Aspire to Innovate (a2i)

Government of the People's Republic of Bangladesh

ICT Division

Agargaon, Dhaka

Terms of Reference

For

"Hiring a firm for enhancement, support and maintenance of myGov platform"

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1. Background

The Government of the People's Republic of Bangladesh had taken the initiative to ensure that Government services are made available to citizens electronically through the improvement of online infrastructure, and Internet connectivity, or by making the country digitally empowered in the field of technology as one of the significant initiatives of Digital Bangladesh 2021. In collaboration with Government offices, a2i had taken initiative to introduce a centralized public service delivery platform enhancing the availability of all Government service applications in a single container so that it can act as the service application technology backbone irrespective of the availability of the back-office solutions. The idea later conceptualized a whole-of-government technology ecosystem known as myGov Platform. Inside the myGov, several technology components orchestrate together to expedite the digital transformation of Bangladesh effectively in the quickest possible way. myGov platform together with the myGov mobile app plays a key role to create direct access to services for the citizens of Bangladesh. In parallel to digital initiatives of the Government, citizens around the country are rapidly adopting smartphones and a significant portion of them are under third or fourth-generation mobile internet coverage.

This rapid development of government e-Service and digital infrastructure has created a great opportunity for e-Service providers of both public and private sectors to avail services at citizens' fingertips. myGov targets establishing a Service Delivery Ecosystem with a mobile-first strategy for creating value through informed governance. The objective is to ensure accessibility, accountability, sustainability, scalability, reliability, and service recipient satisfaction through technology in the most affordable way. This myGov, having multiple access mechanisms irrespective of device, time and location could be termed in short as myGov. Now the government aims to renew the myGov contract and embark on an ambitious journey to enhance the platform further.

The next version of myGov will focus on four key pillars: smart citizens, smart government, smart economy, and smart society focusing on Smart Bangladesh vision 2041. This comprehensive approach aims to empower citizens, foster collaboration, and drive socio-economic growth. Objectives for the new version include enhancing user experience, expanding service offerings, ensuring mobile accessibility, strengthening data security and privacy, fostering collaboration and feedback, continuous upgrades and maintenance, capacity building, and integration with emerging technologies. By pursuing these objectives, the government envisions a myGov platform that offers citizens a seamless and inclusive digital ecosystem, simplifying access to government services and contributing to the advancement of a smarter and more connected Bangladesh.

2. About the organization & Review of the Existing System

2.1 About the organization

a2i, a multinational digital transformation organization founded in Bangladesh, accelerates the inclusive digitization of public services thereby widening access and decentralizes delivery. It evolved from the flagship Aspire to Innovate program of the government's

Digital Bangladesh Vision 2021 initiative, supported by UNDP. Bangladesh's now aspires to become a prosperous, developed, poverty-free and equitable nation with its bold 'SMART Bangladesh Vision 2041' – an aspirational strategic plan to transform the economy to reach High-Income Country status by 2041 and achieve the 2030 Sustainable Development Goals along the way.

Vision 2041 builds on Bangladesh's remarkable journey towards mass, citizen-centric digitization over the past 13 years. At the heart of this development journey lies a simple yet powerful idea: that creating shared prosperity isn't possible unless administrative, financial, and political power is decentralized at the grassroots level. That is, unless all citizens are truly empowered.

Soon to be formally established as Bangladesh's national innovation agency, a2i builds on the Government of Bangladesh's efforts to champion the cause of 'digital equity' and fosters an adaptive, national system for collective strategizing, planning, action and learning to catalyze truly unprecedented transformations in public service delivery. It also works as an innovation intermediary through a 'whole-of-government' approach and supports the government to be on the forefront of integrating new, mission-driven innovation policy and whole-of-society approaches to achieve the SDGs. Through UNDP's Accelerator Labs network, and by leveraging the South-South Network for Public Service Innovation,, a2i is also working to support the digital progress of other least developed countries (LDCs) and many developing countries including Fiji, Jordan, the Maldives, the Philippines, and Yemen with funding, advice and technologies.

2.2 Existing System

myGov is a groundbreaking platform that consolidates all government services in one place, allowing citizens to apply for services using a verified account, while government officers can deliver these services online, ensuring end-to-end digitization. Citizens can access the myGov platform by themselves or through assistive models like 333 and UDC. There are over 1,700 services published from 32 ministries on myGov for citizens. Over 2.3 million applications have been disposed of through the myGov platform. The platform also offers user-friendly Android and iOS apps to provide services to citizens on mobile devices, with over 100,000 app downloads. The Government of the People's Republic of Bangladesh aims to digitize over 1,000 more services by 2025.

The section provides brief description of existing system for better understanding:

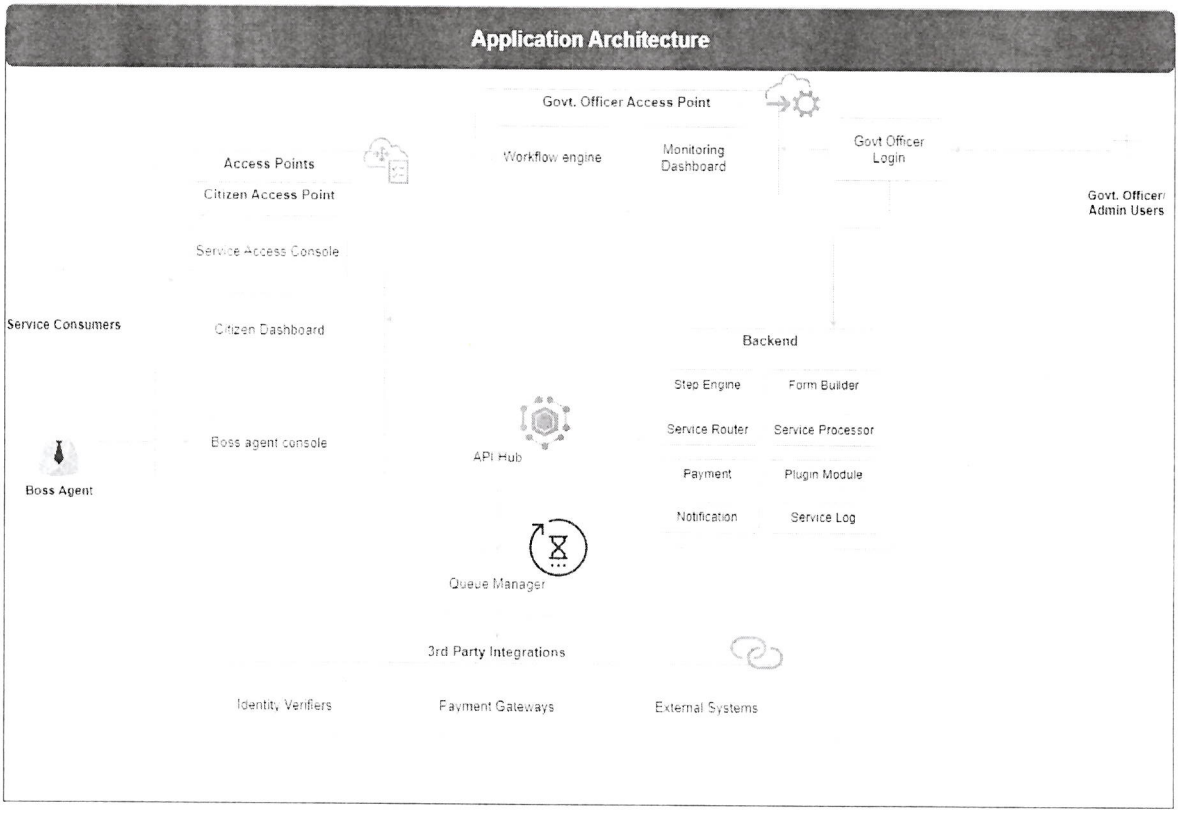


Figure Name: myGov Existing High Level Architecture

We can illustrate the myGov platform from 4 perspectives:

- **Citizen Perspective:**
  - **Citizen Registration & Login through Citizen Digital Account Platform (CDAP)/myInfo:** There is a primary registration and login module for the citizen to get into the system.
  - **Citizen Profile:** Citizens can create a profile upon registration. Within this profile, citizens can update their personal data by verifying it through various means such as NID, BRN, TIN, BIN, etc. The profile can then be utilized to automatically populate application forms with the verified data.
  - **myLocler:** myLocker is integrated with the citizen profile, allowing for the preservation of various types of documents. These documents can be conveniently utilized as attachments in application forms.
  - **Citizen Dashboard:** Dashboard helps citizens to get an overview of:
    - Total number of applied services
    - Total number of availed services
    - Total number of pending services
    - Track Application Status
    - Account settings
  - **Service Tracker:** Citizens can track the status of their service with the help of this module.

- **Service Directory:** This module plays a crucial role in effectively presenting services by various criteria such as "Category-wise Service", "Ministry-wise Service", and "Application Recipient-wise Service".
- **Searching (mySearch):** There is a search facility on this platform integrated with mySearch. Citizens can search services by the service title, service category, Meta keyword and office name .
- **Mobile Application:** myGov mobile app is developed for citizens in both Android and iOS, offering features such as applying for services, service tracking, profile management, registration and login.
- **Assistive Model:** This module assists citizens in accessing the myGov platform through the 333 call center and Union Digital Center (UDC). It enables them to apply for service applications or obtain service tracking status, especially if they are unable to apply themselves.
- **Accessibility:** This module is designed to make the myGov platform accessible for disabled individuals. It includes features like adjustable text sizes, keyboard navigation support, and compatibility with screen readers. By incorporating these functionalities, it ensures that people with disabilities can easily use and navigate the myGov platform, accessing essential government services and information without barriers.

