

Sector Report Digital Innovation



UK Contact

Radhika Pandey

✉ radhika.pandey@ukibc.com

☎ +44 (0)20 7592 3040

Report highlights:

- *In focus: Bangalore – The Silicon Valley of India*
- *Growth prospects of the TMT Sector in India*
- *Impact of India's new government*
- *Investment Updates*

SECTOR:
DIGITAL INNOVATION



SECTOR OVERVIEW:
August 2014

Welcome to this quarter's sector report on Digital Innovation. Our main theme this month is the Silicon Valley of India - Bangalore, the technology capital of India, which has played host to a large number of successful tech startups over the past two decades. In this report, we provide an insightful briefing on the city, including its key growth drivers, competitive advantages, its path towards attaining this status, and steps being taken to consolidate its leadership position. Our report also highlights the assistance offered by the state government to promote Bangalore.

Given Bangalore's high profile in India's business landscape, the UKIBC recently opened its second business centre in India, after Delhi, in the garden city.

In the Market and Investment Update sections, we highlight the growth prospects in the IT services and Telecom sectors in India and on recent acquisitions and joint ventures of India-based companies.

We hope you find this report useful and look forward to your comments and suggestions.

Economic Indicators

Indicator	Q3	Q4
Real GDP Growth (%)	4.6	4.6
FDI (GBP bn, Monthly Average)	1.0	1.6
FII (GBP bn, Monthly Average)	0.5	1.9
NCAER Business Confidence Index	122.3	127
FDI in Telecommunications (GBP billion)	0.2	0.7
FDI in Computer Software & Hardware (GBP billion)	0.1	0.3

Relevant Indices	3 Months	6 Months
S&P BSE TECK Index: TMT Returns (%)	17.60%	19.40%

References: Reserve Bank of India, Department of Industrial Policy and Promotion, Bombay Stock Exchange

Note: Data retrieved on June 6th 2014

In focus: Bangalore – The Indian Silicon Valley

Bangalore is often referred to as the 'Silicon Valley of India' because it is home to the largest concentration of technology companies in India – both domestic (Infosys, Wipro, Biocon etc. are headquartered) as well as foreign (Google, IBM, Intel, Yahoo! etc.). The city hosts over 2,000 Software Technology Parks of India (STPI) registered companies concentrated at two clusters– namely Electronics City (South Bangalore) and Whitefield (East Bangalore), which form the hubs for technology companies. The IT&ITES Sector accounts for 57% of the total office space in Bengaluru, followed by the BFSI sector accounting for 18%.

By 2020, the city is expected to host a large pool of talent, including 2 million IT professionals and about 6 million people via indirect employment. Additionally, Bangalore is expected to generate exports worth GBP 40.2 billion, which will constitute 40% of India's IT exports, by 2020. As of 2012, the city had one of the largest number of chip

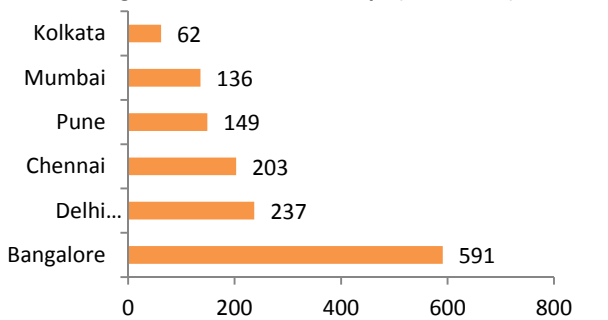
designers in the world, its IT industry employed 900,000 people and exported software worth GBP 16.1 billion.

Bangalore's pre-eminence as a technology hub is underscored by the amount of FDI it has attracted between 2007-12. Bangalore accounted for 32.1% of the total foreign investments in the TMT sector, more than double that of Delhi NCR which accounted for 15.3%. Consequently, the TMT sector was also the highest employment generator during this period, accounting for 26.2% of the total jobs created.

Bangalore is also known as the 'Startup Capital of India'. In 2013, the Karnataka state government launched an incubation facility worth GBP 10 million for IT startups. Around 25 startups operate out of the IT incubation facility. Bangalore has witnessed the highest number of new technology startup launches in the past five years, recording 591 new technology startup launches, more than the NCR (237), Chennai (203) and Pune (149) put together.

