FAQs

About India Innovation Growth Programme (IIGP) 2.0

What is the DST-Lockheed Martin-Tata Trusts IIGP 2.0?

The India Innovation Growth Programme 2.0 is a joint initiative of the Department of Science & Technology - Government of India, Lockheed Martin and Tata Trusts.

Supporting the Government of India's missions of "Startup India" and "Make in India", IIGP 2.0 enhances the Indian innovation ecosystem by enabling innovators and entrepreneurs through the stages of ideation and innovation, to develop technology-based solutions for tomorrow.

Complemented by several implementation partners, Federation of Indian Chambers of Commerce and Industry (FICCI), Indo-US Science and Technology Forum (IUSSTF), Center for Innovation Incubation and Entrepreneurship (CIIE) at IIM Ahmedabad, Indian Institute of Technology (IIT) Bombay and the Tata Center for Technology and Design at the Massachusetts Institute of Technology (MIT); the programme aims to build an innovation pipeline in India through a high-impact programme focused on the social and industrial innovation ecosystem.

Launched in 2007, India Innovation Growth Programme (IIGP) has been one of India's longest standing public-private partnerships. The programme has provided mentoring and handholding assistance to over 400 innovators coming from diverse sectors from across the country; generated over 350 commercial agreements and over $900 Million of economic value for India. (Source: Second Impact Analysis Report by Ernst & Young in 2015).

Through two annual parallel tracks viz. University Challenge and Open Innovation Challenge; IIGP 2.0 identifies and supports both industrial and social innovations through the stages of Ideation and Innovation.

What is the objective of the programme?

The objective of the programme is to search for innovators and entrepreneurs across the country who have built compelling science and technology based solutions for India's development sector problems and specific solutions for the industrial sector The programme provides funding, mentoring and incubation support to selected Indian innovators and entrepreneurs.

What are the focus sectors of the Programme?

IIGP seeks applications in 13 focus areas under the University Challenge. In the Open Innovation Challenge, sectors are divided in 11 industrial categories and 10 social categories.

What if my innovation falls under both social and industrial sectors (For example: A technology led innovation that offers low cost energy solution in off grid areas). In such case, under which Challenge should I apply?

As an entrepreneur, if you have to tradeoff between the commercial interest and social impact, what would come first for you? If social impact is your primary objective, you should apply under social stream. If commercial success is your primary objective (even though there is social impact) you should apply under industrial sector.

Is it necessary that the technology is developed in India, or can technologies developed with a foreign company/university also apply to the Programme?
As long as the IP is owned by an Indian company or Indian individual/entity, you can apply (meaning the entity or individual owning the IP rights or claiming the IP should be domiciled in India).

Are there any sub-sectors to the focus sectors of industrial and social innovations?
Yes. The list is provided below:

- University Challenge
- Open Innovation Challenge

For the social innovation solution, is it necessary to apply with a technological solution or applicants with innovative service delivery models also qualify to apply?
This is a programme for science and technology innovations. Innovative service delivery models/business model innovations should not apply. They can apply to other programmes like Tata Social Entrepreneurship Challenge.

What is the difference between the University Challenge & the Open Innovation Challenge?
The University Challenge caters to the ideation and incubation of concepts in response to specific grand challenges, which are sourced entirely from universities across India. Each University or Institution can send their official representative team.

Open Innovation Challenge, on the other hand, caters to the innovation of concepts, which are sourced from the technology community at large and not specifically from the academic arena. Note that the Open Innovation Challenge fundamentally begins further along the innovation readiness pipeline than the University Challenge. It is open to all.

If I am a student and have a company incubated at an academic institution, do I apply to the University Challenge or the Open Innovation Challenge?
You can apply under the Open Innovation Challenge. If your institution chooses to respond to the specific Grand Challenge, it can participate in the University Challenge with you and your team.

Can I submit more than one application per year in a specific challenge?
Yes, an innovator can submit multiple applications in a year. Similarly, a university/institution can have multiple teams applying for University Challenge. However, please note that one Email ID/Login ID can only submit one application. In case you want to submit multiple applications, you will need to create a different login ID using a different email ID for each application.

Can I reapply to the programme, if applied before?
Yes, an innovator can reapply to the programme in case significant improvements have been made to the technology or if a different product has been developed.

Can I reapply to the programme, if awarded before?

Yes, an innovator can reapply to the programme but with a different innovation. Innovators who have been a part of the Top 10 are requested not to apply to IIGP 2.0 – 2018 with the same innovation.