- **Government Officer Perspective:**
  - **Govt. Dashboard:** There is a dashboard for government officials to monitoring the following statistics:
    - Total number of delivered services
    - Total number of pending services
    - Total number of rejected services
  - **Workflow Engine:** This module is used to process applications and offers the following features:
    - Receive Application
    - Dynamic Filter Option
    - Dynamic Sorting/Compare Option
    - Bulk Processing
    - Create Nothi & Application Process
    - Collect Payment Online
    - Resubmit Application
    - Committee Formation
    - Investigation & Reporting
    - Attachment Certificate

- **Super Admin Perspective:**
  - **Service Builder:** This module plays an important role in the creation of services, encompassing various configurations such as service configuration, service form building, payment configuration, attachment configuration, decision configuration, and desk configuration.

- **Survey & Polling:** This module is used to create different types of survey & polling with different topics within myGov.

- **System Perspective :**
  - **Queue Manager:** The Queue Manager is an important component of the myGov system. It helps organize tasks and data efficiently using a sophisticated queue-based system. Notably, the myGov Queue Manager encompasses various queues, including thes application Queue and Verification Queue for myGov system. These queues play integral roles in facilitating seamless and smooth operations within the myGov.
  - **Notification Management:** This module is used for configure service wise notification within myGov system.
  - **Audit Trail:** This module plays an important role in myGov by tracing the detailed changes made in the service builder during the creation and updating of a service by a service administrator.
  - **API Manager:** The API Manager provides a centralized platform for managing APIs, including API design, development, testing, documentation, and deployment. It offers a range of features and tools, including API governance, security, monitoring, and analytics, that help to ensure the quality, reliability, and security of APIs.

Technology Platform of existing system

Application

Platform	Web Application, Android App, iOS App
Programming Language	PHP, Laravel 8
Client-Side Script	JavaScript, JQuery
Style Sheet	CSS, CSS3, HTML5 & Bootstrap
Other	· AJAX (Asynchronous JavaScript XML) · JSON (JavaScript Object Notation) · XML (Extensible Mark-up Language)
Object Oriented Programming	100%
Framework	Laravel
Database	MySQL 5.7 (Percona cluster)
Cache Server	Redis

Load Balancer	HAproxy
Operating System	Linux
Security Tools	Burp Suite
API Manager	Kong 3.3.0
Queue Manager	Supervisor
Monitoring Tools	Nagios

3. Proposed System

3.1 Objectives

The overall objectives of this assignment will be the following:

1. To focus on improving the overall user experience by making the platform more intuitive, user-friendly, and accessible to citizens of all backgrounds and technological proficiency levels.
2. To integrate and consolidate as many existing digital platforms and services as possible to provide a unified and centralized experience for citizens. This would involve collaborating with different government departments and agencies to bring their services under the myGov umbrella.
3. To expand the range of government services available on the platform by digitizing additional services and integrating new features. This could include services related to healthcare, education, social safety-net, transportation, and more.
4. To establish a regular upgrade and maintenance cycle to ensure that the platform remains up to date with the latest technologies, security patches, and user requirements.
5. To explore the integration of emerging technologies like artificial intelligence & machine learning to enhance the functionality and efficiency of the myGov platform. These technologies can automate processes, provide intelligent recommendations, and deliver personalized services to citizens.
6. To develop reusable building blocks that allow the myGov modules to be utilized as standalone components or integrated into other government systems. This would promote interoperability and efficiency by enabling seamless integration of myGov functionalities and services into various government applications, fostering a modular and scalable approach to system development.

3.2 Scope

The firm will be required to complete the development and deployment of myGov platform as an application following the SDLC methodology and perform the relevant activities accordingly within a proposed stipulated time.

The ultimate scope of this e-Government solution of a2i is to design, develop, and implement an integrated digital service delivery platform where all the Government to Citizen (G2C), Government to Business (G2B) and relevant Government to Government (G2G) services will be digitized with proper simplification and integration. For detailed clarification and understanding the required high-level functional scope of major features are described in the "**Functional Requirement**" part below. Covering all the possible scopes, firms may propose their best architecture and service delivery solution for this system in their technical proposal.

Apart from this, this system's scope is described hereunder from the high-level perspective.

3.3 Functional Requirements (Development & Enhancement)

This section provides a brief scope of the project. Detailed and more accurate scope can be identified after in-depth business analysis and scope of the work may fluctuate from this brief scope explained within this section.

3.3.1 myInfo:

myInfo is a profile aggregator platform which provides many features including SSO, NID/ BRN/ TIN/ BIN/ Passport Verification, auto fill up information of citizens etc. where a citizen can login with a single credential to every integrated platform with myInfo.

Existing Features:

- myInfo acts as a profile aggregator.
- myInfo is integrated with the sources of truth (NID, BRN, TIN, BIN etc.). If any change or modification is made at the end of the identity provider, the change will be reflected in the myInfo end as well through API communication.
- It has a password recovery option.
- myInfo ensures native, and federated SSO

Enhancement:

- myInfo will be integrated with other sources of truth like Passport, Driving License, sectoral system (Education, agriculture, health etc) as required. If any change or modification is made at the end of the identity provider, the change will be reflected in the myInfo end as well through API communication.
- myInfo component must allow global registration so that NRB, immigrants, and foreigners can register and log in.
- e-KYC will be ensured through the myInfo component

New Development:

- Multi-factor authentication shall be introduced in myInfo in order to maintain the security of the profiles.
- There will be an account-sharing option so that one user can easily share his or her account with other users.
- Every user will have a unique user ID as a UID followed by a standard.
- myInfo will have a Family tree which will enable the users to connect their accounts to their parental accounts and make family accounts in which data/ownership of accounts can be transferred.
- It will have a profile recovery option.
- It will have a profile merging option to merge accounts.
- A SoP/Guideline for myInfo should be created for data consuming and sharing with other systems.

3.3.2 Citizen Central Dashboard:

The Citizen Central Dashboard is a central hub for citizens within the myGov platform. It provides an overview of their applied, availed, and pending services, allowing them to track their requests. The dashboard also offers access to account settings for easy management. It is designed to be user-friendly and provides a seamless experience for citizens to interact with the government.

Existing Features:

- Overview of applied services
- Overview of availed services
- Overview of pending services
- Access to account settings

New Development:

- The Central Citizen dashboard will provide a personalized single point of access for citizens to view their service list and service statuses, such as availed services, pending services, etc., regardless of the various digital platforms integrated into myGov.

3.3.3 Central Application Tracker:

The Central Application Tracker on myGov enables citizens to track their service application status, monitor the current processing desk, and access relevant certificates and letters. It will be enhanced to support applications from multiple digital platforms, offering a centralized and user-friendly interface.

Existing Features:

- Track service status
- Monitor current desk
- Obtain certificates and letters as attachments

New Development:

- Citizens will be able to apply for a service either through the myGov Platform or any other digital platform integrated into myGov. As a result, a central application tracker component will be established under the myGov Platform, allowing citizens to track their applied services from a single point.

3.3.4 Smart Service Directory:

The service directory in myGov aims to streamline access to government services, making it easier for citizens to find and utilize the services they require.

Existing Feature:

- **"Category-wise Service":** This feature enables citizens to discover and access services based on specific categories such as licenses, permits, or certifications.
- **"Ministry-wise Service":** With this functionality, citizens can explore and avail services based on the respective ministry responsible for their administration, such as the Ministry of Labor and Women Affairs (MoLWA).
- **"Service Recipient-wise Service":** This feature allows citizens to search and access services based on the intended recipient of the application, categorizing them as Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Employee (G2E), and so on.

New Development:

- There will be a control panel of the Smart Service Directory. With the help of this control panel, a user will be able to configure and create a service. There will be an option in the control panel to group services into different categories such as recipient wise, sector wise, Ministry wise, Office wise, GEO (Division, District, Upazila and Union Wise) etc.
- Smart Service Directory will be a central hub of all Government services. All the services will be created centrally and managed by the control panel.
- Smart Service Directory will be shared with all other Organizations (District, Division, Field level offices). It will be customized as per the preferences of the offices and to be managed by the control panel.
- The Smart Service Directory in myGov will include 3rd party services from ministries as well. Users can click on these services and be redirected to the external service, ensuring easy access to all relevant services in one place.

3.3.5 Mobile Application (Service Recipient Perspective):

The myGov Mobile App provides seamless access to government services in Bangladesh with a user-friendly interface, login/registration, profile management, multiple accounts, and easy service search.

Existing System:

- Login and registration for citizens using various credentials such as email, mobile, NID, BRN, biometric detection.
- Integration with CDAP for citizen login and registration
- Identity verification through NID, BRN, passport, and other official documents
- Profile management with options for basic, standard, and 100% completed profiles
- Multiple account management for users to add and manage multiple accounts
- Accessibility features for persons with special needs
- Account settings including language preferences, notification management, and biometric management
- Service access with search and navigation to find desired services based on categories, offices, ministries, and sectors
- Showcasing and searching services based on organization, service type, and service category
- Personalized services section displaying recently browsed, trending, popular, and recommended services
- Detailed service information including necessary attachments, payment details, and service delivery time
- Application form auto-filled with profile information and voice-driven application form fill-up
- Integration with digiLocker for attaching and managing documents
- Preview and draft facilities for reviewing and editing applications before final submission
- Service bookmarking and referral options for quick access to desired services
- Application submission on behalf of others through integrated profiles
- Application tracking with unique tracking numbers provided to users for updates on application status
- Service tracking on behalf of others for family, friends, and others
- Push notifications for recommended services, popular services, and new update releases
- Application-related notifications on status and desk changes
- Reminders for saved/draft applications, profile completion, and bookmarked services
- Central information broadcasting through global push notifications
- Assistant module for user guidance, including visual and voice assistants
- make these points shorter

- Assistant module (visual, voice assistants)

Enhancement:

Mobile Apps for Service Recipient will have the following features-

- Improved UI/UX: Enhance the user interface and user experience of the mobile app to make it more intuitive, visually appealing, and user-friendly.
- Family Account and Ownership Transfer: Enable users to connect their accounts to parental accounts, create family accounts, and transfer ownership of accounts within the family.
- Family Service Access: Allow users to avail and apply for services on behalf of their family members, simplifying the process and enhancing convenience.
- Nominee Declaration: Provide the option for users to declare and assign a nominee for their own account, ensuring smooth transfer of account ownership in case of unforeseen circumstances.
- Remote Account Privacy Management: Empower users to remotely handle their account privacy settings, giving them control over the visibility and accessibility of their personal information.
- Suspicious Activity Tracking: Implement a system to track and monitor suspicious activities within the app, enhancing security and ensuring the safety of user accounts.
- Multi-Factor Authentication: Strengthen security measures by introducing multi-factor authentication, adding an extra layer of protection to user accounts.
- Voice Integration: Integrate voice capabilities where possible to enhance user interaction and provide a more convenient and hands-free experience.
- QR Code-based Login and Service Access: Implement QR code-based login and service access to streamline authentication processes and improve efficiency.
- Integration of Value-Added Services: Integrate additional value-added services, offering users a broader range of functionalities and enhancing the overall experience.
- Push Notifications: Keep users informed and engaged by sending push notifications for any updates related to services and the myGov platform, ensuring they stay up-to-date with important information.
- Marketing Platform for Government Services: Utilize the mobile app as a marketing platform for government services, promoting general/seasonal events and location-specific offerings, driving awareness and participation.
- Enhanced Data Privacy and Security: Implement robust data privacy and security measures to safeguard user information and ensure compliance with relevant regulations.