SECTOR: DIGITAL INNOVATION

Figure 1: Number of Startups (2007-2012)



Reference: Microsoft India Accelerator 2012 – Medianama Report “379 Tech Startups Launched & 87 Shut Down In India In 2012”

As per the Startup Genome’s Global Startup Index in 2012, Bangalore was ranked in the Global Top 20 cities suitable for startup environment.

Ecosystem	Ranking	Startup Output Index	Funding Index	Performance Index
Silicon Valley	1	1	1	1
Tel Aviv	2	2	1	12
Los Angeles	3	4	6	2
Seattle	4	19	7	6
New York City	5	3	4	8
Boston	6	10	1	7
London	7	7	5	10
Toronto	8	6	9	3
Vancouver	9	13	12	9
Chicago	10	8	15	5
Paris	11	14	13	4
Sydney	12	5	14	16
Sao Paulo	13	9	10	15
Moscow	14	16	19	18
Berlin	15	15	11	13
Waterloo	16	11	16	14
Singapore	17	18	8	19
Melbourne	18	12	17	20
Bangalore	19	17	18	17
Santiago	20	20	20	11

Reference: Global Startup Ecosystem Index

Bangalore’s transformation into ‘The Indian Silicon Valley’

1984-1990: TMT Sector’s emergence in Bangalore

In 1984, the first offshore development facility was set up in Bangalore by Texas Instruments. The Government of India announced changes in computer and software policy, reduced import duties on hardware and software from 135% to 60%. The Government of Karnataka set up KEONICS (Karnataka State Electronics Development Corporation Limited) to develop IT and telecom infrastructure and to provide consultancy and training in IT.

1991-1997: Structuring and Digitisation of the TMT Sector in Bangalore

The STPI scheme was launched by the Ministry of Information Technology (formerly DoE) and the Government of India, whereby fully export-oriented software units located/registered with the STPI, could get tax/duty exemptions. Bangalore had one of the first STPIs, which recorded the fastest growth in membership and was the first park in India to be connected by the Internet. Additionally, the Government of Karnataka became the first Indian state to announce an IT policy.

1998 onwards : State government’s initiatives and Recent TMT Boom in Bangalore

The Government of Karnataka established the Indian Institute of Information Technology (IIIT-B) in collaboration with the IT industry for conducting advanced and industry-oriented courses in IT related subjects. KITVEN Fund (Karnataka Information Technology Venture Capital Fund) was established jointly by the Karnataka State Industrial Investment Development Corporation (KSIIDC), the Karnataka State Financial Corporation (KSFC), and the Small Industries Development Bank of India (SIDBI). As of now, Bangalore has 3 tech parks with 2,160 units and is currently the 4th largest tech cluster after Silicon Valley, London and Boston.

Information technology (IT), IT enabled services (ITeS) and IT hardware sector account for the majority share (67%) of new jobs generated in Bangalore. Over 14,000 new jobs were created in Q2 of FY 14, against 10,600+ new jobs generated in the previous quarter.

Bangalore’s Competitive Advantages

Apart from moderate climate and a large English speaking population, Bangalore possesses a number of advantages - including excellent education institutions, good telecom connectivity, advanced infrastructure, supportive State government, and its status as a national analytics and biotech hub.

Figure 3 :Macroeconomic Indicators for Bangalore

	2010	2025	CAGR
GDP in GBP billion	17.25	76.75	10.5%
Per Capita GDP in GBP thousands	5.35	13.08	6.1%

Reference: LiveMint, July 14th 2012 – “Watch out Mumbai: Coming soon, India’s new commercial capital - Delhi” Note: Change in GDP from 2010 to 2025 is 345%.

**SECTOR:
DIGITAL INNOVATION**



Educational Institutions: Bangalore has over 900 higher education colleges with over 60 engineering colleges and over 100 MBA institutes. The presence of tier 1 institutions such as IIIT (engineering) and an IIM (Management school) also enhances the quality of higher education in the city.

Telecom Connectivity: The entire city is networked via Optic Fibre Cables (OFC) by the state-run BSNL and private companies such as Bharti, TATA, VSNL and Reliance. The STPI Bangalore, provides more than 1,050 IT companies with Individual Satellite Connectivity, which accounts for 45% of the total STPI revenues in India.

Analytics Hub: Bangalore is also considered as the analytics hub in India, hosting 29% of all Indian analytics firms. Interestingly, about 6% of analytics organisations worldwide are either based out of India or have operations in India.

