

CIVILISATIONAL METAMORPHOSIS

AIM

Participants are invited to come up with new innovative Prototype or Ideas that will help in efficiently solving one or more Problems mentioned below.

Note: The following challenges (mentioned under bulleted points) are just guidelines to help you. You are free to think like an unconventional thinker and come up with great innovations. Do not limit yourselves to these challenges.

PROBLEM STATEMENT

- Handicraft Sector

Indian handicrafts and traditional crafts showcase the rich heritage and true culture of our nation. Due to unorganized production, outdated production methods, financial incapability of artisans to upgrade technology in production, lack of market linkages and lack of interest by new generation, handicraft sector is facing many challenges and losing its value.

Participants are invited to come up with innovative technological ideas that can help artisans in overcoming these challenges

- Drug and Substance Abuse

Over the last few decades, the consumption of drugs has become one of the biggest problems in the country. A study showed that 83% of drug addicts in Punjab are well-educated and 83% have jobs. A survey conducted in Delhi revealed that children in the age group of 9-10 have already started consuming tobacco or alcohol.

Participants are invited to come up with innovative technological ideas that help drug addicts in giving up drug or substance abuse, gradually, and prevent such cases.

- Cyber Security

Cyber security is a top concern for today's business owners and technology executives. The cyber security landscape in India is intended to witness several cloud computing security challenges. 76% Indian businesses were hit by cyber attacks in the last year. 14% IT managers who were victim to one or two of these attacks can't pinpoint how the attackers gained entry and 17% don't know how long the threat was in the environment before it was detected.

As the cyber attacks will become worse and worse in upcoming time, participants are invited to come up with solutions that can provide security against cyber crimes.

- Agriculture

Agriculture plays a critical role in food security, political stability and world peace, yet it leaves a big environmental footprint. Agriculture accounts for greenhouse gas emissions and nitric oxide emissions. It is also responsible for waste of water when used carelessly, top layer soil loss and drives 80% of the tropical deforestation.

Participants are invited to come up with innovative technological solutions for irrigation management, to decide which are the best yielding crops for the soil, to provide the better market for agricultural products, to get more production using small strips of land and to solve the problem of water wastage.

- Women Safety

According to the WHO, one in three women globally has been sexually or physically abused. Around 70% women in India are victims of domestic violence. Women's safety is a key issue and tech seems to be a potential solution. A study found that 80% of women of India had experienced sexual harassment ranging from unwanted comments, being groped or assaulted.

The participants are invited to come up with innovative ideas that can help in preventing crimes against women and spreading awareness about women's rights, help them in reporting such crimes.

- Transportation & Traffic Management

Transportation and distribution of all resources and products are an integral part of any economy and any improvement in this sector directly manifests as an improvement in life. According to a WHO report, more than 1.35 lakh lives are lost a year due to road accidents. Innovative ideas of road traffic patterns and transportation need to be encouraged in order to lessen the accidents. Participants are invited to come up with innovative technological solutions for better management of transport systems.

ABSTRACT FORMAT**i. Title****ii. Abstract**

1. Objectives
2. Beneficiaries (For whom)
3. Value of results (Usage)

iii. Background**iv. Statement of Problem**

1. Succinct definition of problem addressed (follows from material in the background section)

v. Research

1. Present methods of tackling the problem (if any)
2. Proposed Solution
3. Alternate solutions/approaches
4. Novelty of Approach: How is/will your solution be better than the existing products that address the same problem?

vi. Technical Report

1. Description of concepts, theories and/or approach involved in the proposed solution
2. Technical aspect of the proposed solution
3. Detailed technical specifications and pictorial representations (block diagrams/ flow chart)
4. Description of the flow of operations demonstrating key features and functionality
5. Performance estimate of the solution
6. Experimentation/Verification done to establish the workability of the above
7. A link to the video of the working model/ prototype

vii. Results

1. Actual findings, significant output of tests and analysis (Must be readable)
2. Include problems encountered, credibility of results, accuracy estimates
3. Pros and cons of your solution
4. Utility of results

viii. A link of the Google Drive Folder which contains Pictures and Video of the working model/ prototype.

ix. Application

1. Your idea as a solution to the problem
2. Additional applications
3. Benefits to the users

- x. Future prospects, research in it and further development (in brief)
- xi. Any other details: (Patent/Business plan etc.)

ELIGIBILITY

1. Individuals or teams from the following categories are allowed:
 - a. Students/research scholars of authorized institutions (students have to show their Valid College ID)
 - b. Early stage startups or up to 3 years old college pass-outs.
2. A team is allowed to have a maximum 4 members.
3. If the participating team feels that their idea requires more participants in their team, they can forward their request, with suitable reasons, to civilisationalmetamorphosis@techfest.org with the subject "**Ideate: Team number increase request**".

REGISTRATION AND SUBMISSION

The Participants have to register on the official Techfest Website and fill all the necessary details.
www.techfest.org -> Ideate -> Civilisational Metamorphosis -> Explore More -> Register -> Fill all your details -> Your team will be formed and now you can add other team members

ABSTRACT SUBMISSION

Teams are required to submit one report to civilisationalmetamorphosis@techfest.org. This report should contain the idea they are looking forward to work on.

