MHRD'S INNOVATION CELL (GOVERNMENT OF INDIA)

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Report on "AI & Innovation Sprints: Rapid Prototyping for Digital Transformation"

Title of the Session: "Accelerating Digital Transformation through Artificial Intelligence, Rapid Prototyping, and Collaborative Innovation"

Organized By: Institution's Innovation Council (IIC), Swami Vivekananda University, Kolkata

Mode of Delivery: Off-line
No. of Participants: 65
Duration: 4 Hours
Date: 16th January, 2026
Venue/Location: MSB Hall 1A, Swami Vivekananda University, Kolkata

Objectives:

The primary objective of the program was to familiarize participants with rapid prototyping methodologies using Artificial Intelligence and digital technologies for solving real-world problems. The workshop aimed to develop participants' skills in ideation, design thinking, AI-assisted solution development, agile project execution, and prototype validation. It also sought to encourage multidisciplinary collaboration, promote innovation-driven entrepreneurship, and help participants transform creative ideas into functional digital solutions. Another important objective was to motivate innovation teams to document and register their AI-based innovations in the YUKTI Innovation Repository while strengthening the culture of research, innovation, and technology commercialization within the institution.

Theme:

"Accelerating Digital Transformation through Artificial Intelligence, Rapid Prototyping, and Collaborative Innovation."

The program focused on empowering young innovators to leverage AI technologies for developing impactful digital solutions capable of addressing emerging societal and industrial challenges.

Outcome:

The event successfully enhanced participants' understanding of Artificial Intelligence, rapid prototyping methodologies, and digital innovation processes. Students gained practical experience in transforming ideas into working digital prototypes while improving collaboration, technical problem-solving, and entrepreneurial skills.

The major outcomes of the program include:

- **More than 5 AI-based digital prototypes were successfully developed** during the innovation sprint activities.
- **Three innovation sprint events** were successfully conducted, promoting collaborative and agile product development.

Institution's Innovation Council (IIC),
Swami Vivekananda University, Kolkata

Institution's Innovation Council
Swami Vivekananda University

- Student teams demonstrated practical AI solutions addressing real-world challenges in diverse application domains.
- The developed prototypes were evaluated for further refinement, incubation support, and commercialization opportunities.
- **The developed AI and digital prototypes were deposited and updated in the YUKTI Innovation Repository**, strengthening the university's innovation portfolio.
- Participants significantly improved their understanding of AI technologies, rapid product development, digital transformation, and innovation management.

KPI	Achievement
AI/Digital Prototypes Developed	More than 5 functional AI and digital prototypes developed
Innovation Sprint Events Organized	3 sprint events successfully conducted
Prototype Documentation	Developed prototypes deposited and updated in the YUKTI Innovation Repository
Innovation Engagement	High level of student participation, collaboration, and hands-on learning achieved

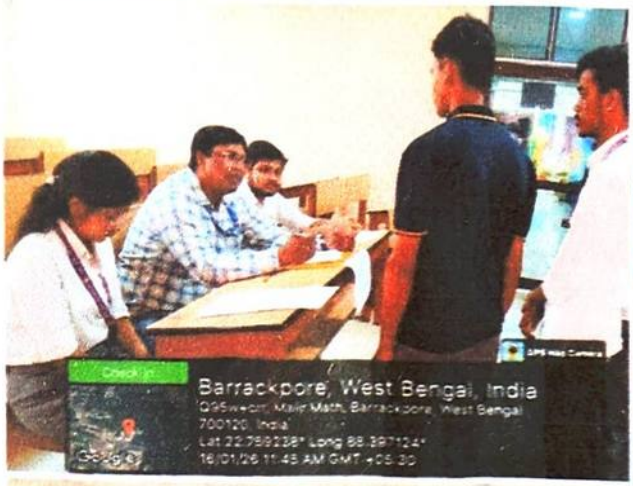
Session Highlights:

