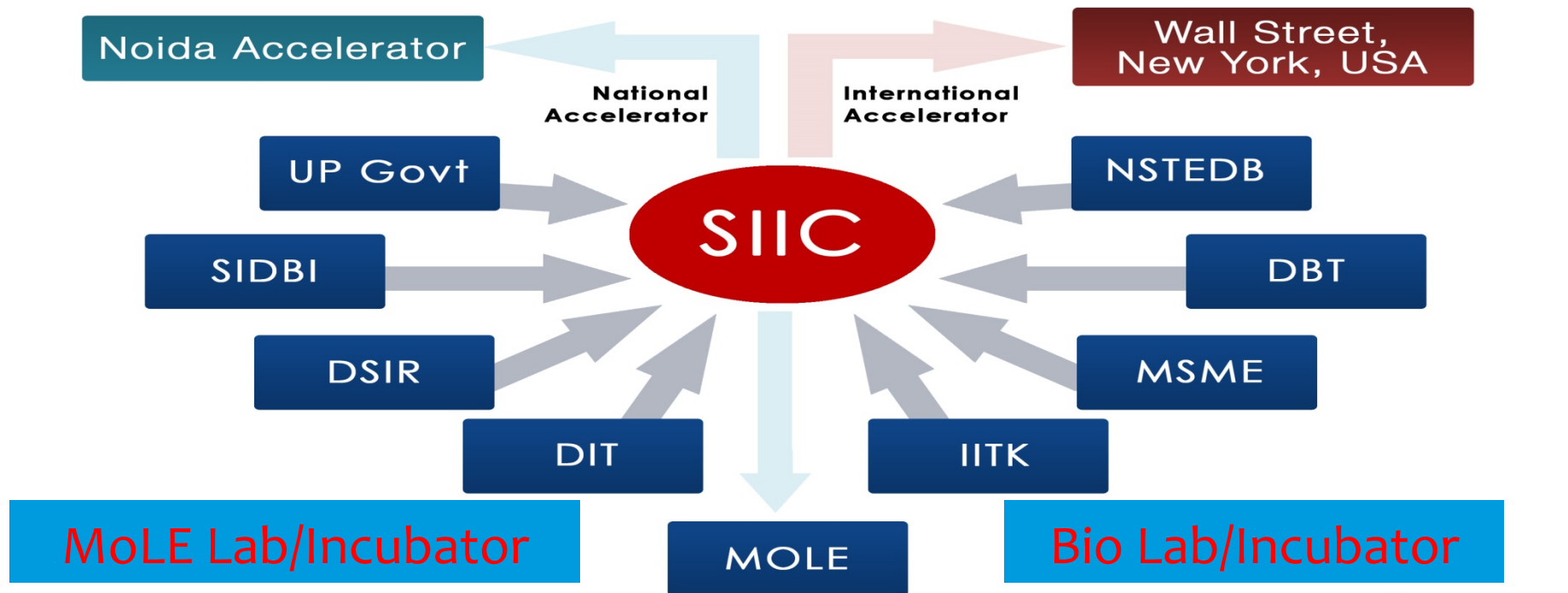


Innovation Ecosystem@IITK

Dr. B.V.Phani
Associate Dean Innovation & Incubation
Open House
18th April, 2015

1

Overview



Resources

4i Laboratory Rapid Prototype Development Lab	Tinkering Student Lab	Motwani Accelerator Creative/Think Lab	SBERTC Technology Cell	IP Cell 250 Patents filed, 60 commercialized
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- Operational Since 2004
- More than 52 startups Incubated
 - 29 startups already graduated
 - 23 are currently under incubation
 - 10 Under Consideration
- Seed fund disbursement to more than 20 startups
- IIT Kanpur's stake in top 5 startups is valued at > Rs 30 crores
- Fund Generation-External 36 Crores
- Commercialization Income 2 Crores
- National Award Winners



Credits

* **Prime Movers**

- * Prof. SG Dhande
- * Prof. AK Mittal
- * Prof. Rahul Varman
- * Prof. AP Sinha

* **Support System**

- * Prof. SC Srivastava
- * Prof. K Muralidhar
- * Prof. AK Chaturvedi
- * Prof. A Chandra
- * Prof. M Agrawal
- * Prof. P Munshi

* **Past Foot Soldiers**

- * Prof. R Varman
- * Prof. J Chatterjee
- * Prof. R. Shekhar
- * Prof. N N Vyas

* **Current Foot Soldiers**

- * Prof. S Bhattacharya
- * Prof. S Khandekhar
- * Prof. SC Srivastava
- * Prof. SSK Iyer

* **Invisible Foot Soldiers**

- * Prof D Philip
- * Prof J Ramkumar
- * Ms Rita Singh

SIDBI Innovation Incubation Center



Rajeev Motwani
Accelerator



Tinkering Lab



Bio Incubator



4i Lab



Extension Centre

Facilitate

- * Knowledge Resources
 - * Students
 - * Faculty
 - * Researchers
- * Infrastructural Resources
 - * Intellectual
 - * Infrastructure
 - * Institutional