State Policy: The state government constantly encourages the development of Small and Medium Enterprises(SMEs) in the technology sector. Also SMEs in the BPO sector are urged to obtain ISO 9000, ISO 14000, and similar international certifications to promote quality. The government also provides assistance by meeting 50 percent of the cost of obtaining such certification, subject to a ceiling of GBP 750 per industry. The government aims to provide wi-fi in 1,300 sq km within Bangalore by 2020.

Startup Capital: Bangalore is home to 41% of the total number of startups in the country, and also the highest number of Venture Capitalists. Around 70% of the top venture capital firms, in India, have a presence in Bangalore. At GBP 98 million, Bangalore received the highest amount of early stage venture capital funding in 2012. Unsurprisingly, Bangalore is home to a number of successful startups in recent times - Flipkart (Online Retail), RedBus(Online Travel portal), Vizury (Online Marketing Solution Providers), InMobil (Mobile Advertising) etc.

Comparative Analysis – Silicon Valley and Bangalore

Figure 4 :Bangalore vs Silicon Valley (SV)

Advantage - Bangalore	Startups are 24 % more likely to monetize directly than SV startups
Bangalore's start-ups have lower scale	Bangalore startups have lower scale compared to their SV counterparts. They are 10% less likely to target market opportunities worth GBP 1 billion – GBP 10 billion, and 51% less likely to tackle GBP 10 billion+ market opportunities
Funding Gap	Bangalore startups raise 75% less capital in stage 2, 90% less in stage 3, and 73% less in stage 4 than SV startups
Average age	Bangalore: 37 years SV: 34 years
Population	Bangalore: 9.35 million SV: 7.15 milion
Gender Division (% Females)	Bangalore: 6% SV: 10%

References: 'List of top 20 startup ecosystems' by Startup Genome - 2012

Startup Grind – TechCrunch Bangalore 2013

In the first half of 2013, India witnessed over 141 deals accounting for GBP 250 million worth of investment. Largest deal closure was worth GBP 95 million for a Bangalore based online bus ticketing company - RedBus.

Over 300 start-ups were involved in these deals, highlighting the VCs intent to invest in new technology companies in India.

TechCrunch Bangalore was organised on November 14 and 15, 2013 with the aim to provide a global platform to Indian start-ups to showcase their capabilities, and also promote India as an exciting global destination for technology start-ups in the long-run. This was supposed to be followed up with similar events in Mumbai and New Delhi in April and August this year respectively. However, a parting of ways between the event partners – Techcrunch and PlatformPlay in December 2013 led to the postponment of all planned activities for this year. However, the TechCrunch event has acted as a catalyst for organising future events involving technology startups

SECTOR: DIGITAL INNOVATION



in Bangalore. The city has hosted a number of such events this year including Techcircle Startup 2014 (February 2014), bigMobilityConf (April 2014) and UnPluggd (May 2014).

UKIBC opened a business centre in Bangalore

Tech Hub: In July 2014, UKIBC inaugurated a 12,600 square feet centre in Bangalore that will primarily focus on supporting tech sectors. By far UKIBC's largest business centre in India, Bangalore marks UKIBC's foray into South India. Clients such as British Airways, ADS, and CDC have already signed up to the Centre. UKIBC also signed a MoU with TIE Bangalore to promote entrepreneurship between the two countries. The Bangalore Centre will also be the base for TechHub, the community and workspace for tech entrepreneurs, who are planning to enter the Indian market.

The Bangalore Centre is part of a global initiative by the UK government to strengthen British business ties in 40 overseas markets. It is envisaged that the Centre will be a platform to provide high quality support to British businesses, especially SMEs, seeking to enter or expand in India.

Market Update

Key Highlights of Union Budget 2014-15

The new Union Government's inaugural Budget for FY 2014-15 was presented on July 10, 2014 by Finance Minister Arun Jaitley. The key proposals regarding digital innovation are as follows:

- Fund of Funds with a corpus of GBP 1 billion for providing equity through venture capital funds, quasi equity, soft loans and other risk capital specially to encourage new startups to be set up by the youth
- Pan-India programme 'Digital India' with an outlay of GBP 50 million to be launched
- Corpus of GBP 20 million to establish a technology centre network to promote innovation, entrepreneurship and agro-industry
- Approximately GBP 10 million has been allotted to set up a Technology Development Fund for Defence to

support R&D in developing indigenous defence systems

The Department of Science & Technology (DS&T) has some of India's leading research centres in nanotechnology, materials science and bio-medical device technology. The government will strengthen at least five such research centres under the DS&T through the Public Private Partnership model to make them more effective

Mixed results from the Union Budget for foreign players in the IT/telecom sectors

The Central Government has proposed to invest GBP 820 million to develop 100 smart cities, which is likely to attract opportunities in IT hardware and telecom sectors. Overall, the smart city project is expected to promote a start-up ecosystem as it did in China and other developing countries.

