

Information Technology & Electronics in West Bengal

2018

Department of IT&E, Government of West Bengal

West Bengal...

Why Bengal?



INR 1,100
crore+ proposed IT investment

Zero hours power outage

Zero man day loss in last 5 years

5G connectivity – Kolkata is one of the first

Growth engine

Largest in India in Power distribution, quality and availability

Kolkata is the 1st metro city in the country with connectivity on 4G

Robust infrastructure

3rd largest road network, 2nd largest metro rail network

Richly endowed with natural maritime advantages

2 International Airports – Kolkata and Bagdogra

Strategic location

Gateway to South-East Asia and North-East India

Well connected with the booming hubs of Asia such as Singapore, Thailand and Malaysia

Rich culture

Birthplace of modern Indian literary and artistic thought

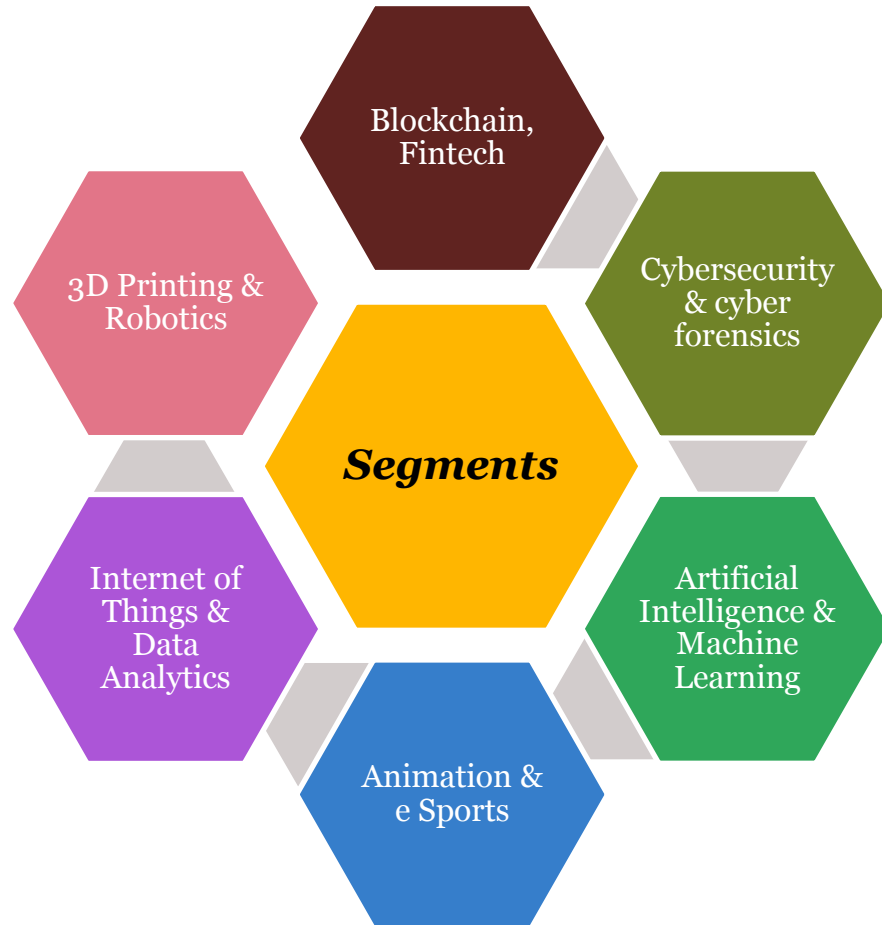
Kolkata is referred as the “Culture/literary capital of India”

Pioneer of cosmopolitan culture in the country

<https://bengalglobalsummit.com/advantage-bengal/>

https://bengalglobalsummit.com/uploads/pdf_storage/BGBS%202018%20Press%20Release.pdf

...Is eagerly fostering a Centre of Innovation



Vision

“To make West Bengal the leader in Innovation in emerging technologies while ensuring the creation of a suitable ecosystem”

