



An e-Governance Newsletter of
NIC RAJASTHAN



Quarterly Digital Newsletter (From OCTOBER to DECEMBER 2022)

Our Heritage



Delwara Jain Temple

<https://www.dilwarajaintemple.org>

The Delwara Jain Temples are situated in Mount Abu, a tourist place and hill station located in Sirohi district of Rajasthan. It is a group of five major temples devoted to Jain Tirthankaras and is a pilgrimage place for Jains. These temples were built between 11th to 13th century AD by two brothers Vastupal and Tejpal and are known world over for its extraordinary architecture and marvelous marble stone carvings which showcases the extraordinary work of human craftsmanship at its best. These sculpture and carvings are exemplified by the devotion, persistence, and spiritual rising of the Jain Community. Although, these temples seem to be a basic temples from outside, but the minutely carved ceilings and pillars of marble stone are phenomenal, unmatched and amazing.

The temples are named after the village they are in and represents the deepest values of devotion in the Jain community. These comprise of - Shri Vimal Vasahi Temple, Khartar Vasahi Temple, Pittalhara Temple, Luna Vasahi Temple and Mahavir Swami Temple. Standing tall in the forested hills, the Vimal Vasahi Temple and the Pittalhara Temple represent the grand stature of the first Jain Tirthankara Shri Adinathaji. Similarly, Luna Vasahi is dedicated to the 22nd Jain Tirthankara Shri Neminathji. In contrast, Shri Khartar Vasahi Temple is dedicated to the 23rd Jain Tirthankara Shri ParshvaNath ji. The Mahavir Swami Temple in the same premises is devoted to the 24th Jain Tirthankara Shri Mahavira swami.

These temples remain open for tourist between 12 pm to 5 pm. Nearest Railway station is Abu Road and Airport is Udaipur. Regular buses are available from Jaipur, Udaipur, Jodhpur, Sirohi and Ahmedabad.



Events / Happenings

Technical Support for Rojgar Mela



Rojgar Mela was organized on 2nd Nov 2022 at many places in the country including Ajmer and Jodhpur in the Rajasthan state as a step towards highest priority of employment generation by the government. Hon'ble Prime Minister addressed the participants through Video Conferencing system. Hon'ble Minister of Railways, Communication and Electronics & Information Technology, Shri Ashwini Vaishnav distributed appointment letters to 200 candidates in Ajmer. Hon'ble Minister of State for Parliamentary Affairs and Culture, Shri Arjun Ram Meghwal distributed appointment letters to 25 candidates in Jodhpur. NIC Jaipur State Centre, NIC Ajmer and Jodhpur District Centres provided all technical support for the event.

Visit of Finance Team, Delhi to Review Integrated Financial Management System (IFMS)



A team of Ministry of Finance, Government of India, Delhi visited Rajasthan to review IFMS project. Team comprising Joint CGA, Shri Harish Srivastava, DDG NIC & HOG (PFMS) Shri Dipankar Sengupta and Deputy CGA, Shri Vijay Chaudhary visited Jaipur to study and review IFMS. They reviewed Personal Deposit Account System and the Single Nodal Account System (SNA) developed by NIC Rajasthan under IFMS. Team visited development Centre of IFMS and Rajasthan State Data Centre(BSDC). At BSDC, Shri Ashish Gupta IAS (Commissioner IT&C) and Shri Jitendra Kumar Verma, SIO along with NIC Data Centre team explained the facilities of data centre, DR servers and backup concept of IFMS. Detailed presentations on IFMS system 2.0 and IFMS 3.0 were given to the team showing the challenge of technology shift i.e. Oracle as Data Base and Java in front end using Helidon platform for microservices by SIO Rajasthan Shri Jitendra Kumar Verma, Shri Manoj Nagar, Group Leader and Shri I D Variyani STD NIC, Ms. Amita Sharma, Addl. Director IFMS and other officers of Finance Department, Rajasthan. Team visited Secretary Finance (Budget), Shri Rohit Gupta, IAS who explained the complete concept. Live Demo of the system was made by the NIC Team, Shri P.K. Jat SSA, Shri Sharul Saxena SSA and Shri Abhay Gupta SSA and Shri Brijesh Sharma, Director Budget along with department officials at newly constructed Finance building. Finally, team interacted with Principal Secretary Finance, Shri Akhil Arora, IAS & visited NIC State Unit, Rajasthan.



