

**Punjab State e-Governance Reform Society**  
**Directorate of Governance Reforms & Public Grievances**  
D241, Sector 74, Phase 8B Industrial Area, Mohali (Punjab)

**Detailed Advertisement**

Applications are invited for **ONE Chief Technology Officer** & **ONE Chief Data Officer**, on a contract basis initially for a period of 3 years. The same may be extendable beyond 3 years. A candidate must use the copy of application form (Click on the below mentioned link)

<https://docs.google.com/forms/d/e/1FAIpQLScG5qYfmUKeD-A-ZhsHrGuKB8UeNzI3OWBIEYod07dneSCUKQ/viewform>

A candidate must use the copy of the application form available at [www.dgrpg.punjab.gov.in](http://www.dgrpg.punjab.gov.in) and create a similar MS Word Template to fill in his information digitally. Printed, signed and scanned copy of that form be sent in PDF format on the email id [dgr@punjab.gov.in](mailto:dgr@punjab.gov.in) with a copy on [tech.experts@punjab.gov.in](mailto:tech.experts@punjab.gov.in) by **24-09-2021** before **5:00 PM**. Applications sent by post will not be entertained.

Only eligible candidates will be invited to participate in the selection process. Intimation in this regard will be given via emails and a notice in this regard will also be uploaded on website [www.dgrpg.punjab.gov.in](http://www.dgrpg.punjab.gov.in)

**(Background)**

2. Government of Punjab has achieved considerable success in the implementation of front end e-Governance projects. However, departments, in general, find a gap in the technical capacity to undertake enterprise level process digitization and government process re-engineering.

3. The Government of Punjab has envisioned "Digital Punjab" initiative to transform the State into a digitally empowered society and knowledge economy by transforming the old established physical ways of doing business and providing government services through new modes that are optimized around real-time systems.

4. The Digital Punjab transformational agenda shall be governed by following principles:-

**a)** Citizen Centered Approach (Hassle free online/mobile based platform for the citizen to discover and avail government services with ease)

**(b)** Services on demand (Services that best suit the citizen needs, such as service availability from anywhere, anytime)

**c)** ONE Integrated Government (with a platform for all departments to collaborate and work in a cohesive manner)

**d)** Social & Economic Empowerment of Citizens (through effective e-governance solutions to help them avail schemes, benefits, services, employment, skill development services from the government in a seamless manner)

**e)** An open, interoperable, extendable & API based platform architecture to drive transformation at scale and speed (that would consists of re-usable blocks or micro-services, would utilize/integrate with already available software developed by the Government of India and /or other agencies).

**f)** Solution design for interconnectedness (using API as a policy that would make transactions easier and cheaper.)

**g)** Data architecture and policies that enable Ownership and exchange of data leading to Single Source of truth (Each department/government entity would have independent ownership of its IT infrastructure but would simultaneously allow that legitimate sharing of the information amongst others to resolve inter departmental dependencies and maintain data attributes as a single source of truth.)

h ) Reorganized services and technical architecture (data available from difference sources may be analyzed and uses for delivery of other services.)

i) Continual re-engineering and feedback loops (The System would start with government process re-engineering with simplified forms, processes, outputs, SLAs and would be strengthened by a feedback loop mechanism from direct user/citizen for continual improvement.

j) Citizen touch points and delivery channels (Special focus would be given to citizen touch points, payment (UPI/Cards/Online/Wallets/QR codes or new options available) and delivery channels (Web/Mobile/Kiosk/New options available) for convenient services delivery.

k) Technological transformation supported by required legislation (various laws/policies required to govern such a digital platform needs to issued/legislated).

5. As part of Digital Punjab, the government is already in the process of implementation of Punjab Enterprise Architecture (PunEA) whereby a single interface would be offered to the citizens and departmental officials cutting across the departmental boundaries. The above background note is merely indicative and not exhaustive. The involvement/responsibility of CTO and CDO on any or all of these elements would be expected.

## **6. Indicative Role and Responsibility /Job Description**

### **(A) Chief Technology Officer (CTO)**

i) Create the technology vision and architecture and roadmap for the State that would provide one integrated Government experience to citizens for anywhere, anytime service delivery and grievance redressal with the scope for continual re-engineering and improvement.

**ii)** Conceptualize, Document and implement Technology, Application, Security and other standards recommended by India Enterprise Architecture (IndEA) and/or other National Frameworks/ Policy Standards.

**iii)** Implement Unique Identify across the government for ensuring data driven decisions with clear data ownership and single source of truth by leveraging new and emerging technologies like AI/ ML/ Robotics/ Blockchain/ IoT.

**iv )** Conceptualize and implement Enterprise Solutions with plug and play/ Mircorservices options to readily integrate with available software developed by the government of India and / or other agencies using APIs

**v)** Foster the collaborations to promote IT Technology adoption by actively participating in various forums and develop technology investment strategies that align with the priorities of the State.

**vi)** Conceptualize and implement technology solutions to increase the citizen tough points and delivery channels for service delivery/ access to the government.

**vii )** Ensure management and security of all the IT assets of the State (network, applications, hardware etc.) to keep them in contemporary state.

**viii )** Steer the process to create required human resource capacities in the State to bring the IT transformation and forecast funding needs for IT staffing, equipment, materials, and supplies.

