr. Biren Ghose	ABAI, Technicolor	President (ABAI), Head Technicolor India
Mr. Ganesh Papanna	ABAI	VP (ABAI)
Mr. Radhakrishna S.S	KBITS, Government of Karnataka	General Manager
Mr. Rangarao TM	Videogyan Studios	Chief Strategy Officer
Ms. Anila Andrade	99 Games	AVP - Operations
Mr. Idris	Changing tree	Founder
Mr. Kiran Mandrawadkar	Disha Communications	Director, Digital
Mr. Ram	One and only design	Creative Head
Mr. Samiksh	Ludus pro (Gaming event Management)	Organizer
Ms. Rupa Chanda	IIMB	Professor of Economics

The Association of Bangalore Animation Industry (ABAI) has been closely working with the Government of Karnataka in the Animation, Visual Effects and Gaming Sector. ABAI has also assisted in providing inputs in drafting the Karnataka AVGC policy (2017-2022) and plays a role in operation of the Centre of Excellence in Animation Visual Effects, Gaming and Comics. The Centre of Excellence at Whitefield in Bengaluru aims to boost the AVGC talent and capabilities in the state. It contains an AVGC Postproduction Lab, a Finishing School to train technicians and an Incubation Centre. The Centre of Excellence also has facilities with equipment such as Facial Capture System, AR/VR Lab, Full Body Performance Capture equipment, Green Screen, 3D Body Scanner, colour Correction equipment and Rendering equipment.

⁵⁰ Insights were also gathered from participants at the Bangalore Ad Club- Big Bang Awards 2019 and at GES 2019 held in Bengaluru

Responsibility Matrix

Table 12: Action plan and funding

Action Plan	Champion Services Pillars	Proposed Funding	Implementing Agency
Comprehensive Vision Group	New Mindset	--	Department of Electronics IT, BT and S&T
AVGC Media City cluster	New Infrastructure	INR 500-1000 Cr	Department of Electronics IT, BT and S&T, KIADB
Encourage Esports	New Sector	INR 2 Cr (5 years)	Department of Electronics IT, BT and S&T
Digital Marketing Workshops	New Standards	INR 60 Lakh/Year	Department of Information and Public Relations
Digital Marketing Grants+Credit Facility	New Sector	INR 2 Cr for the first year	Department of Information and Public Relations
Formal curriculum in Digital Marketing	New Mindset	--	Higher Education Department., Department of Technical Education
Comprehensive High-level committee	New Mindset	--	Department of Information and Public Relations
Tax incentives for co-production	New Processes	--	Department of Information and Public Relations