Interaction of State Coordinator Shri Yogender Kumar with NIC Rajasthan Officials



A first meeting with new Rajasthan State Coordinator Shri Yogender Kumar, DDG was held through Video Conference on November 29th, 2022. State Coordinator congratulated NIC Rajasthan for getting National eGovernance Award for Gang Canal Regulation project. He introduced himself and informed about his tenures in various projects of NIC in different locations. Welcome address, followed by brief about the Rajasthan state, districts, officials posted and projects undertaken was given by Shri Jitendra Kumar Verma, SIO Rajasthan. All senior officers of state centre introduced themselves and explained about the projects undertaken by them and the citizen facilities available on the portal. State Coordinator was introduced to the Major projects of NIC Rajasthan like IFMS, Pension, Works Accounting, Social Security Pension, DILRMP, ePanjiyan, Pehchan, NICCI Chatbot, Shaladarpan, PHED, Rural Development, ePower, Regional Centre of Excellence for Application Security etc. Moreover, Network infrastructure available in the state and support provided to SDC and various departments were appraised to him. SIO informed that NIC Rajasthan is working with major departments of state government for the digitization of their systems. New initiative about setting up the Pool of District officers for development, implementation and assignment of various Rajasthan state ongoing projects to Districts was discussed during the meeting. Some of the exclusive task earlier executed by State Officers is also being assigned to senior District Level Officers like MPR, Newsletter etc. Another innovative initiative in Rajasthan is to assign a STATE to every district in Rajasthan to study the projects running in the Rajasthan and the State allocated respectively, so that new project already developed may be implemented in Rajasthan. State Coordinator appreciated the initiatives of NIC Rajasthan and desired that project wise meeting should be scheduled so that he can have broad view about the projects & discuss about the progress and issues in the project. He assured that he would have full support for the any requirements of the state.



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Events / Happenings

Rajasthan DigiFest & IT Job Fair - 2022



Rajasthan DigiFest and IT Job Fair was organized by Govt. of Rajasthan at Polytechnic College, Jodhpur from 11-13 Nov' 2022 for displaying the advancements in Information Technology and startups to the citizens. NIC participated under guidance of Shri Jitendra Kumar Verma, SIO in the Mega IT event. Hon'ble Chief Minister of Rajasthan, Shri Ashok Gehlot, Principal Secretary (IT&C) Shri Akhil Arora, Commissioner (IT&C) and other senior's officials of Rajasthan visited the DigiFest. SIO and ASIO State, Districts and some DIOs participated in the event. NIC provided the technical support for the event. Many students and Job seekers appeared in jobs interviews and got on spot appointment. The Hon'ble Chief Minister Shri Ashok Gehlot Inaugurated newly Constructed INCUBATION Centre comprising of 15 Startups and New Startup Policy for Rajasthan.

RajHealth Portal Launched

<https://rajhealth.rajasthan.gov.in>

A presentation cum Demo conducted from VC studio of Swasthya Bhawan NIC Rajasthan Jaipur on 10 November 2022 in the Chairmanship of Dr. Prithvi Raj (IAS), Secretary, Medical, Health and Family Welfare department, Government of Rajasthan. Presentation & Demo of the RajHealth Portal was presented to all officers and employees of the department at state, division, district & block level connected through Video Conference. The mission Director (NHM), Joint Secretaries, Directors & other senior officers from Medical Health and Family Welfare department, GOR and Sh. Vinod Kumar Agrawal (Scientist-F), Smt. Anju Mittal (Scientist-E), Sh. Gaurish Kumar Vashistha (Scientist-D), Sh. Teekaram Meena (Scientist-B) from NIC Rajasthan were present. During the presentation, the Secretary appreciated the efforts made by NIC and said that the software will benefit the employees and administration and it will change the work culture of the department. The Software will help in



better co-ordination among different offices and sections of the department and in turn will be helpful in improving the efficiency of the officers. NIC Rajasthan gave a presentation followed with live demo regarding RajHealth portal of Medical and Health department. RajHealth Portal facilitate the employees of department for their day-to-day activities with quick and easy resolution. The portal was launched on 14 November 2022 and is accessible at for all offices and employees of the department across the state.



