West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
General Fax: 304-558-6026
Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

wvOASIS

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Welcome, Alisha S Pettit
Procurement | Budgeting | Accounts Receivable | Accounts Payable

Solicitation Response(SR) Dept: 0323 ID: ESR04022400000005708 Ver.: 1 Function: New Phase: Final ▼ Modified by batch , 04/02/2024

Header 📎2

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1388009

Procurement Type: Central Master Agreement

Vendor ID: VS0000045347 ⬆

Legal Name: Quantiphi Inc

Alias/DBA: Quantiphi Inc

Total Bid: $1,183,200.00

Response Date: 04/02/2024

Response Time: 13:10

Responded By User ID: Quantiphi12 ⬆

First Name: Prajakta

Last Name: Sant

Email: vaidehi.satone@quantiphi.

Phone: 0407716096

SO Doc Code: CRFQ

SO Dept: 0323

SO Doc ID: WWV2400000007

Published Date: 3/25/24

Close Date: 4/2/24

Close Time: 13:30

Status: Closed

Solicitation Description: Virtual Call Center

Total of Header Attachments: 2

Total of All Attachments: 2

Proc Folder:	1388009
Solicitation Description:	Virtual Call Center
Proc Type:	Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2024-04-02 13:30	SR 0323 ESR04022400000005708	1

VENDOR
VS0000045347 Quantiphi Inc

Solicitation Number: CRFQ 0323 WWV2400000007

Total Bid: 1183200   **Response Date:** 2024-04-02   **Response Time:** 13:10:59

Comments: Quantiphi can discuss on discounts/payments if selected as a vendor of choice

FOR INFORMATION CONTACT THE BUYER
Brandon L Barr
304-558-2652
brandon.l.barr@wv.gov

Vendor
Signature X   **FEIN#**   **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	AWS Services				1078200.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: The detailed breakdown for the contract amount is mentioned in attachment Exhibit A Virtual Call Center Pricing Page

Extended Description:

AWS Services
These are estimates, actual costs will be based on consumption

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Cloud Assured Managed Services				60000.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: Above contract amount is the annual Cloud Assured Managed Services Cost.
Please refer to the deviation sheet attached in the response document (RFP Response_Quantiphi_State of West Virginia_Virtual Call Center), it's on page 29, the last page.

Extended Description:

Cloud Assured Managed Services
These are estimates, actual costs will be based on consumption

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Transfer and Setup Costs	1.00000	LS	45000.000000	45000.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: Please refer to the deviation sheet attached in the response document (RFP Response_Quantiphi_State of West Virginia_Virtual Call Center), it's on page 29, the last page.

Extended Description:

Transfer and Setup Cost
One-Time Fee

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Professional Service Hours (PM)	0.00000	HOUR	70.000000	0.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: Above mentioned hourly rate is for offshore resource. We have provided onshore resource cost in Exhibit A.
Delivery days will vary based on the actual scope discussed during the engagement.
The State can select onshore or offshore resources according to the project's needs. We will be able to provide those necessary resources with a 15 day prior notice

Extended Description:

Professional Service Hours (PM)
These are estimates, actual cost will be based on consumption

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Professional Service Hours (Junior Developer)	0.00000	HOUR	60.000000	0.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: Above mentioned hourly rate is for offshore resource. We have provided onshore resource cost in Exhibit A.
Delivery days will vary based on the actual scope discussed during the engagement.
The State can select onshore or offshore resources according to the project's needs. We will be able to provide those necessary resources with a 15 day prior notice

Extended Description:

Professional Service Hours (Junior Developer)
These are estimates, actual cost will be based on consumption

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Professional Service Hours (Senior Developer)	0.00000	HOUR	80.000000	0.00

Comm Code	Manufacturer	Specification	Model #
81112006			

Commodity Line Comments: Above mentioned hourly rate is for offshore resource. We have provided onshore resource cost in Exhibit A.
Delivery days will vary based on the actual scope discussed during the engagement.
The State can select onshore or offshore resources according to the project's needs. We will be able to provide those necessary resources with a 15 day prior notice

Extended Description:

Professional Service Hours (Senior Developer)
These are estimates, actual cost will be based on consumption

State of West Virginia
Centralized Request for Quote
Telecomm
Virtual Call Center (Proc No 1388009)

Cover Page

April 02, 2024

Mr. Brandon Barr
Department of Administration
Purchasing Division,
2019 Washington Street East,
Post Office Box 50130,
Charleston, WV 25305

Re: State of West Virginia Centralized Request for Quote Telecomm

Dear Brandon,

Quantiphi extends its sincere gratitude to the State of West Virginia Purchasing Division, for consideration of our proposal response to migrate and enhance an Amazon Connect contact center solution, as well as to develop outbound call and SMS campaign services.

As a premier AWS consulting partner, we have been serving Federal, State and Local Government in achieving their contact center implementation and migration goals for a number of years. We have served over 50+ clients in contact center implementations across the globe and are proud of the impact that we have made in the lives of citizens through our work. Our Contact Center service line has 100+ certified practitioners aligned to deliver on customer's needs.

We are excited about this opportunity to showcase our expertise in providing contact center solutions to help you deliver a better experience. Our response clearly states our capabilities in helping the State of West Virginia achieve meaningful outcomes.

Quantiphi's team identifies some of the key elements essential for the long term success of this project:

Collaborative Approach - Throughout our partnership, our methodology will remain agile, specifically leveraging Scrum as the adopted project management framework. We embrace and employ open and honest communication with the

stakeholders, to bring transparency across all the aspects of project planning and execution.

Partnership with Amazon Web Services and Quantiphi's Amazon Connect Capabilities - As a launch partner for [Contact Center Intelligence](#) solutions and with competencies in delivering Conversational AI and Connect solutions, we bring in the expertise to achieve the State of West Virginia's goals. Quantiphi excels in leveraging Amazon Connect to revolutionize contact center operations and providing an omnichannel customer experience to provide superior customer service at lower costs.

