MEMORANDUM OF UNDERSTANDING

BETWEEN

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

AND

SAMARTH (represented by Institute of Informatics Communication, University of Delhi)

For Implementation of SAMARTH Digital Public Initiative of Ministry of Education, Government of India,

This MEMORANDUM OF AGREEMENT is made on this 20th April of 2024 at Dr. APJ Abdul Kalam Technical University, Lucknow.

Harcourt Butler Technical University, Kanpur (HEIs), represented by its _____ having its registered office at Harcourt Butler Technical University, Kanpur the terms and expression of which shall mean and include, unless repugnant to the context, its successors, assignees, administrators, of the FIRST PART;

AND

SAMARTH project of Ministry of Education coordinated by Institute of Informatics & Communication, University of Delhi, New Delhi, represented by its **Principal Investigator**, **Prof. Sanjeev Singh** (hereinafter referred to as 'SAMARTH'), having its registered office, Institute of Informatics and Communication, University of Delhi South Campus, Delhi-110021, India and which term and expression shall mean and include, unless repugnant to the context, its successors, assignees, administrators, of the SECOND PART;

WHEREAS, recognizing the critical role of higher education in the advancement of our society, economy, and global competitiveness;

WHEREAS, understanding the need for efficient, transparent, and data-driven governance within Dr. APJ Abdul Kalam Technical University, Lucknow (HEIs);

WHEREAS, acknowledging the transformative potential of technology to streamline administrative processes and improve service delivery to students, faculty, and staff;

WHEREAS, inspired by the vision to foster innovation, collaboration, and standardization in the higher education sector;

WHEREAS, Samarth is an initiative of Ministry of Education, Govt. of India under which a Higher Education ERP system is provided to HEIs and State Higher Education departments (HEDs). Samarth ERP integrates diverse campus functions into a cohesive automation system, empowering universities and HEIs with a digital framework for planning, management, delivery, and monitoring of operations and services, to support NEP goals.

WHEREAS, University of Delhi (DU) is the development and implementation partner of Ministry of Education for Samarth Initiative.

WHEREAS, appreciating the valuable expertise and experience of Samarth Initiative of Ministry of Education, Govt. of India.

NOW, THEREFORE, in pursuit of the shared objective to revolutionize higher education governance and management, and to collaboratively enhance the growth and efficiency through e-governance, the following Memorandum of Understanding (MoU) is established between Dr. APJ Abdul Kalam Technical University, Lucknow and **SAMARTH**.

1. **Objectives and Scope of the MoU**

The MOU seeks to create an environment that encourages innovation in higher education through extension of Samarth initiative of Govt. of India to the states of the country. The

objective is to establish a long-term partnership between the state and Samarth (DU), fostering sustainable growth by encouraging technology innovation.

The primary objectives of this MOU are as follows:

A. **Adoption and Implementation of Samarth ERP :** The Department agrees to adopt Samarth's ERP system for governance and management of HEIs to streamline administrative processes, enhance data-driven decision-making, and improve service delivery to stakeholders. SAMARTH agrees to provide Samarth ERP system for state's department of higher education for onboarding of State HEIs.

B. **The objectives of Samarth Implementation shall be :**
   i. **Enhancing Administrative Efficiency:** Leverage the automation and data management capabilities of Samarth ERP to improve overall efficiency of administrative processes within State HEIs.

   ii. **Streamlining Service Delivery:** Enhance service delivery to students, faculty, and staff through Samarth's user-friendly interface and self-service options for various academic and administrative functions.

   iii. **Promoting Standardization:** Address the automation needs of Higher Education as a whole in accordance with standard policies of State and Govt. of India through a cohesive plan avoiding disjoint efforts.

   iv. **Driving Data-Driven Decision-Making:** Promote informed decision-making, by utilizing Samarth's advanced analytics tools to obtain real-time Key Performance Indicators (KPIs) and insights to support policy and governance.

   v. **Facilitating Monitoring and Compliance:** Utilize Samarth's centralized data management to monitor institutional performance and ensure compliance with regulatory requirements.

   vi. **Unifying Higher Education Services:** Integrate Samarth with existing and upcoming higher education initiatives led by the state, promoting interoperability and a unified ecosystem for effective knowledge sharing and service delivery.

   vii. **Achieving NEP Goals :** The National Education Policy (NEP) 2020 aims to bring about transformative changes in the Indian Education system, addressing various aspects of learning, research, and governance. Samarth will be instrumental in achieving goals of Holistic and Multidisciplinary Education, Technology Integration, inclusivity and equitable access to education services, Flexible Academic Curricula, Facilitating Credit Transfer and Academic Bank of Credits (ABC), Transparency and Accountability and Quality Assessment and Accreditation.