Where can I apply to the programme?
Applications are only accepted online, at www.indiainnovates.in

How will I know my application has been successfully submitted?
Once an application has been submitted, an auto generated e-mail confirming the successful submission will be sent to your registered e-mail address.

In case of general or technical queries, with whom do I get in touch?
For general queries, email us at innovations@indiainnovates.in and if you have any technical issues, email us at info@indiainnovates.in

Can the application be edited?
Yes, you can edit your application using the User-ID and password generated upon registration. However, once you do the final submission, the application cannot be edited.

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University Challenge

Who can apply?

Applications will be sought from individual students/teams across for-profit & non-profit educational institutions/universities in India.

How many maximum team members can be there for applying?

There is no limit on the team size or the # of teams from each university.

Does the team necessarily need to have members from the same university or can I form a team with other universities as well?

Multiple universities can come together and create joint teams.

Can faculty members from Universities also apply or is the Challenge only for students?

In order to promote entrepreneurial spirit among students and in order to provide level playing field, only students can be part of a team. However, they are expected to be mentored by faculty and the research community.

Is there a cap to the number of applications per year?

No, there is no cap to the number of applications to the University Challenge.

Can I still apply if my innovation does not fall under the listed topics?

The University Challenge is only open to innovations, which fall under the listed topics/sub-sectors.

What are the benefits of applying to the challenge?

The University Challenge will cater to ideation and incubation of concepts (both social and industrial), with the following benefits for the participating teams:

Ideation Phase:

- Up to 30 University teams will be selected to receive mentoring by IIT-Bombay on presenting ideas to a panel and an opportunity to pitch ideas at an IIGP Downselect Event.
- Up to 10 selected teams out of the 30 will receive research grants of up to INR 10 Lacs each for developing a concept/prototype, an opportunity to participate in a Design Thinking workshop, mentorship and periodic feedback.

Innovation Phase:

- Up to 10 teams will participate in a boot camp at IIM Ahmedabad and receive further mentoring by IIGP partners.
- Up to 4 teams may be awarded research grants of up to INR 25 Lacs each enabling them to advance to the next stage where they will work in parallel with teams from the Open Innovation Challenge.

What is the evaluation criterion for the challenge?

Technical/Conceptual Design

- Advancement in state of the art for the selected technology
- Risk

Value to Mission

- How great is the need?

Cost/benefit

- Design/build/cost estimates

Qualitative attributes

- Team dynamics
- Market assessment
- Creativity

How many awards will be given per year?

Up to 10 top teams will be awarded research grants up to INR 10 Lacs each.

At the end of the University Challenge (After Phase A: Ideation + Phase B: Innovation), up to 4 teams may be awarded research grants up to INR 25 Lacs to enable them to advance to the next stage, where they will work in parallel with the top teams from the Open Innovation Challenge.

What is the total application and evaluation cycle?

After the deadline for submission of applications; the total application & evaluation cycle will take 1 month when up to 30 top teams will be notified.

What is the programme cycle?

Each Phase (A & B) is 12 months in duration. So, a team can be with the programme for up to 24 months.

FAQs

Who can apply?

Applications will be sourced from the technology community at large and not limited to the academic arena, unlike the University Challenge. This would include:

- Private Individuals
- Local Private Entities
- Government Entities
- Consortia of the above
- Any group of people or organisations

Is there a cap to the number of applications per year?

No, there is no cap to the number of applications to the Open Innovation Challenge.

Can I still apply if my innovation does not fall under the listed topics?

Under the Open Innovation Challenge, while we encourage applicants to choose the topic/sub-sector under which their innovation most fits. However, if that is not the case, applicants can apply under the “others” category under both industrial and social sector.

What are the benefits of applying to the challenge?

The Open Innovation Challenge will cater to innovation of concepts (both social and industrial), with the following benefits for the participating teams:

Innovation Phase:

- Up to 50 innovators will get an opportunity to participate in a rigorous boot camp conducted by IIM, Ahmedabad.
- Up to 16 innovators will undergo an incubation process. Companies in incubation will receive seed funding of up to INR 25 Lacs each as well as mentoring support to enable them to accelerate market penetration and scale-up operations. They will also get an opportunity to travel and interact with scientists, technology experts, entrepreneurs, and investors from our partner ecosystem in MIT.
- Access to network of sponsors, mentoring, hands on support in building the enterprise from people who have done it before, and support for pilots/tests in India.
- Participate at Demo Days organized under the Programme to showcase your technologies to investors.

