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Digitalization for Public Expenditure Accountability and Transparency (d4PEAT)

A re-engineered framework for Public Finance Management in India

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Abstract

Reforms in public expenditure management in India, especially in accounting and administrative processes, have lagged behind the reforms in public revenue management. Lack of uniform accounting codes, limited data standards, and standalone systems across different tiers of governments have led to issues related to data comparability, data aggregability, and misclassification of data. In addition, lack of a single source of truth and inadequate end-to-end digital data capture limits the efficiency, tractability, and accountability of public funds. Limited just-in-time fund-flows, where fund disbursals and actual expenditures are not in tandem, further increases the uncertainty in government transactions. This study identifies the touchpoints where mainstreaming digitalization could address these fundamental challenges of public expenditure management through an actionable roadmap in the form of d4PEAT framework. A composite score under d4PEAT framework for each level of government is calculated, which can be used to rank their performances and assess the progress made in mainstreaming digitalization of public expenditure management. The framework charts a process for debate, suggest areas where policy reforms can be initiated in India, leading to enhancing accountability and transparency in public spending.

Keywords: Public expenditure management, d4PEAT framework, Digitalization, Fund-flow architecture, Accountability, Transparency

JEL Codes: H11, H83, P43, Z18

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1. Introduction

The quantum of public expenditure in India has increased substantially over the years. The total expenditure incurred by the government, at both the Central and State government levels, stood at Rs 65 lakh crores in 2020-21, which is almost one-third of the Gross Domestic Product (GDP) and close to Rs 47,000 per capita in current rupees. In real terms, just over the last decade, the per capita public total expenditure has increased by 66%, from Rs 19,360 in 2011-12 to Rs 32,100 in 2020-21. In the Union Budget 2022-23 of Government of India, Rs 16.24 lakh crore, or 41% of the Central Government spending was allocated to Central Sector (CS) schemes and Centrally Sponsored Schemes (CSS) for beneficiary-oriented or asset-based programs.

The increase in the pace of public expenditure in India in the recent years has been accompanied by an increase in the pace of digitalization of transactions in the public sector too, notably the Public Financial Management System (PFMS) for the Centre, the Integrated Financial Management System (IFMS) for the states, the Government e-Marketplace (GeM) for procurement, direct benefit transfers (DBTs), and several other state government digital initiatives that target beneficiary identification or processes in asset creation. However, for the most part, digital innovations are also standalone systems, with the form and structure of keeping accounts in the government remaining more or less unchanged over the decades.

Bringing in accountability of public expenditure is important for an effective public financial management of the country. Better management of public resources would de facto increase the resource envelope and the fiscal space of a country. However, we see that apart from the recommendations of two expert committees of the Administrative Reforms Commission (ARC) in 1966, that introduced the six-tier accounting classification, not much reform has been undertaken in the public finance management sphere.

Data, for the most part, are maintained manually and subsequently keyed into computers – they are not organically generated. For schemes that run across multiple government departments, the data generated are often kept in standalone systems, which rarely speak to each other. Different tiers of government maintain expenditure under different accounting codes and data standards that are not comparable or inter-operable (CAG 2020). In other words, accounting of expenditure by different departments at different levels of the government follow different accounting codes. This makes data collation difficult.

With this background, at the outset, this paper explores some reform processes required for real-time tracking of government expenditure and for increasing public sector spending efficiencies. Specifically, taking India as a case study, the paper aims at proposing an actionable road map through devising a framework called Digitalization for Public Expenditure Accountability and Transparency, or *d4*PEAT.

The *d4*PEAT framework is built by situating digitalization as the underlying foundation. It identifies the various processes and systems of public expenditure management, that are otherwise standalone, which can be re-wired through digitalisation. With that objective in mind, a re-engineered

framework with 14 pillars and 135 indicators is introduced, that addresses four broad themes involved in public expenditure management: integrity of the accounting framework, efficiency of processes, payments architecture, and institutional transparency. The indicators are real-time indicators, grounded in digitalisation, that can re-wire these different processes together.

Similar frameworks found in the literature track the post-facto achievements of public expenditure rather than focusing on the real-time tracking of public spending and efficiency. For instance, both the Public Expenditure and Financial Accountability (PEFA) framework (The World Bank Group 2020), as well as the OECD's Budget Transparency Toolkit (OECD 2002) are diagnostic assessments based on ex-post indicators. These ex-post indicators deal with budget credibility, comprehensive of information in the budget documents, predictability and control in budget execution, quality and timeliness of audit process, and reconciliation of accounts among others (The World Bank Group 2020).

The application of PEFA framework in the Indian context is sparse. To the best of our finding, (Jena 2010) is the only paper that did a comprehensive assessment of PEFA at the Central government level. At the subnational level, a similar analysis was conducted by the Government of Himachal Pradesh (Financial Management Unit South Asia Region 2009).[1] The report assigned scores to 28 indicators based on available government documentation and through in-depth discussions with ten government officials and distinguished members of academia.

Given that the focus of the PEFA framework is on ex-post indicators, answering some simple questions in public financial management still remains a challenge. For example, under the current accounting framework, is it not possible to aggregate public expenditure pan-India to determine how much money is spent on building a particular asset, or to obtain a beneficiary list with all the benefits an individual is entitled to under different schemes. It is also not possible to track the fund-flow under different schemes till the last rupee spent in India.

Our proposed *d4*PEAT framework looks deeper into these questions. It takes an in-depth and real-time look into the internal wiring of different systems and processes involved in the public management expenditure by addressing the fundamental issues impacting data aggregation, comparability, and interoperability.

The *d4*PEAT framework complements the existing approaches to public financial management systems that focus on budget credibility and fiscal transparency. It further pushes the frontier by looking at *a-priori* data standards and real-time indicators. The framework is built on the concept of business process re-engineering needed at various levels of the government and ensures that the different standalone processes work together.

By situating digitalization as a foundation, *d4*PEAT identifies and lists the various factors that enable an entity to mainstream the process of digitalization. It assesses the readiness of a ministry, department or other entities expending public money for public finance reforms. The framework has benefited from deep interactions with policymakers from the Union and state governments, district

and block officials, and Gram Panchayat (GP) members. It is designed to help translate the government's digital public expenditure mandate into an actionable roadmap.