2. SAMARTH ERP ARCHITECTURE AND SERVICES

Samarth's core architecture is enabled by Open source and open standard technologies. The Cloud based, scalable Software as a Service (SaaS) deployment allows Samarth to be performant and flexible to accommodate Higher Education Institutions (HEIs) of different types and size. SAMARTH ERP is provisioned on MeitY empanelled Cloud Service Providers (CSPs) in accordance with Cloud Guidelines laid down by MeitY for security, disaster recovery and service Levels.

Various modules provided in SAMARTH are classified in four broadgroups, each catering to a specific domain of an HEI's business and operations namely, (1) Academics and Student Lifecycle, (2) Employee Lifecycle, (3) Finance and Accounts, and (4) Other essential services

and governance modules. Modules and their functionalities within each group are compiled in **ANNEXURE-1: SAMARTH MODULES.**

3. **ROLES AND RESPONSIBILITIES OF UNIVERSITY:**

   a. **Implementation Roadmap:** Develop a clear and feasible plan for adopting SAMARTH, including timelines and milestones. Follow the detailed roadmap for implementation, including a phased rollout plan.

   b. **Infrastructure Readiness:** Ensure that the necessary infrastructure is in place to support the adoption of SAMARTH (e.g., adequate internet bandwidth and devices with browser to access SAMARTH).

   c. **Data Migration and Management:** Oversee the migration of data from legacy systems to SAMARTH and ensure ongoing data management and integrity.

   d. **Local Training Initiatives:** Conduct local training initiatives tailored to the specific needs of the institution's staff and users.

   e. **Feedback Loop:** Develop a systematic approach for collecting and analysing feedback from users to inform improvements to Department for assessment and further communication to SAMARTH.

   f. **Process Re-engineering and Change Control:** Implement process re-engineering strategies to control customizations and assist users in the transition to SAMARTH.

   g. **Data Backup and Maintenance:** On Cloud Storage and/or Local Backups: Utilize cloud storage services approved by MeitYto maintain backups of your data from SAMARTH. Perform regular local backups on local infrastructure to have ready access to the data in case of disruptions. Establish disaster recovery plans for your backups that include scenarios for data corruption, loss, or cyber-attacks.Ensure that backups are synchronized with the SAMARTH's live database at regular intervals while maintaining data integrity and security.Regularly audit the data backup processes to ensure compliance with national standards and policies.

   h. **Promote Accountability and institutional capacity building:**

      i. Setup Steering Group/Committee or Project Monitoring Unit (PMU) comprising of university leadership, to provide strategic direction and monitor transformation by measuring Key Performance Indicators (KPIs)

      ii. Constitute an Implementation Task Force comprising of functional heads and operators responsible for the day-to-day functioning across the university. Assign the following responsibilities with university personnel:

         • Project Coordinator/Manager: To oversee the entire implementation, coordinate among teams, manage the organizational transition to SAMARTH and report to the Steering Committee.

         • Module Implementation Teams: Separate teams for each module group, such as academics and student services, employee services, finance control, and governance.

4. **ROLES AND RESPONSIBILITIES OF DR APJ ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW :**

   a. Assign Nodal Officer for Implementation Coordination. Roles and Responsibilities of of Nodal officer explained in **ANNEXURE 2: ROLES AND RESPONSIBILITIES OF NODAL OFFICER FOR THE STATE DEPARTMENT**

   b. The Department shall provide necessary support and resources to facilitate the seamless adoption and implementation of Samarth across HEIs within the State.

   c. The Department will ensure compliance with regulatory requirements and data security standards while using Samarth.

d. The Department shall actively participate in collaborative discussions with Samarth to identify areas for improvement and future enhancements.
e. Develop and enforce standardized implementation guidelines and protocols across all state HEIs to avoid varied customizations.
f. Facilitate change management processes to ensure smooth adoption of the Samarth E-Gov Suite, mitigating resistance and promoting acceptance of standardized procedures.
g. Review and approve change requests to the system, ensuring alignment with overarching state-level objectives.

