

## GovTech Glossary

| Term/Abbreviation | Meaning  |
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| <b>A</b>          |  |
| AI                | Artificial Intelligence (AI) refers to the cognitive ability of machine agents that mimics human cognition in processing information and executing tasks for which the machine agent is trained.   |
| API               | Application Programming Interface (API) denotes an intermediary format employed to permit networking, communication, and integration of computers and (application) software or programs. Open data portals can either be manually updated or automatically updated via APIs.  |
| <b>B</b>          |  |
| Blockchain        | Blockchain technology is also referred to as Distributed Ledger Technology (DLT) because it comprises a shared digital ledger that can be controlled by multiple users rather than a central authority. The distributed ledger is similar to a database but can be dispersed globally and run by any individual through the Internet. Blockchain-based smart contracts can be partially or fully executed or enforced without human interaction for financial services, healthcare, supply chain applications, among others. |
| <b>C</b>          |  |
| CEI               | Citizen Engagement Index (CEI) measures the use of online tools/portals or electronic (feedback) mechanisms to provide open data and information to citizens (e-information sharing), interact with stakeholders (e-consultation), and engage in decision-making processes (e-decision-making). These activities focus on the use of accountability tools to strengthen enforcement and monitoring mechanisms and advance governments' efforts to achieve greater transparency.  |
| CERT              | Computer Emergency Response Team (CERT) is an Information Technology(IT) team that assists an organization during IT emergencies such as during a cybersecurity attack.  |
| CGSI              | Core Government Systems Index (CGSI) seeks to quantify the state of modernization and integration of core government operations such as Tax, Customs, Payroll, e-Procurement, and others. It also measures the key aspects of a whole-of-government approach, including government cloud, interoperability platforms, and enterprise architecture, as well as the use of open-source solutions and disruptive technologies.  |
| COTS              | Commercial Off-The-Shelf (COTS) are commercially available hardware or software products that can be tailored to the needs of the buyer after they are purchased. They are not custom-made to individual specifications from the onset.  |
| CSIRT             | Computer security incident response team (CSIRT) is a team of Information Technology security experts created to detect, protect, and respond to an organization's cybersecurity threats   |

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| Customs System                   | Customs system automates the filing and management of customs documents and data to improve the speed and accuracy of clearance processes and records, and to fulfil compliance obligations in the delivery of goods.  |
| Cybersecurity                    | Cybersecurity denotes protection from cybercrimes including, but not limited to, hacking, internet fraud, telemarketing, and identity theft through an electronic medium.  |
| <b>D</b>                         |  |
| Data Governance Institutions     | Data governance bodies are mostly autonomous entities focused on the challenges of data protection and privacy, and the potential to use data for digital entrepreneurship, contributing to digital economy development.   |
| DPA                              | Data Protection Agency (DPA) is an institution mandated to protect the use and dissemination of data and to ensure compliance with existing data protection and privacy laws. It is established to safeguard the personal data of individuals; prevent and reduce discrimination via the processing of personal data; and regulate the collection, use, and sharing of personal data.  |
| Data Protection/Privacy Laws     | Data protection laws refer to legislation that spells out the conditions under which data is to be legally acquired, used, and shared, as well as authorize institutions to protect the privacy of the respondents' data   |
| DMS                              | The Debt Management System (DMS) is a type of software that is employed to manage domestic and/or foreign debt owed by the government. It is intended to assure timely payment of debts and related interest payments to optimize the government debt portfolio. It helps to meet current and future debt obligations at minimum cost.   |
| Digital Gov't / GovTech Strategy | A digital government or GovTech strategy document specifies the plan to operationalize digital transformation in the public sector. The strategy typically aims to address key challenges to digital transformation, including the need to simplify complex institutional arrangements and avoid overlapping mandates, uncoordinated initiatives, and fragmentation in the implementation of priorities, as well as limitations in terms of infrastructure, capacity, and coverage affecting public service delivery channels. |
| Digital ID                       | A Digital (ID) identity embodies the private information of an entity used by an electronic system to identify the entity. It enables the system to authenticate the entity's access to electronic services without the involvement of human agents.   |
| Digital Platforms                | These are electronic platforms that perform transactions in the public sector including the delivery of goods and services.  |
| Digital Signature                | A digital signature is an authentication mechanism that allows for the creation of a document or message that includes a code as a signature intended to mimic the functions of a handwritten signature. It comprises a generation algorithm, a signature algorithm, and a verification algorithm. A valid digital signature promotes trust and verifies the authenticity of a document or message by indicating that it was sent without alteration.  |
| Digital skills                   | Digital skills are competencies required to access and use digital devices and applications. They vary from basic levels such as online searching and emailing to advanced levels including programming and application development.   |
| DT                               | Disruptive technologies (DT) relate to emerging technologies that displace established products, markets, or networks by altering the way agents interact  |

