



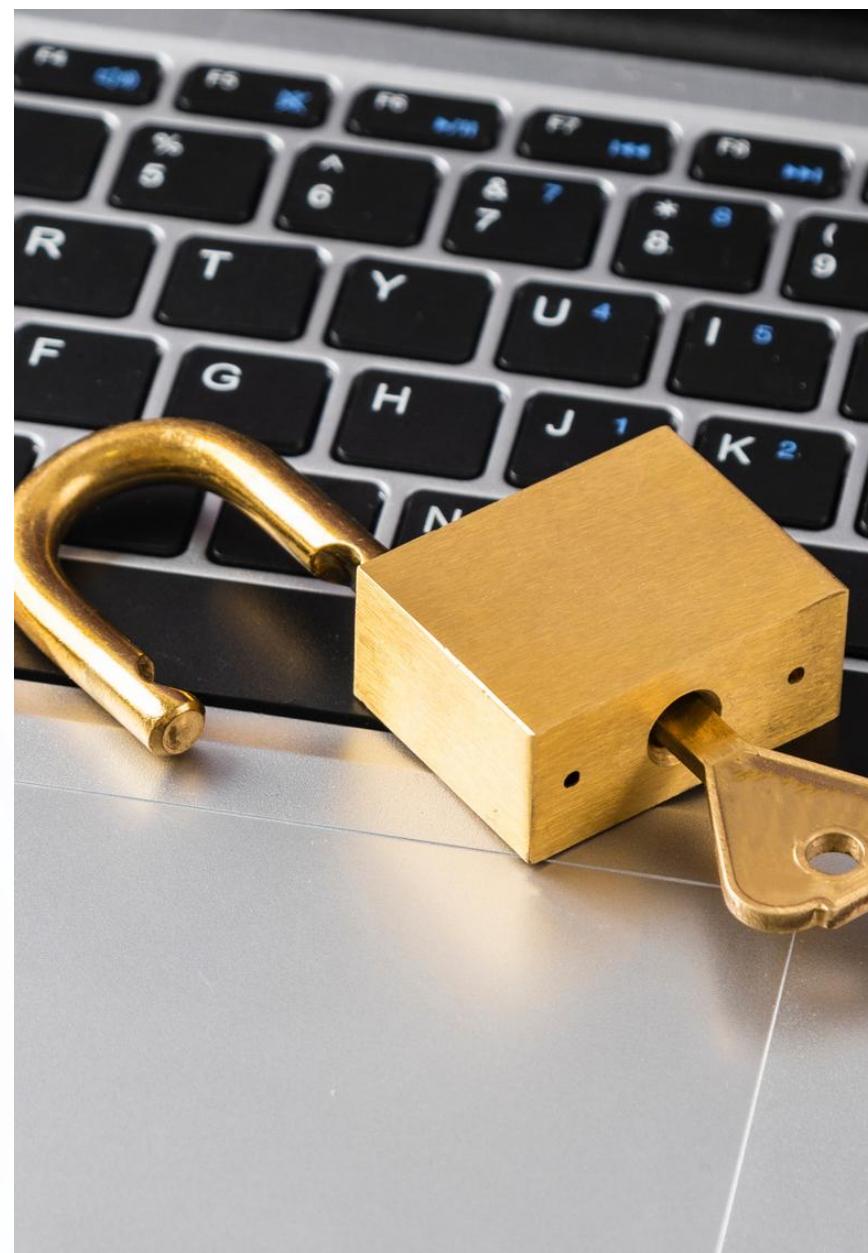
## **STRIDE: Transforming Lives Through Inclusive Innovation**

Empowering Communities, Advancing Social Impact, and Fostering Sustainability



# What is STRIDE?

Social Technology & Research for  
Inclusive Design Excellence



01

**Community wisdom converges with technological excellence**

02

**Local challenges transform into innovative solutions**

03

**Research & design drive social transformation**

04

**Academic expertise meets community needs**

STRIDE is Kerala's pioneering initiative to create India's first integrated ecosystem for democratic social innovation

# THE CHALLENGES

## HUMAN IMPACT

**19.5%**

Labor Force Participation Ratio  
(LFPR) in the PwD segment\*

## ASSISTIVE TECHNOLOGY CRISIS

**75%** dependency on imported devices #

**₹5,000–55,000** Average cost for low-tech assistive devices including switches

**18%** PwDs have access to appropriate devices only

**What if Kerala could become India's first  
assistive technology hub, converting market  
outflow into local manufacturing while creating  
employment for PwDs?**



## Micro Light Switch

Product Number: 58500

**\$95.00**

Quantity

1

Add to Cart

Free standard shipping on all orders &amp; most orders ship within 1-business day.



Roll over image to zoom in

## PowerLink 4 (North America)

Product Number: 10010701

**\$330.00**

Quantity

1

Add to Cart

Free standard shipping on all orders &amp; most orders ship within 1-business day.