Innovation Ecosystem Activities & Policies

* Student Clubs

- * S&T Council

- * E Cell

- * PoWER

- * Business Club

* Student Activities

- * Boot Camps

- * Competitions

- * Workshops

- * TEDx

- * News Letters

* Policy

- * Incubation Policy

- * Faculty Entre Policy

- * IP Policy

- * Student Ent Policy*

* Schemes

- * Deferred Placement*

- * Graduate Fellowship*

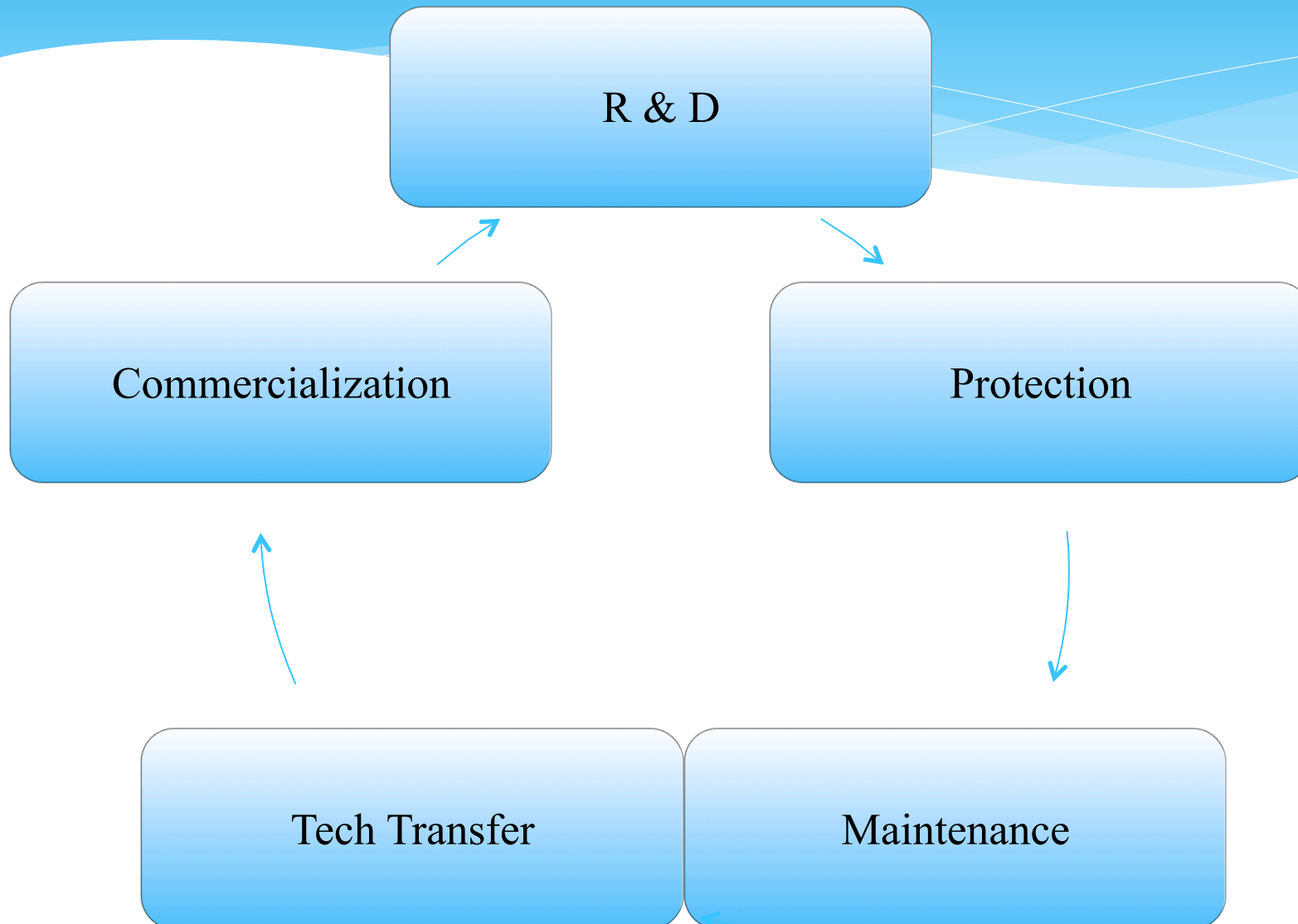
- * Prototype Funding

 - * PRISM

 - * PRIME

 - * 87 Social In

Innovation Ecosystem IP Management



IP Management & Technology Transfer

Support Services

- Dedicated Tech Transfer Office
- Evaluation & Transfer Services
- MOUs with Consultants
- Industry Interaction Initiatives
- Compilation
- Display and Showcase
- Industry Databases

