

# Technical Proposal to ITU for the Development, implementation, and maintenance of a "Consent Building Block"

14th March 2023

Reference Number: RFP-S-BDT-2023-002



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# Confidentiality

The material contained in this proposal represents proprietary, confidential information pertaining to products, services, and methods of Wishtree Technologies LLP ("Wishtree"). By accepting this proposal, **The International Telecommunication Union (ITU)** ("Client") hereby agrees that the information in this proposal shall not be disclosed outside of customer and shall not be duplicated, used, or disclosed for any purpose other than to evaluate this proposal. If, however, a contract is awarded to Wishtree for this proposal because of, or in conjunction with, the submission of this information, client will have the right to duplicate, use or disclose the material contained herein to the extent provided for in the resulting contract. This restriction does not limit client right to use information contained in this proposal if it is obtained from another source.



# **About Wishtree**

Wishtree provides highly customized digital products and platforms to global clients. Wishtree is a process and customer-focused organization with exceptional capabilities in agile software development and technology implementation for a variety of verticals and domains. Wishtree customizes project delivery approach and engagement model to suit the customer's requirements and expectations. The combination of services and engineering expertise makes Wishtree a totally unique and the best-fit technology partner for customers. Wishtree is backed by a team of experts who offer comprehensive planning, development, implementation, support, and maintenance services to accelerate the return on investment of our clients.

The experience Wishtree leverages on while providing phenomenal value to our customer engagements. Wishtree renders its services through its development centers in Pune and Ahmedabad.



## Core values that guide us:

Wishtree has managed to chart a long way from its humble beginnings in 2010 starting with two individuals with a vision to make their mark in the digital services industry. Values such as Grit, Respect, Ownership, and Work Ethics formed the core foundations on which Wishtree is envisaged, operated and these values continue to guide Wishtree to delight the customers through its impeccable track record.

Grit	The creative and strategic directions of the company are manifold,
	powered by a hardcore resolve to succeed, no matter what.



Respect	Be it our team, our clients, or any stakeholder - we design our work and carve our paths around the innate respect that any member of a collaboration is entitled to.
Ownership	We are self-starters with clear objectives and the know-how to achieve them. We build our resilience stronger with each new roadblock we face head-on.
Work Ethics	We are a team of people passionate about technology, and our non-negotiable standpoints around how we leverage it makes all the difference.

#### Long-term Agreements (LTA)

- Signed a Long-term Agreement (LTA) with WHO for Web and Mobile Development services
- Signed a Long-term Agreement (LTA) with UNDP for Diia mobile application development
- Signed a Long-term Agreement (LTA) with UNFPA for Web and Mobile Development services
- Signed a Framework Agreement (FA/LTA) with UNHCR for Graphic Design services
- Signed a Long-term Agreement (LTA) with UNFPA for enhancement and development of mHSP web and mobile application

#### **Awards**

- Top 100 IT firms in India in 2021 (named to Clutch's annual list)
- W3 Award winner in 2020
- Top 50 Most Promising IT SMEs in 2017
- Global European Advertising Standards Alliance (EASA) Best Practice Awards 2016
- Best SMEs in IT 2016: Web & Mobile Development
- Maddies Award 2015

## **Global Partnerships**





#### **UNGM Number**

449376



#### **Wishtree Advantages**

- Global company with strong technical and engineering team comprising accomplished UX/UI designers, Graphic designers, System Analysts, Project Directors, Web Developers and Mobile developers
- Experienced software engineers who are proficient in design and development of data portals, data dashboards and web based data processing applications
- **Preferred technology partner for 11 UN agencies** (including ITU, WHO, UNESCO, FAO, UNICEF, UNHCR, UNDP, WMO, UNCDF, UNFPA, IOM) and The World Bank Group and delivered 70+ digital and software solutions (on web and mobile platforms)
- Current development partner of ITU for the design, development, and maintenance of the:
  - BBMAP Application
  - WSIS Websites and WSIS Gateway web application
- Development partner of WHO WPRO and Ministry of Health Fiji for Fiji Health Research Portal
  which has the similar proposal workflow from submitting Health Research to reviewing and
  approving by the reviewer and approving authority and publishing it on public dissemination
  platform. We can even provide a demo of this platform on request.
- Design and developed Preventing violent extremism research web portal for the UNDP Oslo Governance center where Research has been submitted by researcher and approve and published by the approving authority
- Design and developed 3ie Development Evidence and Research Portal for submitting, reviewing, approving, and publishing research with evidence on various sectors like Health, Agriculture, Education, and others
- Experience of collaborating with the Ministry of health (Fiji), Ministry of Environment (Turkey), Ministry of health (India), Ministry of foreign affairs (Kuwait) and many others across the globe
- Experience partnering with government organizations, non-governmental organizations, funding agencies, international development, and research organizations
- Expertise on Open-Source technologies for optimal Total Cost of Ownership (TCO)
- Wishtree is among the 100 top rated software development service provider and our feedback shared by our esteemed clients is available on a public portal called Clutch <a href="https://clutch.co/profile/wishtree-technologies#review-1708847">https://clutch.co/profile/wishtree-technologies#review-1708847</a>



## **UN Partnership**

























## **Global Clients**

























# Projects Implemented for UN Agencies

UN Agency Name	Project Title
ITU	Enhancement of BBmap web application
	<ul> <li>Design and development of WSIS websites and Gateway Application</li> </ul>
WHO	<ul> <li>Design and Development of Fiji Health Research Data Portal</li> </ul>
	Design and Development of HeartBEAT Data Portal
	Enhancement of AMR Pledge Website
	<ul> <li>Design and Development of Sub-Regional Regulatory Platform</li> </ul>
	Development of Healthy Islands Web Application which
	<ul> <li>Design and Development of Revolution Smoke-Free Website</li> </ul>
	<ul> <li>Development of Online Learning Platform – QATRM</li> </ul>
	Development of WPR Information Management System
UNDP	Design and Development of PVE Research and Knowledge Hub Platform
	<ul> <li>Design and Development of POPP mobile application</li> </ul>
	<ul> <li>Design and Development of "Welcome to UNDP" mobile application</li> </ul>
	<ul> <li>Design and Development of "RR Induction" mobile application</li> </ul>
	Design and Development of Climate Box interactive Learning Platform
	<ul> <li>Design and Development of "TalentHub" web application</li> </ul>
UNHCR	Design and Development of UI and UX for RAIS Database
	Design and Development of Knowledge Hub Data Portal
	Design and Development of My UNHCR e-Services Data Portal
	Development and enhancement of Operational Data Portal
	Enhancement of Support Spaces R4V
UNCDF	Design Infographics, and communication material for SHIFT Programme
	<ul> <li>Design and Development of Financial Health CMS Website</li> </ul>
UNICEF	<ul> <li>Design and development of HVP-MIS mobile and web application</li> </ul>
	Design and development of IEC e-Warehouse website
IOM	Design, Development, and Maintenance of Shelter Data Portal
	Design and Development of RDH Data Portal
UNESCO	Design and Development of FramerSpace Learning Platform
	<ul> <li>Design and Development of EQUALS CMS website for gender equality</li> </ul>
	Design and Development of UNITWIN Digital web application
FAO	Design and Development of Locust Management system (SVDN 3)
WMO	Enhancement of OSCAR Space and OSCAR Surface client web tool
	Design and Development of Aircraft based Observation System
UNFPA	Design and Development of Case Management System



# **Executive Summary**

The International Telecommunication Union is a specialized agency of the United Nations responsible for many matters related to information and communication technologies.