- Personalized Recommendations: Leverage user data and behavior to provide personalized service recommendations, helping users discover relevant services more efficiently.
- Analytics and Insights: Implement analytics capabilities to gather user insights and behavior patterns, enabling data-driven decision-making and continuous improvement of the app's features and offerings.

3.3.6 Mobile Application (Service Provider Perspective):

A Mobile Application will be developed for service providers, offering convenient access to the workflow engine on Android and iOS platforms. Government officers can securely log in, track application progress, make decisions, and manage applications with advanced search and notification features. The app will support offline access and integrate seamlessly with the workflow engine.

New Development:

- Dedicated Mobile app for Monitor analytic dashboard, receive notifications and reminders, access reports, and monitor payments. View ministry-wise, office-wise, section-wise, and desk-wise statistics. Payment dashboard for monitoring payments and generating Payment Disbursement Reports.
- Develop dedicated mobile applications for service providers on Android and iOS platforms, providing them with convenient access to the workflow engine.
- Enable government officers to securely log in to the mobile application using their unique Doptor ID, ensuring authorized access to the system.
- Provide a comprehensive overview for government officers, displaying the total number of received applications, pending applications, and solved applications, allowing them to track the progress at a glance.
- Allow government officers to view detailed information about service-specific applications, including applicant details, submission date, and status.
- Empower government officers to make decisions and forward applications within the mobile app, streamlining the approval process.
- Enhance application management capabilities by implementing advanced search, filter, and sort functionalities, enabling government officers to quickly locate specific applications based on criteria such as applicant name, application ID, or status.
- Provide real-time updates on the status of applications, enabling government officers to stay informed about any changes or progress in the processing workflow.
- Implement push notifications and alerts to notify government officers about important updates, such as new applications, pending tasks, or urgent requests, ensuring timely action and efficient task management.

- Enable offline access to the service provider mobile app, allowing government officers to work on applications in remote areas with limited or no internet connectivity. Implement automatic sync functionality to update the app and sync data once the internet connection is restored.
- Incorporate analytics and reporting capabilities to generate insightful reports on application processing metrics, facilitating data-driven decision-making and identifying areas for improvement.
- Seamlessly integrate the mobile app with the existing workflow engine, enabling smooth communication, user management, and collaboration features for government officers involved in the application processing workflow.

3.3.7 Assistive Model:

This module serves as an intermediary between citizens and the myGov platform, facilitating their access through the 333 call center and Union Digital Center (UDC). It provides citizens with the capability to submit service applications and retrieve service tracking status, catering to situations where they are unable to directly apply for services on their own.

Existing Features:

- **333 Call center Agent:** The integrated 333 call center agents facilitate the application process by assisting citizens in applying for services on their behalf, taking into consideration the specific concerns and requirements expressed by the citizens.
- **UDC Agent:** UDC agents fulfill a similar role to 333 agents in assisting citizens. However, there is a key distinction: UDC agents have the capability to include physical attachments with the application and provide application status updates and online certificates to citizens. This service requires citizens to visit UDC agents in person.

Enhancement:

- **myGov-333 Integration:** A Single Sign-On (SSO) integration will be implemented between the myGov portal and the 333 systems, enabling 333 agents to utilize a unified set of credentials for seamless switching between the two systems. Furthermore, an integration will be established to facilitate the sharing of profile data and status information between these interconnected systems.
- **myGov-UDC/ESC (Expatriate Smart Center) Integration:** An integration will be established between the myGov and the UDC systems, allowing UDC agents to access both systems using a single set of credentials. This Single Sign-On (SSO) integration enables agents to switch between the

two systems without the need for multiple logins. Additionally, there will be a data and status sharing integration implemented to facilitate seamless communication and information exchange between the myGov and UDC systems.

New Development:

- **myGov Agent Registry:** Within the assistive model component of myGov, a dedicated feature for managing agents will be implemented. This feature will allow entrepreneurs nationwide to submit a request to become an agent of the myGov platform by completing a prescribed form.
- **myGov Agent Approval:** A dedicated panel will be established to facilitate the approval process for agents. The concerned authority will utilize this panel to validate and approve agentship requests based on defined criteria and procedures.
- **myGov Agent Panel:** Each approved agent will be provided with an exclusive panel that grants them access to various services. Through this panel, agents will be able to apply for services on behalf of citizens and track the progress of their applications. The panel will provide agents with an overview of the total number of services applied for, approved services, and any services that are overdue.
- **myGov Agent Wallet:** Every agent will be equipped with an agent wallet that includes a credit facility. Agents will be able to utilize this wallet to make payments for service charges associated with their activities.
- **Accounts Management:** myGov Agents will have access to an accounts management feature that provides them with detailed income statements on a daily, weekly, and monthly basis. This option enables agents to monitor their financial activities and track their earnings.
- **myGov Agent Management:** An administrative panel will be available to oversee and monitor the activities of each agent. The admin panel offers comprehensive visibility into the operations and performance of individual agents, allowing for effective management and supervision.

3.3.8 Accessibility:

The Accessibility feature will be developed as a reusable building block, ensuring inclusivity and usability for all users. It will incorporate features such as screen reader compatibility, adjustable font sizes, high contrast mode, keyboard navigation support, and alternative text for images, enabling an accessible and user-friendly experience for individuals with diverse abilities.

Existing System:

- Keyboard based navigation
- Magnifying and minifying the font size

- Highlighting the headlines
- Invert Colors
- Monochrome
- Big Cursor
- Screen Reader etc.

New Development:

Firm will explore global best practices and identify the features to be developed in myGov Platform regarding accessibility plug-in. Here are some sample features which can be developed in the platform to accelerate the accessibility of the platform:

- Mute sound option for users who prefer silent browsing
- Hide image feature for faster loading and reduced distractions
- Useful links section for quick access to important information
- Stop animations to minimize distractions and improve accessibility
- Highlight focus to indicate active elements for better usability
- Read mode for a distraction-free reading experience
- Reading guide and mask for improved reading comfort
- Highlight hover for enhanced visual feedback
- Big black cursor for better visibility and cursor tracking
- Voice search feature for hands-free interaction
- Reading audio and text-to-speech functionality using cursor and arrows
- Smart contrast and saturation adjustments for better readability
- Text spacing and line height customization options
- Text alignment options for personalized viewing experience
- General guidelines for inclusive design and accessibility best practices
- Color contrast ratios to ensure readability for all users
- Touch gestures and haptic feedback for intuitive interaction
- Consistent layouts and navigation for a seamless user experience
- Optimization of app content and media for improved accessibility.

3.3.9 Monitoring Dashboard:

The Monitoring Dashboard will be enhanced to provide additional features and new developments. This includes real-time notifications for incoming applications, a reminder tool for processing remaining applications, gamification to engage users and introduce a leaderboard, and a notification model for higher officials to communicate with subordinates. Additionally, reporting tools will be added for accessing ministry-wise, office-wise, and service-wise reports, with the ability to download them in different formats. The dashboard

will also incorporate a payment dashboard for monitoring payment information and generating Payment Disbursement Reports.

Existing Development:

- Government officers can monitor Ministry-wise, Office-wise, Section-wise, Desk-wise statistics.
- Government officers Can switch to nothi-system or workflow engine directly from the dashboard to process the application.
- Government officer can get citizen happiness index in the dashboard
- Government officers can filter data based on layers like ministry, directorate, division, district, upazila.
- Superadmin can assign a government officer as ministry admin, office admin, section admin or desk admin.

Enhancement:

- A real-time role-based monitoring dashboard shall be developed for government officials who will be able to monitor all the services from a single point.
- Real-time notifications upon incoming applications.
- The dashboard shall consist of a reminder tool that will automatically remind the user for processing their remaining applications after a preset time duration
- Gamification should be introduced to the dashboard which will engage the users more and give the users an incentive to stand on top of the leaderboard based on the points they will receive on solving applications.
- There shall be a notification model which will enable higher officials to warn their subordinates about processing applications.

New Development:

- There shall be reporting tools available to government officers, enabling them to access ministry-wise, office-wise, and service-wise various types of reports. Government officers can download these reports in Excel, CSV, or PDF formats.
- The super admin can create different types of user groups and dynamically assign government officers to those groups.
- A payment dashboard will be developed to monitor the payment information of all services from a single point. The dashboard will display payment information categorized by Ministry, Services, and Offices. It will also include transaction logs. Additionally, the payment dashboard will generate a Payment Disbursement Report.

