

SHE

Problem Statement Inviting solutions for Safety, Healthcare, and Empowerment of Women

"Women's empowerment is intertwined with respect for human rights." -Mahnaz Afkhami

The empowerment and autonomy of women and the improvement of their political, social, economic and health status is a highly important end in itself. In addition, it is essential for the achievement of sustainable development. The full participation and partnership of both women and men are required in productive and reproductive life, including shared responsibilities for the care and nurturing of children and maintenance of the household. Empowerment is the process that creates power in individuals over their own lives, society, and in their communities.

SHE is an initiative to aid technology to contribute to this global movement. It is an effort, a process, to uplift the conditions and status of women around the globe. Gender equality is among the top five Sustainable Development Goals of the United Nations to achieve a better and sustainable future for all. It is not only a fundamental right but a necessary foundation for a peaceful and prosperous world.

SHE invites entries from participants addressing <u>any one (or more) of the three</u> problem statements given below.

1. SAFETY

Violence against women and girls is among the most universal and pervasive human rights violations, affecting at least a billion women across the globe.

Sexual Assault THE ANNUAL TECHNO-MANAGEMENT FEST, IIT (BHU) VARANASI

India's numbers representing the heinous crimes against women are shocking. In 2016, India recorded 106 rapes a day and four out of every ten victims were minors. Additionally, abductions, acid attacks, physical abuse, molestation, stalking, eve-teasing – these are the known crimes occurring in India every single day. Women for no fault of their own, even little girls are attacked with such brutality – that now there is a fear brewing in our minds.



Harassment at the Workplace

38% of Indian working women have faced sexual harassment in the workplace. But it was also revealed that 70% of the women do not report sexual workplace harassment in India. To encourage the economic participation of women, we must first ensure safe and secured working spaces.

Female Genital Mutilation

At least 200 million women and girls alive today have undergone female genital mutilation, says a report by the UN. Female genital mutilation causes severe pain and significant long-term psychological and physical problems. Although being banned in many countries, it is still a common practice in some African and Asian nations and communities.

Human Trafficking

Women and girls are abducted every day and then forced into the trafficking trade. Females account for 71 percent of all human trafficking victims detected globally.

Problem statement: Participants are expected to come up with technical solutions to address the issue of safety for women. The innovations can have hardware components or software or can be a combination of both. The solutions may help in preventing the crimes against women, or provide a medium for personal defense, or aiding them in reporting these crimes, etc.

Example-https://yourstory.com/2015/12/leaf-innovation-safety-women-technology/

2. HEALTHCARE

Gender remains an important social determinant of health since women's health is influenced not just by their biology but also by conditions such as poverty, employment, and family responsibilities. Women have long been disadvantaged in many respects such as social and economic power which restricts their access to the necessities of life including health care, and the greater the level of disadvantage, such as in developing countries, more adverse is the impact on health.

Cancer

Breast, cervical, ovarian and uterine cancer, that account for more than 70% of the cancers in women in India. According to the Union health ministry, breast cancer ranks as the number one cancer among Indian females with a rate as high as 25.8 per 100,000 women and mortality of only 12.7 per 100,000 women.



Maternal Health

In 2010, about 800 women died every day around the globe, due to complications of pregnancy and childbirth, including severe bleeding after childbirth, infections, hypertensive disorders, and unsafe abortions. The risk of a woman in a developing country dying from a pregnancy-related cause during her lifetime is about 25 times higher compared to a woman living in a developed country.

Menstruation

The current state of menstrual hygiene and sanitation in India is in a pathetic state. According to a study published in 2011, only 12 percent of Indian women have access to sanitary pads during their periods. The study says that the remaining 88 percent use shocking alternatives like un-sanitized cloth, ashes, husk, and sand. The lack of hygiene awareness is primarily due to the taboos surrounding menstruation in society.

Problem Statement: Participants are invited to present innovative technical solutions (either as hardware or software or a combination of both) that would contribute to the overall well being of women. The solutions can be in the form of early-stage detection devices or smart health monitoring devices, or innovative menstrual hygiene products etc.