5. ROLES AND RESPONSIBILITIES OF SAMARTH:

a. Provision SAMARTH ERP instance for HEI on cloud
b. Maintain cloud infrastructure to ensure reliable access and security.
c. Provide technical expertise and support for the successful implementation of the ERP system in State Department of Higher Education and State HEIs.
d. Collaborate with the DEPARTMENT to create standard technology interfaces for interacting with higher education services, as per the State's requirements.
e. Provideuser guides for all modules and features.
f. Regularly update and maintain the system, ensuring smooth functioning and data integrity.
g. Training and Handholding
   i. Option for online training workshops is available. Samarth team can assist the university to plan phased implementation and trainings.
   ii. Samarth provides periodic support and personalized remote assistance to the institution for operating key modules such as Leave Management, Payroll, Programme and course management.
   iii. Remote assistance is provided to configure and operate important cyclic processes such as admissions and recruitments.
   iv. The nodal officer can submit the support and service requests via email/phone to support desk
   v. The user and admin guides for Samarth E-Gov suite are available on web on url https://docs.samarth.ac.in
h. Change Management
   i. Samarth is deployed with a minimum customization approach. Multiple configuration sets are provided with key modules such as Payroll, Recruitment, Leave, Programme, Evaluation and Grading.
   ii. Institutions can configure the system based on their policies. Samarth provides regular support for configuring each module of the system.
   iii. Customizations are supported when the workflow configuration options are not sufficient to cater to institution's policies and procedures. Time required for customization are estimated in consultation with the state and institutions.
   iv. HEIs can effectively leverage SAMARTH ERP to streamline operations while minimizing the need for extensive customizations, thereby optimizing the overall implementation process and ensuring sustainable digital transformation in higher education.
   v. SAMARTH conducts change cycles biannually (twice-a-year), aligning with academic calendars to minimize disruptions during peak academic periods.

6. TERM

This MoU shall remain in effect till **March 31st, 2026** commencing from the effective date of signing.

7. CONFIDENTIALITY

Both parties agree to maintain strict confidentiality, during the duration of this MoU and thereafter, regarding any sensitive information exchanged during the course of this collaboration.
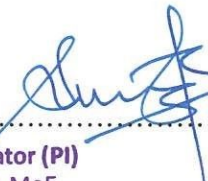
8. DISPUTE RESOLUTION

In case of any disputes or disagreements arising between the HEIs and DU, both parties agree to resolve them through amicable negotiations and discussions.

9. AMENDMENTS

Any amendments or modifications to this MoU shall be made in writing and shall require the mutual consent of both parties.

IN WITNESS whereof the Parties hereto have executed these presents the day, month and year firsthereinabove written

SIGNED AND DELIVERED BY (on behalf of **Harcourt Butler Technical University, Kanpur**)	In the presence of
Signature .... 20·04·2024 Name & Designation .. Prof.(Dr.) S. K. Sharma Registrar HBTU., Kanpur Address	Signature .... MDS 20/4/24 Name & Designation .. M. D. Singh System Manager Address ... HBTU., Kanpur
SIGNED AND DELIVERED BY (on behalf of **SAMARTH** Signature& Seal: .... 20/4/24 **Principal Investigator (PI)** SAMARTH Project, MoE Name & Designation: Prof. Sanjeev Singh, University of Delhi South Campus Principal Investigator, SAMARTH Benito Juarez Road, New Delhi-110021 **Address:** Institute of Informatics & Communication, University of Delhi South Campus, Delhi 110021	In the presence of Signature .... Name & Designation .. SHARAD MISHRA. Head, Project & Technology Address ... IIC, UDSC, Delhi-110021