Make sure you get the correct product by providing your purchaser the product number and product name. Click to print or export a PDF to provide your purchaser with this information

# STRIDE

## A Vision for Inclusive Innovation and Sustainable Impact

### Vision

- Pioneering Kerala as India's ***first Inclusive Innovation Hub*** by 2026.
- Revolutionizing the assistive technology landscape to serve the needs of over ***798,000 persons*** with disabilities in the state.

### Key Goals by 2026

- ***Reduce*** assistive technology import dependency by ***30%***.
- ***Lower device costs by 30%*** through localized innovation and production.
- Create sustainable employment opportunities for ***150+ skilled neurodivergent associates***.

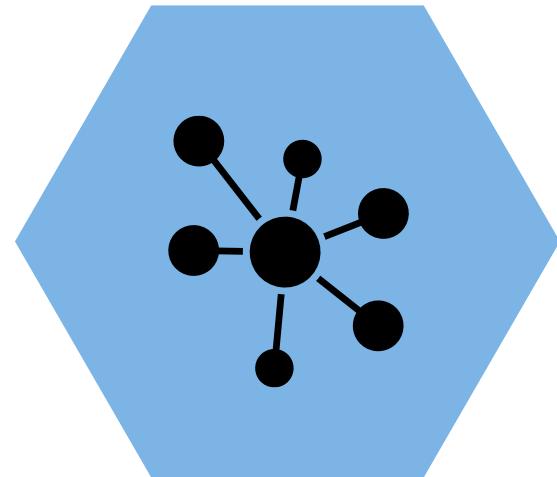
### Why It Matters

- STRIDE ***addresses critical gaps*** in accessibility and inclusion while fostering economic growth and global scalability of social innovations.

### The Call to Action

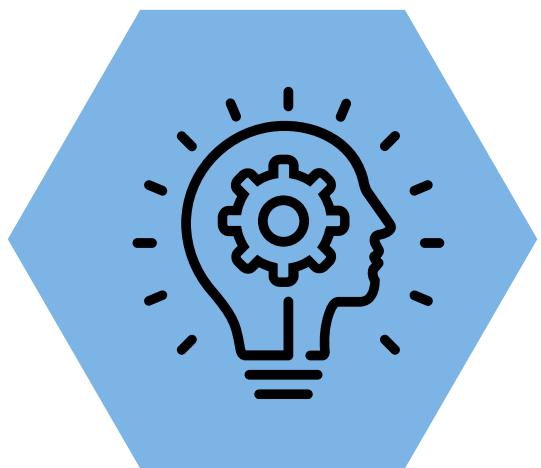
- A partnership opportunity to lead transformational change, aligned with inclusion focus.

# STRIDE ECOSYSTEM



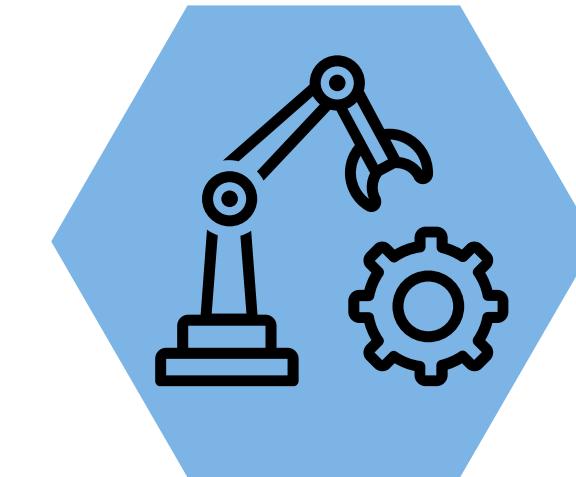
## STRIDE Hub

- Strategic knowledge management
- Technology platform development
- Quality frameworks
- Cross-stakeholder collaboration



## STRIDE Innovation Centres

- Community-engaged design
- Participatory solution development
- Academic integration
- Knowledge creation



## STRIDE Studios

- Community-based manufacturing
- Employment generation
- Quality-controlled production
- Last-mile distribution