Managed Support - Quantiphi will leverage its **TotalCare** offering for support and maintenance of the cloud contact center solution. As a part of the engagement, we will ensure the solution functions smoothly and Quantiphi will resolve any issues brought in by the stakeholders as per the agreed upon SLA's between both the parties.

Subject Matter Expertise - Our dedicated Public Sector Practice has industry/domain experts, solution leads, AI/ML SMEs, AWS Solution Architects, Platform and Data Engineering specialists, Conversation AI Specialists, BI Engineers, and Data Scientists. The sole focus of the practice is to help our customers solve their business problems and pressing challenges by leveraging the true power of the AWS cloud while ensuring the governance and security compliances required in the telecom domain.

We have been recognized by the industry and are mentioning below a few accolades that we received from AWS

As a premier AWS Consulting Partner, we have over **10 years of experience** in delivering enterprise grade solutions to our customers

We have been identified by AWS as one of the **launch partners for Contact Center Intelligence Solutions**

We have been recognized as **AI/ML Partner of the year** by AWS for our work in Machine Learning

We have been recognized as **Industry Partner of the year** by AWS

Proposer Information

Proposer: Quantiphi, Inc.

Website: https://quantiphi.com

Year of Establishment: 2013

Authorized Representative: James Keller, AWS Channel Global Lead

Address: 33 Boston Post Rd W, Marlborough, MA 01752, United States

Telephone: (617)855-5620
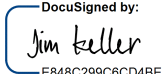
Email: james.keller@quantiphi.com

Important Contacts:

Title	Name	Email	Phone
AWS Channel Global Head	James Keller	james.keller@quantiphi.com	(617)855-5620
AWS US Public Leader	Brian Herndon	brian.herndon@quantiphi.com	(407)716-0966

We would be pleased to provide any additional information if needed. Should you have any questions, please feel free to contact: Brian Herndon@(407)716-0966 or brian.herndon@quantiphi.com. We look forward to working with you.

Yours truly,

DocuSigned by:

Jim Keller

E848C299C6CD4BE...

Jim Keller

AWS Channel Global Head

aws

April 2, 2024

Quantiphi, Inc.
33 Boston Post Road West
Boston, MA 01752
USA

Re: Letter of Support for Virtual Call Center

To Whom It May Concern:

Amazon Web Services, Inc. (AWS) is very pleased to support Quantiphi, Inc. in its efforts to assist Workforce West Virginia for Virtual Call Center using the AWS Cloud. This letter confirms that Quantiphi, Inc. is an AWS Partner Network (APN) AWS Premier Partner in good standing.

Quantiphi, Inc. also holds the following AWS Competencies: Conversational AI Services, Data & Analytics Consulting, DevOps Consulting, Financial Services, Generative AI Services, Generative AI Software, Machin eLearning Consulting, Migration Consulting.

Quantiphi, Inc. participates in the following AWS Partner Programs: AWS Public Sector Partner (Government), AWS Solution Provider Program, AWS Public Sector Solution Provider (Authorized Reseller of AWS), and Well Architected.

AWS offers commercially available, web-scale computing services that help organizations avoid much of the heavy-lifting typically associated with launching and growing successful applications. These services are based on Amazon's own back-end technology infrastructure and incorporate over a decade and a half of experience building one of the world's most reliable, scalable, and cost-efficient web infrastructures. The use of AWS will provide you with access to expertise in large-scale distributed computing and operations and will enable your applications to be robust and scalable.

AWS values and appreciates the opportunity to support Quantiphi, Inc., and we look forward to a long and productive relationship. If you have any questions, or require additional information, please contact Amie Carobrese, Principal Partner Account Manager, at carobres@amazon.com or 858-652-1010.

Sincerely,

Amazon Web Services, Inc.

_____
Shannon Lowther
Senior Manager, Worldwide Public Sector Contract Management

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ WWV24*07

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

☑ Addendum No. 1   ☐ Addendum No. 6
☑ Addendum No. 2   ☐ Addendum No. 7
☑ Addendum No. 3   ☐ Addendum No. 8
☐ Addendum No. 4   ☐ Addendum No. 9
☐ Addendum No. 5   ☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Quantiphi Inc.
_____
Company

DocuSigned by:
Jim Keller
E848C299C8CD4BF...
_____
Authorized Signature

02 April 2024 | 2:23 AM PDT
_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 8/24/2023

Supplemental Terms and Conditions

1. Notwithstanding anything to the contrary contained herein or otherwise, performance of obligations under this proposal shall be subject to mutual agreement on terms and execution of a definitive agreement between the parties.
2. Notwithstanding anything to the contrary contained herein, in the RFP, or otherwise, anything not expressly stipulated as part of our scope under this response shall be considered to be out of scope for the purpose of the RFP.
3. Our response and its terms are subject to the reservations raised by us in this response.
4. All information as highlighted in the Confidential Form provided by Quantiphi as a response to this RFP will be treated as confidential and proprietary to Quantiphi and shall be kept in strict confidence. The State acknowledges and confirms that it has obtained the required consent from data subjects prior to sharing any data with Quantiphi in the event such data has to be shared for Quantiphi to perform the services under the agreement.

Executive Summary

In advent of AI, Analytics and cloud computing, virtual call centers and automated outbound campaigns are very crucial for effective communication, streamlined operations, drive business growth, reduced costs, and enhanced customer engagement.

By embracing transformative technologies and fostering strategic partnerships with qualified vendors, the State of West Virginia is looking to elevate its operational capabilities, enhance customer satisfaction, and achieve greater success in fulfilling its mission to serve the people of West Virginia.

Quantiphi's Understanding

The State currently leverages fully scalable cloud based Amazon Connect Solution with advanced analytics to manage the call workload and efficiently match staffing needs with call loads.The State is looking to migrate and modernize the current setup and build additional functionalities such as outbound call campaigns, customized holiday calendar setup, ticketing systems integration, SMS and email alerts and notifications, call flows, queue management and call transfers to the current AWS Connect solution.

Quantiphi's Solution

With the State of West Virginia's objectives at the forefront, our proposed solution will focus on migrating the existing infrastructure, modernizing communication systems, and enhancing service delivery to citizens and stakeholders.