2. Methods: State visits and in-depth interviews

In a federal State like India, it is a challenge to aggregate and track public expenditure by purpose or activity. In order to better understand all these inherent challenges, this study uses a combination of both primary data and secondary data. The primary data was collected from our field visits to four states in India, viz., Karnataka (Southern region), Gujarat (Western Region), Odisha (Eastern Region), and Uttar Pradesh (Northern region), along with covering the Government of India officials in New Delhi.

In-depth interviews with over 90 knowledgeable and committed professionals were conducted in the four designated states during the two months of March and April 2022. Separate questionnaires were prepared for the Government of India and state officials, state line departments, and officials at the district, block, and Gram Panchayat (GP) levels. Several academic researchers in the field of public finance were also interviewed in the process.

Through these interviews, we sought feedback on different ways to improve public expenditure management. Examples of questions we asked to the professionals include: specific measures to improve the tractability of funds flowing from centre to the lowest implementing agencies; the differences in accounting frameworks across governments; the challenges for putting in place machine-to-machine payment tracking systems; measures to build a non-repudiable online registry for assets and citizens for decision making; the need for standardization of data, among others. We categorized the responses received under different subsections below in the Result section [3.1.1 to 3.1.6].

The secondary desk research was primarily conducted using published papers, the State Finances Audit Reports of 29 states prepared by the Comptroller and Auditor General of India (C&AG), the State Budget manuals, Finance and Appropriation documents of the state governments, Study of State Finances published by the Reserve Bank of India, available sanction orders of various Union Government schemes, Public Financial Management System (PFMS) reports, and web portals of government ministries.

3. Results

3.1 Need for a re-engineered framework

Our result section is broadly divided into two parts: First, from our state visits and in-depth discussions, we argued that the issues pertaining to public expenditure management include misallocation and misclassification of data, difficulty in aggregating data, lack of data standards, difficulty in tracking fund-flows, delays in payments and government transactions, challenges in

comparing data, the issue of data integrity, the lack of end-to-end encryption, and the lack of a single source of truth. In order to better understand these challenges and identify the commonalities, we have classified the issues related to public expenditure management into six buckets, explained in subsections 3.1.1 to 3.1.6. These challenges provide the basis of future reforms in the public financial space.

Second, we concluded that reforms in public expenditure management with mainstreaming the digitalization process entail significant process re-engineering. Wide-ranging digital innovations are needed to rewire the internal configurations of public financial management systems, the nuts and bolts, that increase the comparability, reliability, and tracking of public funds. An actionable road map along this line has been detailed in our proposed, the Digitalization for Public Expenditure Accountability and Transparency (*d4PEAT*) framework (explained in Section 3.2).

3.1.1 Challenges with data reliability

The first major issue stems from the prevalence of an accounting framework that allows for misallocations and misclassification of funds. Issues related to data reliability emerge from three main reasons:

a. Different accounting frameworks: The federal structure of India follows a three-tier government system: the Union government, state governments, and local governments. All these layers have varied structures of accounting. The Government of India's accounting classification follows a six-tier accounting structure, which differs from state governments' accounting codes starting from the fourth tier. Similarly, local government's accounting system differs from both state and Union governments', as shown in Table 1.[2]

Table 1 illustrates the various coding patterns of some selected States.[3] First, the six-tiers, up to the 15-digit accounting classification of the GoI is shown. It is seen that the GoI and the State governments' accounting codes till the third tier, i.e up to nine digits, are uniform. However, the accounting classification starts to differ from the fourth tier onwards, that is, the Minor Head level.

For example, Karnataka has a 'Group Head' which is unique only to that State. The 'Standard Object Head' is unique only to Madhya Pradesh. The 'Sub-Sub Head' as an additional tier of accounting exists only in Assam. The scheme code (Sub-Head) for the States of Odisha and Madhya Pradesh has four digits, whereas it is alpha-numeric for Tamil Nadu and one-digit for Gujarat and Karnataka. The Detailed and Object Heads are also accounted for differently for different states.

The Local government, specifically the Panchayati Raj Institutions (PRIs) follow a three-tier accounting system as opposed to the six-tier one followed at the GoI level. A Sub-Head (adding to one more tier) is sometimes incorporated wherever a scheme exists. The varying heads of accounts across different levels of government pose a difficulty in the collation of data, leading to issues of comparability and aggregability.

Table 1: Accounting Frameworks across Various Tiers of Government

Tiers	Major Head	Sub-Major Head	Minor Head	Sub-Head	Detailed Head	Object Head
GOI	XXXX	XX	XXX	XX	XX	XX

States	Major Head description	Major Head	Sub-Major Head	Minor Head	Group Head	Sub-Head	Standard Object Head	Sub-Sub Head	Detailed Head	Sub Detailed Head	Object Head
Odisha	Housing	2505	60	800	..	3122	..	..	41078	..	0
Assam	Treasury & Accounts Admin	2054	0	97	..	430	..	145	1	1	..
Gujarat	Housing	2216	3	102	..	1	..	..	0	..	3131
Karnataka	Housing	2216	3	104	2	1	..	..	..	..	100
Madhya Pradesh	General Education	2202	2	109	..	2267	34	..	1	..	..
Uttar Pradesh	General Education	2202	1	111	..	1	..	..	2	..	43
Tamil Nadu	Education	2202	1	101	..	JB	..	..	1	..	1

Tiers	Major Head	Minor Head	Sub-Head	Object Head
Local Government	XXXX	XXX	XX	XX

Source: Authors' compilation from field visits and treasury codes of different States.

b. Challenges in data aggregation: Lack of data alignment across different government levels prevents aggregation of data. Close to one fourth of the state governments' expenditures in India is recorded as "Miscellaneous", making the entire chain of transactions difficult to both trace as well as aggregate.

c. Unreliable granular level of information: There is limited data entry at source and manual record-keeping makes data unreliable. The entry of data into computers at a later stage make this data significantly error-prone.