Special Campaign 2.0 Organized at NIC Rajasthan

The NIC Rajasthan organized the campaign in month of October with emphasis on daily cleanliness activities as per action plan. NIC Offices, Project offices and the District Centres under took extensive cleaning activities. This included cleaning of the office premises, de-weeding of files and papers, digital cleaning with clearance of garbage for computers and phone. A VC was organized under chairmanship of SIO Rajasthan with the NIC State & district centres to review the campaign and he advised to inculcate the cleanliness habit and keeping surroundings clean along with regular activities like walk, brisk walk, cycling and other sports activities to keep ourselves fit.



Integration with eCourt under ICJS

Inauguration by Hon'ble Chief justice, Rajasthan High Court, Jaipur for Implementation of Integrated Digital Communication of ePrisons with eCourt under the ICJS Project. Court can view prisoner's antecedents, profile, crime details, parole details and jail Department can view High Court appeal into ePrison software. Rajasthan is the first state in the country to implement such type of Integration.

Rajasthan Ke Siksha Main Badhte Kadam (RKSMBK) Mobile App and other initiatives launched



Hon'ble Cabinet Minister, Education - Dr. Bulaki Das Kalla launched series of digital initiatives developed by NIC Rajasthan for Education department, SIO Rajasthan, NIC officials, media persons etc. These digital initiatives include - "RKSMBK" Phase 2nd Mobile app, Indira Mahila Shakti Nidhi Portal & Staff Online Counselling Portal. Mobile App facilitates digitization of Student's assessment data automatically using OMR assessment sheet. Artificially Intelligence analyze the data & Identify special attention areas where student is

lacking in the studies. The analyzed data is available to subject teachers through the App so that they can pay proper attention to each student to strengthen their capabilities. Indira Mahila Shakti Nidhi Portal facilitate the eligible girls studying in private schools to register online & after verification by concerned DEOs, their School-Fee will be reimbursed directly in their Bank account for her regular study in class 9th to 12th. Staff Online Counselling Portal enables eligible staff to fill choices online for desired posting with allotment as per preferences and vacant place. School allotment letter is generated & made available to the concern staff.

हिंदी दिवस समारोह का आयोजन



भारत सरकार के गृह मंत्रालय राजभाषा विभाग के निर्देशानुसार राजभाषा नीति के प्रति अनुकूल बनाने के उद्देश्य से तथा कार्यालयों में राजभाषा का अधिकाधिक उपयोग हेतु उत्साहवर्धक माहौल बनाने हेतु राष्ट्रीय सूचना विज्ञान केंद्र जयपुर राजस्थान में 14 सितंबर 2022 को हिंदी दिवस समारोह का आयोजन किया गया, जिसमें राज्य व जिलों के NIC अधिकारियों ने वीडियो कॉन्फ्रेंसिंग द्वारा भाग लिया। इस समारोह में राष्ट्रीय सूचना विज्ञान केंद्र नई दिल्ली मुख्यालय से समय-समय पर प्राप्त दिशा निर्देशों के अनुसार सरकार की राजभाषा नीति का कार्यान्वयन प्रभागाध्यक्षों द्वारा अनुपालन किए जाने वाले महत्वपूर्ण बिंदुओं पर चर्चा हुई, हिंदी दिवस पर श्री जितेंद्र कुमार वर्मा राज्य सूचना विज्ञान अधिकारी ने सभी अधिकारियों कर्मचारियों को संबोधित करते हुए राजभाषा के महत्व पर प्रकाश डाला और कहा कि हमें राजकार्य में हिंदी का अधिकाधिक प्रयोग करना चाहिए, साथ ही विभाग के संदेश मोबाइल ऐप के बारे में बताया कि यह हिंदी मैसेज के लिए भी काफी उपयोगी है। उन्होंने यह भी बताया कि सभी अधिकारी एवं कर्मचारी एक कर्मठ टीम के रूप में हिंदी भाषा में अधिक से अधिक कार्य करें। हिंदी राजभाषा संयोजक व वैज्ञानिक-ई, श्री सोहन लाल कुमावत ने राजभाषा विभाग से प्राप्त दिशा निर्देशों को पीपीटी द्वारा प्रस्तुत किया एवं इसकी अनुपालना करने का आग्रह भी किया। अंत में कई अधिकारियों ने हिंदी के उपयोग के बारे में विचार व्यक्त किए।