To support a cost effective approach, Quantiphi has assumed that we will be using the existing instance as a reference model, duplicating all of the existing configuration into an instance in our account. Quantiphi will work with the existing vendor and West Virginia resources to first assess the existing infrastructure/configuration and then migrate the relevant details to a new AWS instance in our account. We will then work with West Virginia to create the solution design for outbound campaigns and deploy it as needed by the State.

Our **modernized Contact Center solution** will leverage the Amazon Connect capabilities to build the enhancements for improving overall customer satisfaction.The Amazon Connect outbound campaigns enable proactive communication via voice, SMS, and email to efficiently assist citizens and enhance agent productivity.

We have detailed our phase wise approach to address the needs of the state below-

In the **Assessment phase**, our team will closely work with key stakeholders to understand the existing infrastructure, configurations, call flows, data and other relevant assets. Our team will document the migration and modernization approach, reusable components from the current setup and the new components that need to be built to improve the efficiency and remain integrated with the vision of the State.

In the **Migration phase,** our team will closely work on transferring the configuration of existing Amazon Connect Solution, transfer of contact flows and other relevant details to the new AWS account.

In the **Design and Development phase**, our architect and SMEs will work on designing and executing the modernized contact center solution and outbound campaigns. The design will include the outline for ad-hoc and scheduled Calls and SMS outbound campaigns, customized holiday calendar setup, ticketing systems integration, SMS and email alerts and notifications, call flow setup, queue management and call transfers. We will leverage agile as a development methodology and ensure our team uses effective unit testing tools to validate the code before sending to higher environments.

In the **Testing and Documentation** phase, Our team will conduct extensive testing of the migrated solution to validate functionality, performance, and data integrity. The testing of new enhancements will also be conducted during this phase. Any issues or discrepancies from the migrated and modernized solution will be identified in the system integration testing phase and resolved before deploying the solution in the production environment.

In the **Deployment** phase**,** the solution will be deployed in the client's AWS cloud environment ensuring security, scalability and high performance of the modernized contact center. Post deployment, Quantiphi's **TotalCare solution** will manage the cloud contact center solution for the State.

Throughout this engagement our focus will remain on enhancing scalability, flexibility and cost-effectiveness, while addressing the evolving needs of the State of West Virginia.

Focused on your Future

An integral component of our value proposition is that each Quantiphi employee engaged in the project is focused on delivering the solution in line with the State's vision. This approach is designed to provide outcomes at regular intervals during the delivery schedule.

Streamlined Communication Channels

Our solution provides an omnichannel communication experience using the right set of communication channels such as voice, email, chat etc. and keeps all the interactions in one palace.

Expedited Benefits

Our AWS powered contact center solution provides cost benefits with modular design and the latest technology stack.

Effective Outbound Campaigns for Call and Messages to drive the business growth and effective communication.

Data Security

Our solution follows rigorous security measures, such as encryption and authentication protocols, safeguard sensitive data, and confidentiality protocols.

Our Values

➢ Extensive experience of 5+ years serving US public sector customers across multiple Contact Center migration and modernization initiatives
➢ Over 800 AWS certified professionals ready to support the initiative as per latest industry trend
➢ Experience building Contact Center Intelligence solutions with 50+ customers
➢ HIPPA and GDPR compliant solutions
➢ ISO/IEC 27001:2013, SOC 1 Type, and SOC 2 + HIPAA Type 2 Certifications

Scalability and High Availability

Quantiphi's solution Utilizes Amazon Connect instances to achieve high availability for the contact center. Amazon Connect instances help in auto-scaling to automatically monitor and adjust the number of Connect instances based on the demand, ensuring it always meets customer demand without any failovers. Additionally, we leverage Amazon Connect's multi-AZ deployment, which replicates the contact center data across multiple Availability Zones (AZs) within a single AWS Region. This ensures data access even if one AZ becomes unavailable.

Quantiphi Overview

A. About Quantiphi

Quantiphi is an award-winning AI-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of our customer's business.

As a Premier AWS Consulting Partner, Quantiphi solves the toughest and most complex business problems for our customers across North America, Europe and Asia by combining deep industry experience, disciplined AWS cloud and data-engineering practices, and cutting-edge artificial intelligence research to achieve quantifiable business impact.
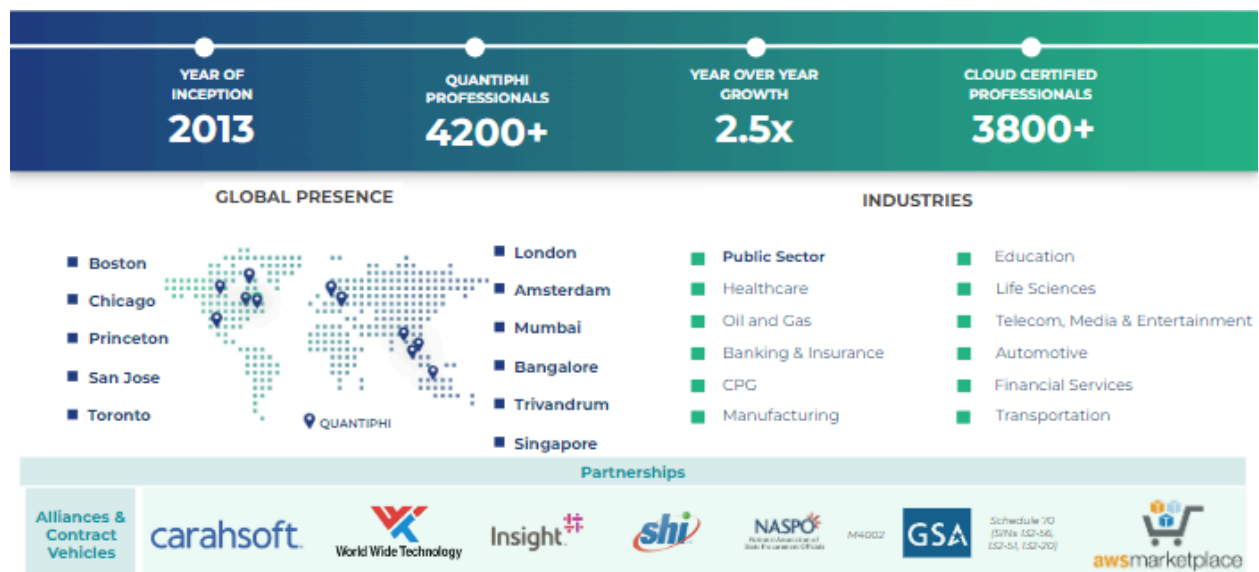