# Assistive Low Tech Needs

Category	Disorders and Conditions	Category	Disorders and Conditions
Neurodevelopmental Disorders	Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), Down Syndrome, Intellectual Disability, Learning Disabilities (Dyslexia, Dyscalculia, Dysgraphia), Developmental Coordination Disorder, Rett Syndrome, Fragile X Syndrome	Physical/Mobility Impairments	Arthritis (Rheumatoid, Osteoarthritis), Fibromyalgia, Chronic Fatigue Syndrome, Multiple Chemical Sensitivity, Amputation, Dwarfism, Osteogenesis Imperfecta, Ehlers-Danlos Syndrome, Chronic Pain Conditions
Neurological Conditions	Multiple Sclerosis (MS), Parkinson's Disease, Cerebral Palsy, Epilepsy, Amyotrophic Lateral Sclerosis (ALS), Huntington's Disease, Muscular Dystrophy, Spinal Cord Injuries, Traumatic Brain Injury (TBI), Stroke, Essential Tremor, Spina Bifida	Speech and Language Disorders	Aphasia, Stuttering, Apraxia of Speech, Dysarthria, Voice Disorders, Language Processing Disorders
Mental Health Conditions	Major Depressive Disorder, Anxiety Disorders, Bipolar Disorder, Schizophrenia, Post-Traumatic Stress Disorder (PTSD), obsessive-compulsive disorder (OCD), Eating Disorders, Personality Disorders	Chronic Health Conditions	Diabetes, Cystic Fibrosis, Heart Disease, Respiratory Disorders, Chronic Kidney Disease, HIV/AIDS, Cancer, Lupus, Crohn's Disease, Ulcerative Colitis
Visual Impairments	Total Blindness, Low Vision, Color Blindness, Retinitis Pigmentosa, Macular Degeneration, Glaucoma, Cataracts, Diabetic Retinopathy	Balance/Vestibular Disorders	Vertigo, Balance Disorders, Vestibular Neuritis, Labyrinthitis
Hearing Impairments	Complete Deafness, Partial Hearing Loss, Auditory Processing Disorder, Tinnitus, Ménière's Disease	Cognitive Disabilities	Memory Disorders, Alzheimer's Disease, Dementia, Traumatic Brain Injury-related cognitive issues, Executive Function Disorders
		Immune System Disorders	Multiple Sclerosis, Rheumatoid Arthritis, Systemic Lupus Erythematosus, Celiac Disease, Primary Immunodeficiency Disorders

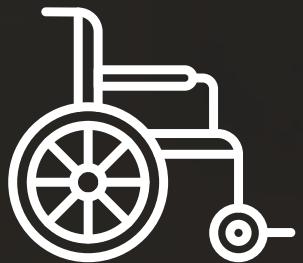
# TECHNOLOGY NEEDS MAPPING

## CURRENT SOLUTIONS OVERVIEW

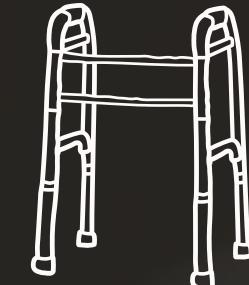
### WHAT'S AVAILABLE TODAY?

#### MOBILITY SOLUTIONS

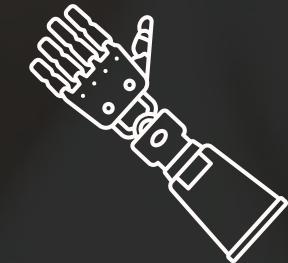
WHEELCHAIR



WALKERS



BASIC PROSTHETICS

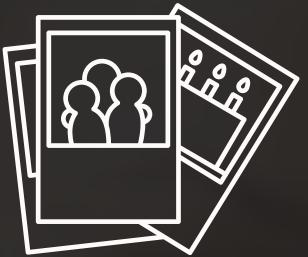


TRANSFER AIDS



#### COMMUNICATION AIDS

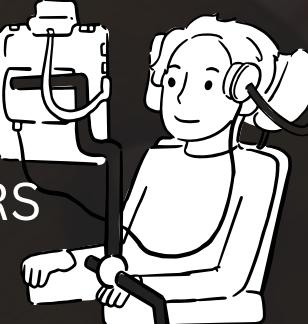
PICTURE BOARDS



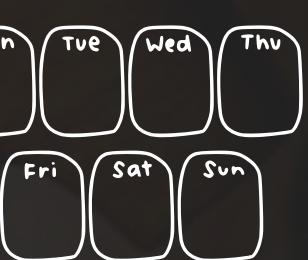
TEXT-TO-SPEECH



SWITCH COMMUNICATORS



PICTURE SCHEDULE



#### LEARNING SUPPORT

WRITING GRIPS



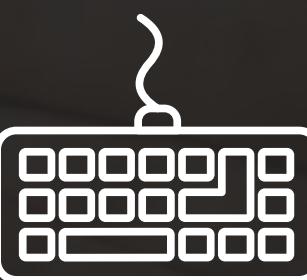
READING STANDS



MAGNIFIERS



ADAPTIVE KEYBOARDS



#### DAILY LIVING AIDS

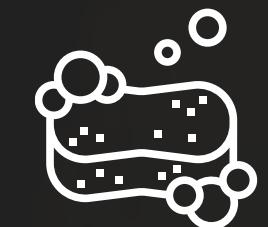
MODIFIED UTENSILS



DRESSING AIDS



BATHROOM EQUIPMENT



REACHING AIDS



# TECHNOLOGY NEEDS MAPPING

## LOW-TECH SOLUTIONS

### LOW-TECH SOLUTIONS: THE POWER OF SIMPLICITY



#### ADVANTAGES

- COST-EFFECTIVE
- EASILY MAINTAINED
- LOCALLY PRODUCIBLE
- SIMPLE TO USE AND REPAIR
- COMMUNITY-FRIENDLY



#### EXAMPLES

- 3D PRINTED WRITING AIDS
- CUSTOM-MOLDED GRIPS
- BASIC COMMUNICATION BOARDS
- SIMPLE MOBILITY AIDS





# STRIDE ASSISTIVE DESIGNATHON 2025

## WHAT IS THE STRIDE DESIGNATHON?

### PURPOSE

To create innovative, low-tech assistive devices that enhance the lives of Persons with Disabilities (PwDs).