On the other hand, an additional customs duty of 10% has been imposed on import of certain goods such as soft switches and VoIP equipment, media gateways, optical transport equipment and LTE products. This has been done with a view to boost the domestic manufacturing sector and is likely to have an impact on the route-to-market strategies of foreign manufacturers.

India's telecom subscriber base rises to 933 million

According to the latest report by the Telecom Regulatory Authority of India (TRAI), the telephone subscribers in India touched the 933 million mark by the end of March. This number includes both mobile phone, and telephone users. Riding on the number of mobile subscriptions, the telecom industry added over a million users in the month of March.

The number of telephone subscribers in India increased from 931.95 million at the end of February, 2014 to 933.00 million at the end of March, 2014, thereby showing a monthly growth of 0.11%. Rural India emerged as the growth driver with mobile services subscriber base in rural areas increasing to 377.73 million in March from 374.96 million in February. Broadband connections registered a growth of 4.95% with net addition of 2.87 million subscribers. The total broadband user base reached 60.87 million in March from about 58 million in February. Idea

SECTOR: DIGITAL INNOVATION



Cellular continued to be the top player in terms of new subscriber additions for the second month in a row.

[The Times of India, 12th May](#)

Department of Telecom's (DoT) New Agenda

The Department of Telecom (DoT) is looking to reform certain dated policies and regulations, which have been long overdue. Some of these policies will ensure greater cyber security and look into laws regarding privacy, data protection, telecom security, encryption, cloud computing, etc. The DoT's list includes introduction of Communication Bill that will replace the over century old Indian Telegraph Act, 1885, as well as Indian Wireless Telegraphy Act 1933, TRAI Act 1997, Cable TV Network (Regulation) Act 1995, IT Act 2000.

An internal committee of DoT has already recommended providing telecom, cable and broadcasting services by a single company and paying for the services through a common bill.

[CJNews India, 25th May](#)

India imports over 90% of its telecom gear market, estimated at GBP 5 billion

Indian companies will constitute 6.6% of the global demand for telecommunication equipment in 2014-15, according to research agency Ovum. The industry expects it will spend GBP 4.63 billion on buying gear, excluding handsets. The bulk of this money will, however, be spent on buying imported equipment, mainly from Europe and China.

It is more costly to make telecom gear in India because of the scale of the global manufacturers. Finished telecom equipment can be imported at zero duty, but components bear duties ranging from 10% to 15%. Indian telecom gear makers pay 16-18% interest on loans, far above their Chinese rivals. Infrastructure costs like power are higher here as well. The government is aiming that by 2019-20, only 20% of telecom equipment in the country should be imported.

[Business Standard, 29th April](#)

BPOs to present a wishlist to Government

Business Processes Outsourcing companies are to present the government with a list of request for

concessions to help the industry overcome the current troubles being faced by them, especially in the domestic market. Some of their requests include compensation for training provided to resources from tier II and tier III towns, as well as subsidised rates for electricity and land.

The industry has a long list of requests for the government but one of the main challenges is the lack of infrastructure in smaller towns and the lack of tax incentives that would make businesses going there more profitable.

[The Economic Times, 5th May](#)

Indian tech startups look towards the US or the UK to find buyers

Indian technological startups, offering products ranging from cloud management software to videoconferencing applications and enterprise management solution, are turning towards the US and Europe to find takers.

The big IT companies in the country, are unwilling to give these startups a go as they are risk averse. Within the country, these startups look to sectors such as banking, retail and finance that are more open to the idea of buying technology from small companies.

[The Economic Times, 15th May](#)

Tech Mahindra and BT Life Sciences partner ecosystem come together

British Telecom and Tech Mahindra have come together to offer IT solutions to life sciences firms. This arrangement between the companies will cover the UK, the US, Western Europe, India and Asia Pacific territories.