Major Projects Transactions Statistics

| SN | Project | October | November | December | Total Trans. |
|----|---|----------|----------|----------|--------------|
| 1 | DBT (through Pay Manager) | 13045000 | 13741000 | 13212258 | 39998258 |
| 2 | DILRMP (RoR Issued) | 3754613 | 4180202 | 5526839 | 13461654 |
| 3 | MNREGA Soft | 1404223 | 1625124 | 3302812 | 6332159 |
| 4 | Shala Darpan (Students) | 687109 | 754342 | 2498762 | 3940213 |
| 5 | IFMS - Rajkosh (Challans) | 856204 | 1056991 | 1212797 | 3125992 |
| 6 | eGras | 716618 | 870970 | 992048 | 2579636 |
| 7 | IFMS - Rajkosh (Bills) | 401117 | 458839 | 393689 | 1253645 |
| 8 | PayManager (Other Bills) | 293574 | 224262 | 200359 | 718195 |
| 9 | Right to education (Students) | 56752 | 347327 | 193620 | 597699 |
| 10 | Registration and Stamps (Documents Processed) | 162648 | 208722 | 220304 | 591674 |
| 11 | Shala Darpan (School/Teachers) | 456643 | 43516 | 32661 | 532820 |
| 12 | Pehchan Registration (Birth/Death/Marriage) | 205366 | 251498 | 262552 | 719416 |



CYBER SECURITY TIP

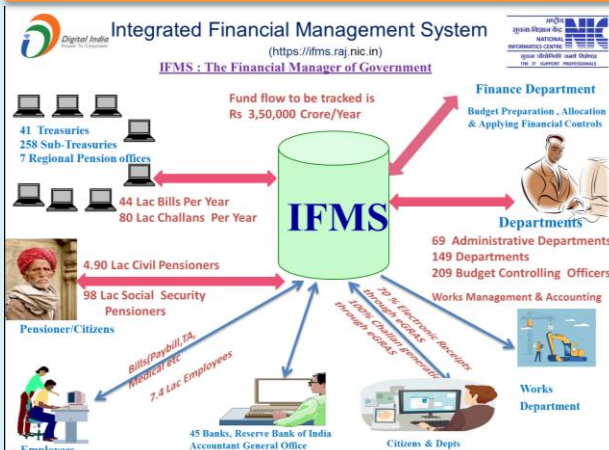
Use HTTPS on your Website

"Having an SSL certificate installed and HTTPS enabled on your website will help encrypt all information that travels between a visitor's browser and your web server."

Project of the Quarter – Integrated Financial Management System (IFMS): BUDGET SYSTEM

Integrated Financial Management System (IFMS) is a statewide IT solution developed by NIC Rajasthan and is operational since 2010. IFMS has matured from a software package into a suite of applications catering to all aspects of financial management in Government of Rajasthan. **IFMS functionalities includes:**