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|                      | with each other and operate with the broader system. Examples include Artificial Intelligence, the Internet of Things, Blockchain, among others.   |
| DLT                  | Distributed Ledger Technology (DLT) is a shared digital ledger that can be controlled by multiple users. The distributed ledger can exist in different locations and be operated by multiple users (see Blockchain).   |
| <b>E</b>             |  |
| e-Filing             | E-filing relates to submitting tax documents to the relevant tax office through the Internet, without the need to submit further paper documents.  |
| e-Payment            | It is a system used for the payment of goods and services via an electronic medium without the use of cash or checks.  |
| EPI                  | e-Participation Index (EPI) measures people's engagement in policymaking through Information Technology (IT). It assesses, "the quality and usefulness of information and services provided by a country to engage its citizens in public policymaking through the use of e-government programs".  |
| e-Procurement System | E-procurement is the process of purchasing supplies and services using the Internet. E-procurement systems automate the public procurement processes, partially or fully, depending on the country's specific needs, including the announcement of procurement notices, submission and evaluation of tenders, contract signature, auctioning, and vendor management. It can be interfaced with other systems, such as FMIS, tax and business registry systems, to automate data exchange using web APIs  |
| <b>F</b>             |  |
| FMIS                 | Financial Management Information System (FMIS) automates public financial management (PFM) processes including budget formulation, execution (such as commitment control, debt management, treasury operations), accounting, and reporting. When FMIS and other PFM information systems (including, e-procurement, payroll, debt management) are linked with a central data warehouse (DW) to regularly record and report financial transactions, the system is termed as an integrated FMIS (or IFMIS). |
| <b>G</b>             |  |
| G2B                  | Government to business (G2B) is one of the primary models of e-service delivery that focuses on providing information and services to businesses. It provides a platform to minimize information asymmetry between government and businesses (for example, concerning tax obligations) and enhance the efficiency of communication and transactions between government and businesses.   |
| G2C                  | Government to citizen (G2C) relates to an online portal or tool through which ICT is applied to improve public services to citizens. G2C helps to improve communication and democratic governance through the use of Information Communication Technology (ICT).   |
| G2G                  | Government to Government (G2G) encompasses e-government centered on interactions within government. This can be in the form of data, documents or information sharing through an online service delivery portal among Ministries Departments and Agencies (MDAs). G2G seeks to improve apply information technology to improve internal efficiency within government.  |