- The AI-powered data analytics dashboard will also provide recommendations for decision-making based on the analysis of data trends and patterns, enabling government officers to make informed decisions and improve the efficiency of service delivery.
- The Monitoring Dashboard will accurately track application progress, including time spent at each desk. This enables effective time management and decision-making tools for desk officers, ensuring streamlined processes and improved productivity.
- The dashboard will support an extended number of roles within an office, enabling efficient management and access to information across multiple layers.

3.3.10 Workflow Engine:

The Workflow Engine is an application processing engine that enables service providers, such as government officers, to process applications by routing them from desk to desk. It facilitates the decision-making process and also notifies citizens about the status of their applications. It will have the below mentioned features:

Existing Features:

- Service admin can configure the application receiving desk dynamically.
- Government officers can create service-specific filter options dynamically to filter the service applications.
- Government officers have the ability to dynamically sort applications and conveniently compare two sets of application data side by side.
- Government officers can utilize the bulk processing feature to efficiently handle a large volume of applications.
- Government officers can create a "Nothi" for a specific service to process all service applications under that "Nothi."
- Different types of payments can be collected online, specific to each service.
- Government officers can ask citizens to resubmit their applications if any incompleteness is found.
- Applications can be processed through a committee.
- During the application processing, government officers can assign an investigation officer to examine an applicant's data and submit a report.
- After final approval, government officers can attach a certificate for each applicant.

Enhancement:

Desk Configuration: Administrator-configured workflow enables smooth movement of service applications between desks, optimizing efficiency and minimizing manual interventions.

Decision Configuration: Administrator-configured decision mapping enables specific decisions to be assigned to corresponding desks, ensuring efficient and accountable service processing.

Payment Configuration: Admin can configure the responsible desk for payment, ensuring that only the designated desk can receive payment for a specific service.

New Development:

Data Verification: The workflow system integrates with authoritative databases, enabling government officers to verify application data accurately and reliably. This ensures data integrity and compliance during the application processing stage.

Template builder integration: Workflow Engine will be integrated with Template builder. The user can create different types of Text templates, Certificate templates, Letter templates etc.

Document Verification Opportunity: Attachments of services processed through the Workflow engine can be verified from relevant servers. The myGov platform will provide the ability to verify information of received applications through integrated software. In the future, there will be an opportunity to approve or cancel received applications based on specific criteria.

Enforce Policy and Standardization: Prepare policies for the workflow engine that align with platform requirements and best practices, outlining the rules and guidelines for application processing, decision-making, and overall workflow management.

Customized Module: Different types of customized modules (not more than 5) will be developed and/or integrated in WFE based on comprehensive requirements.

3.3.11 Service Builder:

Service Builder plays an important role in the creation of services, encompassing various configurations such as service configuration, service form building, payment configuration, attachment configuration, decision configuration, and desk configuration

Service Builder will have the following features -

Existing System:

- Service admin can create a service with basic information such as Service Name, Meta Keywords, Service Providing Procedure, and Service Providing Time Limit, etc.
- Service admin can create different types of decisions and configure them dynamically for each service.

- Service admin can configure assistive models (e.g., 333, UDC) for each service.
- Service admin can configure payment information for each service.
- Service admin can configure the application processing engine when creating a service.
- Service admin can dynamically configure the application receiving desk, enabling the system to automatically send applications to a specific desk.
- Government working days can be dynamically configured for calculating working days for each service.
- Service admin can organize services in different types of Service Directories.
- Form elements can be created dynamically by the service admin.
- Service admin can create dynamic forms for services using the Form Builder.
- Super admin can create different types of user groups and provide varying levels of access to each group.

Enhancement:

- Conditional Formatting shall be available while building services.
- Built-In Calculation should be available in the forms so that calculations can be done within the service form.
- The service builder should be a stand-alone product so that the service builder can be used as a single module and also can be integrated with other systems whenever needed following the plug-and-play phenomenon.
- Applicant Validation Configuration shall be available for services so that the system can declare whether a user needs to have a verified profile or not to apply for that specific service.
- The service admin will be able to create a step-by-step desk mapping so that the system can automatically send applications from one desk to another.
- The service admin will be able to configure desk-wise decisions, enabling the system to authorize specific actions at each desk.

New Development:

- Independent Office Information & Organogram
- Category-Wise Form Template Gallery should be built.
- Digital Authorization (Two-Factor Authentication)

3.3.12 Survey & Polling:

This module is used to create different types of survey & polling with different topics within myGov.

Existing System:

- The service admin can create different types of surveys and polls on the myGov home page.

- The service admin can obtain topic-wise survey and polling reports and download them in Excel, CSV, or PDF format.
- Service admin can create schedules to publish each Survey & Poll.
- The service admin can create different types of user groups to manage different types of surveys and polls.

New Development:

- A comprehensive survey and polling module will be implemented, offering customized survey and polling modules for services, ministries, and events. This centralized dashboard will enable users to easily monitor and manage all their survey and polling activities, providing valuable insights and feedback for informed decision-making.

3.3.13 Distributed Queue Manager:

The Queue Manager plays an important role within the myGov system, facilitating the efficient management and organization of tasks and data through a sophisticated queue-based system. Features of queue manager are listed below:

Existing Features:

Application Queue: The application queue is used to manage all the applications in myGov. The existing application queue can handle all service applications within the same queue.

Verification Queue: The verification queue is used to verify user identity from sources such as NID, BRN, TIN, BIN etc.

New Development:

- **Service Queue**: There will be a service queue manager in which the queue will be channelized based on the priority services, group of services, and event-based services.
- **Notification Queue:** There will be a provision to send notifications through the queue manager.

3.3.14 Notification Management:

This module keeps users informed about activities related to their accounts and government services via email and SMS.

Existing Features:

- **Notification text configuration:** The current system allows the administrator to globally customize the text content of notifications.

New Development:

- **Service-wise notification configuration:** The myGov platform should incorporate service-wise notification configuration, enabling users to opt-in for notifications related to specific government services. Users should have the option to choose the types of notifications they wish to receive, such as service status updates, renewal reminders, and payment notifications.
- **Event-wise service notification configuration:** The myGov platform should also provide event-wise service notification configuration, allowing users to receive notifications concerning specific events such as document expiry, upcoming deadlines, and changes in service requirements.
- **Integration with other systems:** The notification module of the myGov platform needs to be integrated with other government systems to ensure real-time delivery of notifications. This includes integration with databases, payment gateways, and other relevant platforms.
- **Proactive Notification facility:** The myGov platform should offer a proactive notification facility that alerts users to potential issues before they occur. For example, the platform could notify users of upcoming service disruptions or maintenance activities that may impact their access to government services.
- **Personalized Notifications:** The myGov platform should provide personalized notifications to users based on their preferences and previous interactions. This could include customized messages, tailored recommendations, and personalized updates.
- **Multi-channel Notification:** The myGov platform should support multi-channel notification options, allowing users to receive notifications through email, SMS, and push notifications on their mobile devices. This ensures timely and convenient delivery of notifications.
- **Notification History:** The myGov platform should maintain a comprehensive notification history for each user, enabling them to review previous notifications and track their interactions with the platform. This helps users stay informed about their government services and ensures transparency in the notification process.

3.3.15 Audit Trail:

The Audit Trail system, which currently tracks service updates, publishing, unpublishing, and desk changes, will be enhanced with new features. The new version of the Audit Trail will record all activities of users associated with the platform, including changes made to service-related data. It will provide a comprehensive history tracking facility for both service recipients and service providers. Additionally, admin users will have the ability to create reports from this component, enabling them to gather valuable insights and analyze the recorded data.

Existing Development: The current Audit Trail system can keep a record of service updates, publishing, unpublishing, desk changes, etc.

New Development: New version of Audit trail will have the following features-

- It will keep a record of all the activities of all the users associated with this platform.
- If any data related to the services are changed must be recorded as whom, when, and what has been changed.
- Service recipient-wise full history tracking facility.
- Service provider-wise full history tracking facility.
- Admin users will be able to create reports from this component.

3.3.16 API Manager:

Existing System:

API Manager acts as a central gateway for availing access to all relevant service consumers. API manager provides a centralized platform which acts as a reverse proxy, receiving requests and routing API requests from clients and forwarding them to the appropriate backend services.

- API Manager acts as a central gateway for providing access to service consumers.
- It functions as a reverse proxy, receiving requests from clients and routing them to the appropriate backend services.
- The API Manager provides a centralized platform for managing APIs and their access.
- It ensures that service consumers can conveniently access the relevant APIs.
- The API Manager plays a crucial role in facilitating the interaction between clients and backend services.

New Development

It will offer a range of features and tools, including API governance, security, monitoring, and analytics, that help to ensure the quality, reliability, and security of APIs.

- Manages the lifecycle of APIs, including documentation, testing, versioning, and retirement. Offers a self-service portal to discover, explore and consume APIs, comprehensive documentation, interactive API documentation, sample code, SDKs, and sandbox environments for testing.
- Balances incoming traffic to ensure high-quality service by distributing the load across backend services. Supports management of multiple API gateways.
- Allows API consumers to request permission for specific services from administrators. Administrators can manage user access to the API gateway, including creating users, assigning roles, and setting permissions.

- Provides a dashboard with charts, graphs, and visualizations to track metrics such as response times, error rates, and usage patterns. Supports consumer-wise reporting and data monitoring. Generates reports and visualizations to analyze API traffic.
- The API management platform supports the integration of external services and internal components, offering features for API lifecycle management, load balancing, user access management, and comprehensive metrics and reporting.

3.3.17 Proactive Service Delivery:

Proactive Service Delivery will be integrated with myGov. The idea of this component is to provide services to the citizens proactively. It will have the below-mentioned features:

New Development:

- Recommendation Based on the browsing history
- Recommendation Based on the profile data
- Recommendation Based on the service consuming history
- Recommendation Based on the trending services
- Life events based service recommendation to ensure the moments of life
- This will include the integration of a smart search and recommendation engine, leveraging browsing history, profile data, service consuming history, trending services, and life events to provide personalized and relevant service recommendations.