The Consent Management Building Block enables services for individuals to approve the use of their personal data by defining the principles, functions, and architecture of an information system. For organizations that process personal data, it provides the ability to know the individual's will and legitimately process such personal data. The Consent Management Building Block is a process-oriented GovStack Building Block facilitating auditable bilateral agreements within a multi-agent environment that integrates with most other BBs.

The life cycle of consent management starts and ends within the organization responsible for the information system. The organization knows the context in which the information system operates and the intended purpose of the service. The rules and regulations to be applied for a given level of assurance define the functional framework for consent management.

Consent BB deals with transparency on data usage in each context. Thus privacy-by-design of the system's actors is often an excellent guiding principle for interpreting international, national, and organizational policies and governance principles to implement the functional consent framework. ITU intends to collaborate with the service provider for the development, implementation, and maintenance of a Consent Building Block" and deploy and integrate it with the other Building Blocks deployed in the GovStack.

Wishtree proposes to provide its digital transformation services to the ITU for the development, implementation, and maintenance of Consent Building Block as web-based system. The envisaged system will allow the different actors of the system to perform the operation based on the authentication and role based access. The system will also have the workflow of consent submission, consent draft, consent sign, and consent audit.

The envisaged system will be:

- Developed using Opensource technologies to provide Total Cost ownership to the client
- Compatible with modern day browsers (HTML 5 & CSS 3 compliant)
- Optimized for low and unreliable bandwidth connections
- Adhere to the Principles for Digital Development (<a href="https://digitalprinciples.org/">https://digitalprinciples.org/</a>)
- 100% browser-based interface

Wishtree has experience of designing and developing similar workflow systems like:

- Development partner of WHO WPRO and Ministry of Health Fiji for Fiji Health Research Portal
  which has the similar proposal workflow from submitting Health Research to reviewing and
  approving by the reviewer and approving authority and publishing it on public dissemination
  platform. We can even provide a demo of this platform on request.
- Design and developed Preventing violent extremism research web portal for the UNDP Oslo Governance center where Research has been submitted by researcher and approve and published by the approving authority



 Design and developed 3ie Development Evidence and Research Portal for submitting, reviewing, approving, and publishing research with evidence on various sectors like Health, Agriculture, Education, and others

Wishtree's extensive experience makes team the best-fit technology partner for the development of Consent Building Block.

Wishtree proposes to deliver the system in **26 weeks** using open-source technologies and tools (as asked in RFP). Wishtree will provide the training, documentation, and final report at the end of assignment. Wishtree will host the staging system during the implementation period and assist ITU team to deploy on UAT and go-live server post completion.

Wishtree will assign a team of experienced resources who has worked on the development of Similar systems for other UN/Non-profit organizations and ensure that it meets the desired functional and technical requirements. The assigned team will work dedicatedly on the project. The proposed team has the required technical skills, communication, and knowledge with domain experience. The team will have discussions with the client on a daily / weekly basis and provide an update on the project status.



# **Functional Understanding**

# **Envisaged Features**

Wishtree has assumed to develop the following features as part of the project:

Features Description											
Functional Requirements											
Admin Module	<ul> <li>Login/Logout</li> <li>Forget/Reset Password</li> <li>Authentication/Authorization</li> <li>Create, Read, Update, and Delete consent agreements</li> <li>Change notifications for consent agreements</li> <li>My Homepage</li> <li>View/Read receipts of consent agreement</li> <li>Export reports, consent agreements</li> <li>Read/View transactional data of individuals</li> <li>Read and Export revision history of consent agreements</li> </ul> Assumptions <ul> <li>It is assumed that no third party integration is needed for login any user</li> <li>Only email address and password parameters will be considered as valid credentials</li> <li>It is assumed that a consent configurator will be developed where user</li> </ul>										
	<ul> <li>can configure and customize agreements</li> <li>Homepage content will be provided by the client</li> </ul>										
Individual	<ul> <li>Login/Logout</li> <li>Forget/Reset Password</li> <li>Authentication/Authorization</li> <li>Read consent agreements</li> <li>Acceptance to consent agreement</li> <li>Withdrawal of consent agreement</li> <li>Change Notifications for consent agreement</li> <li>Receipt generation of consent agreement</li> </ul>										
	<ul> <li>Assumptions</li> <li>It is assumed that no third party integration is needed for login any user</li> <li>Only email address and password parameters will be considered as valid credentials</li> </ul>										



It is assumed that normal "accept" or "decline" options will provided to user for their approval/rejection of the consent      Out of Scope	be
E-signature functionality is out of scope	
E-signature functionality is out of scope	
Data Process Auditor • Export reports, consent agreements	
Auditing consent (invoking audit workflow)	
Track and Monitor Data policies (view data policy changes)	
LIST - show available AuditTracker objects	
CRUD rights for AuditTracker	
LIST - fetch ConsentRecord objects	
Read Consent ID	
Read Consent agreement	
Read Consent Record ID	
Thead consent necord is	
Foundational ID • Fetching of Foundational ID	
Mapping of Foundational ID with Individual and consent agreement	t
Assumptions	
It is assumed that foundational ID will be fetched from Identity Build	ing
Block	
Generation of Foundational ID is out of scope	
• Integration with GovStack Sandbox environment	
Integration with Identity BB	
Integration with Workflow BB	
Integration with Scheduler BB	
Integration with Digital Registries BB	
Integration with Information Mediator BB	
Assumptions	
It is assumed that by the time Consent BB is developed; GovS:	ack
Sandbox environment will be available for integration	uck
Sanabox environment will be available for integration	
Transactional Data   • Logging and tracing of transactional data	
Development of APIs   • Organizational APIs	
Individual APIs	
<ul><li>Individual APIs</li><li>Auditor APIs</li></ul>	
Auditor APIs	
<ul><li>Auditor APIs</li><li>Data Consumer APIs</li></ul>	
<ul> <li>Auditor APIs</li> <li>Data Consumer APIs</li> <li>Notification APIs</li> <li>Callback APIs</li> </ul>	
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Config APIs	<ul> <li>CRUD rights of Policy objects and Policy revisions</li> <li>LIST - returns a Policy object with a list of all Revisions</li> <li>READ - List of readable Policy objects</li> <li>READ - fetches the latest version of an Agreement</li> <li>UPDATE - An existing Agreement object is created and returned together with AgreementRevision</li> <li>DELETE - An existing Agreement object is created and returned together with AgreementRevision</li> <li>CREATE - A new Agreement object is created and returned together with AgreementRevision</li> <li>READ - Agreements</li> </ul> Assumptions <ul> <li>CRUD for policies and CRUD agreements</li> </ul>
Coming ADIa	Establish de tid alla acceptable
Service APIs	<ul> <li>Fetch Individuals master list</li> <li>Fetch consent agreement master list</li> <li>Fetch agreements for verification</li> <li>LIST - Fetch consent records for supplied AgreementFilter</li> <li>READ - Fetch a specific Consent Record (latest revision). Individual ID supplied as HTTP header.</li> <li>LIST - Fetch consent records (latest revision). For a given Agreement and Individual, query if consent exists</li> <li>CREATE - For a particular Individual and a particular Agreement, create a new Consent Record pointing to the current Revision of a given Agreement. Individual ID supplied as HTTP header.</li> <li>READ - Individual ID supplied as HTTP header</li> <li>UPDATE - Update a particular signed Consent Record. Individual ID supplied as HTTP header.</li> <li>LIST - Individual ID supplied as HTTP header.</li> <li>DELETE - Cascading delete operation for Right To Be Forgotten, deletes all Consent Records that shall not be retained and have a "forgettable" Agreement. Individual ID supplied as HTTP header.</li> </ul>
Documentation	<ul> <li>Technical documentation</li> <li>User Manual</li> <li>Training materials/PPT's</li> </ul>