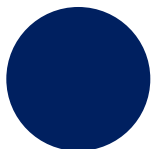


Illustrative Image

Spread over 50,000 Sq. ft area

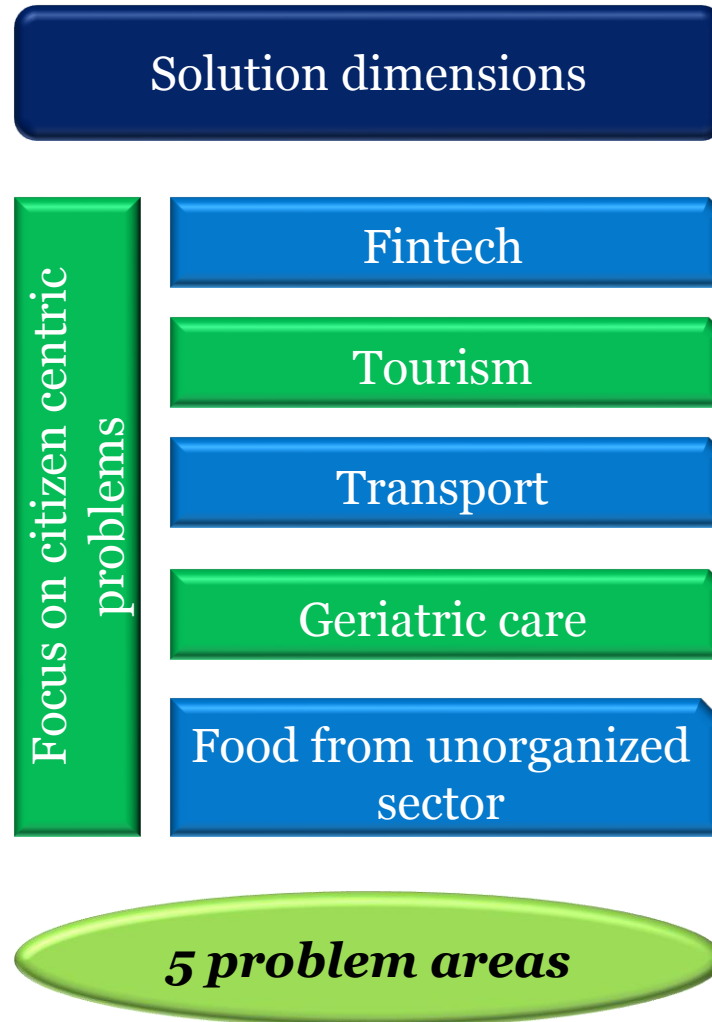
Covers 4 Floors and 8 wings

Expected to be ready by August 2018



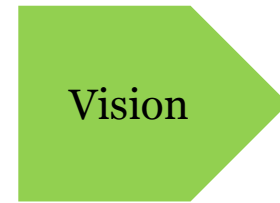
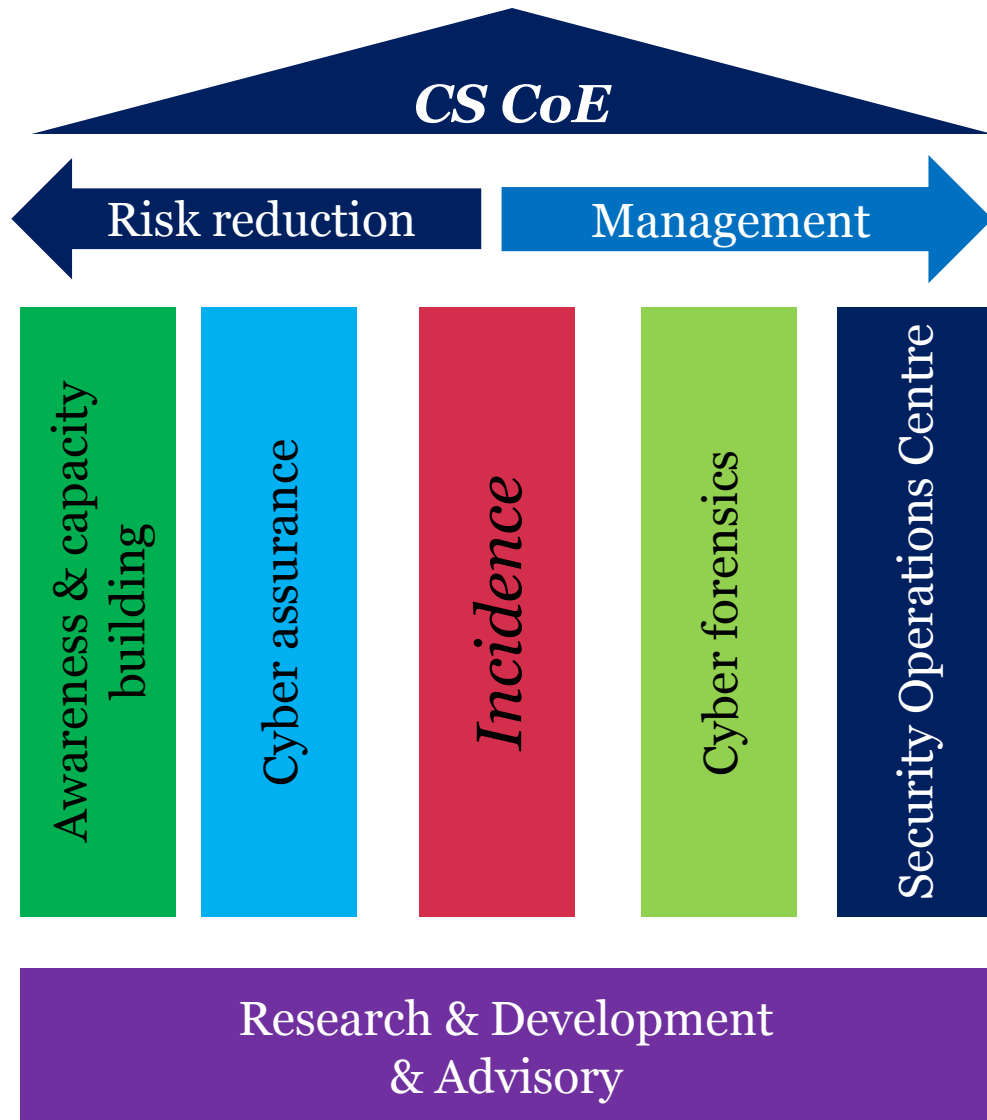