3.3.18 Certificate Builder:

New Development: myGov platform shall have a certificate generator that will generate certificates automatically from the preset certificate templates after the application for the certificate has been approved by the issuing authority. There will be a template directory in the certificate builder. The certificate builder will be integrated with the template builder, allowing the creation of different certificate templates for automatic generation of certificates once approved by the issuing authority.

3.3.19 QR Code Generator:

New Development: QR Approach should be introduced in the myGov Platform so that the users of myGov can authenticate login and application for services using QR codes. QR based certificates generation will be another feature of this component. The QR code generator in the myGov platform will serve as a reusable building block for authentication, application, and certificate generation. It enables users to conveniently verify and validate their login and services using QR codes.

3.3.20 AI-powered Digital Assistant:

New Development:

The AI-powered digital assistant in the myGov platform will be seamlessly integrated with the a2i chatbot, providing a comprehensive user experience. It will serve as a single point of contact for users, offering various functionalities for data and application management. The digital assistant will facilitate data sanitization, data readiness, and ensure smooth operations. It will continuously learn and improve, delivering personalized and accurate assistance to users. An admin panel will be provided for data analysis, enabling in-depth insights and monitoring of user interactions. It will allow administrators to analyze annotated data from platforms like WhatsApp, Messenger, facebook and others, providing valuable information for system optimization and improvement. Regular updates will be implemented to enhance the admin panel's functionality and usability.

3.3.21 Layer Based Service Platforms

New Development: myGov will introduce sector-specific platforms for the Education, Expatriate, Agriculture, Health, Transport etc sectors. These platforms will have dedicated front-end and back-end systems, providing user-friendly interfaces and efficient data processing. Integrated with the myGov Platform, they aim to streamline service delivery and enhance convenience for citizens, businesses, and government stakeholders.

- Layer-based service platforms for different sectors such as Education, Expatriate, Agriculture, Health, Transport etc
- Each sector-specific platform will have dedicated front-end and back-end systems.
- The front-end will provide user-friendly interfaces for accessing sector-specific services.
- The back-end will handle data processing and transaction management for seamless operations.
- The sector-specific platforms will be integrated with the myGov Platform, utilizing common modules and components.
- This approach aims to streamline service delivery, improve convenience, and enhance efficiency for citizens, businesses, and government stakeholders.

3.3.22 myGov Authenticator:

New Development:

It will provide multi-factor authentication services. It will verify the identity of users by generating unique, time-based passwords. This will help to ensure that only authorized users can access myGov applications. The firm will determine what

functionalities and features should be included in the myGov Authenticator to meet the authentication needs of myGov users.

3.3.23 Data Management (Data Analytics):

Central Data Hub: Establish a centralized data hub to collect, store, and share various types of data from different servers and systems. This hub will serve as a central repository for government data, ensuring efficient storage and retrieval.

Data Transformation: Develop a structured framework to transform collected data into a usable format within the central data hub. This involves standardizing data formats, cleaning and validating data, and ensuring data integrity.

Predictive Analysis and Service Recommendation: Utilize data analytics and predictive analysis techniques to assist in finding service recommendations for citizens. By analyzing user, device, and service-related information, personalized recommendations can be provided to citizens based on their needs and preferences.

Integration of Artificial Intelligence and Machine Learning (AI/ML): Harness the power of AI/ML technologies to enhance the capabilities of the myGov platform and improve citizen services.

- **AI-powered Digital Assistant:** Deploy an intelligent chatbot on the myGov platform to provide instant assistance, answer FAQs, and guide users in finding desired services. Seamlessly integrated with the a2i chatbot, it offers personalized and accurate assistance, facilitating smooth operations and enhancing user experience.
- **Voice Recognition and Natural Language Processing:** Integrate AI technologies for voice-based interactions and natural language understanding, enhancing user experiences and enabling more intuitive interactions with the platform.
- **Data-driven Decision-making:** Utilize AI tools and techniques to analyze large volumes of data and generate actionable insights, supporting evidence-based policy-making and governance.

3.3.24 Real-time Application (RTA) frontend:

New Development:

The implementation of a real-time application frontend will enable constant and immediate communication between systems and users, eliminating the need to manually refresh the application. By utilizing technologies like push notifications, email alerts, or in-app messages, users will receive instant updates in real-time, ensuring they are promptly informed about important events, changes, or relevant information. All platforms and users will be synchronized in real-time, ensuring instantaneous updates and seamless collaboration. This enhanced functionality will improve user engagement, simplify communication processes, and facilitate seamless interaction between the platform and its users.

3.3.25 Smart Support Management:

New Development:

myGov is planning to implement a smart support management system that will ensure efficient and responsive assistance for citizens in the future. The first layer of support will be provided through 333. Trained staff from the firm will handle citizen feedback and queries through this hotline. The support team will actively monitor these channels, ensuring timely and effective resolution of citizen concerns. With these upcoming smart support channels and well-trained personnel, myGov aims to provide exceptional support services to citizens.

Smart support management component includes the following features-

- News updates & Notice Board: A dedicated page within myGov where important updates and notices will be posted for citizens to stay informed about the latest developments, announcements, and changes in government services.
- Support Dashboard: An advanced dashboard with comprehensive ticketing statistics, filters, and real-time data on pending, latest, trending, solved, and referred tickets. Enables efficient ticket management and informed decision-making.
- Messenger: WhatsApp can be a great medium to receive feedback and query from citizens.
- Email: There will be a dedicated email for myGov support. Citizens will be able to send their feedback/queries to this email address.
- Live Chat: There will be a dedicated team to provide live support. Citizens will be able to get support instantly through chatting online.

3.3.26 Serverless Architecture Oriented Development:

New Development:

Serverless is an approach to software development that abstracts the server layer from the application code. The serverless approach is a cornerstone of the modern application, with its distributed components that manage their own server-side logic and infrastructure in response to application events. These components are typically Functions as a Service and third-party microservices, often running on containers.

Some typical use cases that lend themselves well to serverless architecture include:

- Auto-scaling websites: Because the serverless backend scales automatically based on runtime demand, fully functional and high performing websites can be launched

without upfront infrastructure setup (and testing). The result is much faster time-to-market.

- Incorporating advanced image and video services: A serverless architecture lets you easily integrate with third-party services for value-added features such as dynamic image resizing, device-adapted video transcoding, facial or image recognition, and so on.
- Seamlessly integrating SaaS events into the system logic: Serverless architecture makes it easy to trigger functions based on events from SaaS platforms such as Salesforce, GitHub, AuthO, or Stripe.
- Multilingual applications: Serverless architecture makes it possible for components to work together smoothly, even if different components were developed using different development languages and frameworks.
- The firm should follow serverless architecture oriented development to make "myGov" go serverless.
- Ensure compatibility with renowned cloud services for modern technology adoption in the "myGov" platform. This enables scalability, high availability, and robust security, leveraging cloud-native services for enhanced agility and efficiency.

3.3.27 myWallet:

New Development:

The myWallet is a dedicated feature within the myGov platform that empowers citizens with convenient and secure financial capabilities. It allows users to add, and manage funds, while also offering the benefit of coupon discounts on services. With the myWallet, users can make seamless payments for government services directly from their wallet, enhancing the overall user experience and providing a streamlined financial solution within the myGov ecosystem.

3.3.28 myGov Community:

New Development:

There will be a blog on myGov platform consisting of the Citizens of Bangladesh, Government Officials, and the other relevant stakeholders of myGov. Users will be able to post their queries regarding the myGov platform and discuss each other.

3.3.29 Guard File Integration:

Workflow Engine will be integrated with Guard File for referencing different types of decisions provided by government officers. Additional features of the guard file will be developed to meet the demand of myGov (if needed).

3.3.30 Smart Document Reader:

The Document Reader module in myGov is a template verifier used to authenticate certificates uploaded by service seekers during the application process. It employs a learning process to ensure accuracy and efficiency in verifying the documents, enhancing the platform's reliability and security.

Existing System:

- Document Reader Module: Verifies certificates uploaded by service seekers.
- Template Verification: Authenticates documents based on predefined templates.
- Learning Process: Ensures accuracy and efficiency through machine learning.
- Platform Reliability: Enhances platform's trustworthiness and security.
- Application Process: Integrates with the overall application process.

The myGov platform aims to undergo continuous development and enhancements to provide an improved user experience, better security, and increased efficiency. Here are the key areas of focus for new development and enhancements:

Enhancement:

- Low-Resolution Image Support: Improved performance on low-resolution images.
- Extract Different Types of Contents: Customization of data extraction from documents.
- Generate Usage Statistics: Interactive dashboard for data collection and visualization.
- Removal of Different Kinds of Noise: Deep neural networks to eliminate noise from images.
- Get Layout From Documents: Deep learning for document layout detection and reconstruction.
- Use NLP to Understand Content: AI integration for text analysis and understanding.
- Model Training GUI: Graphical User Interface for model training and evaluation.
- Dataset Processing Tool: Toolkit for adding and annotating new data to the system.

New Development:

- Multiple Image Formats and Ratios: Introduce support for various image formats and ratios.

- Integrated Labeling Tool and Model Training GUI: Combine labeling and training processes.
- Automated Annotation Tool: Automate the annotation process for biometric verification.
- Real-Time Updates and Alerts: Provide users with up-to-date information through alerts.
- Performance Immune to Image Noises: Enhance system's immunity to different image noises.
- Interactive Diagrams and Sharing Options: Visualize data trends and share insights easily.
- Named Entity Recognition for Filtering: Use NLP to search and filter documents by entities.
- Machine Translation and Text Summarization: Implement language translation and summarization capabilities.
- Visual Evaluation Metrics: Present model evaluation statistics visually for easier understanding.
- Import and Export Functionality: Import/export annotated data for dataset management.