Innovation Ecosystem Incubation

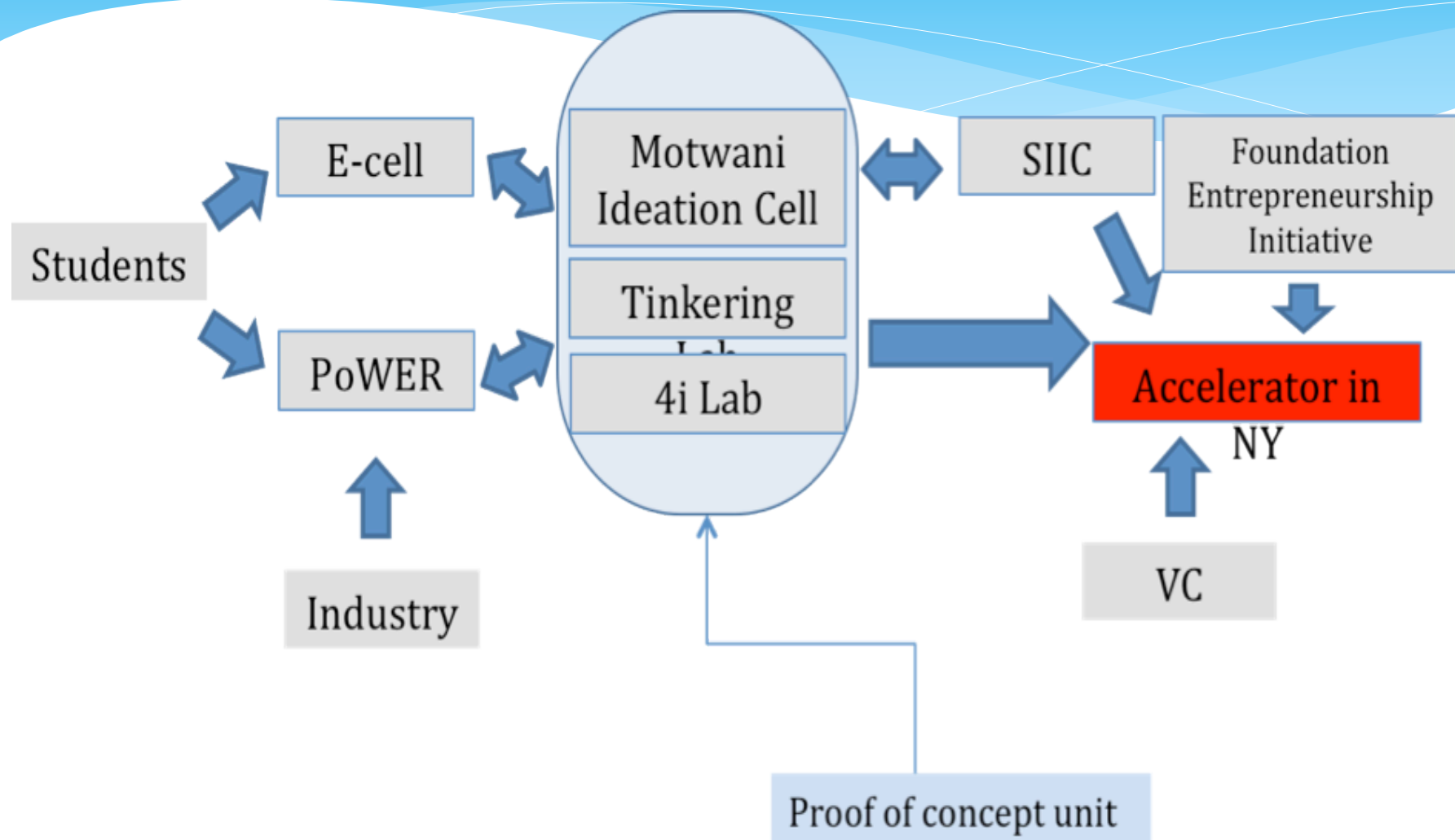
- ❑ Open to anyone
- ❑ Access to IITK Infrastructure
- ❑ Mentoring
- ❑ Office/Residential Space
- ❑ Funding Assistance
- ❑ IP Management, legal, accounting Assistance
- ❑ Seed Funding
- ❑ Funding Assistance
- ❑ Accelerators, IITK, Noida, US
- ❑ Tinkering/4i/Mole/Bio/MIA