...has recently successfully concluded a pioneering hackathon

...Bengalathon...first state level hackathon of its kind



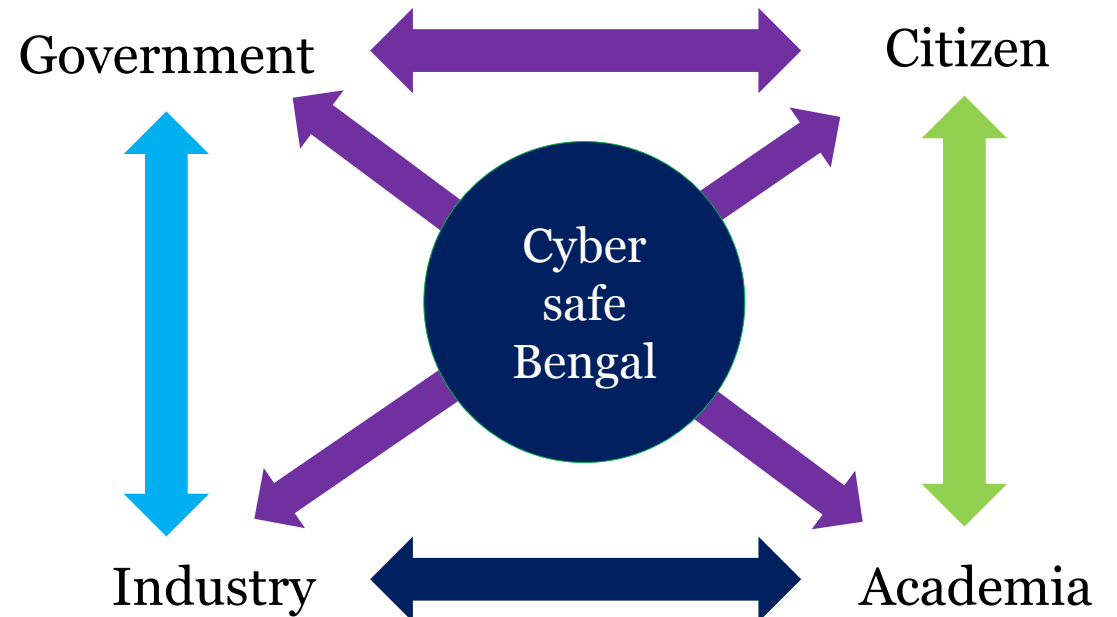
...registrations **and**
4 final winners in
segments like elderly
support, fintech and last
mile transport