Figure 1.Our global expansion across various industries

For more details please visit our website -
https://quantiphi.com/partners/amazon-web-services/

B. Quantiphi's Superpowers

Figure 2. Above figure illustrates Quantiphi's AWS Powered Services

We have proven expertise with helping our clients in migrating to the cloud, modernizing their infrastructure and building a smart analytics layer leveraging AI/ML to build solutions in the domain of Conversational AI, Digital Customer experience, Data & Analytics, Generative AI, Machine Learning, DevOps and Financial Services to name a few.

C. Quantiphi's Contact Center Practice Overview

Quantiphi has worked extensively with a number of states to drive transformation in their contact center operations. We help customers:

- Establish dynamic contact centers
- Develop innovative conversational, self-service agents for round-the-clock support
- Optimize key performance indicators (KPIs) effectively

Our Contact Center Modernization experience positions us with the knowledge, scale, and capability to help the state of West Virginia with increased operational efficiency, optimized data, and advanced AI possibilities.

D. Public Sector Practice Overview

As a Premier AWS Public Sector Partner, Quantiphi has a dedicated team of highly skilled team members focused on providing our clients ways to improve productivity, efficiency and security while lowering cost and improving customer satisfaction. Our Public Sector team has built a variety of specialized practices to help our clientele redesign the way they serve their customers, including:

      a. Contact Center Transformation
      b. Infrastructure Migration and Modernization
      c. GenAI Powered Document Processing
      d. Enterprise Data Warehouse and Data Lake
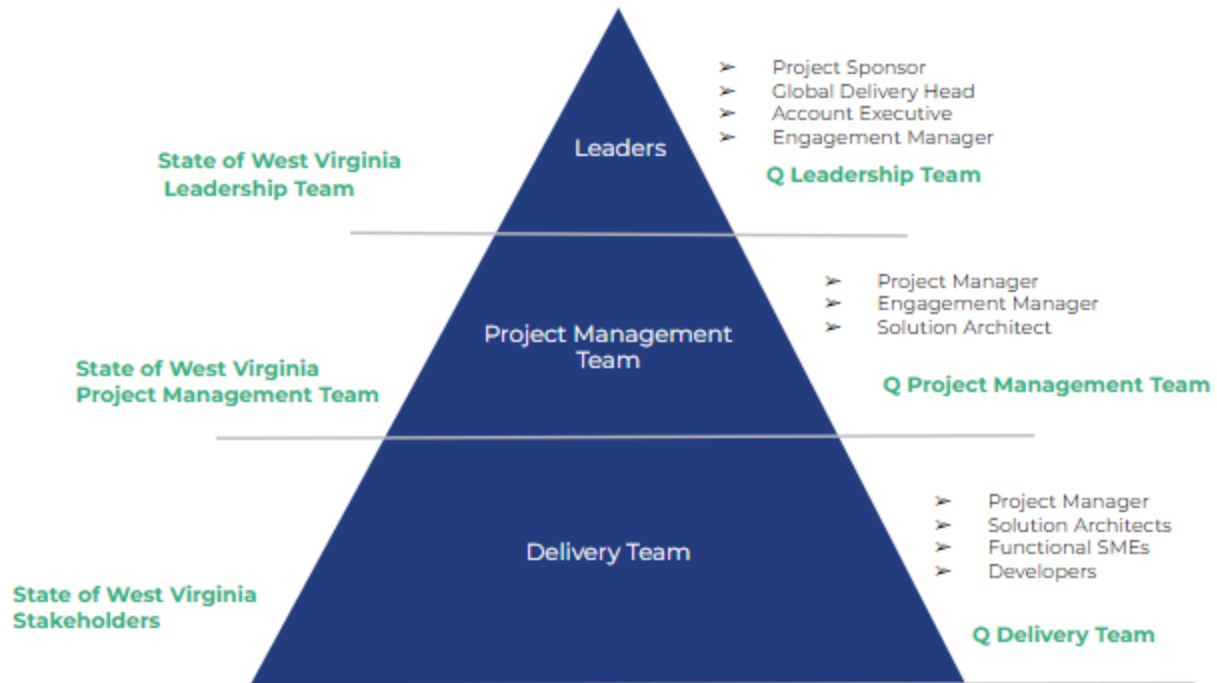
E. Leadership and Project Team Structure

Our AWS Practice, led by Jim Keller fosters an open and honest communication culture with our clients, placing a strong emphasis on your success. We leverage learnings from our past work in the contact center modernization, resulting in more effective and streamlined processes, ultimately instilling confidence in our stakeholders.

Our Highly Experienced Core Team

We understand that assembling the right team is important for the long term success of our clients. We present a team to the state of West Virginia with deep expertise in assisting modernization of their contact center. Please refer to our Project Governance Model for more details.

Leaders
- Project Sponsor
- Global Delivery Head
- Account Executive
- Engagement Manager

Q Leadership Team

State of West Virginia Leadership Team

Project Management Team
- Project Manager
- Engagement Manager
- Solution Architect

Q Project Management Team

State of West Virginia Project Management Team

Delivery Team
- Project Manager
- Solution Architects
- Functional SMEs
- Developers

Q Delivery Team

State of West Virginia Stakeholders

Our experienced team aligns with the State of West Virginia stakeholders for the success of this engagement

Role	Description
Quantiphi Leadership Team	● Responsible for account health and project success
Quantiphi Project Management Team	● Govern the project schedule ● Make sure that project is on time with respect to budget, scope and schedule ● Identify and raise the risks at early stage with the state of West Virginia leadership and provide mitigation plan ● Set Project delivery processes
Quantiphi Delivery Team	● Accountable for delivering project following Agile methodology principles ● Conduct daily scrum calls as per the defined terms ● Follow the project processes and ensure smooth delivery and collaborative coordination with the state of

	West Virginia stakeholders.