# **Envisaged End Users**

# **End Users**

- Admin
- Individual
- Data Processing Auditor



# **Technical Solution**

# **Proposed Technology Stack**

Wishtree proposes the following technology stack for the development of the envisaged web application. Wishtree will choose the final option after a detailed requirement gathering and analysis phase. There are multiple options possible, and we would like to share an option which has the lowest TCO (Total Cost of Ownership) of the web application.

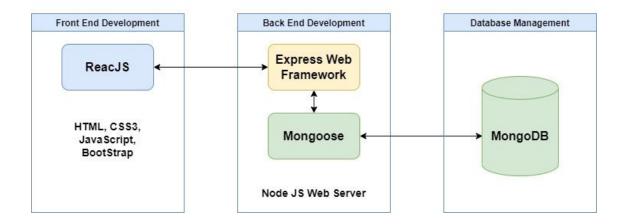
#### **Development of the Web Application**

Frontend: HTML5, CSS3, JavaScript, ReactJS

Backend: Node.js, ExpressDatabase: MongoDB

## **Technical Architecture**

# MERN Stack Development



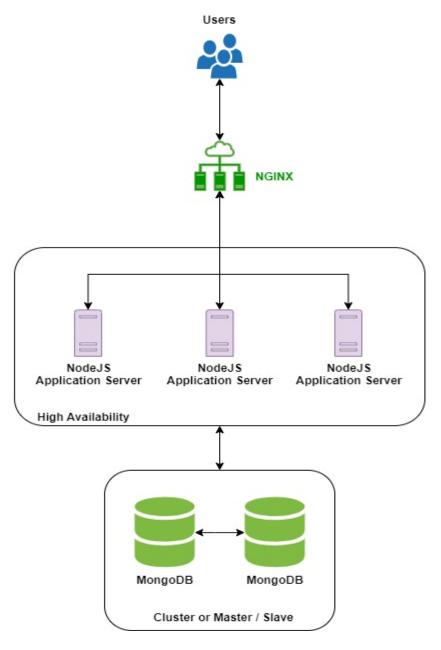
#### **Special Notes:**

- All the proposed tech stacks are based on open-source technologies which are robust, reliable and have proven themselves over time. We have tried to ensure to the best of our knowledge that the chosen tech stacks provide a cost effective and future proof solution
- To ensure coding standards and best practices are followed we use linting tools like esLint (for JavaScript), tsLint (for TypeScript) and practices of GitFlow, CI/CD and automation testing
- After the Requirement Gathering phase Wishtree may propose the different technology stack keeping the best interest of the client and product in consideration



# **Deployment Architecture**

The proposed deployment architecture is mentioned below.





# **Envisaged Tasks/Activities**

The following phases as described will be implemented as part of the envisaged solution:

Activities/Tasks	Description							
	Requirement Analysis Phase							
Requirement	Requirement understanding							
Analysis &	Prepare Requirement analysis document							
Elaboration								
	Assumptions							
	Requirement analysis can be done remotely							
	Project scope is finalized							
	<ul> <li>Interaction with external systems is agreed and finalized</li> </ul>							
	Necessary project documents are shared							
Delivery and Test	Delivery Plea							
Delivery and Test Plan	<ul><li>Delivery Plan</li><li>Test Plan</li></ul>							
riali								
	Test strategy							
	Design Phase							
UI/UX Design	• UI / UX design for a web based application (HTML5, CSS3, Layout, Graphics,							
	Look and Feel, etc.)							
	Generate wireframes, mock-ups, etc to demonstrate features							
	Web application will be responsive which can function cross platform on all							
	popular browsers and in tablets/iPad							
	Approach							
	<ul> <li>Mid fidelity wireframes will be created by the BA covering the full scope of</li> </ul>							
	the application							
	<ul> <li>Maximum 20% of screens from the wireframes will be selected by the BA</li> </ul>							
	and designer and the UI will be created for all these							
	Theme or component library may be selected in advance, after the							
	completion of the wireframes which best suit the application							
	• Developers create the selected pages for which UI was created, using the							
	theme or component library							
	• Developers hand the pages to HTML CSS designers for modifying the pages							
	to match the UI created by the designer in all responsive versions. Then they							
	hand the pages back to the developers for further integration							



	Sprint based UI design approach is taken in such projects
	Assumptions
	<ul> <li>Requirements are signed off</li> <li>Clearly defined IA and module structure and functionality</li> <li>Multiple users with some overlap in module screens (and reasonable overlap in UI)</li> <li>No logo designs</li> <li>No custom graphics or illustrations</li> <li>No custom animations</li> <li>No special interactions</li> </ul>
Application	Application design
Design	System Appreciation
	Prepare Application design document
	Development Phase
Code Build	Development of web-based application as per the requirement and design
	finalization
	Testing Phase
Testing Phase	<ul> <li>Approach</li> <li>System/Functional Testing</li> <li>Smoke Regression Testing</li> <li>Compatibility Testing (Limited Browsers Chrome and FX and OS combinations)</li> <li>End to End Testing</li> <li>Assumptions</li> <li>Application would run on different browser versions</li> <li>Testers should have that information available</li> <li>Set of Regression suit would be ready for Stable functionality</li> </ul>
	Out Of Scope      Automation Testing     Security Testing     Localization Testing     Performance Testing  Deliverables
	<ul> <li>Automation Testing</li> <li>Security Testing</li> <li>Localization Testing</li> </ul>
	<ul> <li>Automation Testing</li> <li>Security Testing</li> <li>Localization Testing</li> <li>Performance Testing</li> <li>Deliverables</li> </ul>