3.3.31 Building Blocks:

The following components mentioned in the TOR will serve as independent building blocks, that will be independent building blocks that can be easily configured and integrated with any platform, empowering organizations to leverage its functionality seamlessly. They are mentioned below:

- myInfo
- Citizen Central Dashboard
- Central Application Tracker
- Smart Service Directory
- Accessibility
- Workflow Engine
- Service Builder
- Survey & Polling
- Notification Management
- Audit Trail
- Proactive Service Delivery
- Certificate Building
- QR Code generator
- myGov Authenticator
- myWallet
- Smart Document Reader

These building blocks can be utilized to enhance and customize the platform according to specific requirements, ensuring flexibility and scalability in delivering services to citizens. The above list may fluctuate from the scope explained within this section.

3.4 Support & Maintenance:

3.4.1 Continuous monitoring of query execution in Database, tuning database and tuning codes & queries to minimize response time.

3.4.2 Fixing all bugs in the system irrespective of its nature and complexities.

3.4.3 Enhance and/or re-arrange existing feature of extended development of any supplementary feature within the existing technology framework complying with core SRS.

3.4.4 Updating training manual adjusting the changes in the system.

3.4.5 Adjust and update system in compliance with any security test, load test or IT audit conducted by the client.

3.4.6 Technical Support (3rd Layer Support):

Consulting firm will ensure third layer technical support in collaboration with ITSM partners of myGov platform.

- Core applications, Database and Infrastructure level bug fixing.
- Accommodating change requests at Core applications, Database and Infrastructure level
- Continuously analyze service logs and take necessary actions if required.
- Taking prompt preventive action solely or with the help of core technology partners if any misconfiguration or anomaly is found in the Core applications, Database and Infrastructure.
- Periodically health checking of Core applications, Database and Infrastructure.

3.5 Non-Functional Requirements

3.5.1 Coding Convention

The firm must follow the standard coding styles to produce high-quality code for further usage of the code in terms of reusability, refactoring, task automation, language factors etc. The firm should submit a standard coding convention approach, which may include different conventions like commenting, indent style, naming etc. following the best coding practices.

Note: A comprehensive **"List of Standards"** based on the latest technology to be compiled for myGov Web and Mobile platform regarding the solution development and operation will be preferred in the firm's technical proposal.

3.5.2 Documentation Plan

Detailed and proper documentation of such ICT based projects like e-service application development and implementation for Government is very vital and essential. Documentation is required for any such project as reference, knowledge

transfer, analysis of development and implementation history, baseline information for any modification or change, guidance etc. In this issue, Vender should show the highest-level of professionalism for delivering the standardized documentation approach at each phase of the e-Service development and implementation project. Firms should include an extensive **"Documentation Plan"** of this project in their technical proposal.

3.5.3 Service Process Simplification

The consulting firm will conduct workshops, implement changes, and provide analysis, training, and updates to enhance the existing systems and achieve seamless digital integration for improved service processes.

- Conduct Service Digitization workshops to analyze, integrate for enhancing the existing systems.
- Implementation of necessary changes, digitalization, and adjustments identified during the workshops.
- Focusing on achieving seamless digital integration and improving service business processes.
- Perform analysis, training, and updates to the current system as required.

3.5.4 Availability:

Ensure 24/7 availability of the myGov platform with allowed downtime for regular maintenance and provision of a test environment.

- 24/7 Platform Access: Ensure myGov platform is available round the clock to users for uninterrupted service accessibility.
- Scheduled Maintenance: Allow scheduled downtime for regular maintenance activities and updates to enhance platform performance.
- Test Environment Provisioning: Set up a dedicated test environment to test changes and updates before deploying them to the live platform.
- High Uptime Percentage: Aim for high uptime percentage to minimize disruptions and maximize user satisfaction.

3.5.5 Fault Tolerance:

Implement proper exception handling and recovery mechanisms to ensure system reliability and avoid irrecoverable data loss in case of transaction failures.

- Exception Handling: Implement robust exception handling mechanisms to handle errors and exceptions gracefully.
- Transaction Recovery: Ensure the system can recover from transaction failures to prevent data loss and maintain data integrity.
- Redundancy and Failover: Introduce redundancy and failover capabilities to mitigate the impact of hardware or network failures.
- Continuous Monitoring: Implement real-time monitoring to detect and respond to faults promptly, reducing downtime.

3.5.6 Supportability:

Design the myGov platform to be modifiable, extensible, and evolvable, allowing for future additions and exploiting new technologies.

- Modular Architecture: Design the myGov platform with a modular architecture to allow easy integration of new functionalities.
- Extensibility: Enable easy extension of existing features and capabilities to accommodate future requirements.
- API Support: Provide well-documented APIs to support integration with third-party services and applications.
- Developer-Friendly: Make the platform developer-friendly with clear documentation and guidelines for easy customization.

3.5.7 Configurability:

Allow behavior control through configuration without modifying source code or redeploying packages.

- Flexible Settings: Allow users to configure various aspects of the platform, such as user interface preferences and workflow settings.
- No Source Code Modification: Ensure that configuration changes do not require modification of the source code or redeployment.
- User Role Customization: Provide options to customize user roles and permissions to align with specific organizational requirements.
- Centralized Configuration: Store all configuration settings in a centralized location for easy management and access.

3.5.8 Scalability:

Ensure the myGov platform easily expands to accommodate additional users, transactions, and data.

- Elastic Infrastructure: Implement an infrastructure that can scale up or down based on demand to handle increased user traffic.
- Load Balancing: Introduce load balancing mechanisms to distribute user requests evenly across multiple servers.
- Database Scaling: Design the database to scale seamlessly to accommodate growing data volumes and user interactions.
- Performance Optimization: Continuously optimize system performance to ensure smooth operations at any scale.

3.5.9 Human Factors:

Design the myGov platform to be intuitive, easy to learn, and limit user errors with clear error messages and recovery instructions.

- User-Centric Design: Adopt a user-centric design approach to create an intuitive and user-friendly interface.
- Clear User Guidance: Provide clear instructions and guidance to users to minimize errors and confusion.
- User Training Resources: Offer training resources and documentation to help users learn the platform quickly.

- Error Prevention: Implement measures to prevent user errors and guide users to rectify mistakes effectively.

3.5.10 Technical Standards:

Follow standards for data exchange, API security, programming models, and application servers, ensuring interoperability and compatibility with existing systems.

- Data Exchange Compliance: Adhere to industry-standard data exchange formats such as JSON for seamless integration.
- API Security Measures: Implement security measures like JWT tokens to protect API endpoints from unauthorized access.
- Best Programming Practices: Follow best programming practices and coding conventions for maintainable and reliable code.
- Interoperability with Legacy Systems: Ensure compatibility with existing systems by adopting compatible programming models and protocols.

3.6 Integration Scope:

Successful Integration with various technology, data, or service points, facilitated by the information mediator layer, is the key to the success of the myGov initiative. The information mediator acts as a data exchange layer, enabling seamless communication and interoperability between different systems and applications. Examples of the information mediator's role include facilitating data exchange between government agencies, integrating external service providers, and connecting with data repositories and APIs. The final integration scope will not be limited to these examples, as the information mediator layer allows for flexible and scalable integration possibilities.

- **Integration with Government Stacks and Systems:** Integration with other government stacks and systems to enable seamless data exchange, interoperability, and collaboration between different government entities. The firm will also create the documentation on the integration scope, develop, test and monitor the integration with other systems.
- **Continuous Exploration of New Integration Opportunities:** Regular evaluation and exploration of emerging technologies and integration possibilities to enhance the capabilities and functionalities of the myGov platform.
- **Robust Documentation and Standards:** Documentation of integration processes, protocols, and standards to facilitate future integrations and ensure consistency, scalability, and interoperability.
- **Firm Management and Fallback Solutions:** Establishment of effective firm management strategies and contingency plans to address situations where specific firms are unavailable, ensuring smooth operations and uninterrupted service delivery.
- **Information Mediator Layer:** To Develop an information mediator layer to enable smooth data exchange and interoperability within the myGov platform, ensuring seamless integration between different systems and services.
- **AI-Powered Digital Assistant:** Integration of an AI-powered smart chatbot that adheres to international standards. AI-powered chatbot technologies, such as ChatGPT, Google Bard, Jasper, etc., will be integrated to provide advanced conversational capabilities and enhance user experience.

- **Integration of OCR (Optical Character Recognition), Cam Scanner, Facial Recognition, Biometric Login, and Photo Editor Tools:** These modules will be integrated with myGov using global standards to enable efficient document processing, identity verification, and image editing functionalities on mobile devices.
- **Payment Aggregator Integration:** Integration with payment aggregators and gateways to facilitate secure and convenient online payment processing for government services.
- **Profile Aggregator Integration:** Integration with profile aggregators to streamline and manage user profiles across different government systems and services, ensuring consistency and ease of use.
- **Integration with Digital Signature:** Flexibility for approving authorities or officers to sign or add digital signatures to Application forms using external devices, providing a convenient and easy option for authentication & signing within the myGov platform.

3.7 Workshop, Training & Knowledge Transfer:

The firm will cover the costs of workshops, training for the myGov initiative. These activities will bring stakeholders together to enhance existing systems, equip staff with necessary skills, ensure data security, and leverage emerging technologies. Capacity development will focus on enhancing technical expertise and fostering innovation. The firm's commitment to continuous learning will drive the success of myGov. The below sections may fluctuate from the scope explained within this section.

3.7.1 Workshop:

- The firm will handle all logistics for the workshops, including venue arrangements, catering services, transportation, and participant remuneration, creating a conducive environment for knowledge sharing, collaboration, and alignment of strategies among participants from diverse backgrounds.
- A series of workshops will be conducted to promote knowledge sharing and enhance collaboration. This includes Yearly Review Workshops and Source code & Architectural Document Handover in last quarter (2 sessions), Internal Audit and Security Workshops and Technical Training/Knowledge Transfer/Capacity Development (2 sessions), and External Workshops focusing on UI/UX, Enterprise Architecture, Integration, Serverless Architecture, Infrastructure, Emerging Technology (2 sessions), etc. These workshops will facilitate valuable discussions and enable participants to stay informed about the latest developments and industry trends in their respective domains. The number of workshops may be subject to change, based on the urgency or specific demands arising during the project execution, to ensure successful completion of the scope and objectives.