2

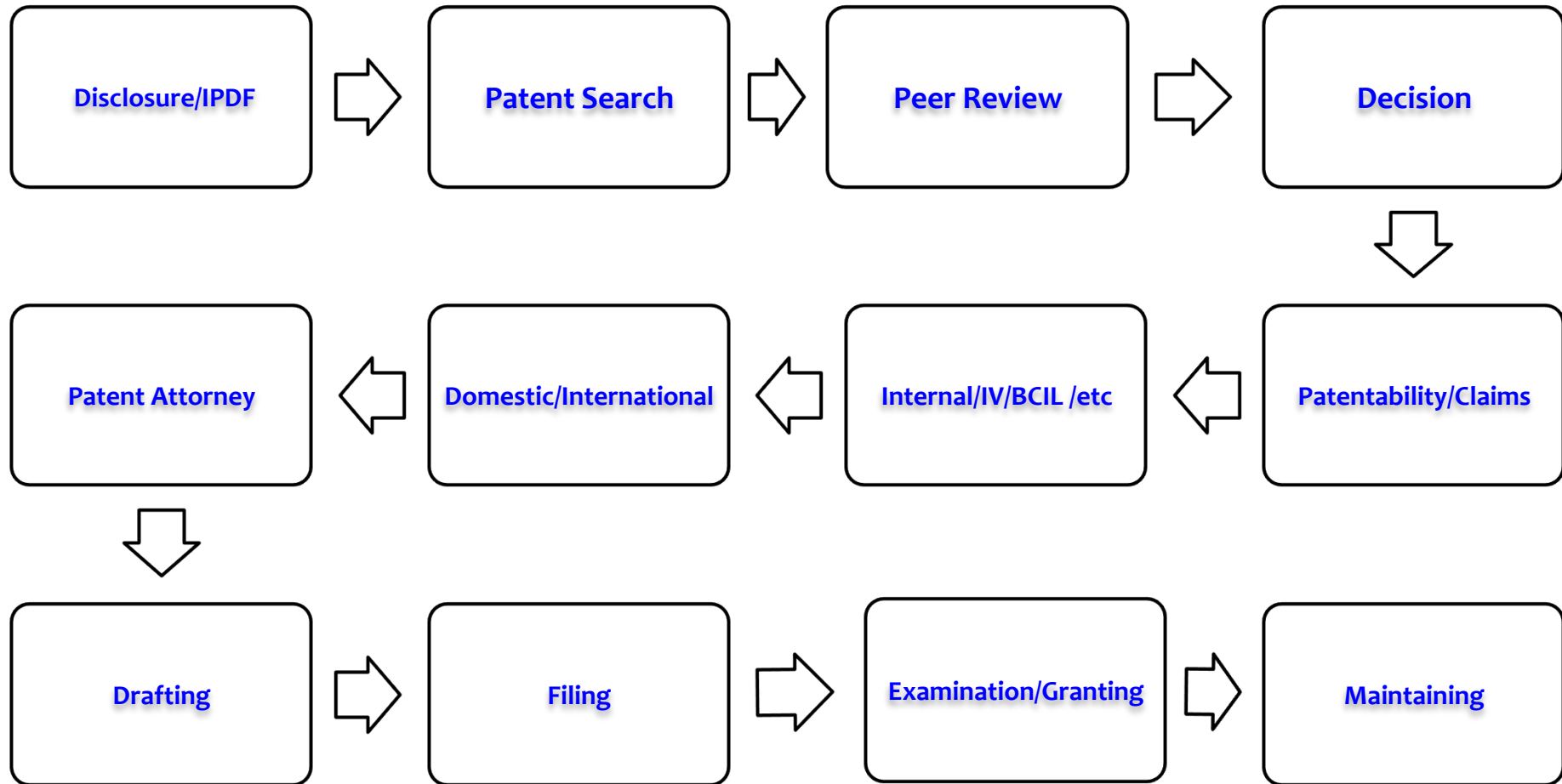
Innovation Ecosystem

Operational Overview

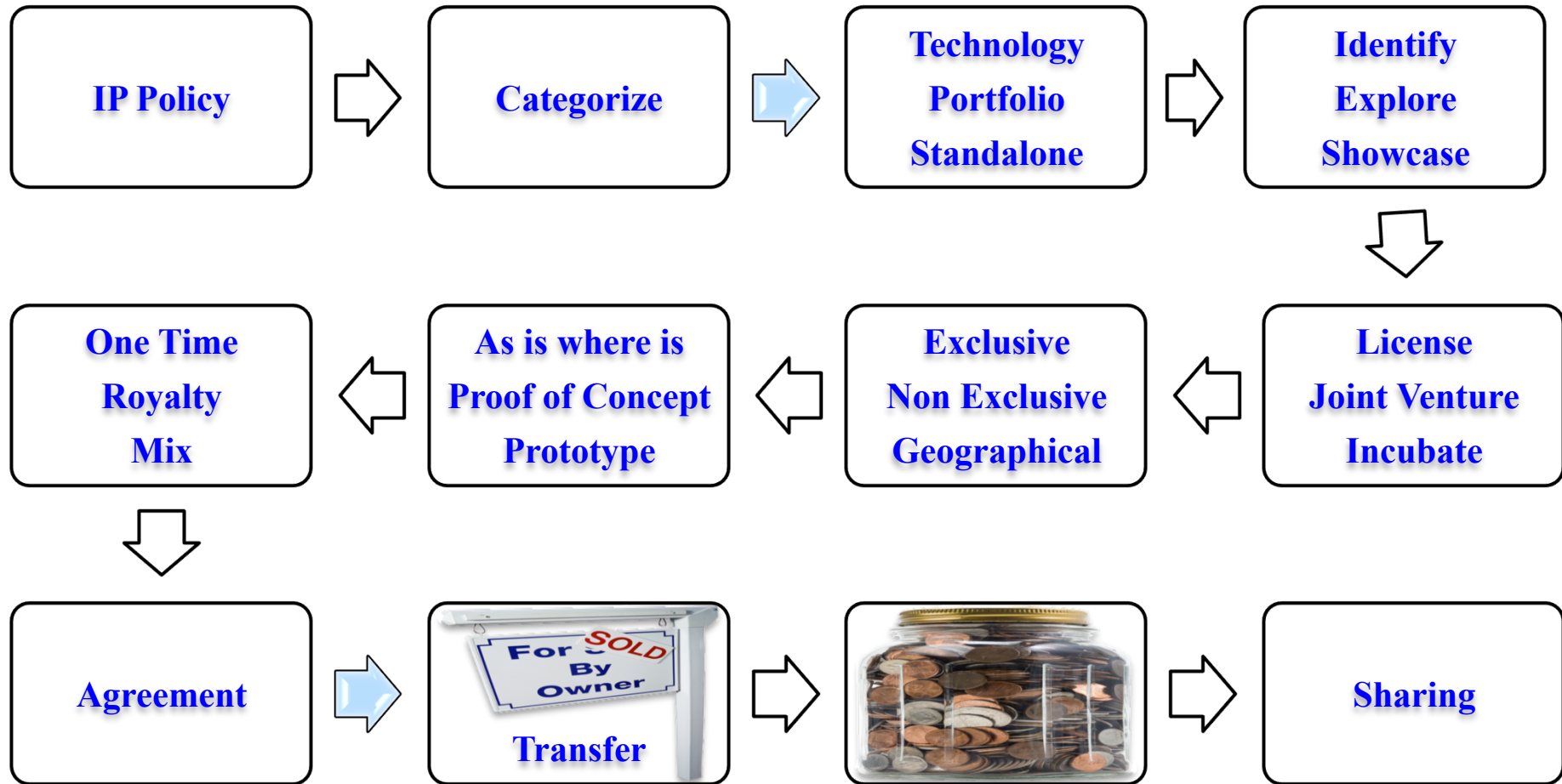
OPERATIONAL-PIPELINE



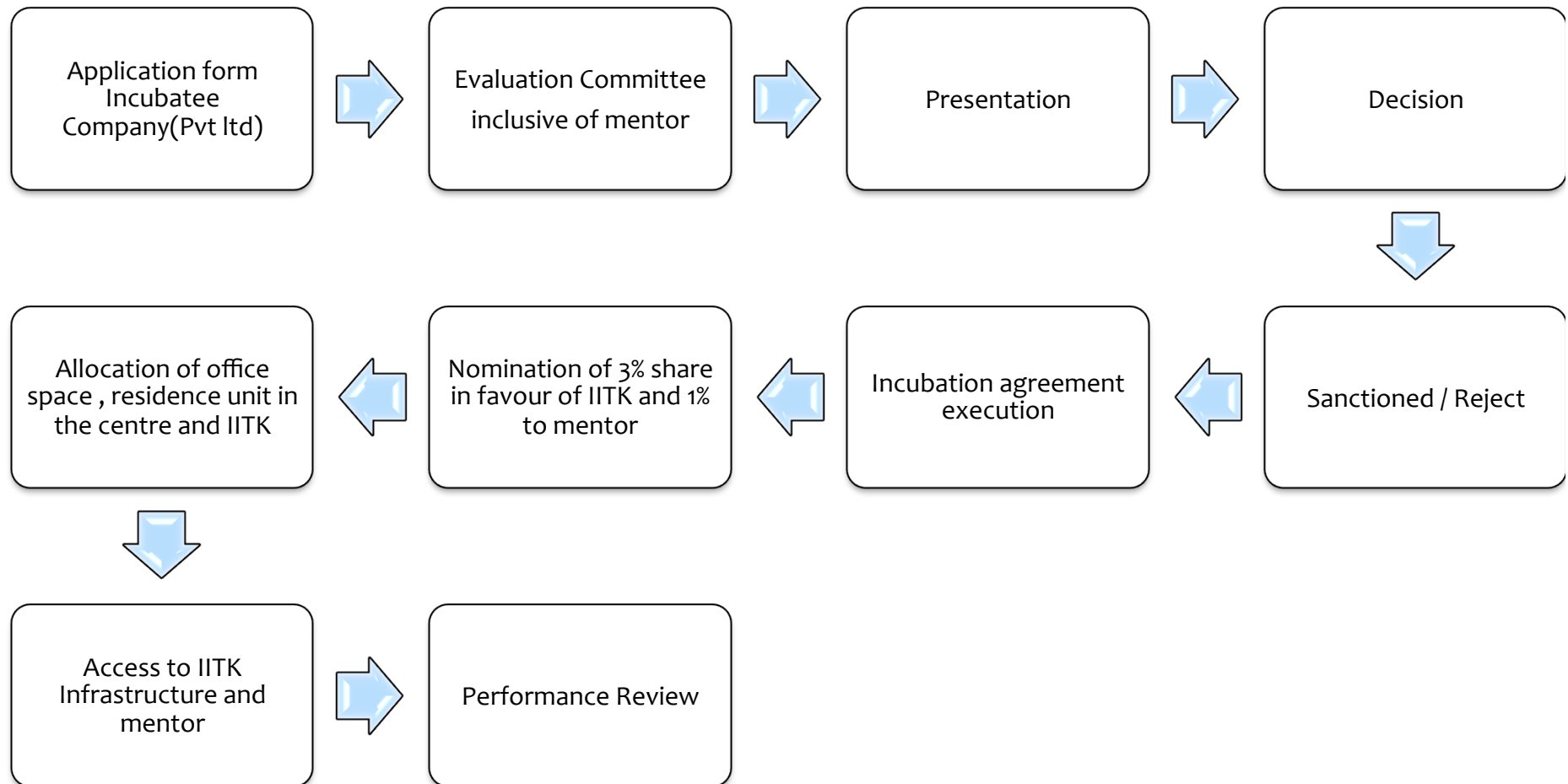
IP Protection & Maintenance



Tech Transfer & Commercialization



INCUBATION PROCESS



Support Services Funding

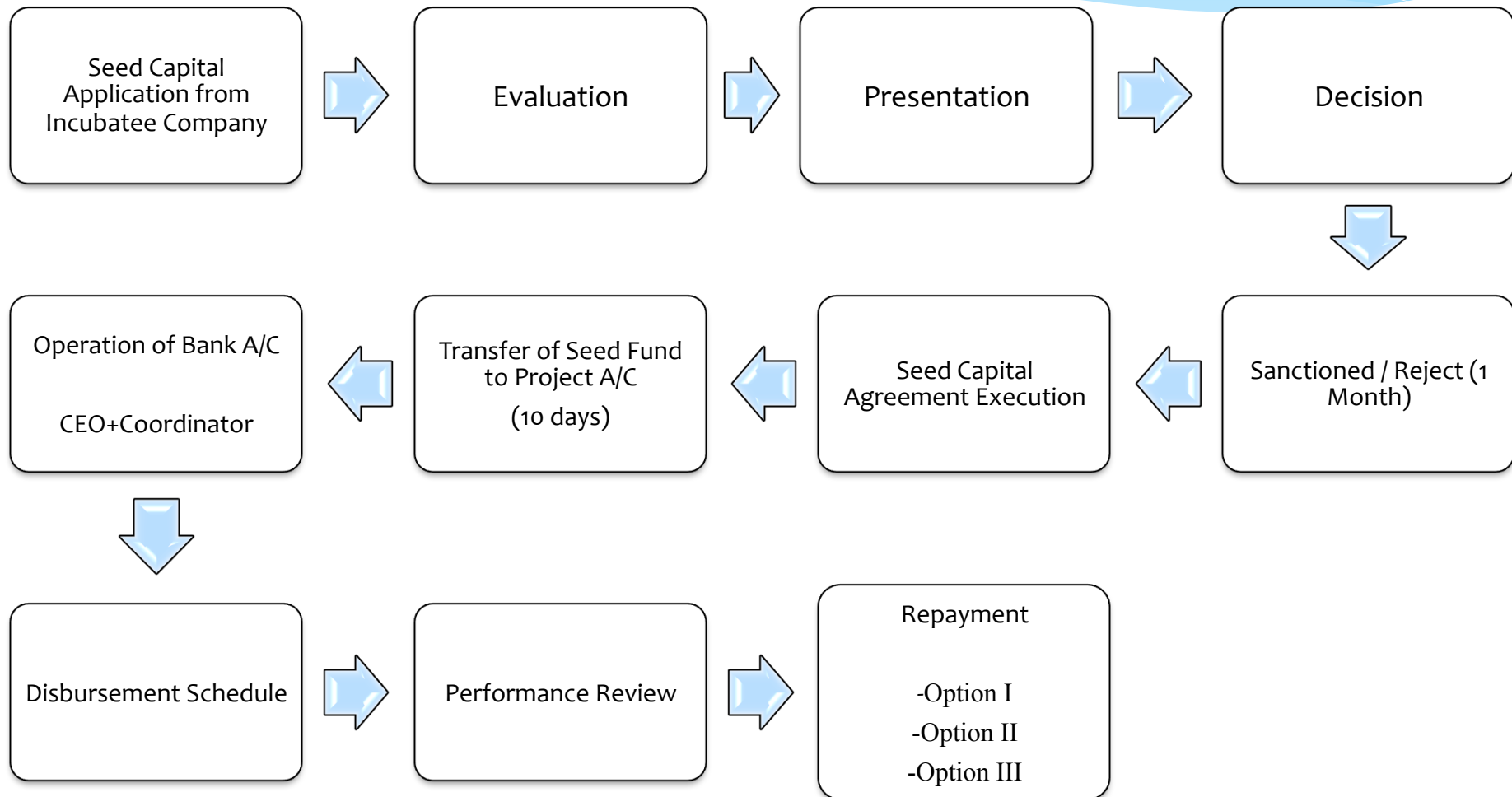
Primary funding

- * Government funding via Seed Capital
- * Alumni funding (Prototype & Seed)
- * Technology Promotion (TePP)
- * Public Private Partnership (DBT, TDB Etc)

Second Stage Funding

- * Banks such as SIDBI Risk Capital/Venture fund
- * Angel and Venture Investors
- * Government funding such as TDB, BIRAC, SIDBI-TIFAC
Revolving fund in form of loan or equity participation
- * Strategic Stake from Industry

Seed capital Funding



Disbursal Options

* Option I:

- ☑ Full amount would be paid back with an interest, which will be prime lending rate of SBI (on the date of sanction) less 4% and remains fixed for the tenure of the loan.

* Option II:

- ☑ 50% of the total seed fund sanctioned will be interest free loan, repayment would start after 18 months from the date of first disbursement.
- ☑ 50 % of the seed fund sanctioned would be convertible into equity (@ 4% equity against loan up to Rs. Five lakhs)

* Option III

- ☑ 75 % of the total seed fund sanctioned will be a loan and will be repaid back with an interest of PLR less 6 %.
- ☑ 25 % of the seed fund sanctioned would be convertible into equity (@ 2% equity against loan up to Rs. 5 Lakhs) at par.

Repayment Options

- * 18 Month Moratorium
- * 3-5 yr EMI

Above Options arrived at by a committee comprising of members from the grant agencies, IITK, Industry Experts, CA & legal consultant.