3.1.2 Fund-flow tracking issues

The second challenge arises from the difficulty in tracking public funds along the entire chain of transactions. This is mainly due to the following reasons:

a. Inadequate mapping and reporting formats of spending entities: All the entities expending public money are not mapped with the treasury, and their accounting codes and reporting formats also differ, resulting in loss of tracking down to the last rupee.

b. Lack of end-to-end data capture: All the processes involved in public expenditure management, starting from budgeting, to sanctions, raising invoices, to approvals and payments are not organically linked. This is because many a times, data is not entered at source digitally, but rather kept in manual registers and entered subsequently. This limits the auto-flow or machine-to-machine flow of information across different software.

c. Challenges in spending accountability: The utilization of public funds is not backed by real-time Utilization certificate.[4] The State Finances Audit Reports of the C&AG for various states point out

that as of March 2020, the cumulative amount of Utilization Certificates aggregating to Rs 5,33,317 crore remained outstanding in 28 major states of India (Iyer and Roy Chowdhury 2022).

3.1.3 Lack of data standards

Data standards establish principles and protocols across different categories of data to remove definitional ambiguities and discretionary classifications. It enables sharing of data through Application Programming Interfaces (APIs) to ensure comparability and interoperability of public expenditure data. Different data standards across different levels of government make it difficult to capture, record, publish and analyze public expenditures.

3.1.4 Delays in payment and transactions

The fourth key issue arises due to lack of just-in-time funding, which lends itself to fund-floats in the system, as well as uncertainty and delays in payments, making it difficult to transact with government (Mathew and Sharma 2020). In a digitalized just-in-time system, money would be disbursed only against actual expenditure on a real-time basis, which address the issues of parking of funds or fund floating at different levels of government.

A move towards a 'smart payments' architecture with predefined conditions for fund-flow and releases with programmed auto-triggers would ensure that funds flow when actual expenditures are incurred. The perusal of State Finances Audit Reports of C&AG for 24 states shows that in 2019-20, Rs 63,731 crores of unspent balances were lying idle in the personal deposit/personal ledger accounts (PD/PLA) (CAG various years). Viewed in perspective, this amounts to about 19% of the sanctioned CSS schemes in the Union Budget 2019-20.

3.1.5 Issues with data integrity

With different data bases operating in silos and with no easy data exchange or interoperability between these databases, this leads to the fifth significant issue in public expenditure management of data integrity. Lack of data integrity emerge from the two following reasons

a. Lack of a single source of truth: The absence of a common data registry for activities, assets, or individuals is a barrier to effective financial governance. The usability of data collected by different entities across all the tiers of government remains limited.

b. Databases are most often standalone systems, with limited interoperability among and across different software and databases. Inter-operability of data is possible when information flows digitally across systems such that attributes of one database are auto-populated in the other databases.

3.1.6 Data transparency

The last key issue is the lack of data transparency leading to the difficulty in aggregation and comparability of data, spending decisions being less transparent and citizen participation more difficult. Lack of data transparency arises due to the following reasons

a. Inaccessibility of publicly available data: Transparency in public spending is better enabled by the availability of data in a machine-readable format in the public domain, especially for citizens who are the ultimate beneficiaries of public services.

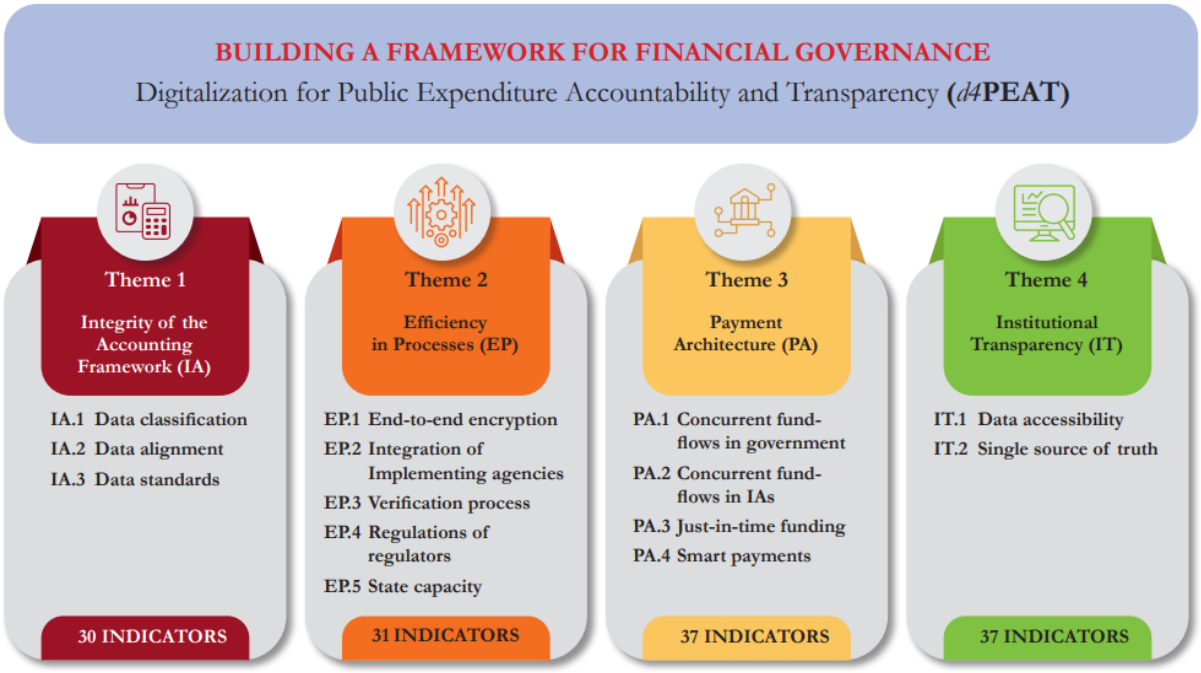
b. Lack of coordination between departments to standardize data, set up data protocols, and clearly delineating ownership norms and responsibilities.

3.2 The Framework: Digitalization for Public Expenditure Accountability and Transparency (*d4*PEAT)

In order to translate the process re-engineering in public financial management (PFM) systems into an actionable roadmap, a set of indicators under the framework called the Digitalization for Public Expenditure Accountability and Transparency (*d4*PEAT) has been conceived. The *d4*PEAT framework strings together the role that technology and digitalization can play in improving public expenditure management systems and spending outcomes in India, across different levels of government. It would entail end-to-end digitalization and integration of all the processes, ranging from accounting to budgeting, to approvals, tendering, verification, and payments.