PROJECT REPORT SUBMISSION

The project report should be mailed to civilisationalmetamorphosis@techfest.org with the subject 'Ideate: "Civilisational Metamorphosis" Project Report: <Team Id>' (for eg. Ideate: "Civilisational Metamorphosis" Project Report: **CM1234**).
Teams must follow the following details for the submission:

- 1.The abstract must be submitted in PDF format only
- 2.Font: Arial
- 3.Size: 11

- 4. Spacing between two lines: 6 pts
- 5. Spacing between two paragraphs: 10 pts
- 6. Bottom margin: 1 inch

EVALUATION

Civilisational Metamorphosis abstracts will be judged by a panel of experts. Following are the broad guidelines for judging:

- 1. Creativity and Novelty:** How novel is the idea? How different is it from the current solutions available? The innovation must be ingenious and novel in its area of application and should have a high potential for leaving an impact on the society.
 - 2. Originality:** The innovation should not, by any means, include copied or stolen work. Such applications will be disqualified immediately.
 - 3. Performance**
 - 4. Cost/Market Value and Acceptance**
 - 5. Durability and Usability:** Durability of the prototype/method proposed.
 - 6. Implementation ability:** Is the solution implementable as described? Is it repeatable? Is the solution feasible for diverse and changing conditions?
 - 7. Scalability:** Is the solution scalable to a higher level, how easy is it to scale up and what are the factors affecting it?
 - 8. Potential of Impact:** How does it benefit the society? The scale of problem that it solves, intensity of the solution and number of people catered from the solution directly and indirectly.
 - 9. Design:** Has the design been taken into consideration? How optimized is the product?
 - 10. Ergonomics** (if the team decides to make a well-designed product)
- In case of any discrepancies, the decision of the Organizers or Judges will be final and binding on all.

SHORTLISTING

Top 15 teams will be selected and would get the chance to present their model/idea in the Final Round at Techfest, IIT Bombay which is from 3rd -5th January 2020. Participants will get a slot for presenting their model/idea to the Judges based on which they will be evaluated.

Top teams would get an opportunity to display their projects in Ideate exhibition during Techfest, IIT Bombay. These teams will be selected by a panel of judges.

GENERAL RULES

1. All projects being displayed will have a fair chance of receiving further development opportunities offered by funding organizations and Venture capitalists.
2. Every team has to register online on our website for the competition. A Team ID will be allocated to the team on registration which shall be used for future references.
3. A team can register at any point of time before 2nd November 2019 and submit the final abstract and video (as mentioned in the structure).
4. The decision of the organizers or judges shall be treated as final and binding on all. Techfest has all the rights to verify the identity and accuracy of the details provided by the participants.
5. No responsibility will be held by Techfest, IIT Bombay for any late, lost or misdirected entries.
6. The idea presented by the teams should be original (not protected by means of patent/copyright/technical publication by anyone else).
7. Note that at any point of time the latest information will be that which is on the website. However, registered participants will be informed through mail about any changes on the website.
8. All modes of official communication will be through the Techfest e-mail.

INTERNATIONAL PARTICIPANTS

All international participants will have to register and will have to submit the complete report along with video prototype before 3rd November 2019. The shortlisted international teams' details will be put up on the website by 8th November 2019.

International Participants would get a chance to present their prototype through video conferencing.

CERTIFICATE POLICY

Only those teams that are shortlisted for the finals and also also give a final presentation about their work during Techfest 2019-20 would be awarded an e-Certificate of Participation. The top 3 entries from this event would be provided with Certificate of Excellence.

PRIZES

The prize money will be awarded to top 5 winners via NEFT and will be processed within 30 working days after receiving the prize money from sponsors.

Winners have to mail the following information (immediately after the announcement of results) to vibhav@techfest.org

FORMAT OF MAIL :

Subject: Civilisational Metamorphosis, <Team ID> - <Your Position> (example- Civilisational Metamorphosis, CM1003 - 3rd Position)

Body of mail:

1. Account Holder's Name
2. Account Number
3. Bank name and Branch name.
4. IFSC Code

TIMELINE

First Project Report Submission	25th September 2019	Submission of First Draft Report
Mentorship Stage	1 st October to 30 th October 2019	Mentors will be allocated for the guidance of the participants
Last Date of Registration	2nd November 2019	Participants need to register before this date
Final Project Report Submission	3rd November 2019	Submission of final project report along with video prototype (if any) has to be submitted before this date
Declaration of Result	8th November 2019	Declaration of shortlisted teams for final presentation at Techfest, IIT Bombay on the basis of final report and supporting materials
Improvisation Stage	9th November to 9th December 2019	Shortlisted participants are to improve upon their model and prepare a presentation for the final round
Final presentation & video submission	10th December 2019	Participants have to submit the final video of the prototype and presentation to be displayed during the festival before this date
Presentation Stage	3rd-5th January 2020	Final presentation along with a demonstration of the working prototype
Exhibition	3rd-5th January 2020	Techfest would give an opportunity to teams selected by judges to exhibit their projects