What is the evaluation criterion for the challenge?

1. Problem Identification
Has the specific problem or need been clearly identified? How relevant is the solution to the identified problem?

2. Technological Innovation
Will the innovation lead to disruptive and nonlinear impact?

3. Financial Sustainability
Is the business model able to sustain itself financially over a period of time?

4. Operational Scalability
Can the business model be scaled-up/replicated to impact multiple segments/geographies?

5. Roadmap Ahead
Does the business have a clear vision on how they want to go forward?

6. Team
Does the business have a competent leadership team able to efficiently execute on its business plan? How likely is the team to stick to the mission?

7. Unique Value Proposition/Solution
How strong or unique is the value proposition of the product/service which is being offered as a solution?

8. Market Advantage (Only industrial innovation)

9. Social Impact Scale (Only social innovation)
Will the solution help disrupt the cycle of poverty through irreversible and deep social impact?

How many awards will be given per year?
There will be up to 16 awards offered every year. These include both social and industrial sectors.

What is the total application and evaluation cycle?
After the deadline for submission of applications; the total application & evaluation cycle will take 2 months when up to 16 top teams will be notified.

University Challenge

Deadline: 18th May 2018 Register Now

Focus Areas

Topic 1

Robust, high bandwidth data transmission to and from Internet of Things sensors/processors embedded in a rotating element

Background: Two key use cases have been identified for robust, high bandwidth data transmission:

1. Helicopter rotor blades, wind turbine blades, maritime propellers, jet turbine components and many other rotating elements are critical to the operation of modern vehicles. Sensors mounted on these components generate valuable real-time data pertaining to safety and reliability. But transmission of this data in real time is currently bandwidth and reliability limited.
2. High data rate, “underwater Wi-Fi” communication needs are developing in multiple areas. Current technologies either have limited data rates or short working distances. Methods to improve the ability to transfer data faster and farther while underwater are needed.

The Requirement: Design, develop and demonstrate key technologies/solutions that create and manage robust, reliable transmission of real-time data from either: a rotating element to a fixed frame or from one underwater point to another.

Topic 2

Transparent or On-Glass Visualization Technology

Background: Multiple sources of data are now available to support:

1. Pilots who need to maintain visual awareness while obtaining new information or;
2. Passengers that want information overlaid on the scenery outside Robust, reliable systems to deliver that data are needed.

The Requirement: Design, develop and demonstrate hardware and/or software solutions that can transform any hard, transparent surface into an on-demand, interactive center with sunlight readable quality. Solution would enable the overlay of multi-media data, including augmented reality applications, on the real time visual environment.

Topic 3

Space Debris Management

Background: Space debris is a big problem that will only get worse with time. Space junk is beginning to litter space and satellites can potentially fail from collision with debris.

The Requirement: Propose innovative solutions to capture space debris. Develop simulations/models to demonstrate effectively of proposed solution. Consider cubesat based prototypes that can demonstrate proof of concept operations.

Topic 4

Low-cost Unmanned Aerial/Underwater Vehicles

Background: Leverage advances in SWAP constrained COTS processing and Artificial Intelligence technologies to develop unmanned autonomous solutions. We encourage teams to leverage variety of sensors and image processing techniques to accomplish their missions.

The Requirement: Design, develop and demonstrate an affordable submersible UAV prototype that can be launched from an underwater platform and fly in air to perform certain mission before returning back to underwater platform. Must be able to withstand corrosive underwater environment.

Topic 5

Environment Tech: Industrial Waste Utilisation/Recycle Technologies

Background: Rapid industrialization has resulted in the generation of huge quantity of wastes, both solid and liquid, in industrial sectors. Toxic and hazardous industrial waste, if released untreated negatively affect open spaces and nearby water sources, contributing to environmental pollution and health hazard.

The Requirement: Propose novel techniques to treat/recycle hazardous industrial waste at source. Need to develop and demonstrate solutions that can be integrated into Small/Medium Industrial production line.

Topic 6

Energy Tech: Sustainable and Affordable Energy for All, Energy Grid Security

Background: Specific focus on Solar energy. Please refer to National Academy of Engineering's Grand Challenge on making solar energy economical Link . In addition to efficient production, storage and distribution, securing the grid is a key area of focus.