ANNEXURE-1: SAMARTH MODULES

Module Group / Category	#	Module	Functionality
Academics and Student Lifecycle	1	Programme Management	Manage Programmes by defining Course Curriculum and evaluation Rules. This module is essential for starting with student lifecycle management.
	2	Student	The Student Module captures each student details such as enrolled programmes, attendance, courses selected, personal details, fee payment details, grade card, transcript and so forth
	3	Admissions	The Admissions Management Module enables the institution/HEI to configure the admission settings in Samarth. It provides an interactive interface for admission processing. The goal of this module is to facilitate smooth registration and application process for students.
	4	Evaluation & Grading	Apply rules for examinations, collaborate with paper setters and evaluators, manage examination schedule and centres, process scores and generate results, record student progression
	5	Hostel Management	Manage hostel admissions, list hostel services for residents, carry out billing for services
	6	Convocation	Manage convocation events by allowing graduand and families to enrol for event, manage ticketing and seat allocation and communicate with attendees
	7	Alumni Portal	Connect with alumni to build and retain a database, engage with alumni to foster professional networking opportunities
	8	Student Feedback Management System	Allows students to enter feedback on faculty and course/subject
	9	Digital Certificates	The student services such as Digital Degree, Marksheet, Provisional, Migration certification etc.
	10	Training and Placement	Connect with industries and firms looking for skilled workforce and allow them to list opportunities for your students. Allow students to apply for the opportunities.

Additional On-Demand Services: Managed LMS/VLE: Deployment and Integration of MOODLE and other open source LMS with SAMARTH on cloud

Online Open Book Examinations: Module for conducting Open Book Examinations where Question papers are securely delivered to student logins and students upload answer scripts. Module enables online allocation of answer script to evaluators and online evaluation, result preparation as well as calculation of remuneration for evaluators

Online Proctored Examinations: For conducting small scale proctored examinations with facial recognition drive attendance. The functionality is provided with MOODLE LMS and Safe Exam Browser, both popular open source software

Module Group / Category	#	Module	Functionality
Employee Lifecycle	11	Employee Management System / HR (PIS)	Employee Management System allows institutions to manage and organize information about employees.
	12	Recruitment	The recruitment management system enables the institution to conduct online recruitment for teaching and non-teaching posts.
	13	Leave Management	The Leave Management Module helps in recording and monitoring leaves as per the government set policies. This module allows to add leave types, and provide customization to leave approval workflows. it also provides leave balances and the status of application in real time, making it easier for both the staff and the administration to keep track.
	14	Payroll	The Payroll module helps to calculate, generate and approve salaries of institution employees according policies created for various pay grade and pay level types.

	15	Knowledge Management System	The Knowledge Management module helps institution to keep track of knowledge created by staff and students like research publication, papers, patents etc
	16	Career Advancement Scheme	The Career advancement scheme module allows employees to apply for career advancement scheme under (APAR) Annual Performance Appraisal System, (PBAS) Performance Based Appraisal system, Career Advancement Scheme Based Appraisal System (CAS)
	17	Training of Trainers (ToT) Management	Admin can schedule trainings/opportunities for employees to apply for anticipating. Employees can request for training sessions which can be reviewed by Institution time-to-time
Finance and Accounts	18	Inventory Management System	The module helps to manage the record of stocks items stored in various store location in the institution. It also helps the institution to issue and track those stock items to employees of the institution. It allows employees to request the items from stores.
	19	Research Project Management System	The RPMS module helps to manage research projects and grants from the funding agency. It allows to track project and funding approval, It also allows to manage the sanction orders, project accounts and expenditure on the basis of sanctioned budget heads.
	20	Budget and Accounts	Budget management module helps the institutions to get complete budget visibility. It helps to manage requested estimates by the organization unit within the institution and allocation of the budget against those estimates for particular financial year. Accounts part of the budget and accounts module helps the institution in management of the accounts of the institution and projects running in the institution. After the completion of the financial year institution can make their balance sheets on the basis of the statistics available in the module.
	21	Bill Tracking System	Allows Institution to enter bills for accounting. gives vendor an interface to track the payment status of such bills
Other essential services and governance modules	22	Core Messaging System	The module helps in sending emails to more than one employee/student in a single click directly from the portal
	23	Estate Management System	Estate management helps to keep record and track all the infrastructure present in the institution.
	24	Legal Case Management System	The module captures the entries of total legal cases, hearings of the given institution and maintains a track for the same along with its graphical representation
	25	File Management and Tracking System	The module is used to manage and track the processing of files
	26	RTI Management	The module is used to manage the RTI files within the institution
	27	Health Facilities	Use this module to list healthcare facility on Campus or affiliated colleges with a institution, such as a clinic or a hospital. Allows staff to avail these services.
	28	IT Service Desk (for University Computer Centre)	It manages tickets raised in the institution. Employees as well as students can raise tickets through this module. Admins can assign tickets to agents through this module.
	29	Sports Facilities	Use this module to list all sports facilities offered by the institution. The module maintains records which can be used in NAAC and other reports.
	30	Minutes and Resolutions Archive and Retrieval System	Make institutional learning repository with an archive of all Minutes of Meetings
	31	Fleet Management	List fleet and transport facilities