### IMPACT

Fostering inclusive solutions that address real-world challenges.



# STRIDE ASSISTIVE DESIGNATHON 2025

## GOALS OF THE DESIGNATHON

### FROM IDEATION TO IMPLEMENTATION

- Empower participants to identify real-world challenges.
- Encourage design thinking to develop practical solutions.
- Build prototypes that can be distributed to BUDS institutions and private schools.

### FOCUS AREAS:



EATING



COMMUNICATION



TOILETRY



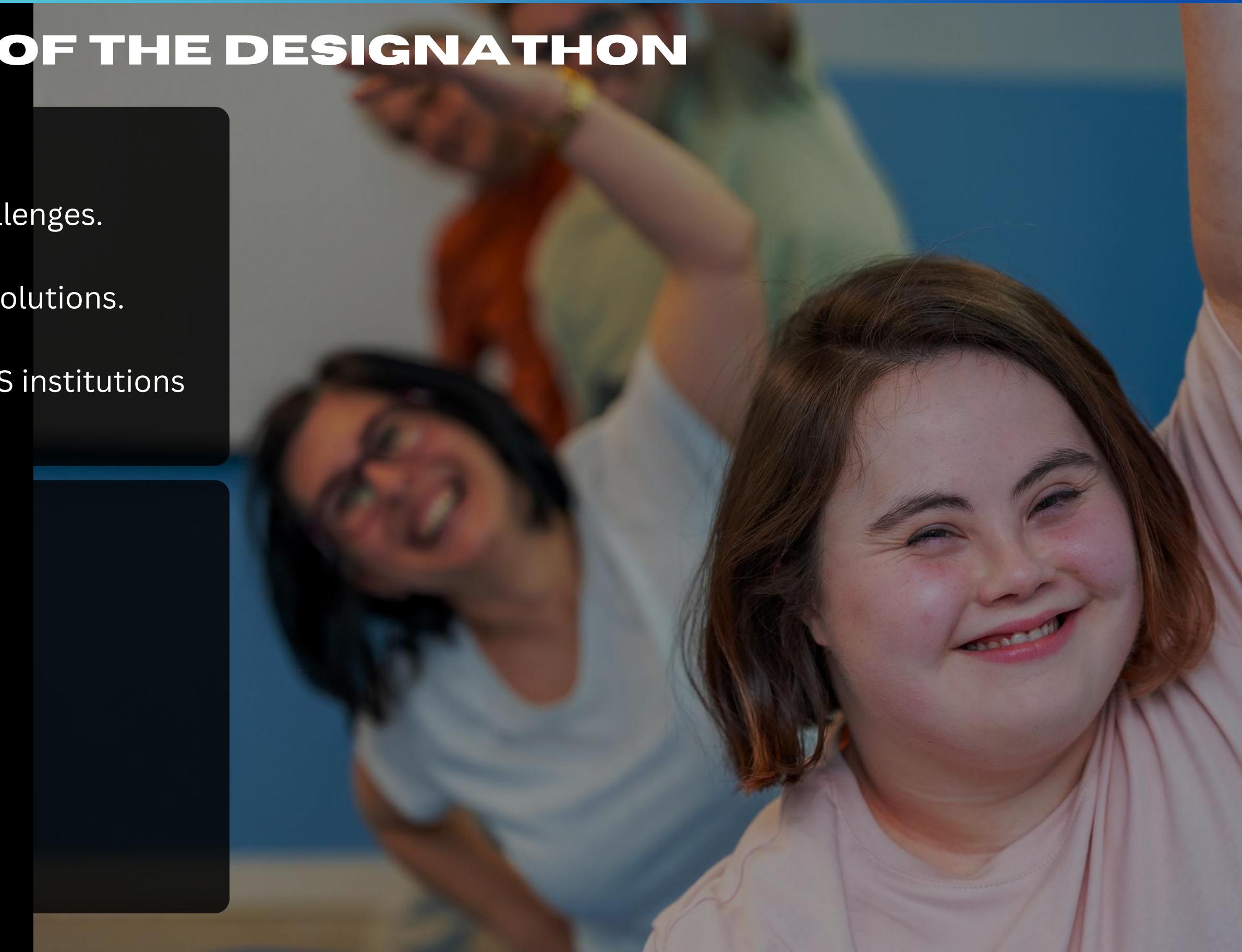
LEARNING



MOBILITY



SENSORY SUPPORT



# PHASE 1

# CONCEPT

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# DEVELOPMENT

**Duration:** March–April 2025

**Focus:** Problem identification and low-fidelity solution design

**Submission:** Digital concept portfolio with supporting documentation

**Selection:** Top 100 teams advance to Phase 2

# PHASE 1

## EXPECTATIONS & DELIVERABLES

*What we're looking for in Phase 1*

### **Problem Definition:**

- Clear identification of a specific challenge faced by persons with disabilities or an existing challenge of PwD
- Evidence of engagement with potential users to understand needs
- Problem statement with impact assessment

