DIGITAL PUNJAB

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Digital Punjab – Introduction

Digital Punjab

- Broadband for all citizens
- Wifi in education
- Access to smart phones
- Aadhar Seeded Bank Accounts
- Service on demand
- Any-time, Any-where, Any-Device Service
- Service delivery - feedback mechanism
- Promote participation using social media
- Digital literacy
- Ease of doing business
- Electronic/ cashless financial transactions

Cloud First Strategy

Digital Punjab

Wifi in education

Mobile Apps

Last Mile connectivity

Social Media
ONE Integrated Government
A single access platform to avail all Government services for all – Citizens, Business & Employees

Citizen Services Anytime, Anywhere
Access to digital services from all channels – Mobiles, Internet, Face-Face, Call Centre, Chat Bots
Mobile First Principle

Connected & Coordinated Departments
All department’s process, systems and human well connected & coordinated to deliver best in class services

Enhancing Life through Technology Innovation
Trial and adoption of digital technologies that can transform life.

Efficient & Transparent Governance
Use of modern tools and technologies to monitor, govern and take appropriate actions
Digital Punjab : The Study

Consultant

- Third party consultant was hired to review the current system and suggest the way forward
- Report suggested implementation of central system / micro services based architecture
- EA came as an option

Estonia Usecase

- A workshop organized with Team from Estonia Dr Taavi Kotka (Ex CIO, Estonia IT Team), Mr Andres Kutt (Ex Advisor Estonia Information Systems Authority) to understand how they implemented various citizen centric services

EA Experts

- Dr Pallab Saha has been consulted and he reviewed the Punjab EA roadmap and plan
Digital Punjab – Department-centric to citizen-centric

Isolated departments

Integrated service providers

Citizen centric Integrated Govt.
Digital Punjab – E-government to E-society

Web presence → Interaction → Transaction → Integration → E-society

Flexible

Traditional Government → Electronic Government
Digital Punjab – The Enterprise Solution

**WHAT**

Is being offered to Citizens
- ✓ Services
- ✓ Schemes
- ✓ Subsidies

**WHO**

Is responsible for delivery
- ✓ Departments
- ✓ PSUs
- ✓ Others

**TO WHOM**

Services are being provided
- ✓ Citizens
- ✓ NRIs
- ✓ Others

The Technology Solution designed for Transparency and Accountability Act

- Inter department handshake
- All Departments / Institutions / PSUs in one system
- Transparency, Accountability and monitoring
- Data Driven Decisions: Coordination Between Legislature and Executive
- Program Evaluations linked with Performance Appraisals

**DATA = INFORMATION = GOVERNANCE**
Digital Punjab – Principles of EA

01 Technology Independence
02 Integrated Services
03 Sharing & Reusability
04 SDG Linkage
05 Data -Sharing
06 Cloud First
07 Mobile First
08 Federated Orchestration
09 Primacy of Principles
Digital Punjab – Overall System

Presentation Layer
- ONE Integrated Portal
- Service Desk Portal
- Mobile Apps

Security Layer
- Authentication
- Authorization
- Policy Mgmt.
- Privilege Mgmt.
- ID Mgmt.
- Media Policy
- Data Encryption
- Monitoring
- 2 Factor Authentication
- Patch Mgmt.

Citizen Services (Micro Services Arch.)
- Email Mgmt.
- Messaging
- Service Payment
- Service Receipt
- Service Tracking
- Service Reporting
- Service Charge
- Document Mgmt.
- Benefit/Payment Service
- Digilocker
- Service Actor Mgmt.
- Service Actor Mgmt.
- Service Actor Mgmt.
- Data Verification

Applications (Micro Services Arch.)
- Core Applications
- Common Applications
- Departmental Applications
- Group Applications

API Gateway Pattern

Master Data Management
- Citizen
- GIS
- Bank Codes

Infrastructure
- Micro Service Toolkit
- API Gateway Infra
- MDM Infra
- IaaS
- DRaaS
- ALM Toolkit
- Service & Support Mgmt.
- Service & Support Mgmt.
- Virtual & physical SDC Infra
Digital Punjab – Overall System

Presentation Layer

*Omni-channel presence. Reaching all citizens, anytime.*

Security Layer

- All round security with no compromise on performance and at optimized cost

Citizen Services (Micro Services Arch.)
- Re-usable building blocks to help build any service by simple drag & drops

Applications (Micro Services Arch.)
- Built with integration capability in MSA with simple configurable approach.
- Flexible to interact with all other systems and data

API Gateway Pattern

Integration Platform to manage integration with systems & data

Master Data Management

- Single source of truth with detailed mapping with specific department data

Infrastructure

- Resilient Infrastructure with flexibility to scale and optimized to lower cost
Digital Punjab – EA – What’s been achieved so far!

- Consolidation of data center and Storage at state data center
- Establishment of software development cell in DGR
- Solutions delivered over EA
  - Grievance Portal
  - eSewa Portal

Micro-services

Data Standards

Cross-platform Independence

Sharing & Reusability

Centralized but Independent

Security
Digital Punjab – Grievance Redressal Module

Citizens
State Government
Departments
District Administrations
Commissions

Stakeholders

Complaints
Escalations
Appeals

Scope
Digital Punjab – Complaint Routing

Complainant

Complaint Type

Within the scope of the Commission

Complaints Externally

Directly

Complaints Internally

For Information

Department

As per departmental matrix

Commission

Other Complaints
Digital Punjab – eSewa/mSewa

✓ State level central system for service delivery

✓ 127 Offline Services (Live) & 50+ Online Services (Under Development)

✓ Service delivery system with configurable workflow and assembled building blocks

✓ Single system for all (Sewa Kendra + Citizen)

✓ Services can be availed from all 3 platforms
  ▪ Web
  ▪ Mobile App
  ▪ 515 Sewa Kendra
Digital Punjab – EA Roadmap Programs

- **Seamless access to e-Gov. services, Cost saving, effective resource (IT) utilization**
- **Integrated ecosystem of applications, with ease of sharing information from various sources**
- **Secured, Compatible, seamless data exchange service platform**
- **Faster deployment, cost savings and highly resilient application deployment option**
- **Decision making capability, effective data management and standardized data design**
- **Secured and resilient State Data Centre for efficient management of IT applications**

- **ONE Integrated Government Portal**
- **Micro Service application platform implementation**
- **API Gateway for seamless internal and external integration**
- **Infrastructure as-a Service (IaaS), Platform as-a service (PaaS) implementation**
- **Data Warehouse, Master Data Management, Data Standardization**
- **Data Centre Security, Monitoring tool implementation**

Several other initiatives – part of strategic roadmap
Thank You

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