F. Quantiphi's Leadership

Brian Herndon is Quantphi's **AWS Public Sector Leader**. He holds over 25 years of extensive experience as a sales professional, proficient at fostering productive relationships with customers. Additionally, Brian boasts more than 4 years of expertise with Quantiphi in technology and public sector domains with a focus on delivering cutting edge solutions to our customers and building strategic relationships with them.

Paula Morton is our **AWS Contact Center Practice leader**. Paula's expertise in CCaaS, digital, and CTI/application integration extends across industries, including Healthcare, Insurance, Government, and Service sectors. Paula has led numerous complex contact center technology migration and transformation initiatives.

Vibhav Gupta is our **Global GTM Leader**. He has over 10 years of experience and is responsible for execution of our sales and marketing initiatives across our various industry domains with a specific focus on the US Public Sector. He will serve as a primary liaison to comprehend the State 's challenges.

Rahul Jain is our **Global Delivery Leader.** He carries 25+ years of vast industry experience in the Financial Services, Retail and Public Sector domain. He is a veteran in building high performing delivery teams and building strong client relationships. Rahul, along with his delivery team will work closely with the State stakeholders to manage the project delivery.

Suraj Vandigodi is the **Technical Architect for Contact Center practice** at Quantiphi. He has over 10+ years of experience in architecting solutions for machine learning, conversational AI and contact centers. He will work with our delivery team to ensure the State's technical and business requirements are addressed.

Proposed Solution

Quantiphi's proposed solution involves a comprehensive assessment of the current call center setup, followed by seamless migration using Amazon Connect. The design and development phase focuses on configuring AWS infrastructure, implementing customized call queue settings, SMS settings and integrating with ticketing systems. We will perform rigorous testing to ensure quality assurance. Post-deployment support and maintenance will be through Quantiphi's TotalCare support offering.

Phase 1 : Assessment of existing call center setup

Quantiphi's approach involves migrating the current solution implemented by the existing vendor thereby minimizing rework by leveraging existing developments. This requires effective collaboration among Quantiphi, the State of West Virginia, and the current vendor.

Assessment Scope:

1. Quantiphi will conduct a comprehensive audit of the current Contact Center built by the existing vendor.
2. Quantiphi will audit and assess existing documentation, including design documents and call flow designs, to understand the existing infrastructure.
3. The State and the existing vendor will facilitate knowledge transfer sessions to provide Quantiphi with insights into flows, code, and infrastructure.

Based on the findings, Quantiphi will devise a migration plan, detailing which components will be reused and which will need to be built additionally based on requirements. Redesign of existing flows, agent profiles, queues and integrations has not been considered as part of the currently scoped effort.

Phase 2: Migration to the new call center setup

Quantiphi will leverage Amazon Connect for seamless migration of flows to another AWS instance. For migrating a few flows, we will utilize the import/export feature within the flow designer. For bulk migration using APIs, we will follow below procedure:

Source Instance:

- Utilize ListContactFlow to obtain the Amazon Resource Number (ARN) for the desired flows
- Employ DescribeContactFlow to gather comprehensive information about each flow slated for migration

Destination Instance

- Utilize CreateContactFlow to establish the flows in the destination instance
- UpdateContactFlowContent enables the update of flow content as required

Phase 3: Design and Development phase

Mandatory requirements

Quantiphi will leverage AWS Connect capabilities to establish a cloud-based contact center, tailored to the needs of the State of West Virginia. This phase focuses on configuring AWS infrastructure, implementing customized call queue settings, SMS settings and integrating with ticketing systems.

Agents will utilize the AWS Connect Agent Workspace for handling incoming and outgoing calls. We will build customized call flows to efficiently route users to appropriate queues and routing profiles, optimizing customer interactions.

1. **Infrastructure Setup**
   As a part of the solution implementation, the first step is to ensure that we set up the AWS infrastructure in the State's AWS account. This is to ensure that our development team has necessary access, roles and permissions to start building the solution.
   - Creating IAM users and accesses
   - Roles and Policies - A role is a type of IAM identity that can be authenticated and authorized to utilize an AWS resource
   - Setting up Connect Instance

2. **Customized Call Queue Settings**

Amazon Connect simplifies contact center queue management and provides admins with the ability to create, delete and manage queue attributes. Queues are an essential part of a contact center, which are used to ensure that the contact center is easily managed. There are two types of queues mainly:

Type of Queues	Description
Standard queues	• Contacts wait in standard queues before they are routed to and accepted by agents • These queues are typically used to manage incoming contacts and distribute them among available agents based on predefined routing rules
Agent queues	• These queues are created automatically when you add an agent to your contact center. • Contacts are only routed to agent queues when explicitly sent there as part of a flow

For example, you might route contacts to a specific agent who is responsible for certain customer issues, such as billing or premium support or you might use agent queues to route to an agent's voice-mail.

Properties of the Queue :
    a. Set the hours of operation and timezone for a queue
    b. Set up outbound caller ID
    c. Set the maximum contacts in queue limit
    d. Create quick connects

3. **Allow for multiple tiers for Call Triage and handling**

Call flows are an easy way to do a preliminary assessment of why the user is calling a call center.
- Amazon connect supports DTMF (Dual tone multi frequency) or conversational interaction with the IVR using Amazon Lex.
- Based on the different options the user selects, the user is then assigned to the right queue to ensure that the call is handled by the skilled agent to ensure the call handling times are low.