### **Concept Design:**

- Low-fidelity prototype (paper/chart-based)
- Design iterations showing evolution of thinking
- Consideration of usability, affordability, and accessibility

### **Documentation:**

- Photos of prototype and design process
- Explanatory text connecting the design to the problem
- Preliminary impact assessment



# PHASE 1

## EVALUATION CRITERIA

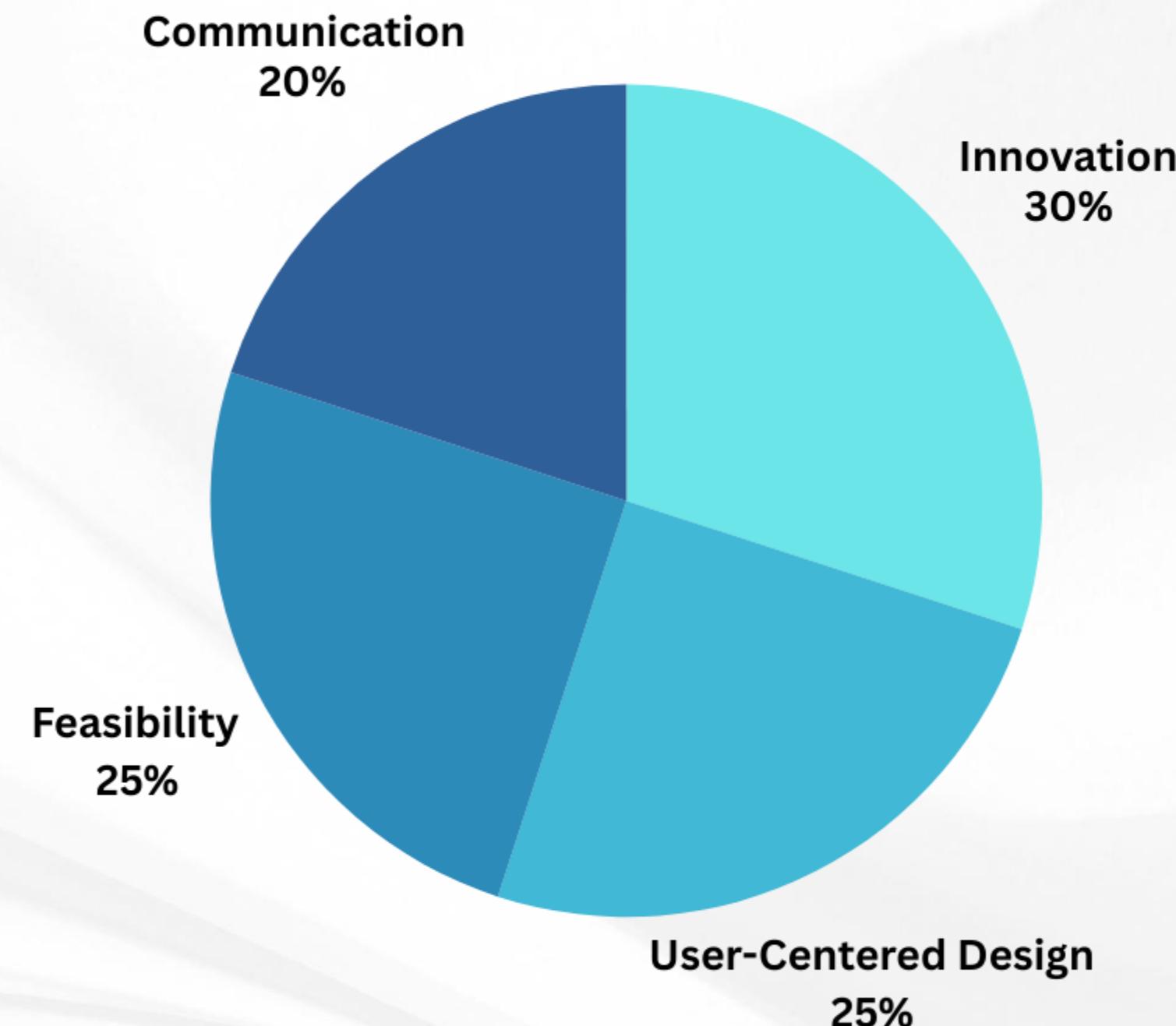
How your Phase 1 Submission will be judged