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| GEA                       | Government Enterprise Architecture (GEA) provides a common framework for integrating strategic, business, as well as technology management as an integral part of public sector modernization. It supports a whole-of-government approach to digital transformation by ensuring the delivery of services and functions in an efficient and coordinated manner. The Open Group Architecture Framework (TOGAF) defines GEA as "a whole of government approach to support government ecosystems by transcending boundaries for delivering services in a coordinated, efficient, and equitable manner."  |
| GIF                       | Government Interoperability Framework (GIF) refers to a document or group of documents that specify common features including vocabularies, concepts, principles, policies, guidelines, recommendations, standards, and practices for Ministries Departments and Agencies (MDAs) that intend to cooperate to achieve joint delivery of public services (Lisboa and Soares, 2014). Avoiding silos of MDAs can be accomplished through horizontal and vertical integration. Horizontal integration also referred to as "government service bus" (GSB), entails cross-boundary platforms for connectivity and interoperability of systems across ministries and agencies. Vertical integration relates to the cross-layer connectivity of government systems according to their specific functions.               |
| Government cloud          | Government cloud provides a shared platform to support the different needs of public entities. It is a technology that enables access to files, data, software, hardware, and third-party services from a Web browser, in real-time, through the internet. A private or hybrid government cloud offers government agencies more flexibility than traditional data center operations through shared resource pooling, secure Internet access, and measured and expandable services, such as software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS). A private government cloud can be established within the country, whereas public clouds provide hosting services usually outside the country. Hybrid clouds combine the functions of public and private clouds. |
| Government Responsiveness | Government responsiveness refers to the practice of ensuring that citizens are served responsibly by government officials.   |
| GovTech Institutions      | GovTech institutions are entities dedicated to the advancement of GovTech. GovTech is a whole-of-government approach to public sector modernization that promotes simple, efficient, and transparent government with the citizen at the center of reforms. GovTech is the approach that represents the current frontier of government digital transformation.  |
| GRM                       | Grievance Redress Mechanism (GRM) is a set of arrangements that allow citizens to express grievances about government's services, and (in)actions and seek redress. It is a vital means to mitigate, manage, and resolve potential or realized adverse impacts of government's behavior or behavior of government officials.   |
| GSB                       | Government Service Bus (GSB) is a standards-based integration platform for automating secure data exchange among different government databases and applications to support government operations and the delivery of services.  |

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| GTEI                    | GovTech Enablers Index (GTEI) quantifies maturity in the cross-cutting drivers of the digital transformation agenda. They include digital skills in the public sector, an appropriate and conducive legal and regulatory regime, strong enabling and safeguarding institutions, and an environment that fosters innovation in the public sector. Effective regulations, improved technical skills, and accountable institutions are the analogue complements of digital investments. The key foundations of internet connectivity, robust identification systems, digital signature, and other important dimensions are also included in this component. |
| GTMI                    | GovTech Maturity Index (GTMI) measures four main GovTech focus areas, namely: core government systems, public service delivery, citizen engagement, and GovTech enablers. The GTMI is not intended to create a ranking of countries. Instead, it measures a country's position on the GovTech trajectory by measuring progress in the four GovTech focus areas the reflect progress in digital transformation in the public sector.  |
| <b>H</b>                |  |
| HRMIS                   | Human Resource Management Information System (HRMIS) is a software or system is used to manage human resources. HRMIS can help to perform several functions including recruitment, storage of employee data, payroll management, time and attendance recording, and management of worker performance and training. When the HRMIS is linked with other systems, it is described as an integrated HRMIS.  |
| <b>I</b>                |  |
| IaaS                    | Infrastructure as a service (IaaS) is a government cloud option that provides highly scalable and automated on-demand and as-needed computing resources. IaaS is fully self-service for accessing and monitoring computers, networking, storage, virtualization, and other services. Virtualization creates a software-based - or virtual - representation of servers, storage units and network resources to increase the efficiency and agility of computer hardware.  |
| ICT                     | information and Communications Technology (ICT) is defined in the e- ASEAN Framework Agreement as, "infrastructure, hardware and software systems, needed to capture, process and disseminate information to generate information-based products and services..." (ASEAN, 2000, Article 1a).   |
| Inclusive Participation | Inclusive participation emphasizes leaving no one behind. In other words, inclusive participation exists when all individuals, including vulnerable and minority groups, can fully take part, use, and benefit from an existing system, mechanism, or portal.  |
| IoT                     | Internet of Things (IoT) is a technology that involves using interlinked controls and sensors to collect and analyze data about a system or an environment and its constituent elements, with the view to enhance understanding of the system and automate processes that were previously undertaken manually.   |
| <b>J</b>                |  |
| Job Portal              | Job Portals are websites used to post vacancies. In the public sector, they can serve as an integral part of the hiring procedure and limit the probability of corruption in the hiring process through greater transparency and reduction of information asymmetry regarding the availability of job openings. Efficient use  |