4. **Simple transfer options for call center personnel**

   Amazon Connect offers diverse transfer options for seamless call handling -
   - *Agent-to-Agent Transfers***:** Facilitate transfers between agents for efficient call/task resolution.
   - *Transfers to Specific Agents*: Route contacts to the last interacting agent or those with designated responsibilities, ensuring personalized assistance.
   - *Transfers to Queues*: Direct contacts to specialized queues like sales, support, or escalation, optimizing contact routing. Utilize queue quick connects for voice, chat, and task contacts.
   - *Transfers to Phone Numbers*: Instantly connect contacts to external phone numbers, such as on-call pagers, by creating phone number quick connections.

5. **Customized list of holidays for call center closure**

   Quantiphi has a tailored solution that helps contact center administrators to effortlessly manage holiday calendars. At a high level, the following approach helps perform holiday calendar updation -
   - Through a database or storage solution like S3, admins upload a file detailing holiday schedules.
   - A dynamic integration of contact flow and lambda function retrieves this data, ensuring the contact center remains updated with the latest holiday list.

Automated Outbound Call Campaigns

Automated outbound campaigns using Amazon Connect assists in proactive communication across voice, SMS, and email channels. Through the Amazon Connect admin console, we can easily create campaigns to reach millions of customers daily for various purposes such as reminders and promotions. We can tailor campaigns by specifying the contact list, preferred channel, message content, and even pre-recorded audio for seamless customer connection to live agents.

Leveraging advanced features such as *predictive dialer and machine learning-powered answering machine detection,* these campaigns optimize agent productivity and increase live-party connections by intelligently managing unanswered calls. Integration with Amazon Pinpoint Journeys and Amazon Connect enables seamless creation of outbound campaigns spanning voice,

SMS, and email channels.

Amazon Connect supports three types of campaigns, each serving distinct purposes tailored to specific requirements:

Type of Campaigns	Description
Predictive Campaigns	• Ideal for scenarios prioritizing agent productivity, cost per call, or contact center efficiency. • Predictive dialers anticipate a certain percentage of unanswered calls and dial multiple numbers concurrently during an agent's shift, leveraging predictions about agent availability
Progressive Campaigns	• Employed when reducing answer speeds is crucial. • Progressive dialers sequentially dial the next number in a list after an agent completes the previous call, ensuring a controlled pace based on agent availability.
Agentless Campaigns	• Utilized for high-volume personalized voice notifications, appointment reminders, or enabling self-service via Interactive Voice Response (IVR) without the need for agents. • Suited for scenarios where direct agent involvement isn't necessary but effective communication with customers is vital.

Based on specific requirements, we'll select the most suitable campaign approach to optimize outcomes and meet objectives effectively.

SMS Campaigns

Quantiphi will leverage Amazon Pinpoint to promptly deliver transactional messages or incorporate SMS messages into campaigns. When initiating an SMS campaign in Amazon Pinpoint, we can select from pre-configured templates, define targeted segments, and monitor response metrics post-campaign deployment. With SMS campaigns, we have the flexibility to schedule delivery for immediate or specific dates and times, on a recurring basis, or triggered by events.

SMS campaigns can be triggered in the following ways:
1. Immediate delivery
2. Scheduled delivery at a specified date and time

3. Recurring delivery
4. Event-triggered delivery

For scheduling a campaign at a specific date and time:
1. Select "At a specific time" under "When should the campaign be sent."
2. Choose "Once" under "How often should the campaign be sent."
3. Set the start date and time for message delivery, along with the preferred time zone.
4. Optionally, enable "Use recipient's local time" to base delivery on each recipient's local time zone.
5. Proceed to the final step by selecting "Next."

Campaign Segments

In Amazon Pinpoint's SMS campaigns, we establish targeted segments. These segments can be dynamically configured using a CSV file to specify the list of recipients. A segment group consists of these components:

- Base segments: Initial user populations defining segments.
- Criteria: Audience information categories applied atop base segments.
- Filters: Audience size reduction mechanisms tailored to segment requirements.

By utilizing dynamic segments, we ensure precise targeting and customization for effective SMS campaign execution.

Email Alerts

Quantiphi will develop a mechanism to trigger email alerts to fulfill your need for sending emails upon outbound call initiation or for any designated events. Our solution will leverage AWS Simple Email Service (SES) to facilitate seamless email functionality.

Integration with the ticketing system

Amazon Connect simplifies the integration process with ticketing systems via Lambda functions embedded within contact flows. Leveraging the "Invoke Lambda" block, we seamlessly execute API calls—whether to retrieve or submit data—between Amazon Connect and the ticketing system. This approach assumes that the ticketing system supports API-based integrations, enabling smooth communication facilitated by Lambda functions within the contact flow architecture.

Phase 4: Testing and Deployment

Testing and Documentation

Quantiphi is committed to provide a seamless transition and optimal user experience through comprehensive testing of the migrated and enhanced solution. Our testing process includes:

- Integration and functional testing.
  - Test the call flows
  - Testing of call and SMS campaigns, ad hoc and scheduled
  - Test inbound and outbound calls
  - Test the integration with Ticketing system, do ensure data integrity
- Load testing to support scale