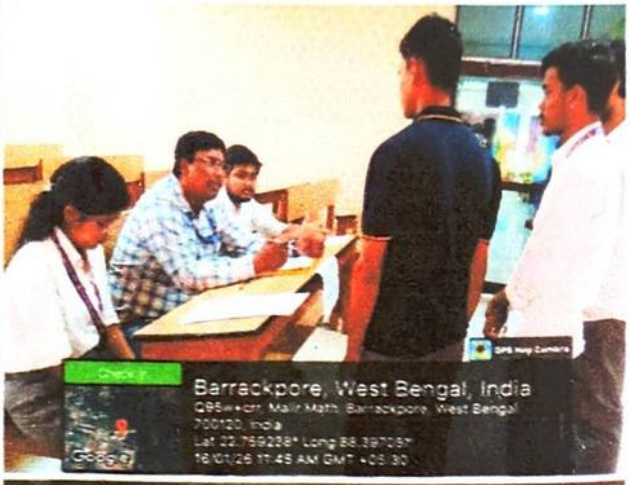
The program commenced with an introduction to Artificial Intelligence, digital transformation, and innovation sprint methodologies. Participants were introduced to the concept of rapid prototyping and learned how agile innovation frameworks can significantly reduce product development time while improving solution quality.

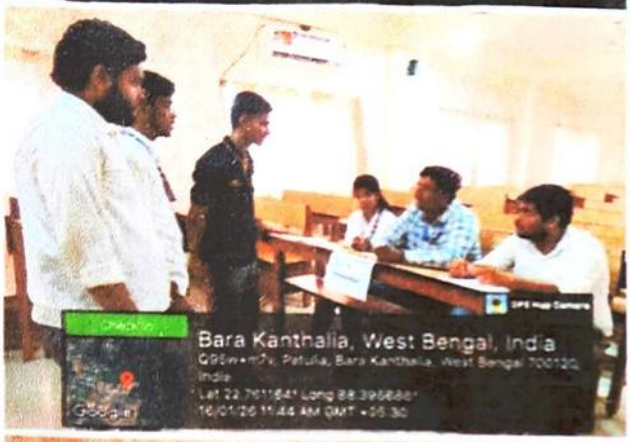
Hands-on sessions guided participants through the stages of problem identification, idea generation, AI tool selection, prototype development, testing, validation, and presentation. Teams utilized AI-powered platforms and digital development tools to create functional prototypes addressing practical problems in multiple domains. Faculty mentors provided continuous technical guidance and constructive feedback throughout the sprint activities, helping teams improve usability, scalability, and innovation potential.

Interactive brainstorming sessions, design reviews, prototype demonstrations, and team presentations created an engaging innovation ecosystem where participants refined their concepts based on user-centric design principles and technological feasibility. The event concluded with prototype evaluations and discussions on future development, startup opportunities, and technology commercialization.

Glimpse of the event:













General Participants Feedback:

Participants highly appreciated the practical, fast-paced, and collaborative learning environment created during the innovation sprint. They found the opportunity to build working AI prototypes within a structured timeframe both challenging and rewarding. The hands-on exposure to AI tools, continuous mentoring, brainstorming sessions, and prototype demonstrations significantly enhanced their confidence in developing technology-driven solutions. Many participants expressed interest in further developing their prototypes into startup ventures and appreciated the

Institution's Innovation Council (IIC),
Swami Vivekananda University, Kolkata

Institution's Innovation Council
Swami Vivekananda University

guidance on innovation management and commercialization. Overall, the workshop received **more than 80% positive feedback**, reflecting its effectiveness in promoting experiential learning and innovation.

Recommendations:

Based on participant feedback and program outcomes, it is recommended that AI Innovation Sprints be organized regularly with advanced themes such as Generative AI, Machine Learning, IoT, Robotics, Smart Manufacturing, Healthcare Technologies, and Sustainable Development Solutions. Future editions should include industry mentors, startup founders, AI researchers, and incubation experts to provide real-world guidance and commercialization support. Prototype mentoring sessions, hackathons, startup pitch competitions, and technology showcase events should be conducted to help participants refine their innovations and progress toward higher Technology Readiness Levels (TRLs). Continuous support should also be provided to enable promising AI solutions to advance through incubation, intellectual property protection, startup formation, and technology transfer while increasing the number of innovations registered in the YUKTI Innovation Repository.

Signature of the Convenor with University Seal

Institution's Innovation Council
Swami Vivekananda University

Convener:
Dr. Ranjan Kumar,
Convener, IIC Cell
Associate Professor & Head, Dept. of Mechanical Engineering,
Swami Vivekananda University, Kolkata-700121.