The *d4*PEAT framework stands on four themes, 14 pillars, and 135 indicators, and includes cutting-edge financial governance indicators using digital technologies in real-time, as shown in Figure 1. The four themes described in detail in the following sections are: (1) *Integrity of the Accounting Framework,* with three pillars and 30 indicators; (2) *Efficiency in Processes*, with five pillars and 31 indicators; (3) *Payment Architecture*, with four pillars and 37 indicators; and (4) *Institutional Transparency*, with two pillars and 37 indicators. The themes and the pillars under each subsequent theme are provided in the figure below; whereas the detailed indicators capturing these fundamental aspects for reforms are delineated in Appendix 1.

Figure 1: Digitalization for Public Expenditure Accountability and Transparency (*d4*PEAT)



The *Integrity of the Accounting Framework* (IA) is the first theme of *d4*PEAT. This theme highlights the accounting challenges and outlines the need for a transparent accounting system. To that effect, it helps the States assess their existing accounting architecture and facilitates in identifying a roadmap towards data aggregation and comparability between different entities expending government funds.

Efficiency in Processes (EP) maps work-flows that are end-to-end encrypted, with verification processes, approvals, and regulations built into the system digitally. The theme focuses on mainstreaming the digitalization of these individual standalone processes. This transition to end-to-end work-flow reduces subjectivity that is often involved in policy-making. It ensures the online flow of information from one work-flow to another, thereby reducing the time needed in the processing of the files as well as increasing the transparency in the whole chain of transactions.

The *Payments Architecture* theme, in essence, captures the concurrent fund flows to the governments and the Implementing agencies. This theme also lays down indicators measuring the extent of just-in-time fund flows in the process of transaction through a smart payment architecture.

Finally, *Institutional Transparency* is measured by the extent of data availability such that the information is readily shareable across and within government departments and Implementing Agencies. Transparency is also analyzed by the degree of accessibility of data in the public domain in machine-readable formats.

3.2.1 Calculation of the Composite *d4*PEAT score

The use of digital initiatives to manage public finance widely varies across different tiers of government (Central, State, and local government), Ministries, and departments. *d4*PEAT framework can systematize digital innovations along the key digital touchpoints of various processes of PFM. The 135 indicators under the four themes of *d4*PEAT can be used to compute a Composite score, such that the performances of Central government, Central Ministries, State governments and the State Departments are assessed and ranked. Each tier of government, ministry, and department can self-assess their current pace of digitalization by arriving at a composite score based on the real-time indicators. This will also be indicative of the extent of digitalization needed going forward.

In arriving at a composite score, we first segregate the 135 indicators of the framework as 'Ranking' and 'Non-Ranking' indicators. There are also certain indicators that are 'Informational' in nature, and are not ranked. It is also to be acknowledged that not all the indicators are applicable for all levels of government. For instance, questions on State government accounting codes and their alignment with Central government's accounting codes are directed only to the State governments. Only Applicable indicators that are ranked are scored to attain the Composite *d4*PEAT score index.

The ranking indicators can either take the option of 'Yes' (assigned a value of 1) or 'No' (assigned a value of 0). For instance, if all the government departments dealing with a similar type of activity capture data in a unified format, they get a score of 1, else 0.

For some indicators 'Yes' might represents a worse performance. For instance, if States respond affirmatively to money being parked in the PD/PLA account, the 'Yes' is given a value 0 and 'No' a value of 1.

With this scoring pattern, pillar-wise scores for each pillar under different themes can be computed. Also, for each theme, 'Maximum possible' Theme score and 'Obtained score' by each level of government can be computed as in the Table 2 below.

All the pillars under a single theme have equal weights. Likewise, all the indicators under a particular pillar are weighted equally. The Composite (*d4*PEAT) Score at different government levels is the simple summation of the Obtained scores under the four themes.

Each government entity can self-assess their readiness or progress made on digitalization of the public financial management process through their Composite Obtained Scores. Obtained scores of the entities, when compared against the Maximum score, would also suggest and point to the areas of improvement.

Table 2: Theme-wise maximum scores under *d4*PEAT at each level of government

	Number of ranked indicators at all levels of Government	Maximum possible score of Central Government	Maximum possible score of Central Ministries	Maximum possible score of State Government	Maximum possible score of State Departments
Theme 1: Integrity of the Accounting Framework (IA)	27	13	16	27	18
Theme 2: Efficiency in Processes (EP)	30	14	27	14	29
Theme 3: Payment Architecture (PA)	33	19	21	33	31
Theme 4: Institutional Transparency (IT)	37	30	28	34	31
Composite *d4*PEAT score: Maximum possible	**127**	**76**	**92**	**107**	**109**
Composite *d4*PEAT score: Obtained	Based on actual responses given				

4. Conclusions

Moving from standalone systems to digitally end-to-end rewired processes, from unreliable data to a single source of truth, from uncertainty in fund-flow to just-in-time funding, are singular reforms needed in public expenditure management.

This is the first research paper that studied in-depth the various challenges in the current public expenditure framework in India. The primary objective of this study was to better understand the public financial management landscape and identify touchpoints where mainstreaming digitalization could improve the effectiveness and tractability of public expenditure. Towards this end, we also sought to develop an actionable roadmap in the form of the *d4*PEAT framework for addressing the fundamental issues of data aggregation, comparability, and interoperability.

The contribution of this study is that it goes beyond the ex-post indicators, as has been commonly done in the literature, by looking into a-priori data standards, as well as appropriate process re-engineering that is needed at various levels of government.

In India, different States have their individual approaches for maintaining the integrity and transparency of the accounting framework. Over the last decade, various States have introduced and implemented digital innovations that have best suited their financial architecture. The universality of *d4*PEAT lies in recognizing the diversity and approaches already in existence in different States. With every State being at different points in the digital reform space, *d4*PEAT does not advocate a unique roadmap as long as the four main reform ideas incorporating the challenges are integrated into digital innovations.

*d4*PEAT also has the advantage of being non-simultaneous in these four proposed reforms. Given the complexities and the challenges to roll-out all the necessary innovations in process re-engineering at the same time, a few key reforms that can be undertaken in the immediate term that have synergistic impact are below.

The first one is developing data standards, which would involve standardization of data formats and data fields across accounting level processes, across various types of transaction, and also at the recipient level. A Nodal unit – responsible to ensure that government departments dealing with a similar type of activity capture an equal number of data fields in a unified and machine-readable

format – needs to be set up at the Central and State government level. A detailed list suggesting specific indicators for data standardization is available in Theme 1 (Integrity of the Accounting Framework) under Pillar 3 (Data standards).