TotalCare - Managed Services

As a part of the proposal, Quantiphi will ensure that the team with the right skills is maintaining and managing the solution as part of Quantiphi's TotalCare support offering. The exhibit below highlights Quantiphi's AWS TotalCare offering to ensure the State's AWS environments are secure, optimized, and managed by experts, enabling focus on core objectives.
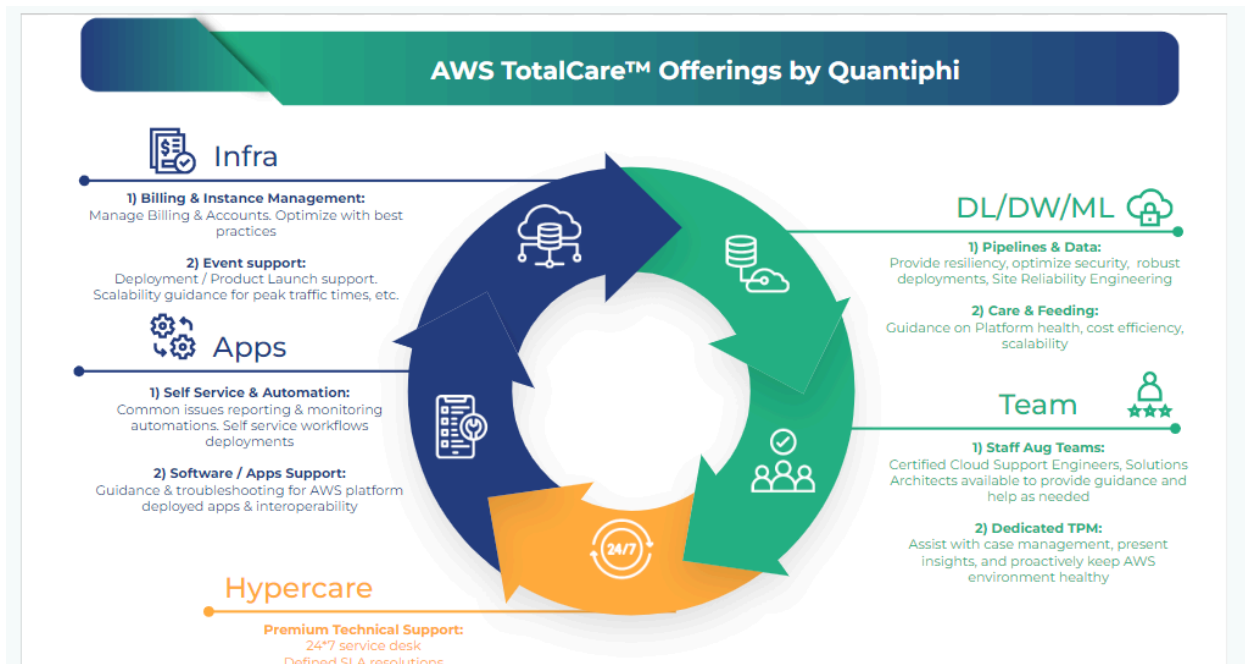

Figure 3. Maintenance and Support offering of Quantiphi

Quantiphi will provide 24X7 support in accordance with the State's team requirements.

Assumptions

- Quantiphi has determined estimated commercials in the Exhibit A considering an India based offshore team for development and managed services. Quantiphi can also provide a US based team or a team with mix of US and India resources if needed by the State of West Virginia
- Quantiphi has extended AWS estimates for the minutes provided by the State of West Virginia team considering the tier-based pricing options; however under the Managed Services model, West Virginia will only be billed for the actual consumption.
- For migration/transfer of the contact center, the State of West Virginia team will support the collaboration between the previous vendor and Quantiphi to fetch all the necessary documentation and help with knowledge transfer sessions to Quantiphi.
- Quantiphi will not be developing additional call flows but re-use the call flows developed by the current vendor.
- Quantiphi will be developing SMS and outbound campaign capabilities for English language only. Any other language support needed can be taken up in the subsequent phases.
- The State of West Virginia team will ensure that the ticketing tool we need to integrate with has Rest API based integration, and ensure Quantiphi team gets necessary developer accesses and documentation to complete the integration.
- The necessary design decisions on outbound campaigns and ticketing tool integration will need to be completed within the first 2 weeks of the engagements and documented.
- Procurement vehicle related fee will be above and beyond the commercials estimated in Exhibit A

High level Project Timelines

Quantiphi anticipates a eight (8) weeks engagement to complete the engagement in the State's AWS environment. The details of the tentative implementation schedule are captured in the image below:
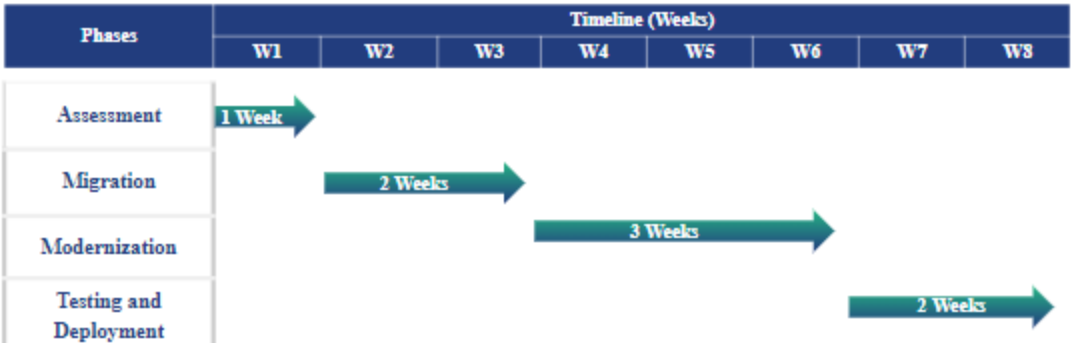
Figure 4. High level timeline of the engagement