	Infrastructure Setup, Deployment, Documentation, Training
DevOps	Development and Operations Activity
	Infrastructure setup
	Sandbox Deployment
Security	None specified so will follow the standard security requirements
Hosting and	Wishtree will assist the ITU team to deploy the building block in both
Deployment	sandbox and live environment
	Wishtree will also provide the hosting guide for the future use
Training	Wishtree will conduct an online training
	Wishtree will follow a "Train the Trainer" approach
Support and	Wishtree will provide support and maintenance services post deployment
maintenance	for 1 year i.e. 12 months
	Wishtree assumed 5 person days of efforts per month for the support and
	maintenance activities. Total estimated efforts are $(5*12) = 60$ person days
	Wishtree will not design/develop any new features of the building blocks
	during the support period
	Wishtree will not change the functional behavior of any deployed feature of
	building block



# **Key Deliverables**

- Requirement Analysis document
- Delivery Plan
- Test Plan
- Application Design document
- Wireframes
- User Stories
- Style guide document
- Design of the system
  - UI or mockups of selected pages
  - o Preliminary and full style guides
  - o HTML/CSS if no theme is chosen
  - Theme pages if theme is chosen
- Final version of the building block
- Test Scenario draft
- Test Cycle Report for each sprint
- Test Closure Report
- Code in readable format and in code repository
- User Acceptance Testing
- Detailed user manual developed, and administrative training conducted with the 'train the trainer' approach
- User Manual & Admin user documentation
- 1 year support post deployment

Note: All the deliverables will be the intellectual property of the client and reserve all the rights of the web-based system



# Delivery Plan (Gantt Chart)

# **Proposed Timeline**

Milestones/Phases	W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10	W 11	W 12	W 13	W 14	W 15	W 16	W 17	W 18	W 19	W 20	W 21	W 22	W 23	W 24	W 25	W 26
Design, Development, and Implementation of a																										
"Consent Building Block"  Validation of the CONS-BB																										
Integration of CONS-BB in Sandbox																										
Training																										



# Estimated Efforts (Deliverable Wise)

Objectives	Estimated Efforts (Person Days)
Design, Development, and Implementation of a "Consent Building	
Block"	315
Validation of the CONS-BB	46
Integration of CONS-BB in Sandbox	15
Training	22
One year Technical Support and operation	
<ul> <li>Estimated efforts per month – 5 person days</li> </ul>	60
Total efforts (12*5) – 60 person days	
Total Estimated Efforts	458



# **Development Additional Details**

# **Logistics Requirement**

- All logistics (software and hardware) necessitated for the development will be provided by the client
- Any licensed software or hardware necessitated for the development of the system will be provided by the client
- All third-party APIs necessitated for the development will be provided by the client
- All images, audio files, content and messages will be provided by the client if needed

# **Assumptions**

- The estimated efforts for the development of the envisaged system includes Design, Development, Deployment, Testing, Training, Documentation, and Support and Maintenance of envisaged system. The estimates are made in good faith based on the current understanding of the project scope
- Any material event / activity that are not part of the current project plan will be considered out of scope. If additional requirements come up during the project, they will be discussed with the client and factored in the project plan and commercials as additional services
- Delivery Plan: As there are no detailed requirements mentioned so delivery plan is created as suggested in TOR. It is assumed that after requirement elaboration we will adjust delivery plan based on requirement understanding, its dependencies and priorities
- Requirement Gathering: All input data, screens, systems integrations, etc must be clearly defined before the design and development is started.
- Communication with stakeholders: The client will provide timely consultations, confirmations and sign offs regarding queries, deliverables from vendor. Incase of prolonged unavailability, delays from client's end, it could impact the project timelines and delivery plan
- Content will be provided by the client
- Testing:
  - The creation and execution of UAT Test scripts will be owned by client and Dev teams will support UAT activities as per the agreed Test plan
  - The functional testing test scripts would be used by QA team for progression/regression testing and these are not assumed to be used for other purposes such as UAT/Go-Live testing.
- Training & Documentation: A standard user manual with screenshot will be provided which list all the steps to configure, host and maintain the system.
- Documentation: User guides or any other project documents will be create in English only language
- Travel: It is assumed that No travel is required for the project
- Remote training: It is assumed that Training can be done remotely and no physical presence is required
- DevOps: DevOps requirements like CI/CD pipeline is considered out of scope



- Production and pre-production environment: Client will need to provide Production and preproduction environments (dev, test, QA, etc) before start of respective phases like Development, Testing, UAT, etc
- Authentication and Authorization:
  - It is assumed that authentication / authorization will needs to be developed within the system and not to be integrated with any external system
  - Once the rights/role of any user type is defined; there will not be any customization in the rights/role for any user type
- Static and other pages: It is assumed that we have to create few static pages like about us, contact us, site map, privacy policy, etc but we have not considered any other dynamic or complex pages
- Testing: It is assumed that we have to only conduct system testing and no other testing is required
- User Registration:
  - Each user will have a valid email address
  - o Parameters for registering any user will be provided by the client
- Landing Page/Home Page: Landing Page content will be provided by Client
- Language: Default language of the portal/website will be English
- Login:
  - o It is assumed that no third party integration is needed for login any user
  - o Only email address and password parameters will be considered as valid credentials
- Browser Compatibility: Browser versions will be finalized during requirement gathering phase
- Unavailability of stakeholders from client's end:
  - Incase of prolonged (sequence of 3 or more missed planned meetings or a duration of 3 weeks) unavailability, delays introduced due to any reason and a failure to address the situation via means of escalation then Wishtree reserves the right to make reasonable assumptions on behalf of the client in the interest of adhering to the project timelines and delivery plan.
  - These assumptions will be documented and shared with the client at the time of making them and subsequent attempts to correct or change these assumptions by the client would constitute a change request and the efforts of which will be separately billed to the client.
- Sign Offs:
  - Wishtree requires sign-off from the client at the completion of each phase to start working on the next phase. The delays in the sign-off or feedback from the client will affect the timeline of the project
  - The client needs to provide timely review comments in case of any corrections or a sign off on the deliverable within a week from the submission of the deliverable and in the event of non-response for more than a week the deliverables will be considered as signed off by the client.