...and focusing on cyber security through a dedicated CoE



"To make West Bengal the leader in creating cyber security clusters in emerging technologies while ensuring safety and security of citizens, industry and government in a digital economy"

A state level empowered committee is taking initiatives forward



The state is ideally placed to leverage IT...

...through IT parks



We believe in cluster based development

...through hardware parks...



- Sonarpur hardware park is open for allotment in first come first served basis
- <https://land.webel-india.com/>

- Focus areas**
- Electronics & Telecommunication
 - Renewable energy
 - Component manufacturing

...& Electronic manufacturing clusters

- Manufacturing support services**
- Central warehousing & raw material block
 - Product design house
 - Testing and R&D centre
 - Incubation center for startups

- Welfare services**
- Hostel, mess, food court
 - Medical centre, Crèche/nursery
 - Shopping centre & departmental store
 - Bank & ATM



2 upcoming at
Naihati & Falta

Kick starting blockchain

West Bengal is taking pioneering steps

EoI floated for leveraging blockchain in loyalty program

Develop Skillsets in Blockchain

Build a holistic ecosystem

Develop Centre of Excellence

Explore how Blockchain can improve Government processes

*Blockchain
Hub*

...A fintech hub

10-acre New Town plot marked for FinTech hub

Suman.Chakraborti
@timesgroup.com

Kolkata: The Housing Infrastructure Development Corporation (Hidco) has allocated a 10-acre plot in New Town's financial hub as a space for reputable FinTech companies. The need to provide a space for such companies was felt after the financial technology industry turned out to be a game-changer in the financial and banking sectors, said a source.

Hidco took the decision at a recent board meeting. The authorities plan to start inviting applications from interested companies for a space in the hub by end-2017.

FinTech is an emerging industry that comprises companies who use digital technology to provide financial services. "These companies are involved in digital payment,

GROWING SECTOR

What is FinTech?

► The word 'FinTech' is a combination of **finance** and **technology**. FinTech is used to support or enable **banking** and **financial services**

Key sectors in FinTech

- Integrated digital banking
- Digital payments



and others

- Alternative lending
- Robo advisory
- Cyber and financial crime

At New Town financial hub

- 10-acre area reserved for FinTech companies
- 21 financial institutes have been allotted space there

automatic digital banking, share market analytics, insurance predictions and asset management," said Hidco CMD Debashis Sen.

Officials said the financial hub already has 21 financial institutes, which have an annual turnover of over Rs500 crore.

Hidco authorities said they were also working to set up an international financial

services centre in the central business district (CBD) of the hub, on the lines of Dubai or Singapore. It will be a dedicated zone for investors and foreign nationals, where they will be able to trade and exchange in foreign currency. Earlier, Hidco had also allowed 49% of the CBD to be used for residential purpose to provide accommodation to officers of the financial institutes.



SBI Institute near Fintech Hub: Ready for Inauguration

Some of our IT success stories

Matir Katha

An innovative platform for leveraging IT in agriculture

Influx of big players

Infosys is investing INR 100 cr to create 1000 jobs
Genpact is investing INR 200 cr to create 6000 jobs

eGovernance

Leading position in Ease of Doing business

Success of e District (21 lakh+ applications), single sign on
and many others

Success stories (continued)

GoWB is leveraging IT to inculcate efficiency

Integrated Financial Management System – efficiency, transparency, authenticity
EoDB – Shilpa Sathi – Single Window Service
Innovation in Assistive Technology - Society for Natural Language Technology Research
Online Labour services, Online irrigation support services and many others