Another area that needs thrust is developing a single source of truth, in the form of a dynamic common digital beneficiary and vendor database. A single source of truth will serve as a unique source of information for key decision-making processes, such as determining beneficiary eligibility and assessing vendor quality or bid capacity. This dynamic digital social registry would enable data shareability and comparability within relevant departments through inter-operable information and APIs. Specific indicators that map to the creation of a single source of truth are detailed under Theme 4 (Institutional Transparency), particularly in Pillar IT.2A (for beneficiaries), Pillar IT.2B (for vendors), and IT.2D (Data synergies).

Finally, moving towards End-to-end data capture is our third key recommendation for the immediate term. Algorithmically-programmed systems would have to be put in place, such that all transactions starting from demand requests to raising invoices, approvals, and finally payments are made electronically, and no human interface is possible in this chain of transactions. Theme 2 (Efficiency in Processes), Pillar EP.1A (Process mapping), and Pillar EP.1 B (Point of Occurrence) suggests specific indicators putting in place end-to-end data capture.

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Notes

1. Himachal Pradesh is a northern state of India. The report was prepared in consultation with the state government of Himachal Pradesh.

2. The existing system of accounting expenditures in the Government of India (GoI), issued by the Department of Expenditure, Ministry of Finance, follows a six-tier hierarchical structure (CGA, 2021). The Major Head [first-tier of four digits] represents the major function of the government. The Sub-Major Head [second-tier of two digits] is a sub-function of the government, which is followed by the Minor Head [third-tier of three digits] that identifies a specific program. The scheme towards which the particular expenditure is accounted for comes in the Sub-Head level [fourth-tier of two digits]. Finally, the Detailed and Object Heads [the fifth and sixth tiers, respectively, both of two digits] represent the sub-scheme and economic nature of the expenditure, respectively. The first nine digits of the GoI accounting classifications are (mostly) uniform across all the State governments. However, the recording of expenses below the Minor Head starts to differ across states. The local government follows a three-tier structure, comprising of a nine-digit accounting system which is different from the Centre and the States. Details can be seen from the Report "List of Major and Minor Heads of Account of Union and States LMMH". Ministry of Finance, Government of India. https://cga.nic.in/Book/Published/7.aspx and "Model Accounting System for Panchayats. Ministry of Panchayati Raj. https://www.panchayatportals.gov.in/documents/1744472/0/PDF.PDF

3. There is no particular sequence or reasoning behind choosing these specific States. The States have been chosen purely from the perspective of illustrations.

4. Utilization Certificates (UCs) remain the primary financial statements required to be submitted by the designated authorities against funds received by them from GoI or State governments. The UCs certify the use of funds by the recipients. Outstanding UCs implies that either public funds are utilized but there are no accounts backing this utilization in real-time, or that public funds are "parked" and either not utilized, or utilized for a purpose that it was not allocated for.

Appendix 1:

Composite score of *d4*PEAT framework using indicators specific to each level of government

If a question is pertinent at a particular government level, the highlighted cell will state "Applicable". The ranked questions can either be 'Yes' or 'No'. Only Ranked and Applicable indicators are used in calculating the Composite score. Indicators that are Ranked (+), a Yes value gets a score of 1 and a No gets a score of 0. For indicators that are Ranked (-), a Yes gets a score of 0 and No gets a score of 1.

	Theme 1: Integrity of the Accounting Framework (IA)	Ranked (+, -) Non Ranked (Informational)	GoI (Applicable, Yes=1, No=0)	Central Ministries (Applicable, Yes=1, No=0)	State Government (Applicable, Yes=1, No=0)	State Departments (Applicable, Yes=1, No=0)
IA.1	**Data classification**					
	GOI 6 tier / 15-digit accounting					
1	The GoI accounting codes has 6 tiers/15 digits. How many tiers/digits are there in your State accounting codes?	**Informational**			**Applicable**	
2	Do the Central and State shares of funding for a scheme have separate identifying/accounting codes?	**Ranked(+)**			**Applicable**	
3	Are all the Central and State schemes always classified at the Sub-Head level by these identifying codes?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Do the Detailed Heads of Account have a unique identifying code that is non-zero for each category of expenditure?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Are the Detailed Heads of the State IFMS mapped in the Central PFMS?	**Ranked(+)**			**Applicable**	**Applicable**
6	Are the Object Heads of the State IFMS mapped in the Central PFMS?	**Ranked(+)**			**Applicable**	**Applicable**
7	Are Object Heads of State IFMS maintained at the: District level, Block level, GP level, Corporations, using government money?	**Ranked(+)**			**Applicable**	
8	For schemes that converge, do you have an accounting framework that consolidates all the expenditure under the different schemes available?	**Ranked(+)**		**Applicable**	**Applicable**	**Applicable**
9	For schemes that converge, is there a unique accounting ID for each source of funds building the same asset?	**Ranked(+)**		**Applicable**	**Applicable**	**Applicable**
10	If yes, do you maintain electronically linked consolidated total expenditure, department-wise, for each asset built under different schemes?	**Ranked(+)**		**Applicable**	**Applicable**	**Applicable**