# Out of Scope

- Development of Any mobile application
- Purchase of any images and/ or scripts if required
- Infrastructure, Software & Services:



- The client will be responsible for acquiring and providing access to the UAT & Production environments
- The client will have to purchase the membership, plans or licenses of any platforms, services, plugins, and software required by the system for both development and production purposes
- Additional requirements: Any additional requirements not mentioned in statement of work is out of scope
- Security: No detail security requirements are shared, so will follow standard security guidelines
- CI/CD and DevOps: As there are no requirements shared for CI/CD or DevOps, so its scope is not considered in this proposal

# **Engagement Methodology**

- Wishtree will assign a Project Manager who will be the focal point with the client and lead the team working on the assignment
- The assigned team members will work from Wishtree's development center in India
- Wishtree's team effort assumes 8-hour billable days and 5 working days in a week
- Wishtree will provide reasonable working hours overlap with client's Standard Time zone for smooth communication



# **Envisaged Risks and Mitigation Plans**

Category	Risk	Mitigation		
Availability of stakeholders for requirements	During the initial phase of the project, we would need reasonable availability of the stakeholders for clarification and finalization of the solution.	Assign a Single Point of Contact (SPOC) who can represent multiple stakeholders from the organization and ensure clarity and decisiveness in terms of communication		
Availability of Decision Makers	We would need the decision makers to have reasonable availability to provide approval on solutions suggested by the team.	Constant communication for project tracking, information gathering and issue and risk escalations		
Clarity for functional, performance and usability features	Better understanding of tangible requirements at functional and non-functional level to get the overall picture of the proposed system	Open and timely communication approach to clarify business logic, feedback, workflows, and expectations		
Lack of testing during UAT	During the UAT phase, we propose organization stakeholders to perform UAT on the developed system and provide us timely feedback	Early identification of stakeholders for UAT, formulate strategy for UAT to optimize efforts and maximize coverage		
Changes in Scope / Expectations from deliverables	We would confirm all the requirements of the projects during the requirement elicitation phase and follow agile delivery approach by having close consultations with stakeholders	<ul> <li>Close consultations with the client at the start of the project i.e., in Requirements Planning &amp; Site Definition</li> <li>Define and agree on assumptions, limitations and constraints during the Requirements and Planning phase.</li> <li>Agile delivery approach to iterative development model which allows client to review deliverables and suggest changes early in the development cycle which minimizes the impact and risks (time, cost, and quality)</li> <li>Agreed change management process for change requests (enhancements) which have been Agreed as "out of</li> </ul>		



Lack of understanding/agreement on task ownerships	By following agile methodology during the delivery process, we track every requirement/feature of the system and would require appropriate availability of task owners	scope" during the Site Definition phase  Shared responsibility model i.e. RACI Chart (responsibility Matrix)	
Integration and data exchange with other products and services (If applicable)	During the vendor selection process, we did not get detailed information regarding the preexistent products/data (name of the product) which we need to integrate/migrate. We would need additional details to understand product/data and need to plan the integration/data migration approach	<ul> <li>Product and Service documents are to be shared initially during the requirement analysis phase</li> <li>Point of Contact for each System for quick resolution of queries</li> <li>Sandbox or dev environment for dev integration testing</li> <li>System access and test data setup during the analysis phase</li> </ul>	
Dependency on GovStack Sandbox environment	As of now, the development of GovStack sandbox environment is in progress which creates a dependency on the environment as at the end we need to integrate Consent BB with Sandbox Environment	<ul> <li>Workshop with the GovStack team to discuss the integration</li> <li>Project timeline alignment with GovStack Sandbox deliverables</li> </ul>	



# Wishtree's Contractual Relationship with ITU

# **Client – International Telecommunication Union (ITU)**

The International Telecommunication Union is a specialized agency of the United Nations responsible for many matters related to information and communication technologies

## **Project – BBMAP's Application**

Project Name	BBMAP's Application
Project Description	ITU allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide. ITU's Mapping Digital Networks Infrastructure is a basic asset to understand and plan the closing of connectivity gaps. Under the ITU Broadband Map services portfolio and the global project, that is providing inputs to related mapping activities from special initiatives.
	Wishtree collaborated with ITU to develop further layers to the GIS interface "BBmap" aiming to improve its visual analysis capabilities and it's visual analysis. Wishtree will work on addition of new layers to the GIS interface, school location and connectivity improvements, spectrum usage for IMT, testing and development of interface and other standard features as mentioned by ITU.
Technology Stack	Front – End: HTML, CSS, JavaScript
	<ul> <li>Back – End: GIS</li> <li>Database: MySQL</li> </ul>
Status	Under Development
Contact Details	Still under progress of the development but can be contacted for the process reference:
	Name: Vladimir Daigele
	Position: Future Networks and Spectrum Management division  Email: vladimir.daigele@itu.int



Project – WSIS Websites enhancement and WSIS Gateway Application Development

Project Name	WSIS Websites enhancement and WSIS Gateway Application Development			
Project Description	The World Summit on the Information Society was a two-phase United Nations-sponsored summit on information, communication and, in broad terms, the information society. Annual forum events have been held in Geneva for following up on WSIS. These events are hosted by ITU and facilitated by UNESCO, UNCTAD and UNDP. ITU has also been maintaining and coordinating an online presence for WSIS Process and other related websites, platforms, and social media channels. ITU required redesigning WSIS websites and development of one WSIS Gateway.  Wishtree collaborated with ITU for the redesigning of its website and development of WSIS Gateway web application. The envisaged website will have added information architecture, a new .NET application and a modern design system. Wishtree will also work on content migration, new user experience features, improved data visualization and community engagement.			
Technology Stack	<ul> <li>Front – End: HTML5, CSS3, Angular.js</li> <li>Back – End: .Net</li> <li>Database: MSSQL</li> </ul>			
Status	Under Development			
Contact Details	Still under progress of the development but can be contacted for the process reference:  Name: Michael Kioy Position: Technical Officer Email: Michael.Kioy@itu.int			



# Relevant Experience – Similar Web Applications

# **Client – WHO (World Health Organization)**

WHO's primary role is to direct international health within the United Nations' system and to lead partners in global health responses. WHO main areas of work are health systems; health through the life-course; noncommunicable and communicable diseases; preparedness, surveillance, and response; and corporate services.

Project – Fiji Health Research Web Portal (very similar to HRP RP2)

Project Name	Fiji Health Research Web Portal			
Project Description	Fiji Health Research Web Portal is developed for Fiji Islands to strengthen			
	their research submission, review and approving process.			
	The purpose of this portal is to provide a platform for an integrated online research management system for all health research in Fiji. The portal aims to improve accountability, efficiency and quality of health research conducted in Fiji through transparency and streamlining of the ethics review, approval, publishing process. The lifecycle of the research is as below:			
	User 1 Investigator/Researcher : Submit the research on the web portal/platform			
	User 2 Coordinator : Validate the research paper with pre-defined			
	criteria and assign to reviewer for review (internal/external)			
	User 3 Reviewer (Internal/external) : Shares the review report/comment with coordinator			
	<ul> <li>Coordinator either shared it with chair to approve if approved by reviewer</li> </ul>			
	<ul> <li>Or re-share it with Investigator/researcher with review comment to improve</li> </ul>			
	User 4 Chairperson : Approve/sign the research paper reviewed and give permission to publish			
	User 5 Super Admin: Can manage entire user flow and operation as an administrator of the web portal/platform			
	We have also developed separate Data request process as below:			
	User 1 – Public User : Request more data for any research			
	User 2 – Senior Statistician : Review the request and pass to Head of			
	Department to approve and share data			
	User 3 – Head of Department – Review the request and comment of			
	Senior Statistician and approve/share data requested			



Technology Stack	<ul> <li>Front – End: React.JS, HTML 5, CSS 3, Bootstrap</li> <li>Back – End: Node.js</li> <li>Database: MongoDB</li> </ul>
Status	Phase 1 Implemented, Phase 2 under development  Excellent review provided by client on public platform can be viewed via this link – Clutch Review
Contact Details	Name: Dr Changgyo Yoon Title: Technical Officer Email: yoonc@who.int Phone Number: +679 323 4114

# **Client Name – United Nations Development Programme (UNDP)**

The United Nations Development Programme is the global development network of the United Nations. It promotes technical and investment cooperation among nations and advocates for change and connects countries to knowledge, experience, and resources to help people build a better life for themselves.