Outstanding performance in Citizen-Centric Service Delivery



Track Child-Online Tracking System for Missing Children
Department of Women and Child Development, Kolkata, West Bengal



Excellence in Government Process Re-engineering



e-Initiatives in Commercial Taxes
Directorate of Commercial Taxes, Finance Department, Government of West Bengal



Outstanding Performance in Citizen-Centric Service



Kanyashree Prakalpa Portal Kanyashree online

Matir katha

Agri-Portal Matir Katha for Agriculture Department Gov. of West Bengal

মাটির কথা

- This is an **agriculture based portal** involving 5 Departments
- Through this portal, **useful information** in different Agricultural Sectors are available to farmers
- Information includes name and kind of seeds, availability, price and quality control of seeds, suggestions for Season / Area / Crop / variety wise cropping (based on crop calendar), different information related to Soil and Fertilizer, Cultivation Technique of different crops, crop diseases and their remedies, Agro-Climatic Zones and Schemes for cultivation of different crops.

12 Working Modules

| | | | |
|---|-------------------------|----|-----------------------------|
| 1 | Scientific Farming | 7 | Departmental Communication |
| 2 | Agri Questions & Answer | 8 | Project report |
| 3 | Virtual Krishi School | 9 | Modern Agriculture Glossary |
| 4 | Weather information | 10 | Data Analytics |
| 5 | Fertilizer Calculator | 11 | Agri & Allied Dept. Update |
| 6 | Mandi Price Capture | 12 | District Agri Profile |

<http://www.nic.in/projects/agri-portal-matir-katha-agriculture-department-gov-west-bengal>

Innovation in Assistive Technology at SNLTR

Who needs assistance

- Common People
- Differently abled people: *Blind people, People with low vision and People with Neuro-Motor Disorders and Speech Impairment*
- Socio-linguistically Challenged People: *Endangered linguistic community*

| | | |
|---|---|---|
| Braille Book Printing (for Bangla and English Text including Nemeth) | Voice output communication aid (VOCA) for cerebral palsy and speech impairment | Digital Archive of Endangered Languages of West Bengal |
| Tactile Graphic Design of Images, Figures and Diagrams for Blind Students | Any Spoken Language to Bangla Speech generator (using MS API) with Braille output | Revitalization through Information Technology including e-content and linguistic module development |
| Interactive IT modules for blind children | Interactive Online Literary Archive | Web-series for indigenous form of Music and Musical Instruments |
| Keyboard layout for Bangla, Devanagari, Odia, Meetei Mayek and Ol-chiki | Bangla OCR, Spell Checker and Swaralipi Editor | Machine-Readable Bangla Dictionary, Inter-lingual Lexicon |

Technology: Virtual and Augmented Reality, Artificial Intelligence, Language Learning and Language Generation, Semantic Net, Mobile computing, etc.

Shilpa Sathi

A Single Window System will provide **single window service under the various applicable Acts, Rules, Policies and Schemes.**



This Single Window System will also provide all **facilitations and handholding** support to the investors intending to start a business or operating a business in the State

<http://silpasathi.in/>

Implementation scorecard

| S.NO. | STATE | SCORE (%) |
|-------|----------------|-----------|
| 1. | HARYANA | 90.79 |
| 2. | WEST BENGAL | 90.79 |
| 3. | JHARKHAND | 90.79 |
| 4. | KARNATAKA | 90.79 |
| 5. | MAHARASHTRA | 90.24 |
| 6. | RAJASTHAN | 89.97 |
| 7. | UTTAR PRADESH | 89.43 |
| 8. | ASSAM | 89.16 |
| 9. | ANDHRA PRADESH | 89.16 |
| 10. | CHHATTISGARH | 89.16 |