11	If different components of the same scheme are housed in different departments at the Centre and State levels, are all these electronically mapped through a common code?	Ranked(+)		Applicable	Applicable	Applicable
12	Do different government entities creating similar assets identify the same by specified assigned asset codes?	Ranked(+)		Applicable	Applicable	Applicable
13	If yes, are separate asset codes assigned to classify revenue and capital expenditure of schemes?	Ranked(+)		Applicable	Applicable	Applicable
	'Data classification' score: Maximum possible	**12**	**2**	**8**	**12**	**10**
	' Data classication' score: Obtained	**12**	**0**	**0**	**0**	**0**
IA.2	**Data alignment**					
1	Is the State IFMS mapped with the Central PFMS?	Ranked(+)			Applicable	
2	If yes, how many digits of the State accounting code are mapped with the 15 digit Central PFMS code?	Informational			Applicable	
3	Are the Ministries/Line Departments electronically linked scheme-wise to the treasury code?	Ranked(+)	Applicable		Applicable	
4	Are the districts, blocks and the GP expenditure codes electronically linked scheme-wise to the treasury code?	Ranked(+)			Applicable	
5	Do IAs using government money have expenditure codes electronically linked scheme-wise to the treasury code ?	Ranked(+)	Applicable	Applicable	Applicable	Applicable
6	Has the concordance table between the IAs and GoI/State accounting system been made?	Ranked(+)	Applicable	Applicable	Applicable	Applicable
7	Are there State level schemes that are similar to CSS providing the same benefit (for e.g., house) ?	Informational			Applicable	Applicable
8	If Yes, has the concordance table for the State and Central Governments been made for both the CSS and State schemes?	Ranked(+)	Applicable		Applicable	
9	Has the concordance table between the Panchayat accounting system and State accounting system been made?	Ranked(+)			Applicable	
	'Data alignment ' score : Maximum possible	**7**	**4**	**2**	**7**	**2**
	'Data alignment ' score : Obtained	**7**	**0**	**0**	**0**	**0**
IA.3	**Data standards**					
	Definition: Data standards are rules for standardization of data elements in terms of both their format and their precise meanings.					
1	Is there any Nodal unit for developing data standards at the Central/State government level?	Ranked(+)	Applicable		Applicable	
2	Do all the government departments dealing with a similar type of activity capture an equal number of data fields? (For example,	Ranked(+)	Applicable	Applicable	Applicable	Applicable

	date, specifications for road, nutritional standards, vendor information, etc.)					
3	Do all IAs using government funds and dealing with similar activities capture an equal number of data fields?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Do all the departments capture the data fields in a unified format (for example, mm/dd/yyyy for the date)?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Are all the data fields that have been captured available in a machine-readable digital format?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Is a digital data dictionary (description of data elements with its codes) maintained and used by each government department?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
7	Is there a meta-data catalogue consolidating the data dictionary of all the government departments?	**Ranked(+)**	**Applicable**		**Applicable**	
8	Do all the IAs using government funds report transactions using the same meta-data dictionary used/prescribed in the government?	**Ranked(+)**		**Applicable**		**Applicable**
	'Data standards ' score : Maximum possible	**8**	**7**	**6**	**7**	**6**
	'Data standards ' score: Obtained	**8**	**0**	**0**	**0**	**0**
	Theme 1 Score: Maximum possible	**27**	**13**	**16**	**26**	**18**
	Theme 1 Score: Obtained	**27**	**0**	**0**	**0**	**0**

	Theme 2: Efficiency in Processes (EP)	Ranked (+, -) Non Ranked (Informational)	GoI (Applicable, Yes=1, No=0)	Central Ministries (Applicable, Yes=1, No=0)	State Government (Applicable, Yes=1, No=0)	State Departments (Applicable, Yes=1, No=0)
EP.1	**End-to-end encryption**					
EP.1A	***Process mapping***					
1	Are all the budgetary processes (planning, allocations, approvals, tendering/ procurement, and billing) directly made on a digital portal?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Are all the budgetary processes (planning, allocations, approvals, tendering/ procurement, and billing) conducted on one single portal?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	If no, do the key parameters from the different portals above auto-populate into each other's portal?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Have any auto-triggers been put in place to deal with any discrepancies? For example: An auto-trigger built in if the bill amount raised is greater than the sanctioned amount or if the BOQ is different from the Measurement Book, etc.	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
EP.1B	***Entry at source (Point of occurrence)***					
5	Are the Detailed and Object Head level expenditures entered manually in registers and subsequently fed into the computers?	**Ranked(-)**		**Applicable**		**Applicable**
6	Are demand requests raised electronically by the vendors?	**Ranked(+)**		**Applicable**		**Applicable**
7	Are demand requests raised by the vendors at the primary unit of activity?	**Ranked(+)**		**Applicable**		**Applicable**
8	Do the vendors themselves upload the invoices online in a prescribed format (for example: Updating a BOQ, BM15, etc.)?	**Ranked(+)**		**Applicable**		**Applicable**
9	Have algorithmically programmed systems of approvals been put in place within the hierarchy?	**Ranked(+)**		**Applicable**		**Applicable**
10	Are payments to vendors automatically initiated after all the pre-prescribed approvals are digitally signed?	**Ranked(+)**		**Applicable**		**Applicable**
	End-to-end encryption' score: Maximum possible	**10**	**4**	**10**	**4**	**10**
	'End-to-end encryption' score: Obtained	**10**	**0**	**0**	**0**	**0**
EP.2	**Integration of Implementing Agencies in financial transactions**					

1	What percentage of the contracts follow the e-tendering process?	**Informational**		**Applicable**		**Applicable**
2	Can the participating vendors view and raise objections online on any information submitted by the competing bidders?	**Ranked(+)**		**Applicable**		**Applicable**
3	If yes, is the identity of the vendor raising the objections online kept confidential?	**Ranked(+)**		**Applicable**		**Applicable**
4	Is there a tender committee that looks into the objections raised by vendors and records the recommendations online?	**Ranked(+)**		**Applicable**		**Applicable**
5	Is there a separate tender disposal committee that oversees the recommendations of the tender committee and records the final decisions online?	**Ranked(+)**		**Applicable**		**Applicable**
	'Integration of IAs' score: Maximum possible	**4**	**0**	**4**	**0**	**4**
	'Integration of IAs' score: Obtained	**4**		**0**	**0**	**0**
EP.3	**Verification process**					
1	Are Measurement Books maintained manually or entered online directly?	**Ranked(+)**		**Applicable**		**Applicable**
2	If maintained online, is the Bill of Quantities (BOQ)/Terms of Contract automatically updated into an e-bill management system?	**Ranked(+)**		**Applicable**		**Applicable**
3	Are any independent third-party verifications of the project done at the pre-defined stages?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Are there different Third-Party Investigators (GoI, State government, Own departments/Other departments, private agencies) at every stage of the project?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Are the Third-Party Investigators randomly assigned at every stage of the project?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
	'Verification process' score: Maximum possible	**5**	**3**	**5**	**3**	**5**
	'Verification process' score: Obtained	**5**	**0**	**0**	**0**	**0**
EP.4	**Regulations of regulators**					
1	Are the trust scores of vendors maintained based on third-party verifications and sample audits?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Is the process of assigning third parties double-blind in the sense that the list of third parties and projects is anonymized and the assignments are made randomly?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Are risk assessment systems put in place to randomly audit third parties?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Is a process put in place for risk mitigation using sample audits of third parties?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**