**Innovation** : 30%

**Problem-Centered Design** : 25%

**Feasibility** : 25%

**Communication** : 20%



PHASE 2

# HIGH-FIDELITY --- PROTOTYPING

**Duration:** May–June 2025

**Participants:** 100 selected teams from Phase 1

**Focus:** Creating functional prototypes with advanced technologies

**Culmination:** Final Makethon showcase event in Ernakulam

# PHASE 2

## MANDATORY REQUIREMENTS



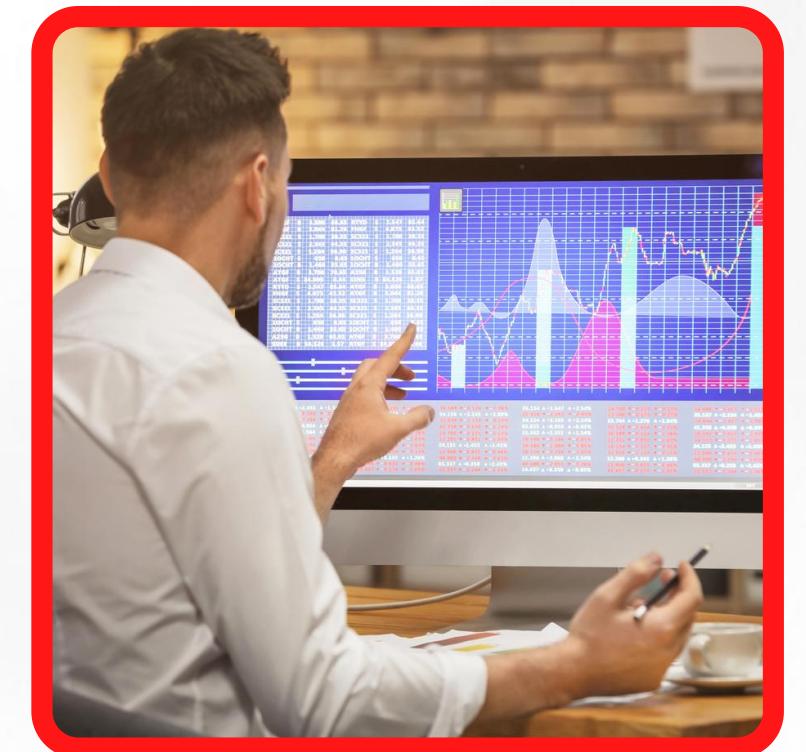
### Inclusive Team Composition

- Must include at least one person with disability as active team member
- Collaborative design approach required throughout process



### User Testing Documentation

- Multiple iterations of user testing with target beneficiaries
- Documentation of feedback and resulting design modifications

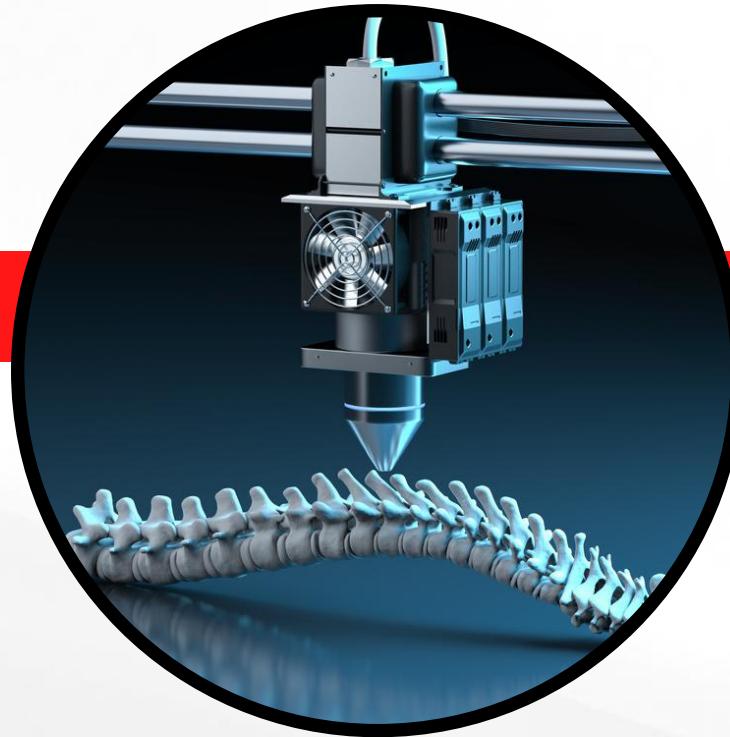


### Technical Specifications

- Material selection justification
- Production cost analysis
- Assembly/use instructions

# PHASE 2 RESOURCES & SUPPORT

RESOURCES AVAILABLE FOR PHASE 2 TEAMS



## Technical Resources

- Access to 3D printers (if needed)
- Materials for prototype development
- Technical mentorship from industry experts (IEEE and Industry)

## Community Connections

- Facilitated engagement with potential users through BUDS institutions
- Feedback sessions with healthcare professionals

## Documentation Support

- Photography/videography assistance during designathon
- Template for technical documentation

# FINAL EVALUATION & RECOGNITION

## Makethon Showcase



- Live demonstration of working prototype
- 10-minute presentation + 5-minute Q&A
- Evaluation by expert panel and community members

## Evaluation Criteria

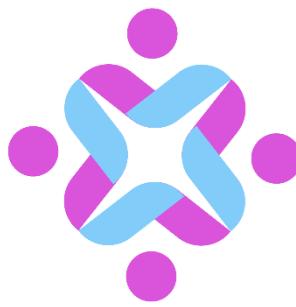


- Functionality and effectiveness (25%)
- User experience and accessibility (25%)
- Innovation and originality (20%)
- Scalability and production viability (20%)
- Presentation quality (10%)