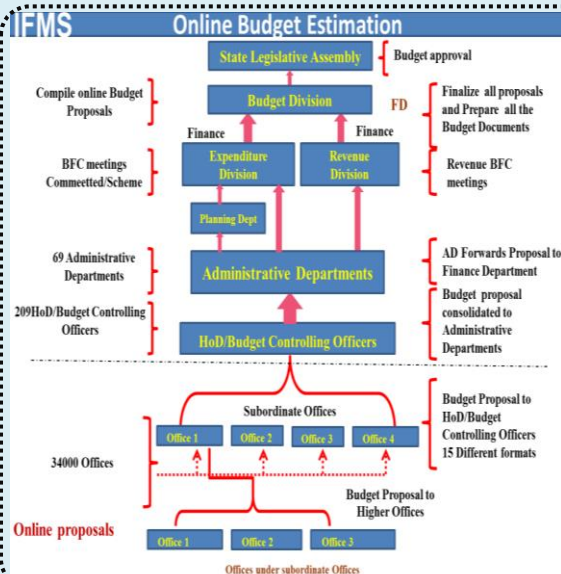
| RAJKOSH - Treasury Accounting System | ONLINE BUDGET SYSTEM | RajSSP - Social Security Pension System |
|--|--|---|
| e-GRAS- Electronic Government Receipt Accounting System with Mobile app. | Budget Estimation, Preparation, Printing, Allocation & Control at treasuries, automated process for revised Budget Estimate (RE) and Supplementary Budget Preparation with Mobile App to view real-time Budget Allocation & Expenditure. | IFPMS - Civil Pension Management System |
| Pay manager- Online Bill Preparation and Payment System with Mobile app. | Rajasthan GST Accounting System | OSIS - Online Stamps Inventory System |
| Digital signature Authentication and encryption for electronic Payments | Real-time Expenditure and Revenue status | Works Management System |
| Integrated with PFMS, AG, eKuber of RBI and other departments. | | |



Main beneficiaries and Key stakeholders

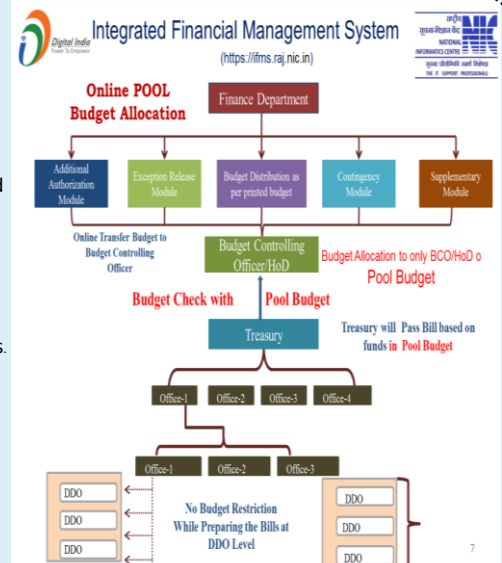
- * Administrative Departments (69)
- * Departments (149)
- * Budget Controlling Officers (209)
- * 45 Banks and DDOs (31000)
- * Government Offices (34000)
- * Treasuries (41), Sub-treasuries (239)
- * Accountant General Office
- * Employees of Government
- * Autonomous bodies (7.4 lacs)
- * Civil Pensioners in lacs (4.9)
- * Social Security Pensioner (98)
- * Divisions of Works Department (569)
- * Personal Deposit A/c (6750)

The various applications of IFMS developed in phased manner and for seamless data exchange between various applications; new requirements needs to be added and to fill up the gaps in functional coverage of the system. Therefore, restructuring and refinement in the integration processes is required. **Hence, development under phase 3.0 with new technology has started. This article emphasis details on Budget related Applications, which is a complete automated platform for Government budget practices.**

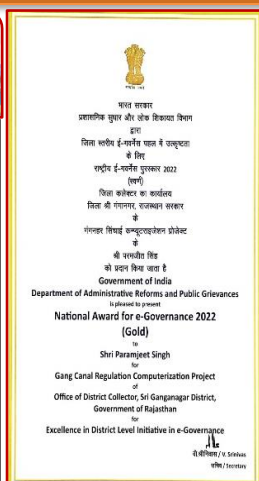


Budget System includes –

- Process for Budget Estimation, Preparation and Printing.
- Paperless budget presentation.
- Budget Allocations and Pool Budget concept.
- Additional authorization, Contingency and Re-appropriation.
- Vote on account preparation.
- Fund Management, PD accounts and Annual Schemes.
- Excess Saving statement annually.
- Sanctions for Posts, Vehicles & Computers.
- PD accounts opening and Fund Transfer.
- Unified PD Accounts.
- Integrated with PFMS & AG.
- Work Project Proposal Approval by BFC.
- Agriculture Budget.
- Gender and Child Budget
- Mobile App to view real time budget documents, allocation and expenditure.