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|                                       | of job portals in the public sector will translate into the employment of qualified candidates at lower costs.   |
| <b>M</b>                              |  |
| ML                                    | Machine learning (ML) is a part of Artificial Intelligence that encompasses the improvement of computer algorithms through experience (or by iterative execution) and by the use of data. The algorithms can learn/adapt by analyzing and drawing inferences from patterns in data, without human intervention or explicit instructions from a human agent.  |
| <b>O</b>                              |  |
| OCDS                                  | Open Contracting Data Standard (OCDS) is a set of standards that provide best-practice guidance to publishers of public contracting data. OCDS specifies relevant data and documents that need to be published at each stage of contracting to procure goods and services for the public sector. It details out key documents and data that should be published, supported by a documented open data specification that lays out the data structures and fields that publishers need to use to increase the accessibility, interoperability, and usability of the published data.  |
| OGP                                   | Open Government Partnership (OGP) is a partnership-oriented initiative established to obtain and strengthen the commitments of governments to boost transparent, participatory, inclusive, and accountable governance.   |
| Online Pension Portal                 | Online Pension Portal or e-Pension portal is an online tool that can be used to manage and update pension records. It provides an automated (rather than a manual) procedure for calculations related to the settlement of pension and other retirement benefits to the public sector employees.   |
| Online public service delivery portal | A portal or website from which individuals and businesses can access public services. The portal capabilities can be categorized as Government to Business (G2B), Government to Citizen (G2C), Government to Government (G2G), Government to Employees (G2E) or other forms to describe the focus on related interactions. The portal can be a one-stop shop for multiple public services instead of multiple access points for multiple services. Integrated online public service portals, also called "One-Stop Shop" or similar, provide access to all available services. Level 1 or 2 is mostly information / forms and some online transactions. Level 3 or 4 is mostly transactional, including single sign-on mechanisms. Transactional services refer to the requests that can be submitted online after a secure sign in process, ideally with no paper submission or electronic document upload, and it can be processed and completed online. The connected government systems handle the interchange of administrative documents (e.g., filing of administrative forms, delivery and cross-checking of administrative certificates, between end users and service providers) and pull necessary data from relevant registries and databases to complete the service request. |
| Online Social Protection Portal       | An online portal dedicated to improving social protection of vulnerable and minority groups such as the aged, unemployed among others. The portal performs functions such as the registration of individuals and organizations that require social protection, as well as the transfer of financial payments and non-financial support to the same persons or groups.  |

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| Open Data portal       | These are portals that provide access to government data for improving transparency and accountability. The data can be accessed in either machine-readable format such as CSV files or non-machine-readable formats such as PDFs and used without restrictions from copyright, patents, or other forms of control.  |
| Open Government Portal | It is a portal created to operationalize and strengthen open governance and transparency through the timely and proactive publication of data and documents for universal access, reuse and (re)distribution without restriction. Proceedings of the government can also be accessed through the portal to encourage effective public oversight and accountability.  |
| OSS                    | Open-Source Software (OSS) is a software that is available under a license whereby the copyright holder grants users of the software the freedom to use, study, change, and distribute the software and its source code. Firefox browser is a simple example of an OSS. Open-source machine learning/prediction tools may help governments analyze and enhance the information value of public financial management and administration data in tax compliance, fraud detection, and procurement. |
| <b>P</b>               |  |
| PaaS                   | Platform as a service (PaaS) is a government cloud option that provides hardware and software tools available over the Internet for developers to create customized applications. All servers, storage, and networking can be managed by the enterprise or a third-party provider, while the developers can maintain management of existing government systems and applications.   |
| Payroll System         | The payroll system primarily focuses on the compensation of employees, unlike the broader HRMIS system which concentrates on management worker relations but can also be used for payroll management functions. When the payroll system is linked with other core government systems, it is termed an integrated payroll system. The system can be distributed (i.e., comprise a separate Payroll in MDAs) or centralized (i.e., constitute a shared Payroll for all MDAs)                       |
| Pension system         | The pension system computes the value of the pension settlement and other retirement benefits to the public sector employees. An interconnected pension system with core government systems is termed an integrated pension system. The system can be distributed (i.e., constitute separate pension systems in MDAs) or centralized (i.e., comprise a shared Payroll for all MDAs)  |
| PIMS                   | Public Investment Management System (PIMS) streamlines, automates and supports the management of the public investment lifecycle, involving the submission, review, and approval of project proposals, as well as the execution and monitoring of the projects.  |
| PKI                    | Public Key Infrastructure (PKI) comprises a set of roles, policies, hardware, software, and procedures required to generate, use, manage, distribute, store, and revoke digital certificates, as well as manage public-key encryption. It controls the issuance of digital certificates to protect data and provides unique digital identities for users, devices and software applications, PKI also secures end-to-end information exchange.   |