## Project : PVE Research Web Portal

Project Name	PVE Research Web Portal			
Project Description	PVE stands for Preventing Violent Extremism. UNDP Oslo Governance Ce of UNDP wishes to advance the research agenda on Preventing Violent Extremism (PVE).  Wishtree collaborate with the OGC to design and develop following portals:  1. Central Research Hub: A central research hub is developed dissemination of all knowledge materials and reports which were spracross various platforms. The platform has strengthened UN knowledge management and acting as a valuable tool to practition and academics looking for information related to PVE. The pudissemination platform is available to review via - <a href="http://undp-dev.wishtreetech.com/">http://undp-dev.wishtreetech.com/</a>			
	2. Research Platform: A very similar platform like RP2 where Researcher submit research which will be get assigned to reviewer (internal or external) and then get approved and published by designated authority			



Technology Stack	Public Dissemination Platform:  Front – End: HTML 5, CSS 3, Bootstrap  Back – End: WordPress CMS  Database: MySQL  Research Platform  Front – End: React.JS, HTML 5, CSS 3, Bootstrap  Back – End: Node.js  Database: MySQL
Status	Implemented
Contact Details	Name: Victoria Skeie Title: PVE expert Email: Victoria.skeie@undp.org Phone Number: +47 98 64 51 49

# **Client – International Initiative for Impact Evaluation (3ie)**

3ie is an international grant-making organization promoting evidence-informed development policies and programs in low- and middle-income countries. 3ie has offices in London, Washington, DC, and New Delhi. The three main funders of 3ie are the Bill & Melinda Gates Foundation, UK Aid through the Department for International Development (DFID), and the William and Flora Hewlett Foundation.

## Project : 3ie Development Evidence and Research Portal

Project Name	3ie Development Evidence and Research Portal
Project Description	The Development Evidence Portal (DEP) is an expansive and growing repository of rigorous evidence on what works in international development. It contains high-quality impact evaluations, systematic reviews, and evidence gap maps and is the most comprehensive resource for this kind of evidence from low- and middle-income countries.  Wishtree collaborate with the 3ie to design and develop following web portals:  1. Central Research Hub: A central research and evidence hub is developed to dissemination of all research, evidence and gap maps which were conducted by 3ie on various subjects. The platform has strengthened 3ie's knowledge management and acting as a valuable tool to practitioners and academics looking for information on related research. The public dissemination platform is available to review via - <a href="https://developmentevidence.3ieimpact.org/">https://developmentevidence.3ieimpact.org/</a>



	2. Evidence and Research Platform: A very similar platform like RP2 where Researcher submit research which will be get assigned to reviewer (internal or external) and then get approved and published by designated authority
Technology Stack	<ul> <li>Public Dissemination Platform:</li> <li>Front – End: HTML 5, CSS 3, Bootstrap</li> <li>Back – End: Drupal CMS</li> <li>Database: MySQL</li> <li>Research Platform</li> <li>Front – End: React.JS, HTML 5, CSS 3, Bootstrap</li> <li>Back – End: Node.js</li> <li>Database: MySQL</li> </ul>
Status	Implemented  Excellent review provided by client on public platform can be viewed via this link – Clutch Review
Contact Details	Name: Saurabh Khandelwal Title: IT Manager Email: skhandelwal@3ieimpact.org Phone Number: +91-93 12 127051



# Relevant Experience – International Development Domain

Kindly review "Relevant Experience – International Development Domain" section of Additional Details.pdf document attached with the submission.

# Reference Letters

Kindly review "Reference Letters" section of Additional Details.pdf document attached with the submission.

# References

Kindly review "References" section of Additional Details.pdf document attached with the submission.

# Client's Feedback

Wishtree is among the 100 top rated software development service provider and our feedback shared by our esteemed clients is available on a public portal called Clutch <a href="https://clutch.co/profile/wishtree-technologies#review-1708847">https://clutch.co/profile/wishtree-technologies#review-1708847</a>



# UI/UX Design Goals or Design Statement

The given below is the standard description of a typical design statement, which may vary as per the type of the project. Depending upon client request, certain points would be included or excluded and would have implications on the timeline for the design phases.

#### **User Experience**

- We use the principle of 'Progressive disclosure' show selected amounts of information at different stages of the application to avoid overloading the user
- The information on each screen is distributed by similarity, frequency of usage etc. and is represented by meaning
- We apply controls-grouping logic to identify the top one or two actionable per screen to be highlighted and nest others into menus
- We set the information hierarchy according to its one-time or repetitive importance to a user
- We create the entire interface package with a clear understanding of modules and sub-module structures
- This leads to the creation of wireframes where all the functionalities become structures as schematic screens

#### **User Interface**

- We use the wireframes to create UI which is the final look of the application
- We choose an appropriate visual language based on the context of the application and which is relevant to modern design guidelines
- Our selection of imagery is carefully done to match with the other user interface components
- Our selection of fonts is not only to compliment the UI but also make it efficient to load
- Our selection of colors is based to suit existing brand guidelines or enhance the UI in an appropriate manner, balancing core colors with peripheral highlights
- This leads to the creation of a style guide as well, which our developers use to style the bulk of the screens

## **Accessibility**

- We choose font sizes, icon style, color contrast and other visual elements to make sure that the target user feels comfortable using the interface
- Using appropriate white space and placement of elements, we make the interface look clean to make it easier for users to see
- In cases of users having extreme conditions like sensory impediments, physical impediments and so on, we make sure to follow established guidelines to make our interfaces and their accessibility and usability simple

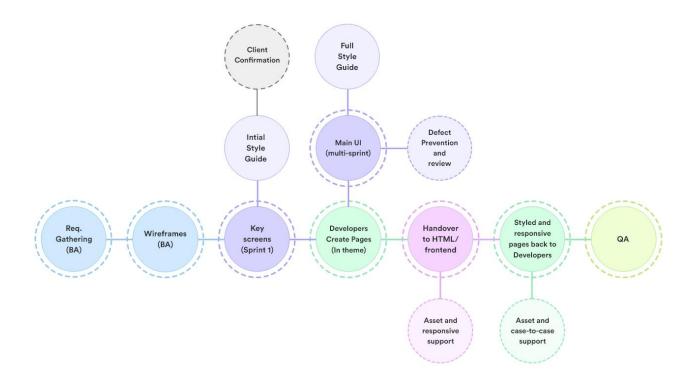
#### **Coding Compliances**

 We make sure that the code standards comply with W3 school benchmarks so that code implementation in the later stages is also up to par



# **Design Process**

Wishtree will employ an adaptive, holistic & user centered approach to design. Our designs are driven by informed intuitions that combine creativity, rigor, insight, outsight & foresight.