The Requirement: Propose novel techniques for any of the following areas. Proposed solution(s) should include prototype development and demonstration. Areas of focus:
(I) Improving state of the art in efficiency of converting sun light into electricity
(ii) Affordable, Distributed storage solutions
(iii) Energy grid security

Topic 7

Virtual / Augmented Reality

Background: Please refer to National Academy of Engineering's Grand Challenge on engineering advances required to simulate reality effectively Link.

The Requirement: Design, develop and demonstrate novel applications of Virtual Reality in the following areas:
(I) Improving human cognition
(ii) Improving human-machine (robot) interface
(iii) Improving human endurance in tactical applications and/or productivity in manufacturing applications.

Topic 8

Agriculture: Reduce post-harvest losses through technologies that improve shelf life of produce at farm gate

Background: India's agricultural losses in harvest and post-harvest are almost INR 92,000 crores (~ USD 13 billion). Post-harvest losses are estimated to be 10-25% in durables, semi-perishables and perishables. In case of fruits and vegetables, post-harvest losses are higher at around 30-40% per cent.

The Requirement: Technological solutions that increase incomes of small and marginal farmers by reducing losses at farm-gate, or during handling and storage. These solutions should be affordable, easy-to-use, environmentally-sustainable, and ultimately scalable.

Topic 9

Energy: Promoting productive use of energy for livelihoods in underserved areas through super-efficient appliances

Background: Lack of or limited access to energy services has been known to impair economic growth and development of individuals, communities as well as economies. Poor access to energy services creates a vicious cycle of poverty, which makes accessing energy services at their current costs even more difficult. This downward spiral not only creates inequities but also causes irreparable damages to communities and smaller local economies, severely impacting their resilience to even small stresses.

The Requirement: Super-efficient and innovative energy solutions catering to productive uses of energy for micro-enterprises that can break the vicious energy-poverty cycle and pull-back households as well as local village economies from the margins. These solutions need to be designed with a focus on demands and requirements from the rural entrepreneurs and need to be affordable and easily accessible. Some examples of these solutions include productive loads/mechanization of small shops (refrigeration, electrical appliances for printing, copying etc.), enterprises (such as flour mills, mill chillers, computer centres etc.) and workshops (such as flour mills, carpentry and blacksmith workshops etc.), home-based productive appliances (such as mechanization of tailoring, embroidery, handicraft making) etc.

Topic 10

Healthcare: Rapid point-of-care (POC) solutions for mass screening and monitoring

Background: Sustainable Development Goals (SDG) representing health focus on ensuring healthy lives and promoting well-being at all ages. It includes ambitious goals to end preventable deaths of new-borns and children under 5 years of age, end the epidemics of AIDS,

tuberculosis, and malaria, ensure universal access to reproductive health care services, and achieve universal health coverage and access to safe, effective, quality and affordable healthcare for all.

The Requirement: Self-administered/point-of-care solutions for rapid detection and diagnosis of non-communicable diseases (NCDs) and infectious diseases with intelligent data capture and ease-of-use which can allow them to be deployed for massive screenings in low-resource settings. These solutions should be accurate, affordable and rapidly scalable.

Topic 11

Waste Management: Adoption of municipal solid waste (MSW) segregation at source

Background: India generates more than 1 lakh tonnes of waste per day. A large part of this is un-segregated and gets dumped into landfills. Municipal solid waste (MSW) is typically more than 50% composed of food waste which in turn has high moisture content in India. The lack of segregation and moisture content of the mixed waste are often cited as one of the bigger bottlenecks to successful waste management and processing in the Indian context.

The Requirement:

1. Compact, user-friendly and affordable solution for MSW segregation at source.
2. Next-gen technology for the scientific and efficient processing of low-calorific value Indian mixed waste to energy.

Topic 12

Water: A membrane-less, maintenance-free filter for potable water

Background: All the methods of treatment of water have one or more of these problems: the necessity for periodic replacement of membranes, unclear disposal of leftover sludge, inability to filter for bacteria (if designed for inorganic solvents and vice versa), all of which make them ineffective to an extent.

The Requirement: An inexpensive, scalable filter where periodic maintenance is either not needed or is very simple to implement. Disposal of collected sludge has to be considered. Focus is on the ease of distribution of the technology.

Topic 13

Environment-friendly housing

Background: It is possible to reduce the carbon footprint of a home by reducing energy consumption, water conservation and water recycling. It is possible to design an environmentally sustainable building and operate it to minimize the environmental impacts.

The Requirement: Design, develop and demonstrate novel environmental friendly housing approach in the following areas: (I) Green tech construction materials

(ii) Building construction practices
(iii) Energy-efficient heating and cooling systems, appliances, and electronics.