3.7.2 Training/Knowledge Transfer/Capacity Development:

- Training sessions will be organized to equip staff with the necessary skills and knowledge related to the myGov platform.

- Knowledge transfer initiatives will be implemented to share domain-specific knowledge and best practices among team members.
- These training sessions will cover a wide range of topics, ensuring comprehensive understanding and proficiency among staff members.
- Capacity building programs will be implemented to enhance technical skills and knowledge of the team members.
- The focus will be on emerging technologies and industry best practices to stay updated with the latest trends and advancements.

3.8 Security and Privacy Policy

The system's authentication and permission system are robust to ensure the highest level of security. The following measures will be placed to prevent any kind of security breach:

- **Invalid Input:** Validating and purifying incoming data for data integrity and user access.
- **URL Restriction:** Limiting access to URLs based on user permissions and prohibiting unauthorized URL access.
- **Protected Administration Panel:** Securing the admin panel with SSL encryption and different URLs to prevent data hijacking.
- **Password Hashing:** Using one-way algorithms and random salts for password hashing.
- **Session and Cookies:** Regenerating user sessions and cookies uniquely for improved security.
- **Disclosure of Sensitive Information:** Suppressing and logging errors to prevent sensitive information exposure.
- **CSRF Prevention:** Generating automatic tokens to prevent Cross-Site Request Forgery attacks.
- **SQL Injection Prevention:** Implementing prepared statements and proper escaping to prevent SQL and Code injections.
- **Cross-Site Scripting Prevention:** Filtering user-submitted content to prevent XSS attacks.
- **SSL Encryption:** Ensuring SSL encryption for communication between user browsers and the administration panel in myGov.

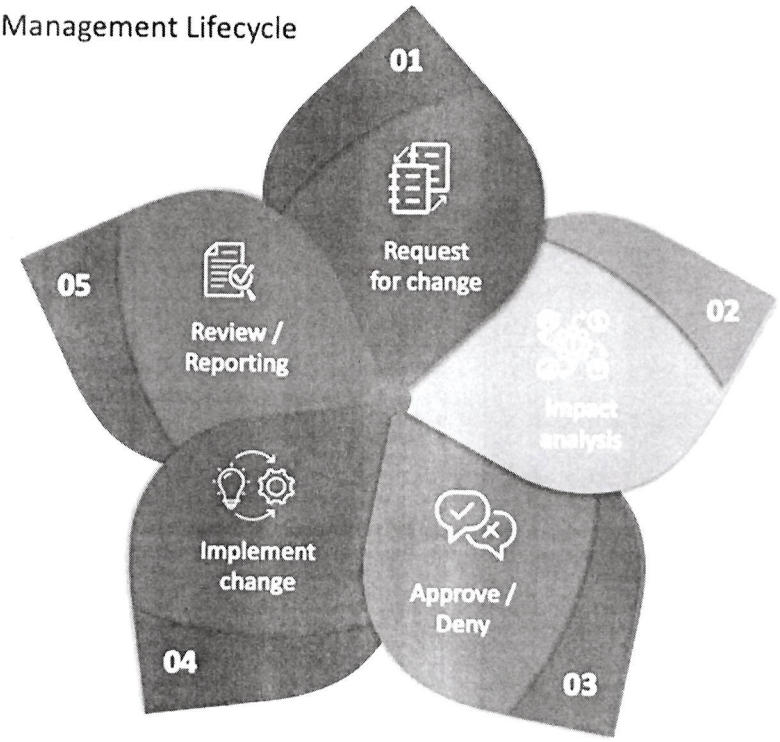
3.9 Change Management Plan

The firm should submit a **"Change Management Plan"** which may include the below-mentioned features:

- Develop, document, and report change documents, source code management, and version management to effectively track and manage changes throughout the project.
- The Service Support team is responsible for efficiently implementing approved changes as per the directives of the Concern Authority.
- Changes should be implemented by the Service Support team in a manner that ensures the existing and integrated services are not exposed to any risks.
- The Change Management process, based on the ITIL Framework, should be followed by the Service Support team to ensure effective change control and governance. A general Change Request (CR) process flow diagram should be provided for reference.
- In addition to change management, the hiring firm should also implement processes for Incident Management, Problem Management, and Release Management to effectively handle incidents, analyze and resolve problems, and manage software releases.

ITIL CHANGE MANAGEMENT

ITIL Change Management Lifecycle



4. Expected Deliverables & Payment Schedule

The assignment is scheduled to last for 24 months. The selected firm will be required to sign separate agreements, including an SLA and NDA, for smooth implementation of the contract.

Sl. No.	Major Areas	Deliverables	Deadline	% of Amount
1	Inception Report	Inception report with proper project plan	15 days after signing the contract	05% (upon accepted by client)
(Q1)	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q1 • Architectural Documents ○ Application Architecture ○ Deployment Architecture • Continuously push source code and all relevant documents into the GIT repository.	End of 04 months after signing the contract	10% (upon accepted by client)
	Workshop	• External Workshops focusing on UI/UX, Enterprise Architecture, Integration, Serverless Architecture, Infrastructure, Emerging Technology		
	Development & Enhancement	• **Workflow Engine:** Development & enhancement. • Service Builder: Development & enhancement. • Certificate Builder: Development. • Application Modernize with Serverless Architecture Compatibility: Identify and integrate components within the myGov platform to leverage the benefits of serverless architecture.		

	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions		
Q2	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q2 • Continuously push source code and all relevant documents into the GIT repository.	End of 06 months after signing the contract	20% (upon accepted by client)
	Development & Enhancement	• **myInfo:** Development & enhancement. • Monitoring Dashboard: Development & enhancement. • Smart Service Directory: Development & enhancement. • Application Modernize with Serverless Architecture Compatibility: Assess compatibility of identified components for serverless architecture integration. • Application Modernize with Serverless Architecture Compatibility: Identify and integrate components within the myGov platform to leverage the benefits of serverless architecture.		
	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions • Information mediator		

(Q3)	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q3 • Continuously push source code and all relevant documents into the GIT repository.	End of 08 months after signing the contract	
	Workshop	• Internal Audit and Security Workshops and Technical Training/Knowledge Transfer/Capacity Development		
	Development & Enhancement	• **Citizen Central Dashboard:** Development & enhancement. • Distributed Queue Manager: Development. • Real-time Application (RTA) frontend: Development. • API Manager: Development & enhancement. • Application Modernize with Serverless Architecture Compatibility: Ensuring successful implementation and integration of identified components into the serverless architecture, as per the planned timeline and feasibility analysis & test run.		
	Integration	Integration Report • Integration of OCR (Optical Character Recognition), Biometric Login • Integration with Government Stacks and Systems • Payment Aggregator Integration • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions		
(Q4)	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q4 • Continuously push source code and all relevant documents into the GIT repository.	End of 12 months after signing the contract	15% (upon accepted by client)
	Workshop	• Yearly Review Workshop for Q1, Q2, Q3 & Q4		

	Platform Development & Enhancement	• **Assistive Model:** Development & enhancement. • myGov Authenticator: Development. • Notification Management: Development & enhancement. • Accessibility: Development & enhancement. • Application Modernize with Serverless Architecture Compatibility: An in-depth assessment of identified components' compatibility with serverless architecture. And continuing delivery based on previous test run & feasibility study. • Mobile App Service Recipient Perspective: Development & enhancement. • Proactive Service Delivery: Development.		
	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards		
(Q5)	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q5 • Continuously push source code and all relevant documents into the GIT repository.	End of 16 months after signing the contract	15% (upon accepted by client)
	Workshop	• External Workshops focusing on UI/UX, Enterprise Architecture, Integration, Serverless Architecture, Infrastructure, Emerging Technology		
	Platform Development & Enhancement	• **Mobile App Service Provider Perspective:** Development. • myWallet: Development & enhancement. • Survey & Polling: Development & enhancement. • Smart Support Management: Development. • Central Application Tracker: Development. • Application Modernize with Serverless Architecture Compatibility: Ongoing delivery of the project based on the findings and recommendations from the previous test run and feasibility study.		

		• myGov Community: New Development • Guard File Integration: New Development • Layer-based Service Platforms: Development.		
	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions		
(Q6)	Documentation & Source Code	• Software Requirement Specification (SRS): Detailed development documentation for Q6 • Continuously push source code and all relevant documents into the GIT repository.	18 months after signing the contract	15% (upon accepted by client)
	Platform Development & Enhancement	• **Audit Trail:** Development. • QR Code Generator: Development. • Application Modernize with Serverless Architecture Compatibility: Ongoing delivery of the project based on the findings and recommendations from the previous test run and feasibility study. • AI-powered Digital Assistant: Development. • Data Management (Data Analytics): Development. • Smart Document Reader: Enhancement & Development.		