## Recognition for Top 12 Teams



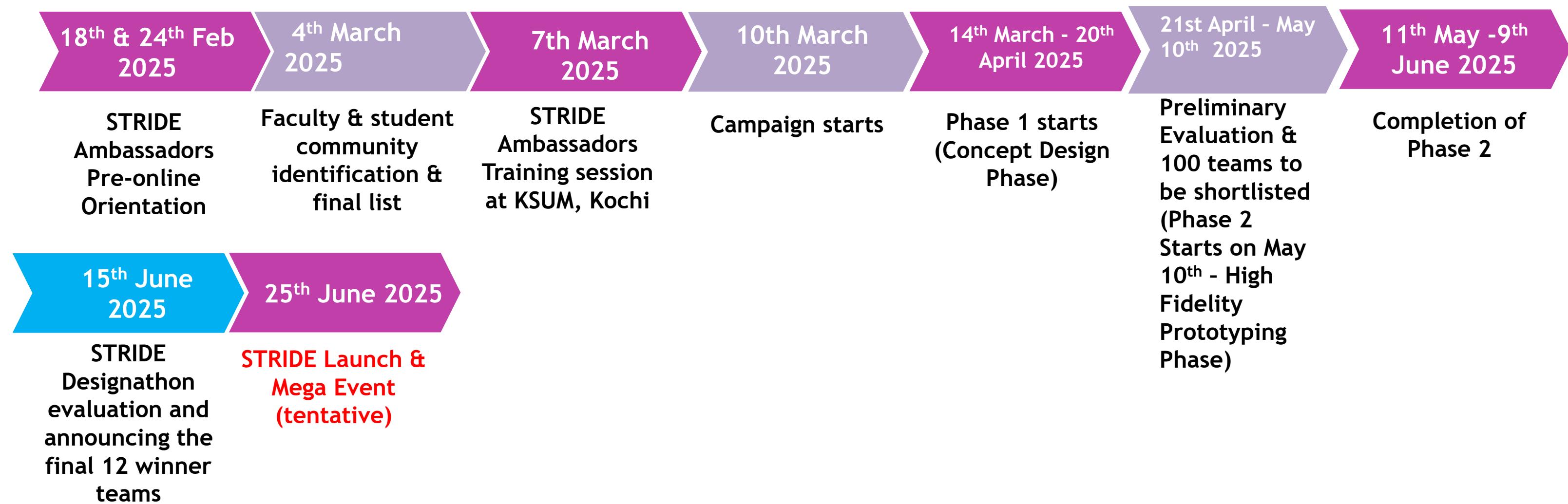
- Cash prizes
- Job Interviews with MNCs
- Potential for implementation support
- Inclusion in STRIDE repository of solutions



# STRIDE Assistive Designathon 2025

## *Innovate for Inclusion*

### Timeline







# IEEE AND K-DISC

## IEEE & STRIDE: PARTNERSHIP FOR SOCIAL INNOVATION

### IEEE'S KEY ROLE IN THE STRIDE DESIGNATHON



CREATING AN ASSISTIVE TECH COMMUNITY



LEADING THE DESIGNATHON EXECUTION



DRIVING ENGAGEMENT & PARTICIPATION

OPPORTUNITIES FOR **NATIONAL AWARDS, FELLOWSHIPS, AND LEADERSHIP ROLES** IN **INCLUSIVE TECHNOLOGY AND SOCIAL IMPACT ECOSYSTEMS.**

IEEE WILL TAKE A LEADERSHIP ROLE IN **EXECUTING THE STRIDE DESIGNATHON**, ENSURING **SUCCESSFUL PARTICIPATION AND IMPACT.**

IEEE WILL WORK TO ACHIEVE **1,000+ REGISTRATIONS**, INCLUDING MENTORSHIP AND OUTREACH TO **MAXIMIZE QUALITY PARTICIPATION.**

# IEEE AND K-DISC

## IEEE'S SUPPORT AREAS IN DESIGNATHON



### AWARENESS & OUTREACH

Organizing awareness campaigns at IEEE SBs and institutions to drive registrations.



### FIELD VISITS & PROBLEM IDENTIFICATION

Facilitating visits to BUDS schools, NGOs, and rehabilitation centers for student teams to understand real-world challenges.



### EVALUATION & SHORTLISTING

Supporting the evaluation process, ensuring fair selection of top 100 entries from submissions.



### MAKETHON & MEGA EVENT EXECUTION

IEEE's role in coordinating the final Makethon and Mega Event showcasing solutions.



### PR & SOCIAL MEDIA

Amplifying the event's reach through IEEE's network and communications.

# IEEE AND K-DISC

## IEEE'S LONG-TERM ENGAGEMENT IN STRIDE



### STRIDE AMBASSADORS

IEEE members will be part of the STRIDE Ambassadors Program, **contributing expertise** in assistive tech and **social impact**.