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| PSDI                     | Public Service Delivery Index (PSDI) measures the state and progress of GovTech projects that support the design of human-centered online services which are simple, transparent, and universally accessible. Special attention is paid to services that are accessible through low-cost digital solutions such as mobile phones and free open-source applications, tailored to digital literacy and reaching all intended beneficiaries and users, including vulnerable groups. |
| Public sector innovation | Public sector innovation labs emphasize the enhancement of innovation and digital skills in the public sector in collaboration with the private sector. Public sector innovation encompasses improvements in both the content of public services and the instruments used to deliver them.   |
| <b>R</b>                 |  |
| RTI                      | Right to Information (RTI) law specifies the sets out of the rules and procedures regarding citizens' right to information. The RTI guarantees the right of citizens to have access to certain data and information in the public sector.  |
| <b>S</b>                 |  |
| SaaS                     | Software as a service (SaaS) is the most commonly used government cloud option for businesses. It utilizes the Internet to deliver applications, such as Zoom, WebEx, and Dropbox. A majority of SaaS applications run directly on a web browser, which means they do not require any downloads or installations from the client's viewpoint.  |
| SC                       | Steering Committee (SC) is a committee that is responsible for determining the priorities or order of business of an organization or project, coupled with the management of its operations.   |
| <b>T</b>                 |  |
| Tax System Services      | Tax online service portal provides access to specific transactional services (registration, filing, payments, etc.) as an extension of the Tax Management Information Systems (see TMIS below).  |
| TMIS                     | Tax Management Information System (TMIS) automates and streamlines the processes related to configuring, collecting, managing, accounting, and reporting of taxes.   |
| TOGAF                    | The Open Group Architecture Framework (TOGAF) is one of the most frequently used frameworks for enterprise architecture in the public and private sectors. It provides an approach for designing, planning, implementing, and governing an enterprise digital architecture.  |
| TSA                      | Treasury Single Account (TSA) refers to the unification of government bank accounts to consolidate, utilize and manage government cash resources. It minimizes cash management and borrowing costs by reducing fragmentation in the handling of government receipts and payments. The GTMI assesses whether there is a TSA linked with a Financial Management Information System (FMIS) to automate payments and bank reconciliation.  |
| <b>U</b>                 |  |
| Universal Accessibility  | Universal accessibility or omnichannel access enables individuals with disabilities and vulnerable groups to gain access to all services and participate fully in all aspects of life in an inclusive society through varied media including   |

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|          | mobile phones. The emphasis on universal accessibility is intended to ensure that government-provided services reach all intended beneficiaries and users.   |
| URL      | Uniform Resource Locator (URL) is the unique address of a given resource on the Web.   |
| <b>V</b> |  |
| VR       | Virtual reality (VR) is an emerging technology that simulates experiences that can either be similar or different from real-world experiences through an interaction with an artificial three-dimensional (3-D) visual or another sensory environment.   |
| <b>W</b> |  |
| WoG      | Whole of Government (WOG) promotes systems thinking and integrated approaches to policymaking and service delivery for accessible, transparent, and efficient government. It emphasizes MDAs working across boundaries to accomplish shared goals and related responses to specific issues and challenges.   |
| <b>X</b> |  |
| XaaS     | Anything as a Service (XaaS) is a broad category of services linked with remote access and cloud computing. It encompasses a large number of products, tools, and technologies that can be delivered to users as a service online. In addition to Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS), it also includes Storage as a Service (StaaS), Database as a Service (DBaaS), Disaster Recovery as a Service (DRaaS), Communications as a Service (CaaS), and Network as a Service (NaaS). |