Awards/Accolades



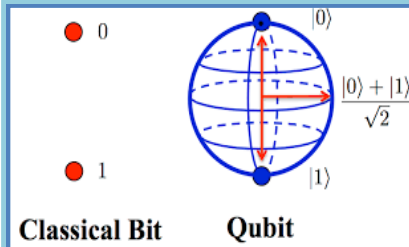
**TECH
TALKS**

Technology Talk on Quantum Computing

The Quantum Computing and the Qubit - Quantum computing is a rapidly emerging technology that harnesses the laws of quantum mechanics to solve the problems too complex for classical computers. The Quantum in 'Quantum computing' refers to the quantum mechanics that the system uses to calculate outputs. In physics, a quantum is the smallest possible discrete unit of any physical property. It usually refers to properties of atomic or subatomic particles, such as electrons, neutrinos, and photons. Quantum computers harness the unique behavior of quantum physics—such as **superposition**, **entanglement**, and **quantum interference**—and apply it to computing. This introduces new concepts to the traditional programming methods. These machines are very different from the classical computers that have been around for more than half a century. A **Qubit** is the basic unit of information in quantum computing. Qubits play a similar role in quantum computing as bits play in classical computing, but they behave very differently. Classical bits are binary and can hold only a position of 0 or 1, but qubits can hold a superposition of all possible states.



Ladesh Kumar Sharma
ADIO & Scientist D, JALORE



Need to go for quantum computers? To solve problems with a very high degree of complexity, Supercomputers are used. These are classical Computers, often with thousands of classical CPU and GPU cores but may struggle to solve certain kinds of problems. In such situation, Quantum algorithms take a new approach to these sorts of complex problems by creating multidimensional spaces where the patterns linking the individual data points emerges. Classical computers cannot create these computational spaces, so they cannot find these patterns.

How does quantum-computing works? Quantum computers operate by using superposition, interference, and entanglement to perform complex calculations. Quantum computing uses quantum bits, or **qubits**, which take on quantum properties of probability, where the bit is both zero and one, with coefficients of likelihood, until measured, in which their discrete value is determined. More importantly, qubits consist of quantum particles and are subject to quantum entanglement, which allows for computing using coupled probabilities. With these phenomena, quantum computing opens the field of special quantum algorithms development to solve new problems, ranging from cryptography, to search engines, to turbulent fluid dynamics, and all the way to directly simulating quantum mechanics, allowing for the development of new pharmaceutical drugs. Because qubits are of probabilistic values, quantum computers do not run traditional algorithms. Quantum computers require development of new algorithms specifically for quantum computing. Referred to as **quantum algorithms**, these algorithms are designed in a fashion similar to that of circuit diagrams, in which data is, computed systematically using quantum logic gates. These algorithms are extremely difficult to build, with the biggest challenge being that the outcome of the algorithm must be deterministic, as opposed to undefined and probabilistic. This has created a new field of computer science, with careers opening in the near future for quantum algorithms engineers. **Quantum computers** are elegant machines, smaller & requiring less energy than supercomputers. An IBM Quantum processor is a wafer not much bigger than the one found in a laptop. A quantum hardware system is about the size of a car, made up mostly of cooling systems to keep the superconducting processor at its ultra-cold operational temperature.