	32	Content Federation System	Institution can moderate content, allowing multiple contributors to create, edit, and submit content for publishing on institutional public portals
	33	Essential Services	This module helps employees/students/users having administrative accounts avail services offered by the institution such as a guest house, conference hall, transport, etc.
	34	Grievance Management	Allows users to submit Grievances. Allows the Institution can process and monitor redressal.
	35	Security Service Listing	List Security services at the institution. The module maintains records which can be used in NAAC and other reports.
	36	Endowment Portal	Online platform to allow alumni and public to contribute/pledge endowments to institution
	37	Residential Accommodation Allocation & Management (Optional)	The Residential Allocation Management system helps the institute to list Housing facilities for staff member and have scheme centric online house allocation system.
	38	Affiliation Management (Optional)	This module helps the institution to manage its affiliated colleges, requests and extension.
Base Modules	39	User Management	These are base modules which need to configured before starting any other module of Samarth. Define the organisational structure and organigrams to create and manage users of system. Samarth allows for Role Based Access Control meaning the users need to be assigned specific Roles and Permissions to interact with different functionalities of the system.
	40	Organizational Units	
	41	Organigram	

ANNEXURE 2: ROLES AND RESPONSIBILITIES OF NODAL OFFICER FOR THE STATE DEPARTMENT

The Department/State shall assign a Nodal Officer to coordinate SAMARTH implementation in State. The State Nodal Officer will serve as the central coordinating authority for the implementation of the Samarth E-Gov Suite across all state Higher Education Institutions (HEIs). The key roles and responsibilities of the Nodal Officer are as follows:

1. **Overall Coordination and monitoring**
   A. Manage and oversee the implementation of the Samarth E-Gov Suite across all state HEIs.
   B. Coordinate with individual HEIs to ensure uniformity and adherence to standardized implementation processes and timelines.
   C. Monitor the progress of implementation in each HEI and track milestones achieved.

2. **Infrastructure and Resource Management**
   A. Ensure that all necessary infrastructure, including hardware and software requirements, are available and operational in all state HEIs.
   B. Facilitate the allocation of university/college staff to support the successful implementation of the Samarth E-Gov Suite.

3. **Change Management and Control**
   A. Develop and enforce standardized implementation guidelines and protocols across all state HEIs to avoid varied customizations.
   B. Facilitate change management processes to ensure smooth adoption of the Samarth E-Gov Suite, mitigating resistance and promoting acceptance of standardized procedures.
   C. Review and approve change requests to the system, ensuring alignment with overarching state-level objectives.

4. **Stakeholder Engagement and Communication**
   A. Act as the primary liaison between the Samarth team and state HEIs, facilitating regular communication and updates.
   B. Engage with relevant authorities and stakeholders within the state to obtain timely approvals and support for the implementation process.

5. **Quality Assurance and Support**
   A. Ensure that implementation assistants in each HEI are adequately trained and supported to carry out implementation activities effectively.
   B. Provide guidance and support to module admins in addressing day-to-day challenges during implementation.

6. **Reporting and Feedback**
   A. Regularly engage with the Samarth Support team to provide updates on state-level implementation progress.
   B. Collect feedback and challenges faced during implementation from HEIs and communicate them effectively to the Samarth team for resolution.

7. **Adherence to Standards and Timelines**
   A. Ensure that all state HEIs adhere to the standardized Activity Schedule and Implementation Plan provided by the Samarth team.
   B. Monitor and enforce compliance with project timelines and deliverables to ensure successful and timely execution of tasks.

8. **Data Management and Data-Driven Reporting**
   A. Facilitate the collection and management of accurate and timely data from HEIs for reporting and monitoring purposes.
   B. Provide necessary information and reports to the Samarth project team as required for project evaluation and reporting.
   C. Utilize data collected from HEIs to generate comprehensive reports on the outcomes and effects of policy implementation.
   D. Present insights and findings to state-level authorities, highlighting key trends, successes, and areas needing attention or adjustment.