Example- http://marikoproduct.com/Flo

3. EMPOWERMENT

For a long time, women were excluded from any kind of participation in the economy of a nation. It is very true that the equal growth of both sexes will increase the economic

and social development in every area of the country. Empowering women so that they have the independence is essential to build a developed nation with a sustainable future.

Education

Education is one of the most important means of empowering women with the knowledge, skills, and self-confidence necessary to participate fully in the development process. With 65.46% female literacy rate as per 2011 census, women's education in India is still a point in question.



Employment

Were India to rebalance its workforce, the world's biggest democracy would be 27% richer. There are strong cultural prohibitions in some parts of India against women undertaking paid work outside the home. A rise in female employment rates to the male level would provide India with an extra 235m workers, more than the EU has of either gender and more than enough to fill all the factories in the rest of Asia.

Problem Statement: Participants have to come up with technical solutions that would contribute towards women's education and/or empowerment and/or overall development. Solutions can have hardware or software components or both. They can be in the form of low-cost innovative devices that may aid in training for jobs, or as a medium of primary education, etc.

Example-https://www.globalfundforwomen.org/our-approach/initiatives/technologyinitiative/_

NOTE: The sub-topics and examples of solutions listed above are only for guidance and indicatory purposes, rather than restrictions. Participants are free to come up with out-of-the-box ideas and innovations.

RULES AND GUIDELINES

I. Eligibility

- 1. Only students of authorized institutions are allowed as participants.
- 2. Participation can either be individual or as a team.
- 3. A team is allowed to have a maximum of 4 members with atleast one female member.
- 4. Multiple teams from the same institution are allowed.
- 5. Teams comprising of members from different institutions are allowed.

II. Registration

All participants have to register on the official website: www.technex.in ->PAHAL->SHE->Register.

III. Communication

All official communication will be through Technex e-mail. Participants will be notified and updated as required.



IV. Event Structure

SHE will be a two-stage event.

1. Abstract Submission:

The registered teams need to submit an abstract describing the idea they wish to present. The format of the abstract is at the end of this document. Teams must strictly adhere to this format. The abstract should be mailed to events@technex.in (subject- <Team name>_SHE). Teams will be judged on the basis of their abstract and top teams will proceed to the 2nd round.

2. Presentation:

- i. Shortlisted teams from the first round will be allocated a mentor right after the results of the first round. The participants are encouraged to improve upon their ideas in the mentorship phase and prepare a presentation for the finals. The mentors will guide each team through the preparations.
- ii. The presentation round will be conducted during Technex'20. Shortlisted teams of the first round will be invited to present their ideas. The time for presentation will be 8 mins + 5 mins (presentation + QnA). They will be judged by an esteemed panel of judges. The decision of the The jury shall be final and binding.

V. Judging Criteria

Teams will be judged on the basis of the following criteria:

- 1. Creativity and Novelty: How novel is the idea? How different is it from the current solutions available?
- 2. Originality: The innovation should not, by any means, include copied or stolen work. Such applications will be disqualified immediately.
- 3. Implementation ability: Is the solution implementable as described? Is it repeatable? Is the solution feasible for diverse and changing conditions?
- 4. Scalability: Is the solution scalable to a higher level, how easy is it to scale up and what are the factors affecting it?
- 5. Potential of Impact: How does it benefit society? The scale of the problem that it solves, the intensity of the solution and the number of people catered from the solution directly and indirectly.



VI. Abstract Format

The following details must be taken care of while preparing the abstract:

- 1. The abstract must be submitted in a pdf format.
- 2. Font- Arial, Font Size- 11
- 3. The abstract should contain the following sections in the given order:
- i. Title
- ii. Team Name, Team ID
- iii. The problem addressed (mention the problem statement addressed from this document)
- iv. Objective
- v. Beneficiaries (for whom)
- vi. Description (brief)
- vii. Technical details (of the solution)
- viii. Pictures, video of the working prototype (if any not compulsory)



TECHNEX 20