**ix)** Any other work assigned to her/him by the reporting officer.

**(B) Chief Data Officer**

**i)** Creation of the data policies, standards and enforcement of data management concepts. The CDO shall also oversee and report on data metrics and have executive-

level responsibility for all enterprise information and data management budgeting and initiatives.

**ii)** Conceptualization and implementation of policies, procedures, structures, roles, and responsibilities that outline and enforce rules of engagement, decision rights, and the accountabilities for the effective management of information assets. The CDO must determine the government's current data quality and maturity levels, design quality assurance framework and assist data stewards in developing improvement plans. The CDO must also establish enterprise standards including a uniform and repeatable system development lifecycle methodology. For instance, there's a common set of standards for data naming, abbreviations, and acronyms.

**iii)** The CDO will oversee the master business intelligence system for the government including establishing an enterprise architecture and a collection of integrated decision-support applications and databases - providing the community of decision-makers easy access to relevant data. This may include building a data warehousing, which can involve a single massive database or a collection of data marts that are integrated. The data warehouse strategy should provide consistent, clean, and integrated data.

**iv)** Determine and enforce specific security and privacy requirements for each piece of data - especially as it relates to privacy laws, industry information to make more informed decisions.

**v)** . The CDO's team must build government performance dashboards government performance management system that provides timely information and insights that enable employees to improve decisions, optimize processes and plans, and work proactively.

**vi)** . The CDO should create a Community of Practice (CoP) for data scientists, knowledge management specialists, data stewards and custodians and leverage this

community to create a culture of data- driven government across departments and agencies.

vii) . Aggregation and preparation of evidence based policy inputs

viii) Any other work assigned to her/him by the reporting officer.

## 7. Qualification and Experience

Sr.No.	Name of the post	Qualification & Experience
1.	Chief Technology Officer	<p>1, Minimum Qualification; B,E./ B,Tech./ MCA/ MSc(IT/CS)/ M, Tech./ MBA (preferably in Information Technology/ Computer Science/ or any other related field).</p> <p>2. Minimum 15 year experience in IT field, preferably with software development background/technological role or EA implementation. Out of above experience, minimum 5 years must be at senior executive level positions like Director/Partner/HoD etc.</p> <p><b>Experience should be post minimum educational qualification. (Training &amp; Teaching experience will not be counted towards eligibility)</b></p> <p>3. The Chief Technology Officer will play a highly collaborative role where he/she will interact with stakeholders, departmental heads and leadership, as well as other executives. He/she must be capable of tailoring messages in a clear, concise, unambiguous, engaging, and convincing manner, understandable even by non-technical department personnel.</p> <p>4. Leadership/People Skills: The Chief Technology Officer must possess strong leadership skills, being able to move cross-functional groups in a unified direction. He/ She must inspire trust and confidence in others.</p> <p>5. Candidates from top tier institutions with overall NIRF ranking up to 50 will be preferred.</p>

		6. Candidates with prior Government experience will be preferred
2.	Chief Data Officer	<p>1. Minimum Qualification: B.E./ B.Tech./ MCA/ M.Sc./ M. Tech./ MBA (preferably in Information Technology/ Computer Science   Data Science, Information Management Systems, Statistics, Analytics or any other related field). An equivalent of the same in working experience is also acceptable for the position</p> <p>2. Minimum 15 year experience in Database management/ Data warehousing/ Data Governance and other relevant areas (must have had over 5 years of working experience in a senior administrative or executive position within a fast-paced and complex work setting). The Chief Data Officer should have a vast experience building and leading organizations as well as in transforming organizations through the use of data management. He/she would also have a wide experience in working across multiple sectors with a regular interface with government and industry.</p> <p><b>Experience should be post minimum educational qualification. (Training &amp; Teaching experience will not be counted towards eligibility)</b></p> <p>3. Analytical skills: The candidate will be highly skilled in the design, development, and validation of descriptive, predictive, prescriptive, and applied analytics. He/ she must also have a proven and successful experience in a senior consulting or administrative roles, as well as experience with hands-on leadership roles managing teams, and driving change within large, complex organizations through the use of technology.</p> <p>4. Communication Skills: Excellent communication skills absolute necessity for the Chief Data Officer who</p>

	<p>must be capable of conveying information and messages with clarity and precision.</p> <p>5. Collaboration. The Chief Data Officer will play a highly collaborative role where he/she will interact with stakeholders, departmental heads and leadership, as well as other executives. He/she must be capable of tailoring messages in a clear, concise, unambiguous, engaging, and by non-technical understandable even convincing manner, department personnel.</p> <p>6. Leadership/People Skills: The Chief Data Officer must possess strong leadership skills, being able to move cross-functional groups in a unified direction. He/She must inspire trust and confidence in others.</p> <p>7. Candidates from top tier institutions with overall NIRF ranking up to 50 will be preferred.</p> <p>8. Candidates having Government experience will be preferred</p>
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**Remuneration for both positions:-** Negotiable.

**8. Nature of Engagement:** - Contractual Engagement for a period of 3 years, with periodic performance review. The same may be extendable beyond 3 years.

**9. Selection Process:** - Mode of selection will be interview by the selection panel notified by PSeGS. The Candidates will be shortlisted for interview in the ratio 1:10 based on their qualification and experience. The final appointment will be based on the decision of the selection Panel constituted for the purpose. Deputation from Government organization/ private and public companies would be allowed.

Dated:-

Member Secretary