MHRD'S
INNOVATION CELL
(GOVERNMENT OF INDIA)

INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

AI & Innovation Sprints: Rapid Prototyping for Digital Transformation

Date: 16th January, 2026

Sl. No.	Name	Department	Reg. No. / Faculty ID	Signature
1	Arif Khan	ME	002-101-2025-19	Arif Khan
2	Subhen Tanti	ME	002-101-2025-002	Subhen Tanti
3	Md. Salid Sahaji	ME	002-101-2025-004	Md. Salid Sahaji
4	Pabitra Bhunia	ME	002-101-2025-009	Pabitra Bhunia
5	Santu DAS	M.E.		Santu DAS
6	MD. IRSHAD ANSARI	B.TECH-ME	002-101-2025-011	
7	Avishek Ranat	ME	Faculty	
8	SK Jahangir Alom	ME	4	
9	SANAYAN HALDER	ME	000-101-2025-037	Sanayan Halder
10	Koushik Halder	D.ME	000-101-2025-040	Koushik Halder
11	Bikash Maity	DME	000-101-2025-011	Bikash Maity
12	SAYANTAN KAMILA	DME	000-101-2025-041	Sayantan Kamila
13	Tofan Ghosh	"	000-101-2025-057	Tofan Ghosh
14	Atanu Maji	DME		Atanu Maji
15	Sachin Kumar	DME	000-101-2025-033	Sachin
16	Debarghya Chakraborty	DME	000-101-2025-001	Debarghya Chakraborty
17	Santanu Roy	D.ME		Santanu Roy
18	Satyajit Pal	D.ME		Satyajit Pal
19	Krishnakanta Jana	D.ME		Krishnakanta Jana
20	Akash Das	D.ME		
21	Debaprasad Das	D.ME	000-01-2025-014	Debaprasad Das
22	Tushar Bangal	D.ME	000-01-2025-058	Tushar Bangal
23	Bambam Kumar	D.M.E	000-101-2025009	Bambam Kumar
24	Susanta Biswas	D.M.E	000-101-2025-055	Susanta Biswas
25	Arijit Gayen	D.M.E	000-101-2025-006	Arijit Gayen
26	Satyajit Pramanik	D.ME	000-101-2025-124	Satyajit Pramanik
27	Ayan maity	D.M.E	000-101-2024-032	Ayan Maity
28	Chandan Bag	D.M.E	000-101-2024-053	C. Bag
29	SANJOY BHUNIA	D.M.E	000-101-2025091	Sanjoy Bhunia
30	AVIJIT MANNA	D.M.E	000-101-2024-102	Avijit Manna
31	SANAJIT JANA	D.M.E	000-101-2025-120	Sanajit Jana
32	Amit Dangar	DME	000-101-2024-062	Amit Dangar
33	SUBHAJIT PRAMANIK	D.M.E	000-101-2025-101	Pramanik
34	SOUMEN MONDAL	D.M.E	000-101-2024-063	Soumen Mondal
35	Pradip Kr. Karan	D.M.E	000-101-2024-112	P. Karan
36	Sabnam D Choudhuri	D.M.E	000-101-2024-009	S. Choudhuri
37	Jayanta Maity	D.M.E	000-101-2024-010	J. Maity

Institution's Innovation Council (IIC),
Swami Vivekananda University, Kolkata

Institution's Innovation Council
Swami Vivekananda University

MHRD'S
INNOVATION CELL
(GOVERNMENT OF INDIA)

INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD Initiative)

Sl. No.	Name	Department	Reg. No. / Faculty ID	Signature
38	Asit Baran Adak	Dr. M.E	000-101-2024-12	Asit Baran Adak
39	Dipak Sarkar	M.E	Faculty	D Sarkar
40	Pradip Kr Das	ME	Faculty	Das
41				
42	Dr. Tapas Chakraborty			
43	Joylip Roy	ME	Faculty	
44	Sourav Deb	ME	"	Sourav
45	Md Abdul Latif	ME	M	
46	SANDIP PRADHAN	ME		Sandip Pradhan
47	Susanta Roy	ME		Susanta Roy
48	Sahadeb Maity	ME		Sahadeb Maity
49	Shahmukh Shaikh	ME		Shahmukh Shaikh
50	Md Abdus Salam	ME	002-001-2025-015	
51	Avnish Gupta	ME	002-101-2025-010	Gupta
52	Rohan Ray	ME		Rohan Ray
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				

Institution's Innovation Council (IIC),
Swami Vivekananda University, Kolkata

Institution's Innovation Council
Swami Vivekananda University