OTHER FUNDING/EXIT OPTIONS

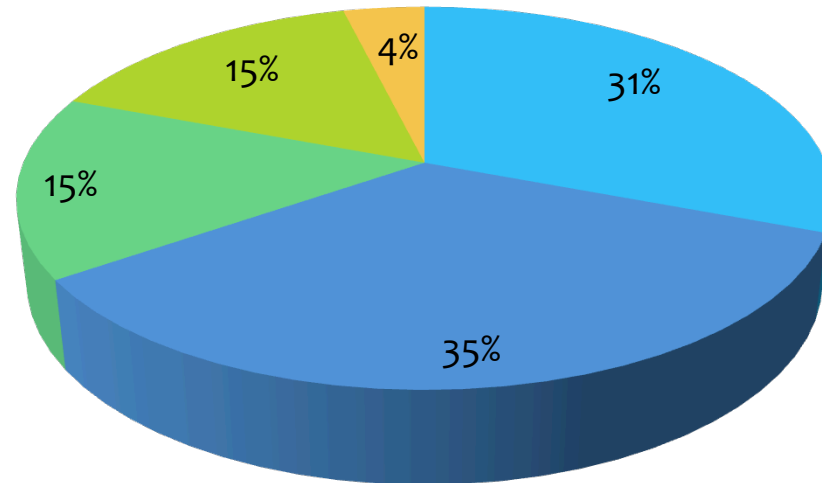
- **Government**
 - PRISM
 - TDB
 - TIFAC-SIDBI
 - SIBRI ETC
- **Risk Capital**
- **Angel Funding**
- **Venture Capital**
- **Private Equity**
- **Term Lending**
- **Merger/Acquisition**
- **Strategic Investment**
- **Public Issue**

Mergers/Takeovers/Strategic Alliances

Incubate Company	External Stake Holder
Adya Systems	Whiz Net Inc USA
Aurora Integrated	Tatas
Weather Risk	ICICI
GeoKno	GMR
Whorl Engineering	Walchand Industries
Aarsh	CMC/Polaris/Infosys
Irene Nano Core	Biocon

CURRENT INCUBATION PORTFOLIO (51 COMPANIES)

■ Biotech ■ IT & Electronics



Joining Soon

Saurya EnerTech	Solar Drinking Water Systems for rural and below poverty line communities
Kanopy Techno Sol	Basic Electrochemistry kits and devices
Lightfaber Tech	Design, Manufacture and Integration of 3D Printing/Additive
Promorph Sol	Business Intelligence and Big Data
ROBUST Results	Automation tools for Digital services
CloudShell Tech	Cloud Management and embedded BigData Analytics
Aniketana Ecosystems	Safe and Ecofriendly Educational toys, puzzles & Games
GenPro Therapeutix	Molecular and biochemical diagnostic kits, small RNA based therapeutics, Viral and non vector modes of gene delivery

3

Performance metrics

SIGNIFICANT MILESTONES

*** IP Management**

- * Patent filing 12 in 2006 to 40 annually.**
- * Growth is estimated to reach 300 per year**
- * Commercialization Revenue \$ 400000 in the last 2 years**

*** Incubation**

- * Single Centre to 8 Centers**
- * Establishment and/or Augmentation of 5 labs/workshops**
- * Growth from 2 to 30 expected 80-100**
- * Graduated companies 32**
- * Extension Centre**
- * First Exit option exercised**
- * Second under consideration**

*** Ecosystem**

- * Tinkering Lab, SBERTC, MIA, Bio Lab, MoLE Lab, RuTAG**
- * Significant Rise in E Cell Activities**
- * Outreach in association with IIMA, NEN & TiE UP**
- * Funding Support raised around 36 Crores**

Notable Alliances

Incubate Company	External Stake Holder
Adya Systems	Whiz Net Inc USA
Aurora Integrated	Tatas
Weather Risk	ICICI
GeoKno	GMR
Whorl Engineering	Walchand Industries
Aarsh	CMC/Polaris/Infosys
Irene Nano Core	Biocon
Curadev	Roche

Credits

Supporting Staff

* **Institute**

- * DoRD/DORA/Account/Audit/IWD
 - * Satyamurthy
 - * Sachan
 - * Shakheel
 - * OP Sri
 - * Gunade
 - * AK Misra
 - * Rajeev Garg
 - * Raghavendra
 - * VK Tiwari
 - * Anand
 - * Arvind Kumar
 - * Gaur
 - * Phalke
 - * Sunil
 - * Manoj
 - * Avanti

* **SIIC**

- * Ram Misra
- * Raghunath
- * Sudha
- * Rajendra
- * Rashmi
- * Seema
- * Sangeetha
- * Soumya
- * Mouli
- * Ruma
- * Ashok
- * Dikshit
- * Reema
- * Tirth
- * Prachi

THANK YOU

?????? & !!!!!