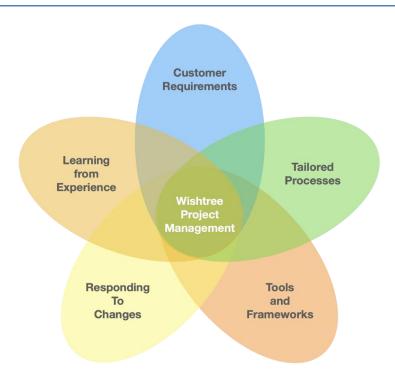


## **Approach / Process**

- Mid fidelity wireframes will be created by the BA covering the full scope of the application
- Max. 20% screens from the wireframes will be selected by the BA and designer and the UI will be created for all these
- Theme or component library may be selected in advance, after the completion of the wireframes which best suit the application
- Developers create the selected pages for which UI was created, using the theme or component library
- Developers hand the pages to HTML CSS designers for modifying the pages to match the UI
  created by the designer in all responsive versions. Then they hand the pages back to the
  developers for further integration
- Sprint based UI design approach is taken in such projects



# Project Management Control/Approach



Wishtree has the experience of working with multiple UN agencies and private organizations alike. Among the various factors that contribute to a successful project and stakeholder satisfaction is a project completed within the time, adhering to the defined scope and desired quality. While managing these expectations, Wishtree's experienced leadership has developed a project management philosophy which is well evolved through projects that Wishtree has delivered and accounted for its successful project deliveries.

The project management approach in Wishtree works on a five-pronged strategy.

#### **Customer Requirements**

A project is commenced with a business case and corresponding requirements and the execution of the project at each level of execution should justify the business case. The Wishtree's project management team involves all relevant stakeholders though the requirements, planning, designing phase to ensure all their usability, functionality and performance requirements are met.

Wishtree will share a detailed RACI Chart (responsibility assignment matrix), which depicts the close interaction between Wishtree project teams and customer stakeholders to ensure that the roles and responsibilities are clear and transparent. This will also ensure that every stakeholder is planning about the future tasks.

#### **Tailored Process**

The purpose of tailoring is to ensure that the project management approach and effort is appropriate for needs of the project. The approach allows the project management team to align processes based



on project's scale, complexity, importance, capabilities, and risks to govern and support the project through the planning, designing and development and testing phases.

#### **Tools and Frameworks**

Over the years, Wishtree has acquired expertise in a variety of project management tools and frameworks. However, during the execution of the project, Wishtree takes into consideration the client preferences, project's scale, complexity, and time constraints to choose the appropriate tools to execute the project. This approach helps optimize the project management overhead, controls the cost, and improves the responsiveness.

#### **Responding to Changes**

Change is an important part of the project; a fact that is embraced by Wishtree. Wishtree's matured project management approach accounts for changes in the scope and the functionality and accommodates them through a change management process. This allows customers to suggest changes during the project execution and incorporate them earlier than waiting for the project end which would otherwise result in increased costs.

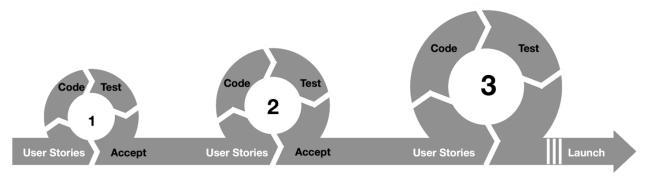
## **Learning from Experience**

Wishtree's project teams continually record learning from the project through periodic logs, Lesson Reports and Project Closure reports. These reports capture challenges of the project, the approaches taken to solve them, and lessons learned for future projects.



# Software Delivery Approach (Agile)

The most popular Agile methodology today, Scrum, involves a set of well-developed practices. Development work is organized in self-organizing teams in short cycles called Sprints aimed at continuous improvement. Sprint goal is defined before each cycle starts. The customer's priorities are systematically analyzed and fed into the work of the team. The lessons learned in each iteration are captured in retrospectives and used in future iterations. In this way, the products are not only continuously improved but the process for developing them also improves. Wishtree will implement the Agile development process during the development cycle of the project.



#### Identify the user stories and creating a Product Backlog

The product backlog lists and prioritizes task-level details required to execute the strategic plan in the development roadmap. It identifies what is next on the development team's to-do list as the team executes development work. The priority of each requirement comes from the client based on strategic objectives.

A few traits of Product Backlog are

- **Detailed Appropriately:** User Stories in Backlog contain enough contextual information to be understood and discussed by the development team
- Emergent: It is easy to add new stories and items as new information arises. Nothing is set in stone
- **Estimated:** The effort involved with each User Story is estimated with standardized measures agreed to by the team
- **Prioritized:** User Stories in Backlog are ranked based on their value and the strategic purpose(s) they serve

## Sprint planning/planning meeting

Once the team has the Product Backlog ready, it divides the development cycle into Sprints of 2 or 3 weeks depending upon project size and team size. A Sprint Backlog is a list of tasks identified by the development team picked up from the Product Backlog. Tasks in the Sprint Backlog must be completed during the Sprint. Here, the team selects Product Backlog items mainly in the User Stories. Sprint Planning is attended by the Product Owner, Scrum Master, Development Team, and the QA.



#### **Implementation & Testing**

Based on Sprint Backlog, the development team starts coding and QA will prepare test cases / test scenarios simultaneously. Once developers finish coding on one user story/requirement and give a build for testing, QA will verify that functionality and qualify it. QA will log bugs if any and developers can work on bug fixes and coding of another planned requirement of sprint. At the end of the sprint cycle, the team has user stories in the Sprint Backlog implemented and tested by QA.

## **Communication & Status Reporting**

The team sets up a weekly status call for reporting development progress and overall progress of backlog items identified for current sprint. If there is any requirement change OR query, then this status call will help to resolve the queries. Also, if there is a change in priority then the weekly status call will allow making required changes and planning for the rest of the days accordingly. The team sends a MOM document after the weekly status call so that if any concerned person is unable to attend the meeting, he/she can review the points and share the feedback via email.

## **User Acceptance Testing and Sign Off**

If the client agrees then Wishtree appoints one or more persons from the actual user(s) as UAT in the scrum team. The role of that person(s) is to test the requirements / User Story from the end-user perspective. This helps to find critical business cases if the QA team misses before release. It also ensures a smooth release.



# Exit Management Plan

#### **Project Overview**

The goal of this software development project is to create a "Consent Building Block" and integrate it with the other building blocks of GovStack for ITU. The project is scheduled to be completed in 26 weeks as mentioned in the Delivery Plan. The key stakeholders include the ITU team, the Wishtree Delivery Team, and the project manager.

#### **Handover Process**

The handover process will be as follows:

- Transfer ownership of all project files, including code, documentation, and other relevant information to the ITU
- Provide training and support to the ITU Stakeholders to ensure they have the necessary skills and knowledge to maintain and support the Consent Building Block
- Schedule a meeting with the ITU Team to provide an overview of the new system and answer any questions they may have

## **Knowledge Transfer**

The key stakeholders will get trained or educated on the Consent Building Block identified by the client. Training will be provided in the form of user manuals, video tutorials, and live training sessions.