The University Challenge caters to the ideation and incubation of concepts (both industrial and social) sourced from universities across India. Out of the applications received, up to 30 top teams are down-selected as Phase A finalists (15 – Social, 15 – Industrial) through a highly competitive evaluation process.

Phase A: Ideation

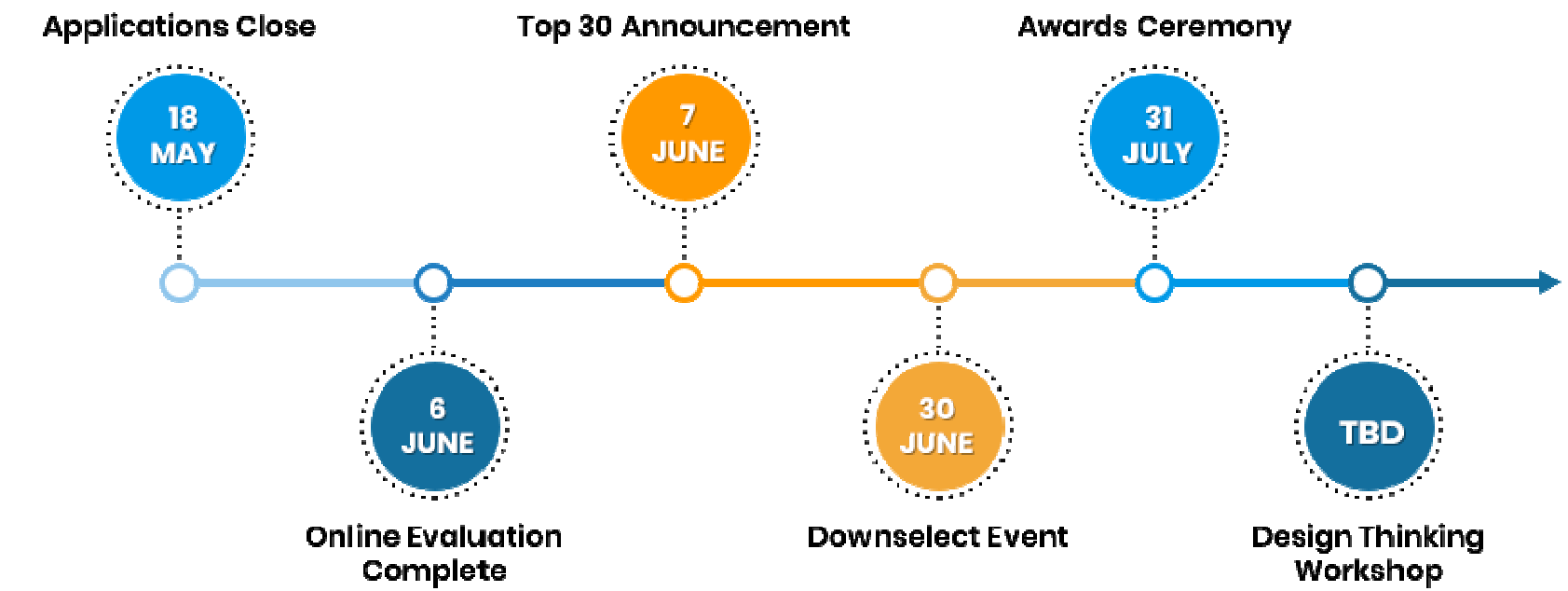
Up to 30 top teams are mentored by IIT Bombay; on presenting their ideas to a panel at an Innovators Down-select Event with each team getting an opportunity to pitch to a jury panel. Upto 10 selected teams receive research grants up to INR 10 Lacs each for developing a concept/prototype, opportunities to participate in a Design Thinking Workshop, mentorship and periodic feedback through monthly/quarterly reviews.

At the end of the year, these teams are expected to be on par with the start-ups applying for IIGP 2.0 Phase B through the Open Innovation Challenge.

Phase B: Innovation

Up to 10 University Challenge teams get an opportunity to participate at a bootcamp at IIM Ahmedabad and receive further mentoring by IIGP 2.0 partners. Through participation at an Innovators Competition, up to 4 University teams are down-selected as Phase B winners and may be awarded research grants up to INR 25 Lacs, enabling them to advance to the next stage, where they work in parallel with the teams of the Open Innovation Challenge.

Timeline: 2018



*Timeline is subject to change.