### ASSISTIVE TECH COMMUNITY

IEEE will lead initiatives to **foster an active assistive technology community** for Persons with Disabilities (PwD) throughout Year 1.



### AWARDS & RECOGNITION

Collaborating to define award categories for IEEE faculty, student teams, and institutions to **recognize impactful contributions**.



### SESSIONS & INITIATIVES

Conducting **expert talks, training sessions, and workshops** on assistive technology & inclusive innovation.

# IEEE AND K-DISC



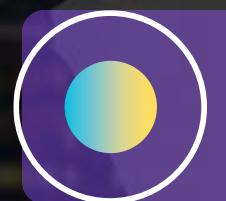
## CALL TO ACTION – IEEE'S NEXT STEPS



**FINALIZE** THE IEEE CORE COMMITTEE FOR STRIDE DESIGNATHON.



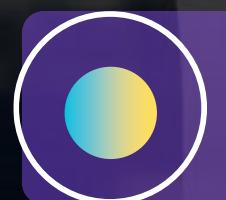
**KICKSTART** AWARENESS CAMPAIGNS ACROSS IEEE SBS & INSTITUTIONS.



**SET UP** THE ASSISTIVE TECH COMMUNITY AND DEFINE FOCUS AREAS.



**BEGIN PLANNING** FOR THE DESIGNATHON, MAKETHON, AND MEGA EVENT EXECUTION.



**DEFINE** IEEE AWARD CATEGORIES FOR CONTRIBUTIONS TO STRIDE.



# STRIDE AMBASSADORS

## ROLES, RESPONSIBILITIES, AND RECOGNITION

### STRIDE AMBASSADORS: LEADERS OF IMPACT

MENTORS & CHANGEMAKERS FOR  
STRIDE ECOSYSTEM



# STRIDE AMBASSADORS

ROLES, RESPONSIBILITIES, AND RECOGNITION

**THEME: EMPOWERING CHANGE THROUGH LEADERSHIP**

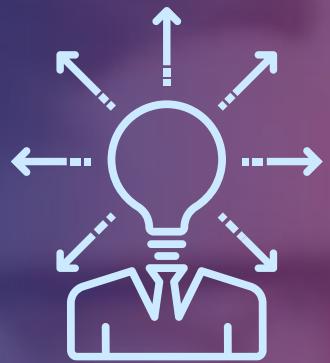
STRIDE AMBASSADORS AS THE DRIVING FORCE BEHIND  
STUDENT SUCCESS, **COMMUNITY IMPACT**, AND **INCLUSIVE  
INNOVATION**.



# STRIDE AMBASSADORS

## ROLES, RESPONSIBILITIES, AND RECOGNITION

### CORE ROLES OF STRIDE AMBASSADORS



#### AWARENESS CREATORS

Spreading the message of inclusivity, assistive technology, and social innovation within academic and community spaces.



#### MENTORS

Guiding student teams through ideation, research, design thinking, and implementation processes.



#### EVALUATORS

Assessing project submissions with a focus on innovation, feasibility, social impact, and inclusivity.



#### COMMUNITY LIAISONS

Building strong connections between academic institutions, BUDS schools, and local communities to ensure real-world impact.



#### INNOVATORS

Driving change through the development of new ideas, prototypes, and transformative assistive solutions.

# STRIDE AMBASSADORS

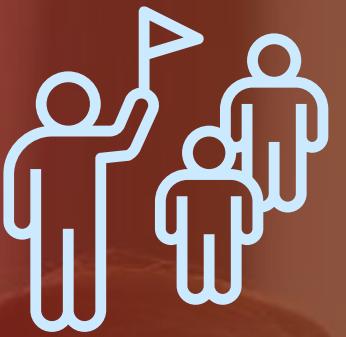
## ROLES, RESPONSIBILITIES, AND RECOGNITION

### EXPECTATIONS FROM STRIDE AMBASSADORS



#### ENGAGING WITH BUDS INSTITUTIONS

Identifying and understanding the unique challenges faced by children with disabilities to inform inclusive design solutions.



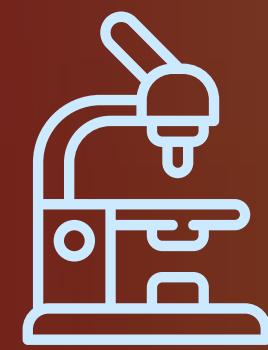
#### GUIDING STUDENT TEAMS

Offering continuous mentorship on assistive technology, design thinking, problem-solving strategies, and ethical innovation.



#### FOSTERING COLLABORATIONS

Encouraging interdisciplinary partnerships with NGOs, healthcare professionals, policymakers, and industry leaders to enhance project outcomes.



#### PROMOTING RESEARCH

Leading and supporting research initiatives, publications, and presentations related to assistive technology and social innovation.



**"Together, we can transform Kerala into India's first truly inclusive innovation hub, creating lasting impact for generations to come."**