#### **Maintenance and Support**

The Wishtree will be responsible for the ongoing maintenance and support of the Consent Building Block for 1 year. A support team will be established within the IT department to provide support to end-users.

#### **Project Closure**

The project will be considered complete when the following criteria have been met:

- All tasks identified in the project plan have been completed.
- All documentation and deliverables have been provided to the IT department.
- The Consent Building Block has been tested and is functioning as expected.
- The ITU team is satisfied with the new system and has provided feedback.

#### **Communication Plan**

A communication plan will be put in place to inform all stakeholders of the project's completion. This will include an email to the client, a presentation at the final meeting, and a email notice on the stakeholders.

#### **Contingency Planning**

Potential risks or issues that may arise during the exit process include:

- Delays in the transfer of ownership of project files.
- Technical issues with the new software system.



• Resistance to change from end-users.

Contingency plans to mitigate these risks include establishing clear timelines for the transfer of ownership of project files, performing thorough testing of the new software system, and providing ongoing training.

# **SLA for Support & Maintenance Services**

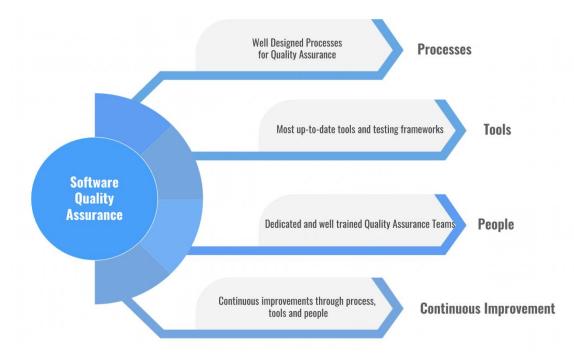
Wishtree will use the following guidelines to prioritize Support & Maintenance requests

Severity Level	Description	First Response Time	
Fatal	Complete Degradation – all users and/or critical functions affected. Item or service completely unavailable	The first response will be within 8 to 12 business hours.  The issue resolution will be attempted in keeping with the nature of issue type.	
Severe	Significant Degradation – large number of users and/or critical functions affected.	Within 12-24 business hours	
Medium	Limited Degradation – limited number of users and/or functions affected. Business processes can continue.	Within 24-36 business hours	
Minor	Small degradation – Very few users and/or functions affected. The business process can continue.	Within 36 -48 business hours	



# Quality Control and Assurance Mechanism

This section describes about the Quality approach to be followed by Wishtree during the project execution.



#### **Quality Assurance Process**

Wishtree takes a comprehensive approach to Quality and believes that Quality must be built in and not inspected. This is achieved by adhering to a well-defined process and by adhering to certain well-defined Quality Assurance techniques. These consist of:

- Definition of Project Phases with deliverables identified at the end of each of these phases.
- Procedural Standards that provide the project team with a set of proven, practical tools and techniques with guidelines on how to use them.
- Documentation Standards that provide the project team with the means of preparing the identified tangible deliverable.

Wishtree uses quality assurance procedures like reviews, inspections, code walkthrough and testing in each of the defined phases to:

- Facilitate problem detection at the earliest.
- Assure conformance to Guidelines and Standards set forth for all deliverables.

## **Quality Management**

Wishtree is extremely quality conscious. It believes that consistently high quality of deliverables can be achieved only if formal procedures and processes are defined for the various tasks are adhered to. It has evolved a detailed set of processes for Development, Conversion, Packaging, Implementation and Maintenance. Training, standards and quality checklists, tools, re-use, causal analysis, and defect prevention is some of the ways in which the repetition of errors is prevented.



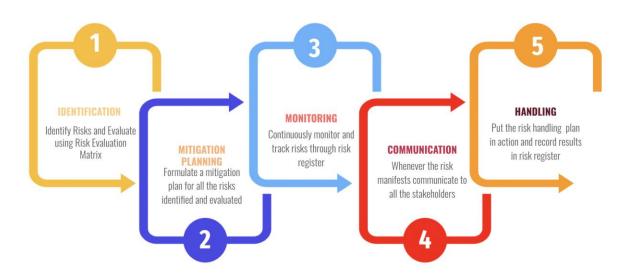
Collecting process and product metrics periodically, to evaluate and improve the processes monitor quality levels.

#### Wishtree Quality policy includes following:

- Implements well designed processes for ensuring and improving the quality of all its products and services and improving them.
- Integrates quality control activities, such as reviews, inspections, and testing into development processes.
- Places emphasis on building quality in products and services by promoting error prevention through training, standards and checklists, tools, reuse, and causal analysis.
- Introduces various quality metrics in products and processes to monitor and control quality levels.
- Improves processes, methodologies, and techniques continuously by capitalizing on evolving technologies to attain continuous improvements in our quality levels.

# Risks/Mitigation Measures

Wishtree's risk management is based on a six-point risk management strategy framework for risk mitigation and a shared responsibility model.



#### **Risk Management Strategy**

Wishtree's Risk Management strategy is based on five pillars namely Risk Identification and Evaluation, Risk Mitigation Planning, Risk Monitoring, Risk Communication and Risk Handling.

- 1. Identification: Identify Risks and Evaluate using Risk Evaluation Matrix
- 2. Mitigation Planning: Formulate a mitigation plan for all the risks identified and evaluated
- 3. Monitoring: Continuously monitor and track risks through risk register
- 4. Communication: Whenever the risk manifests communicate to all stakeholders
- 5. Handling: Put the risk handling plan in action and record results in risk register



# **Shared Responsibility Model**

An important mechanism of our risk mitigation approaches is the shared responsibility model, which illustrates interaction between the Wishtree project team and customer stakeholders to ensure that the delivered artifacts are of the desired quality and devoid of risks due to lack of understanding regarding high level activities, responsibilities, and overall communication strategy.

	Wishtree Team			Customer	
Phase	PM/BA	Design	Development	QA	Stake holders
Requirement Planning	R	С	I	I	R/A
UI/UX Design	С	R	I	I	А
High level Design	R	I	I	ı	А
Iterative Deliverables	С	С	R	ı	А
UAT	I		R	R	R
Deployment	I		R		А
Change Management	R	С	С	I	А
Support & Maintenance	I		R	R	А

Note: R= Responsible, A = Accountable (or Approver), C = Consulted (Consultant), I = Informed



# **Proposal Validity**

This proposal is valid for a period of **180 days** from the delivery date of this quotation. If our client signs this proposal after the expiration date, Wishtree reserves the right to submit a revised proposal.

# **Authorized Signatory**

Entity Name:	Wishtree Technologies LLP
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	Ahmedabad, Gujarat. India
Name and Title of duly authorized	Dilip Bagrecha,
representative:	Partner
Signature:	
	Dkumaiy
Date:	14 <sup>th</sup> March 2023