	'Regulations of regulators' score: Maximum possible	**4**	**4**	**4**	**4**	**4**
	'Regulations of regulators' score : Obtained	**4**	**0**	**0**	**0**	**0**
EP.5	**State capacity**					
1	Is there a nodal department at the Central/State level that can spearhead IT innovations and linkages across all Ministries/Departments in the hierarchy?	**Ranked(+)**	**Applicable**		**Applicable**	
2	Are job aids (checklists) available for every point in the chain of digital transactions (for example: checklists for entry at source, approvals, verifications, and payments)?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Do the blocks have the capacity to computerize records originating from the GP level? (Capacity is defined as the availability to deliver accurately and on time with the required number of data operators and trained manpower.)	**Ranked(+)**				**Applicable**
4	Do the data entry operators at the block level receive training on PFMS systems on a regular basis?	**Ranked(+)**		**Applicable**		**Applicable**
5	Is high speed internet connectivity available at all times at the GP level?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Do the PEOs have the capacity to make data entries in the digital format at the GP level? (Capacity defined as availability of specialized manpower and computers)	**Ranked(+)**				**Applicable**
7	Do the data entry operators at the GP level receive training on PFMS systems on a regular basis?	**Ranked(+)**		**Applicable**		**Applicable**
	'State capacity' score: Maximum possible	**7**	**3**	**4**	**3**	**6**
	'State capacity' score : Obtained	**7**	**0**	**0**	**0**	**0**
	Theme 2 Score: Maximum possible	**30**	**14**	**27**	**14**	**29**
	Theme 2 Score: Obtained	**30**	**0**	**0**	**0**	**0**

	Theme 3: Payment Architecture (PA)	Ranked (+, -) Non Ranked (Informational)	GoI (Applicable, Yes=1, No=0)	Central Ministries (Applicable, Yes=1, No=0)	State Government (Applicable, Yes=1, No=0)	State Departments (Applicable, Yes=1, No=0)
	Implementing Agencies (IAs) are defined as Statutory bodies, Corporations, Trusts, Registered Societies, Autonomous Bodies, State Govt. Institutions, Local Bodies etc. spending government money directly.					
PA.1	**Concurrent fund-flows in government**					
1	Are PD/PLA accounts maintained for Central government schemes?	**Ranked(-)**			**Applicable**	**Applicable**
2	In the last financial year, what percentage of the Grants-in-aid for all CSS schemes were in the PD/PLA accounts?	**Informational**			**Applicable**	
3	Are PD/PLA accounts maintained for State government schemes?	**Ranked(-)**			**Applicable**	**Applicable**
4	In the last FY, what percentage of the total allocation under State government schemes were in the PD/PLA accounts?	**Informational**			**Applicable**	
5	Are different bank accounts maintained at different levels (district/block/GPs) for each CSS government schemes?	**Ranked(+)**			**Applicable**	**Applicable**
6	Are these different bank accounts maintained at different levels for CSS schemes zero balance or child accounts?	**Ranked(+)**	-	-	**Applicable**	**Applicable**
7	Have the Single Nodal Accounts been implemented for all CSS schemes at the State level?	**Ranked(+)**			**Applicable**	
8	Have the Single Nodal Accounts been electronically integrated with the State Treasury?	**Ranked(+)**			**Applicable**	
9	Are there any PD/PLA accounts for CSS schemes still open after SNA?	**Ranked(+)**			**Applicable**	**Applicable**
10	Are the bank accounts maintained at different levels (district/block/GPs) of each State government schemes zero-balance or child accounts?	**Ranked(+)**			**Applicable**	**Applicable**
	'Concurrent fund-flows in government' score: Maximum possible	**8**	**0**	**0**	**8**	**6**
	'Concurrent fund-flows in government' score: Obtained	**8**	**0**	**0**	**0**	**0**
PA.2	**Concurrent fund-flows in IAs**					
1	Do IAs using government funds also have separate accounts for each Central scheme?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Are there several IAs implementing a single Central scheme?	**Informational**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	If yes, have all the IAs for a single scheme registered their bank accounts in the PFMS?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Do all the bank accounts of IAs for Central schemes have zero-balance/child accounts?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**

5	Do IAs using government funds also have separate accounts for each State scheme?	**Ranked(+)**			**Applicable**	**Applicable**
6	Are there several IAs implementing a single State scheme?	**Informational**			**Applicable**	**Applicable**
7	If yes, have all the IAs implementing a single scheme registered their bank accounts in the IFMS?	**Ranked(+)**			**Applicable**	**Applicable**
8	Do all the bank accounts of IAs for state schemes have zero-balance/child accounts?	**Ranked(+)**			**Applicable**	**Applicable**
	'Concurrent fund-flows in IAs' score : Maximum possible	**6**	**3**	**3**	**6**	**6**
	'Concurrent fund-flows in IAs' score : Obtained	**6**	**0**	**0**	**0**	**0**
PA.3	**Just-in-time funding**					
1	Have time limits been prescribed for vendors to raise their invoices in a digital format?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Have time limits been prescribed for verification of the invoices raised by the vendors?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Have algorithmically programmed time limits been put in place for approvals within the hierarchy?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Do government departments/other government bodies/IAs have defined drawing limits for the expenditure incurred?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Do government departments/other government bodies/IAs receive approved pre-expenditure funds?	**Ranked(-)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Have automatic triggers been put in place for fund transfers after a pre-prescribed spend is reached?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
7	Have algorithmically programmed time limits been put in place for the release of payments after approvals?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
8	Does the fund flow to the government departments/ other government bodies/IAs at pre-prescribed intervals without UCs?	**Ranked(-)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
9	Does the fund flow to the government departments/ other government bodies/IAs only in real time (just after the expenditure is incurred) when the invoice is raised?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
10	Pre-prescribed lumpsum benefits are given in advance for some schemes like housing. For other schemes, are lump-sum benefits released in phases to beneficiaries at pre-prescribed intervals?	**Ranked(-)**		**Applicable**	**Applicable**	**Applicable**
11	Are lump-sum benefits released in phases to beneficiaries only in real time?	**Ranked(+)**		**Applicable**	**Applicable**	**Applicable**
12	Are all your social welfare schemes, including both Central and State schemes, under the Direct Benefits Transfer (DBT) system?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
	'Just-in-time funding' score: Maximum possible	**12**	**10**	**12**	**12**	**12**
	'Just-in-time funding' score : Obtained	**12**	**0**	**0**	**0**	**0**