India Innovation Growth Programme 2.0

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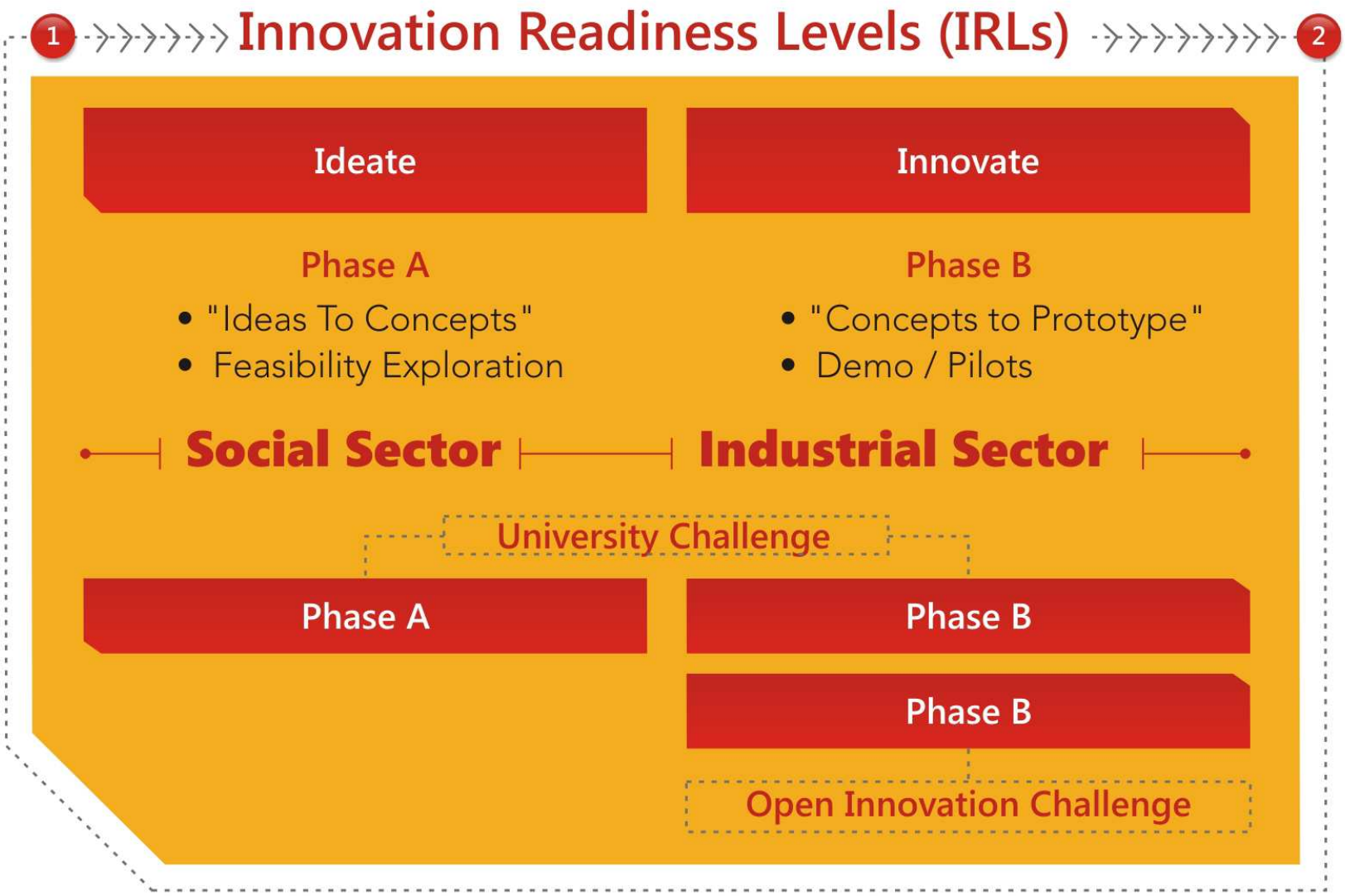
Through two annual parallel tracks viz. University Challenge and Open Innovation Challenge, IIGP 2.0 identifies and supports both industrial and social innovations through:

- Phase A: Ideation
- Phase B: Innovation


1
Innovation Readiness Levels (IRLs)
2
Ideate
Innovate
Phase A
"Ideas To Concepts"
Feasibility Exploration
Phase B
"Concepts to Prototype"
Demo / Pilots
Social Sector
Industrial Sector
University Challenge
Phase A
Phase B
Phase B
Open Innovation Challenge