	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions • Information mediator		
(Q7)	Documentation & Source Code	• Continuously push source code and all relevant documents into the GIT repository.	21 months after signing the contract	20% (upon accepted by client)
	Workshop	• Internal Audit and Security Workshops and Technical Training/Knowledge Transfer/Capacity Development		
	Maintenance & Support of the Platform	Continuous maintenance and support of the platform		
	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions		
(Q8)	Documentation & Source Code	• Continuously push source code and all relevant documents into the GIT repository. • Architectural and Technical Documents Handover	24 months after signing the contract	
	Workshop	• Yearly Review Workshop for Q5, Q6, Q7 & Q8 and Source code & all Related Documents Handover		

	Maintenance & Support of the Platform	Continuous maintenance and support of the platform		
	Integration	Integration Report • Integration with Government Stacks and Systems • Continuous Exploration of New Integration Opportunities • Robust Documentation and Standards • Firm Management and Fallback Solutions		

5. Work Distribution & Team Composition

SL	Position	No. of Person	Qualification	Job Description
1.	Team Lead	1	i) Minimum Academic requirement is graduation in Computer Science and Engineering/ICT degree from a recognized University ii) Minimum 5 years of experience in managing large scale IT projects with a total of 10 years of experience in ICT industry.	The Team Lead is responsible for the day-to-day operational management of the myGov project, including overseeing the work and preparation of project progress reports. The chosen candidate will be responsible for regular reporting to the client and ensuring effective communication throughout the project. They will also be responsible for overseeing all technical aspects of the myGov project implementation, including analyzing the user requirements, developing software design specific to

				myGov, selecting the appropriate technical solutions, and ensuring the successful implementation for long-term sustainability.
2.	Enterprise Integrator	1	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Must have minimum 05 years of profound experience of different system integration technology on large scale e-government projects.	Defining an overarching enterprise architecture which integrates multiple platforms, to allow the initiation, flow, processing and management of data flows in a secure and reliable manner.
3.	Integration Engineer	5	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant disciplines with ICT certification from any recognized University. ii) Must have a minimum 03 years of profound experience of different system integration technology on large scale e-government projects.	Ensuring that integration solutions can be delivered, deployed and operated in a highly repeatable and predictable manner through interaction and collaboration with Integration Expert.
4.	Security Expert	1	i) Minimum graduate in Computer Science and Engineering / relevant subjects. ii) Minimum 5 years of experience in IT System security with a total of 7 years of experience in the ICT industry. iii) Firm Certification e.g (ISSP/CEH/ISO/CISA/CISM is expected) will get advantage.	Develop plans to safeguard computer files against unauthorized modification, destruction or disclosure. Choose, implement, monitor and upgrade computer anti-virus and malware protection systems Encrypt data transmissions and erect firewalls to conceal confidential information during transmit

				Modify security files to incorporate new software, correct errors, and change user access status Perform risk assessments and tests on running data processing activities and security measures Educate workers about computer security and promote security awareness and security protocols
5.	Security Engineer	1	i) Minimum graduate in Computer Science and Engineering / relevant subjects. ii)Minimum 3 years of experience in IT System security with a total of 5 years of experience in the ICT industry. iii) Firm Certification e.g (ISSP/CEH/ISO/CISA/CISM is expected) will get advantage.	Security Engineer will assist the Security Expert to: Develop plans to safeguard computer files against unauthorized modification, destruction or disclosure. Choose, implement, monitor and upgrade computer anti-virus and malware protection systems Perform risk assessments and tests on running data processing activities and security measures Educate workers about computer security and promote security awareness and security protocols Keep accurate and current backup files of all important data on the shared corporate network
6.	Senior Developer	2	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 7 years of profound experience in the field of web-based software	Conduct requirement analysis for a particular ICT for development solution Develop the necessary business and system specifications Provide assistance to develop system design for any technical solutions Develop URS, SRS for any outsourcing of project work.

				Carry out the technical evaluation for project development standardization Monitor execution of the outsourced project work programming/coding/scripting for ICT based application or Software development. Experience needs to focus on multiple development platforms including PHP
7.	Developer	8	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 3 years of profound experience in the field of web-based software	The Developer will develop code accordingly to ensure the product's usability and stability based on requirements. Assist team members in critical areas of programming. programming/coding/scripting for ICT based application or Software development. Experience needs to focus on multiple development platforms including PHP
8.	AI/ML & Data Expert	1	i) Minimum graduate in Computer Science/CSE/Software Engineering or any other relevant disciplines from any University. ii) Should have a minimum 3 years of profound experience in the field of artificial intelligence (JAVA/C/ Python/R, JavaScript, SQL, machine learning and data science) with a total of 7 years of experience in the ICT industry.	Coordinate with data engineer to Collaborate with Data Scientists, Data Architects and Business Analyst to ensure alignment between the business objectives and the analytics back end as well as ensure the scalability security of the final product.

9.	AI/ML & Data Engineer	1	i)Minimum graduate in Computer Science/CSE/Software Engineering or any other relevant disciplines from any University. ii)Should have a minimum 02 years of profound experience in the field of artificial intelligence (JAVA/C/ Python/R, JavaScript, SQL, machine learning and data science) with a total of 05 years of experience in the ICT industry.	Collaborate with Data Scientists, Data Architects and Business Analysts to ensure alignment between the business objectives and the analytics back end as well as ensure the scalability security of the final product.
10.	Senior Mobile App Developer	2	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Should have minimum 03 years of profound experience in the field of mobile apps design and developing or programming with a total of 07 years of experience in the ICT industry.	Develop the assigned task and assist Mobile Apps (IOS and Android) Developer to accomplish the project & report on daily basis to Team Lead
11.	Mobile App Developer	4	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Should have a minimum 02 years of profound experience in the field of mobile apps design and developing or programming with a total of 05 years of experience in the ICT industry	The Mobile App (IOS and Android) Developer will develop the mobile app for both ios and android and ensure the product's usability and stability based on requirements. Assist team members in critical areas of programming.
12.	Technical Document Expert	1	i) Minimum graduate in any Computer Science or any other relevant discipline. ii)Should have a minimum 02 years of profound experience in the field of technical documentation with a total of 05 years' industry experience.	Technical document expert will ensure Record Technical description of features, API, 3rd party integration. Guide technical writer to prepare user manual by describing the current flow of application. Also deliver the release notes to the team lead with proper explanation for the user.

13.	Technical Document Writer	2	i) Minimum graduate in any Computer Science or any other relevant discipline. ii)Should have a minimum 01 years of profound experience in the field of technical documentation with a total of 3 years' industry experience.	Technical document writers record technical description of features, API, 3rd party integration. prepare a user manual of the application. Create release notes with proper explanation for user
14.	Infrastructure Administrator	1	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Must have a minimum 05 years of profound experience in the field of system installation, configuration. iii) Must have experience on large scale data backup and user management systems.	Infrastructure Administrator will be responsible for Supervising, Leading and Guiding the Infrastructure Team. Designing and Executing Strategic Plans to assure Infrastructure Capacity Attains Current and Future Needs.Defining and Managing IT Disaster Recovery Strategy. Reporting and Preparing Strategies to Maintain Server and Evaluating System's Performance. Determining Network and System Requirements. Maintaining Integrity of The Network, Server Deployment And Security
15.	Infrastructure Engineer	1	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Must have a minimum 03 years of profound experience in the field of system installation, configuration. iii) Must have experience on large scale data backup and user management systems.	Infrastructure Engineer will be responsible for Identifying, analyzing, troubleshooting and preparing detailed resolutions of infrastructure related issues. Daily troubleshooting and monitoring bandwidth, resource consumption, network consumption, CPU and RAM usage. Identifying and Recommending over Load balancer, Firewall and caching related problems to the Core

				Infrastructure team. Forecasting and Taking intensive care in collaboration with the core infrastructure team to handle excessive traffic for any special event/Campaign. Ministry and service wise usage analysis and measurements accordingly
16.	DevOps Engineer	1	i) Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii) Must have a minimum 03 years of profound experience in the field of system installation, configuration. iii) Must have experience on large scale data backup and user management systems. iv) System administration experience of minimum 1 years with cloud architecture.	A DevOps Engineer is responsible for assisting the senior DevOps Engineer in designing, automating, and maintaining the infrastructure, implementing CI/CD pipelines, and ensuring security and scalability in software development and deployment.
17.	UI/UX Expert	1	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 03 years of profound experience in the field of UI/UX.	This role is about designing the interface to ensure it delights the user.
18.	UI/UX Designer	1	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 01 year of profound experience in the field of UI/UX.	This role is about designing the interface to ensure it delights the user. He/she will support the UI/UX Expert to ensure the proper design of the interface and user satisfaction.

19.	QA Lead	1	i) Minimum graduate in Computer Science and Engineering/ICT. ii) At least 5 years of progressive experience in Quality Assurance.	QA Lead will oversee the activity of the quality assurance, developing, implementing, and maintaining a system of quality and reliability testing for the System.
20.	QA Engineer	2	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 03 years of profound experience in the field of software quality assurance in application.	QA Engineer is expected to designing and developing automated test procedures on the basis of requirements (S)he is expected to executing the test cases all across the system following the procedures This role is about designing the interface to ensure it delights the user.
21.	Developer (3rd Layer Support)	2	i)Minimum graduate in Computer Science and Engineering/ICT or any other relevant Science disciplines from any University. ii)Should have a minimum 3 years of profound experience in the field of web-based software	The Developer will develop code accordingly to ensure the product's usability and stability based on requirements. Assist team members in critical areas of programming. Also ensure the proper development of agreed features and bug fixing of the system.

6. Qualification Criteria & Eligibility criteria

following are defined as minimum eligibility criteria:

- Experience of developing WoG (Whole-of the Government) digital platform for Government of Bangladesh where citizens can apply for services for different government agencies and/or Govt can process public decisions. WoG platform means the system is developed and capable of serving the whole government or can connect multiple govt agencies (Please provide details of the same with "URL. along with a copy of the contract and contract completion certificate).
- Minimum 5 years' experience in ICT business as a registered company/entity. Please submit the certificate of incorporation (if applicable)
- Must have valid and up-to-date trade license (2021-2022), VAT certificate, TIN certificate, and Income tax payment certificate.

- Must have a minimum turnover of BDT 4.90 crore in the last 2 years. Please submit the last two audited financial statements (if applicable).
- Minimum amount of liquid asset in the form of an unconditional credit line from any scheduled Bank of Bangladesh or working capital shall be BDT 4.20 crore. Please submit the last two audited financial statements (if applicable).

7. Joint-Venture Modality

Multiple Companies having technical and legal competency for developing such Products can bid jointly but they must have a legal agreement among them where one company needs to be lead. The lead company needs to fulfill all conditions mentioned in this TOR.

8. Exit Process

During the contracted period, there will be a technical team at the procurement entity side who will be engaged to gather knowledge on both the technology and operation of the platform. Once the contract expires and the platform is delivered, that team will undertake the platform. A2i will work on that to take over the responsibility on behalf of Govt. of Bangladesh will handle this technology after expiry of the contract.