PA.4	**Smart payments**					
1	Has the system of First In First Out (FIFO) been put in place for each invoice raised?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Has the system of First In First Out (FIFO) been put in place for verification of the invoice?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Has the system of First In First Out (FIFO) been put in place for each approval?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Have pre-defined conditions been programmed into the payments system that enable automatic payments after these pre-defined conditions have been met?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Has a randomized double-blind audit system been put in place for every step of the smart payment process?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Are detailed record of expenditures for each vendor or beneficiary available in real time?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
7	Is it possible to get complete financial statements in real time to enable auto-generation of UCs?	**Ranked(+)**			**Applicable**	**Applicable**
	'Smart payments' score: Maximum possible	**7**	**6**	**6**	**7**	**7**
	'Smart payments' score: Obtained	**7**	**0**	**0**	**0**	**0**
	Theme 3 Score: Maximum possible	**33**	**19**	**21**	**33**	**31**
	Theme 3 score : Obtained	**33**	**0**	**0**	**0**	**0**

	Theme 4: Institutional Transparency (IT)	Ranked (+, -) Non Ranked (Informational)	GoI (Applicable, Yes=1, No=0)	Central Ministries (Applicable, Yes=1, No=0)	State Government (Applicable, Yes=1, No=0)	State Departments (Applicable, Yes=1, No=0)
IT.1	**Data accessibility**					
1	Is there a data governance working committee that identifies the key data parameters to be collected for each scheme?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Does the data governance working committee classify the key data parameters that can be shared in the public domain and/or across departments using APIs?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	For data deemed to be non-confidential, is it accessible publicly in machine-readable formats?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	Have internal cross validation mechanisms been put in place to ensure that the data available in the public domain is complete and accurate?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Are there mechanisms in place where citizens can act as watchdogs for data integrity?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Are the details on expenditure under the Object Head (sixth tier in GoI accounting/ last tier in State government accounting) available in the public domain?	**Ranked(+)**	**Applicable**		**Applicable**	
7	For schemes that converge under different accounting codes, is the data available in a consolidated form and published online?	**Ranked(+)**	**Applicable**		**Applicable**	
8	Are concordance tables made for State and Central schemes, IAs, and other entities available in the public domain?	**Ranked(+)**	**Applicable**		**Applicable**	
9	If Central schemes have different names at the State level, is this information available in the public domain?	**Ranked(+)**			**Applicable**	
	'Data accessibility' score: Maximum possible	**9**	**8**	**5**	**9**	**5**
	'Data accessibility' score: Obtained	**9**	**0**	**0**	**0**	**0**
IT.2	**Single source of truth**					
IT.2A	***Selection of beneficiaries***					
1	Is there a common digital beneficiary database to assess the beneficiary eligibility under different schemes?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**

2	If yes, is the information in the common digital database obtained from administrative government databases?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	If no government sources exists, is the data collected at the primary unit by local officials like Panchayat Executive Officers (PEOs)/Gram Rozgar Sevaks (GRS)?	**Ranked(+)**			**Applicable**	**Applicable**
4	Are sample audits conducted for all beneficiary databases collected at the local levels?	**Ranked(+)**			**Applicable**	**Applicable**
5	Do all beneficiaries have a unique single digital ID based on some key parameters?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Are all beneficiary IDs seeded with Aadhaar?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
7	Is there a mechanism that can list all the benefits that a beneficiary gets under multiple schemes using a unique single digital ID?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
8	Do you have a system of social audits to verify beneficiary databases?	**Ranked(+)**			**Applicable**	**Applicable**
9	Is there a pre-prescribed frequency for the verification process of data collected at different levels of governments?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
IT.2B	***Selection of vendors***					
1	Is there any common digital data registry for vendors that auto-populates with all sanctions and approvals of government funds?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Is there a common digital vendor database to assess vendor quality and bid capacity?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Do all suppliers have a unique ID based on some key parameters?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	If yes, does the online digital database dynamically update the vendor status in terms of the quantum of work in progress and the new contracts awarded?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
IT.2C	***Use of data***					
1	Have adequate data security measures been put in place for the use of all digital databases?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
2	Have data ownership norms and responsibilities been clearly defined?	**Ranked(+)**	**Applicable**		**Applicable**	
3	Is there a framework governing the ethical use of data?	**Ranked(+)**	**Applicable**		**Applicable**	
4	Is there a system in place to ensure that the data is traceable to its primary source whenever it is used by another entity?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
IT.2D	***Data synergies***					
1	Is there any dedicated unit for consolidating data in each Ministry/Department at the Central/State government levels?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**

2	Do you have an online integrated beneficiary registry that consolidates and displays all the benefits received by a single beneficiary?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
3	Do you have an online unified portal with geotagged assets for work-in-progress and completed works?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
4	If the same scheme is spread over multiple Ministries/Departments, do they share their data electronically with each other?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
5	Are the key parameters of all schemes electronically available to all the participating Ministries/Departments?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
6	Can the data available in one scheme be used to autopopulate the pre-conditions of other schemes?	**Ranked(+)**		**Applicable**		**Applicable**
7	Does each Ministry/Department have a digital registry of data collected from the primary unit of activity?	**Ranked(+)**		**Applicable**		**Applicable**
8	If yes, are these registers dynamic and maintained online?	**Ranked(+)**		**Applicable**		**Applicable**
9	Do digital databases maintained at different Ministries/ Departments levels talk to each other through interoperable information and APIs?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
10	Do all these digital databases have a common ID that can enable them to be merged?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
11	Can data registries be accessed online through an API by both the Central Ministries and the State government Departments?	**Ranked(+)**	**Applicable**	**Applicable**	**Applicable**	**Applicable**
	'Single source of truth' score: Maximum possible	**28**	**22**	**23**	**25**	**26**
	'Single source of truth' score: Obtained	**28**	**0**	**0**	**0**	**0**
	Theme 4 Score: Maximum possible	**37**	**30**	**28**	**34**	**31**
	Theme 4 Score: Obtained	**37**	**0**	**0**	**0**	**0**