A **quantum computer** has three primary parts: a) An area that houses the Qubits b) A method for transferring signals to the Qubits c) A classical computer to run a program and send instructions. For some methods of Qubit storage, the unit that houses the Qubits is kept at a temperature just above absolute zero to maximize their coherence and reduce interference. Other types of Qubit housing use a vacuum chamber to help minimize vibrations & stabilize the Qubits. Signals can be sent to the qubits using a variety of methods, including microwaves, laser, & voltage. **Quantum computer uses and application areas:** A quantum computer cannot do everything faster than a classical computer, but in few areas, quantum computers have potential to make a big impact. **Quantum simulation** - Quantum computers work exceptionally well for modeling other quantum systems because they use quantum phenomena in their computation. This means that they can handle the complexity and ambiguity of systems that would overload classical computers. Examples of quantum systems that we can model include photosynthesis, superconductivity, and complex molecular formations. **Cryptography** - Classical cryptography—such as the RSA algorithm that widely used to secure data transmission—relies on the intractability of problems such as integer factorization and discrete logarithms. Quantum computers can solve many of these problems more efficiently. **Optimization** - Optimization is the process of finding the best solution to a problem given its desired outcome and constraints. In science and industry, factors like cost, quality, and production-time effects the critical decisions and to optimize these factors, quantum-inspired optimization algorithms need to be executed on classical computers; we can find solutions that were previously impossible.

Quantum machine learning - Machine Learning on classical computers is revolutionizing the world of science and business. However, training machine-learning models comes with a high computational cost, and that has hindered the scope and development of the field. **Search** - A quantum algorithm for Searching was developed in 1996 that dramatically speed up the solution to unstructured data searches, running the search in fewer steps than any classical algorithm could. **Quantum Computing in Practice and Future:** Many Companies are trying to implement quantum computing into their products and services. There are four major US-founded players in the quantum computing (QC) - Google, IBM, Microsoft and AWS Bracket. IBM is working with Mercedes-Benz and offering cloud-based IBM Quantum System for research and learning.

IBM Q System one



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Journey of NIC Officers



Smt. Neeta Saxena Scientist 'E'
NIC Rajasthan State Unit (Dec. 1988 to Oct. 2022)
• Joined NIC on 12/12/1988 at NIC State Unit Jaipur.
• Served at State Unit, Rajasthan High Court, Vitta Bhawan, RA office Yojna Bhawan, Jaipur.

Major contribution includes - establishment of NIC State Unit, core implementor with technical support and guidance to the user department in the below mentioned projects:

- Worked as Registering Authority of Rajasthan for DSC making for state & central govt. officials as well as PSUs.
- Digitization of 5000 Antiquities and Manuscripts for department of Archaeology under Dharohar Project.
- High court and District court computerization.
- DISNIC, Agriculture and Locust control Management.
- Computerization of National Institute of Agriculture Marketing
- Indira Gandhi National Pension programme for Widows and old age pension scheme.
- Committee member of Land & Property (LPC) and GEM.
- Worked as Welfare officer.

In my long journey of NIC Rajasthan, I enjoyed working with my colleagues. I learned a lot and worked on different Technologies. I wish all the success to NIC.

~ Neeta Saxena



Shri Prem Prakash DIO & Scientist 'F'
NIC District Centre Jhunjhunu (Sep. 1988 to Oct. 2022)
• Joined NIC on 26/10/1988 at NIC Jhunjhunu
• Served at NIC District Centre JHUNJHUNU Raj.

Served more than 34 years and got the opportunity to promote IT culture in the district. During this long journey, number of applications were developed, implemented and various trainings conducted.

Major contribution includes - some of the Projects developed and implemented as shown below:

- Polling Party and Statistics Compilation (1990-91), Panchayat Reservation (1991-92)
- GFP & SI, Small Savings, PGV (1999), Works Monitoring (2004), Mid-day meal (2007), DILRMP, MNREGA and Sainik Kalyan.

Awards -

National Level - Digital India Week Award in 2015
State Level - eMitra Project & Small Savings (DOI) District Level & Appreciation - More than 30



We should do our best efforts collaboratively to achieve the motto of our Organisation and continue to promote IT culture in the government.

~ Prem Prakash