<http://eodb.dipp.gov.in/>

IFMS

An online real time system....for



Management

Monitoring

Control

...of all fund allocation and financial transaction

Has option of single payment and multiple credit within a department

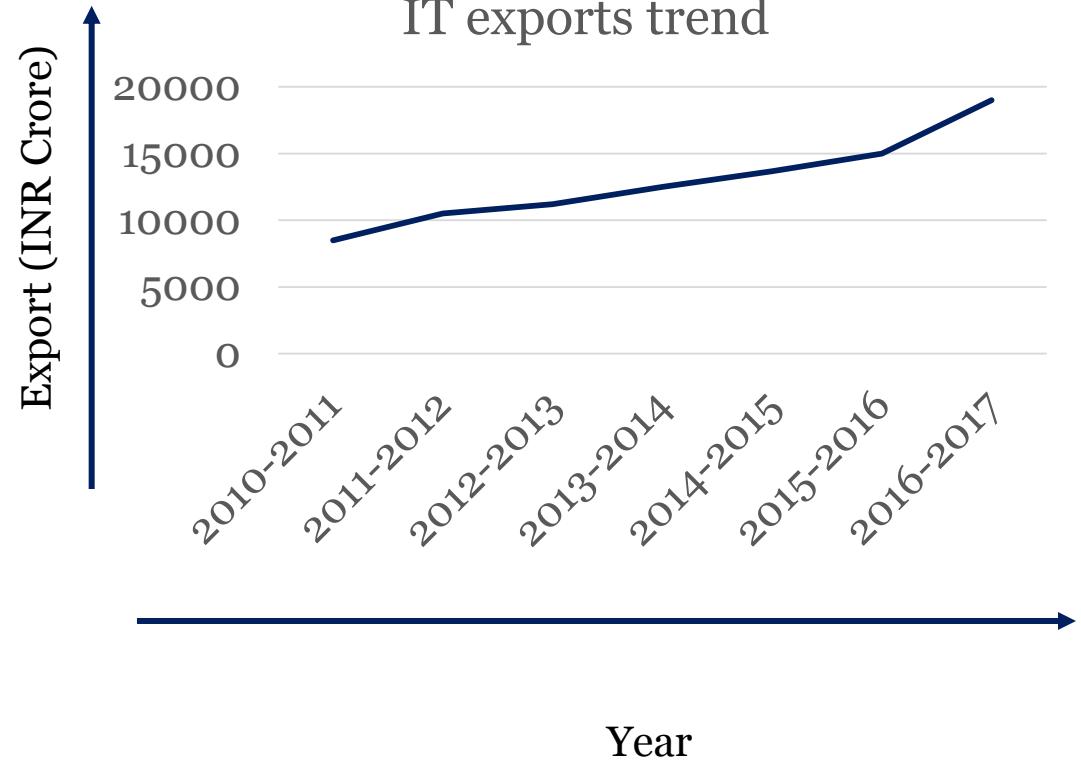
Direct integration with treasury

We are surging ahead

Permanent employment



IT exports trend



To sum up...The centre of gravity of IT is shifting eastwards and Kolkata can be your epicentre

Wechat is **rapidly closing the gap** with Facebook owned Whatsapp (900 million+ vs 1.2 billion users)

Alibaba's business model is more profitable than that of Amazon (+**30%** operating margin vs **<3%** in 2017)



Catching
up



amazon.com

Kolkata with its strategic location, plug and play infrastructure, diverse talent pool, optimized costs and good social infrastructure is ideally placed for investments

Kolkata also brings in many focused advantages

4G services were launched in the city

Kolkata is also a pilot for 5G rollout

NDTV

☰ SECTIONS

HOME | ALL INDIA

Reliance Industries Will Invest ₹ 5,000 Crore In Bengal: Mukesh Ambani

Speaking at the Bengal Global Business Summit, India's richest man paid lavish compliments to Chief Minister Mamata Banerjee saying that under her leadership "West Bengal is becoming Best Bengal!"

<https://www.ndtv.com/india-news/reliance-industries-will-invest-rs-5-000-crore-in-best-bengal-mukesh-ambani-1800672>

<https://timesofindia.indiatimes.com/business/india-business/Airtel-launches-4G-in-Kolkata/articleshow/12617622.cms>

http://www.business-standard.com/article/companies/airtel-s-first-round-of-5g-capable-tech-deployment-in-bengaluru-kolkata-117092601126_1.html

Thank you

Questions and Answers