As part of the new partnership, Tech Mahindra will become a strategic member of the BT for Life Sciences partner ecosystem. This enables both companies to offer proof of concept trials to global pharmaceuticals, contract research organisations, government health organisations, and healthcare providers. Tech Mahindra's Life Sciences practice capabilities will be aligned with the existing BT for Life Sciences services, offering more comprehensive end-to-end solutions for clients. It will also help them derive insight from large health datasets, patient stratification, and adherence to regulatory requirements

[The Economic Times, 30th April](#)

SECTOR:
DIGITAL INNOVATION



Investment Update

Systema JSFC looks to increase its stake to 100% in Indian Unit SSTL

The Russian telecom operator Systema JSFC has filed with the foreign investment promotion board (FIPB), to seek permission to increase its stakes from 74% to 100% in its Indian subsidiary Systema Shyam Teleservices Limited. The Russian player has hinted that it intends to increase its stakes in SSTL in tranches, and not in a single transaction.

Systema entered India in 2007 when the sector was on a high by buying a 10% stake in an Indian entity. In 2008, the JV was awarded licences and spectrum to offer telecom services in all of India's 22 circles using the CDMA technology, and Systema gradually raised its stake in the joint venture. The company with over 10 million subscribers narrowed its net loss for 2013 to GBP 271.2 million from GBP 300.2 million in 2012.

[The Economic Times, 7th May](#)

Reliance Communications in talks with China's Citic Telecom, for an undersea cable JV

India based Reliance Communications is in talks with Chinese player, Citic Telecom over an undersea cable 50-50 Joint Venture, which would result in Reliance Communications' cable assets being valued at GBP 0.6 billion.

Reliance Communications surged as much as 3.6% after the news was reported.

[Reuters, 23rd May](#)

Relativity Media announces JV with B4U in India

In order to leverage on their combined expertise of resources and relationships, Relativity Media and B4U have come together in a Joint Venture to create and distribute highly engaging long and short form entertainment and sports content in India. The aim is to span a variety of mediums including film, television and digital.

Going by the significant growth potential of the Indian film and television market, which are expected to grow to Rs GBP 2.1 billion and GBP 9.1 billion by 2017, respectively, the joint venture aims to provide a platform for both Relativity and B4U to co-invest and distribute local Bollywood films and television productions.

[Business Line, 22nd May](#)

FSIF, Mauritius based PE Fund invests in Mumbai based SMAAASH Entertainment

Introducing the field of sports simulation technology in India, Mumbai based SMAAASH has developed a unique concept that blends sports, music and dining into an immersive and involved social entertainment experience. FW Sports Investment Fund LP (FSIF), a Mauritius-based private equity fund, has acquired a significant minority stake in Smaaash Entertainment (SMAAASH). This is the first round of private equity funding into the company.

[BestMediaInfo Bureau, 15th May](#)

Concentrix to invest in India

Concentrix is focussing on strengthening its analytics and developer base in India with plans of investing up to GBP 15 million in the next 24 months. Of its 45,000 employees globally, Concentrix has over 20,000 based out of India.

[The Economic Times, 25th May](#)

UKIBC Seminar held in Cambridge University

On the 20th of May, UKIBC conducted an event at Cambridge University, in association with the University of Cambridge and the Bangalore-Cambridge Innovation Network (BCIN), titled - "Changing Dynamics of Innovations in India."

The event was informative in nature, wherein the companies got a good look at the Indian innovation landscape; technology collaboration present in India, the frameworks adopted in the UK, and how they aligned with the Indian scheme of things. The biggest take-away from the event was that it provided the attending companies in an excellent networking opportunity with similar innovative companies, from different sectors- TMT, healthcare and engineering.

SECTOR:
DIGITAL INNOVATION



[Changing Dynamics of Innovations in India, 20th May](#)

Upcoming Events

On November 12, 2014. UKIBC, UKTI and BT, will hold an event 'Cyber Security in India'.

Strong demand: India's IT and Cyber Security market already represents 9% of UK Cyber Security exports. Additionally, Indian government's investment plans regarding IT infrastructure is likely to drive imports of telecommunication equipment, increasing the overall demand to GBP 6 billion annually.

Interestingly, in 2013, spending on information security by Indian companies doubled to GBP 3 million over the preceding year.

For more information on our sector reports or subscription process please visit [sector service](#) or contact membership@ukibc.com

Please note:

•The conversion rate used across the report is for June 4th 2014. 1 GBP = 99.3603 INR and 1 GBP = 1.6723 USD

•Numbers rounded across the report