Innovation Ecosystem

Future Directions

Innovation Ecosystem

Future initiatives

- * Apex Advisory Innovation Council**
- * Mentor Advisory Council**
- * Core Innovation Council**
- * Student Entrepreneurship Policy**
- * Sabbatical for Incubation**
- * Incubate Accelerators in US and Noida**
- * Graduate Entrepreneur Fellowship Program**
- * New Building accommodate 80-100 startups**
- * Innovation Entrepreneurship Park (IEP)**
- * Science & Technology park**

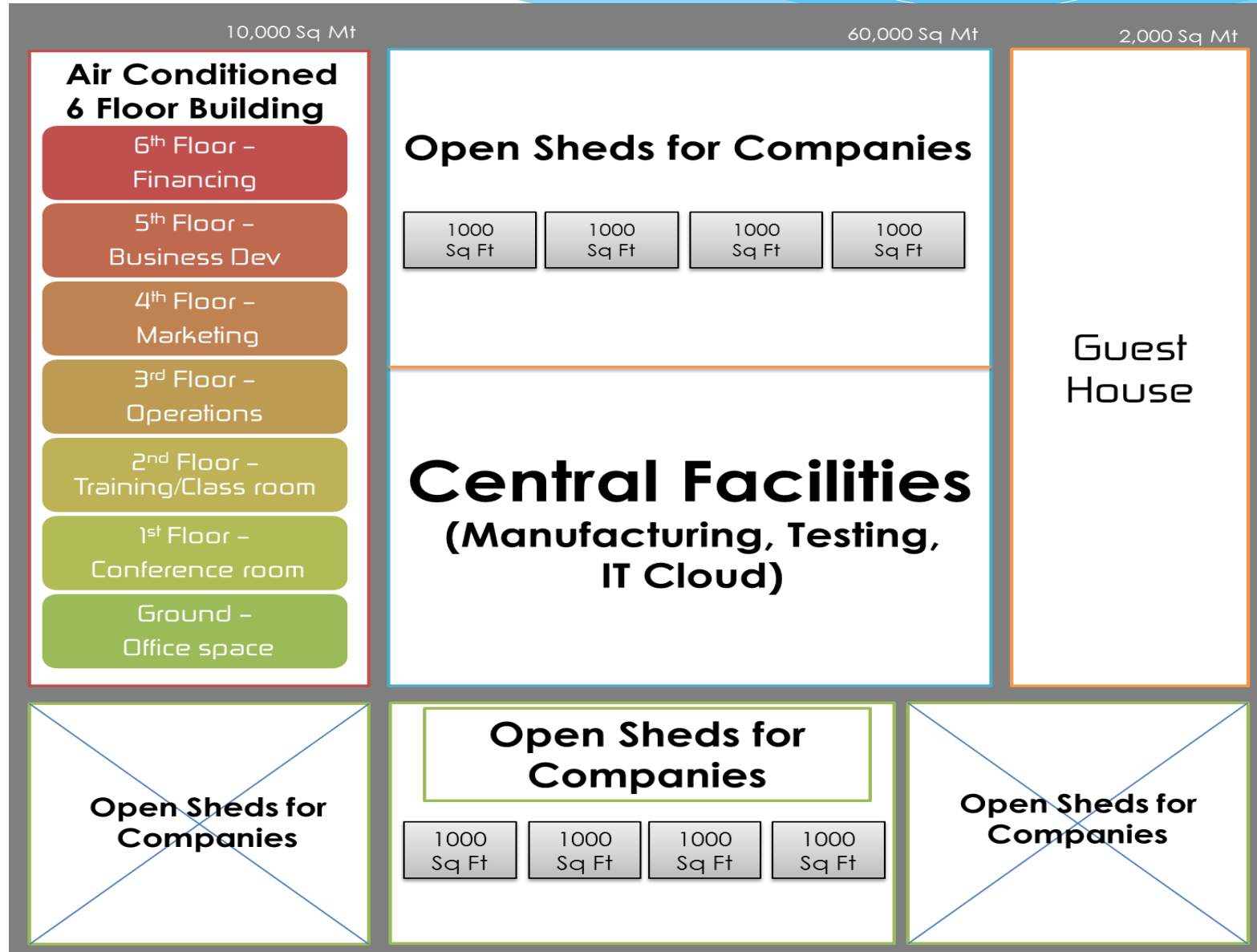
Innovation Ecosystem

Future initiatives

- * MS in Innovation & Entrepreneurship**
- * 101 on Entrepreneurship & Innovation**
- * Workshops/Boot Camps on Innovation & Entrepreneurship**
- * Prototype Center for Electronics System Design (ESD)**
- * CSR Funding Initiatives (IP & Incubation)**
- * International Patenting Support**
- * Patent Portfolios**
- * Funding for new building**

IEP Layout Plan

20 acre (~81,000 sq m) layout



PROPOSED DESIGN

IIT KANPUR

INCUBATION CENTER
CONCEPT



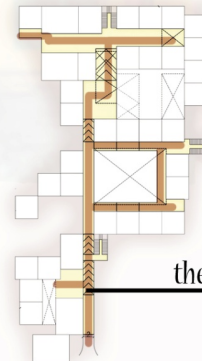
The blocks are not on the same level. The levels are created by the use of ramps and steps

All blocks open up at various levels which allows the daylight to enter in the building and also avoids the glare of direct sunlight due to the overhangs created by upper floors.

The differentiated floorplans increases the amount of views on different levels.



the terraces created are a mix of private and semi public spaces, covered or open.



the building plan resembles the tree of enlightenment.



The whole unites in a building based on the concept of pixelation creating links, pedestrian streets and suspended terraces, aerial spaces, skylights of different angles, colonnaded spaces, without forgetting the openings, here and there.









THANK YOU