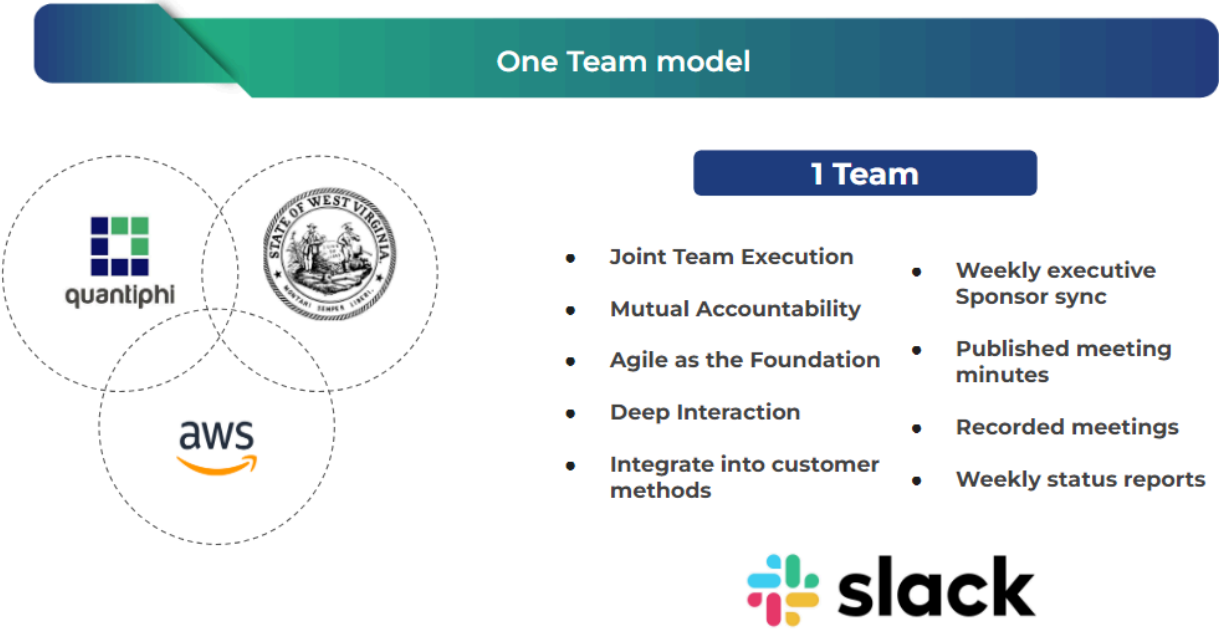## Project Governance Model

Figure 5. One Team Model

Quantiphi has developed a One Team Model that will be leveraged to meet the requirements of the State of West Virginia. We leverage the **agile development methodology** and will have weekly/biweekly meetings with the project manager at the State to track progress and call out any delays. Furthermore, the project lead/manager from the State will have a single point of

contact with Quantiphi's Project lead/manager to coordinate.This project lead/manager will be responsible for:

- Sharing details on project progress
- Sharing details on actual project progress vs planned progress
- Sharing details on any blockers from the State's side and working on any resolution plan
- Sharing details on any changes with request to scope or engagement roadmap and work with the State for necessary approvals
- Setting up monthly governance meetings to provide progress updates to the State's Leadership

We will follow a hierarchical governance model for account management with a dedicated point of contact at every level to enable a successful partnership with clients:
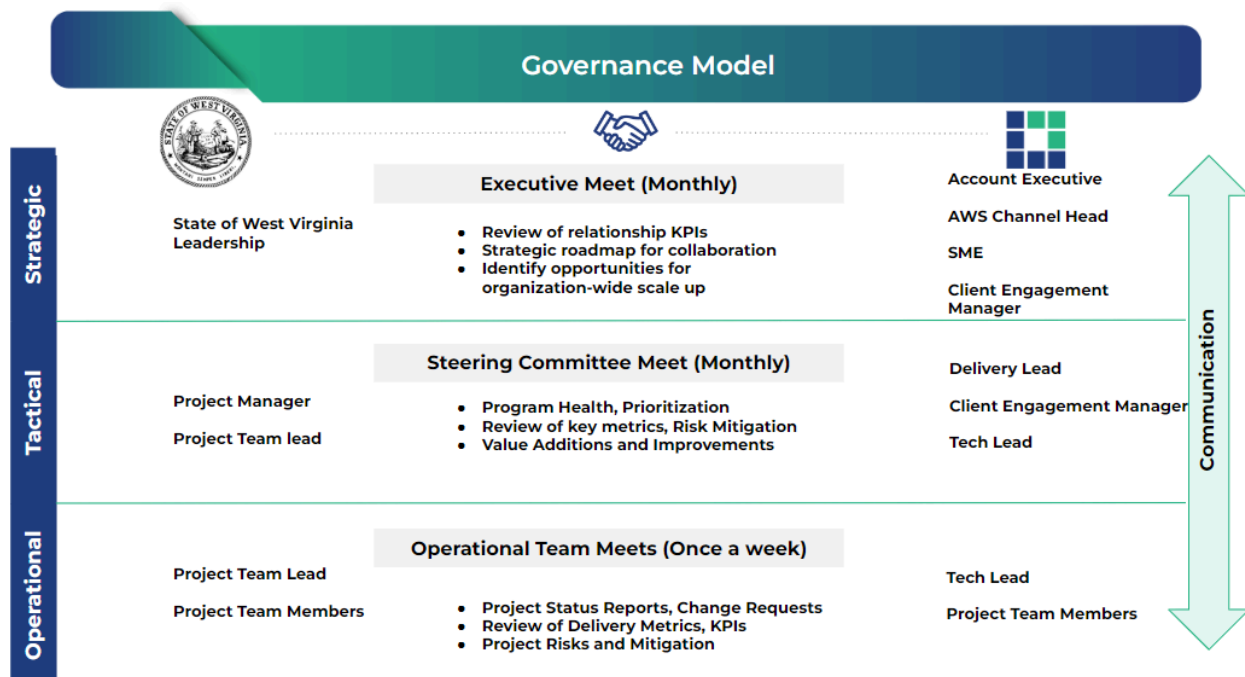

Figure 6. Project Governance Model

a. **Executive meeting**

The leadership teams of the State and that of Quantiphi can meet on a monthly basis to discuss strategic initiatives and review the key relationship indicators. This committee is further responsible for shaping the vision of the collaboration, setting priorities and

goals, and ensuring that execution follows the strategic route, with key focus on adhering to quality standards and timeliness of deliverables.

b. **Steering Committee**

The Steering Committee has the program managers from the State and the account lead from Quantiphi and key stakeholders from AWS. The committee shall be involved in planning, monitoring, and execution of different initiatives running as a part of the engagement.

c. **Operational Meeting**

This is the Project Execution body which consists of the teams from both the State and Quantiphi managing daily operations and delivery. There will be daily/weekly meetings of the two teams to discuss progress and resolve any queries or potential issues found.

d. **Communication Plan**

Quantiphi will follow a structured communication protocol to ensure that the State is always updated about the progress of the project. Progress of the project is monitored against interim milestones via communication at regular intervals across levels to avoid any unwanted surprises. We use the latest technologies and platforms (mutually agreed upon with the customer) like Slack, Webex, Teams etc. to overcome location barriers that come with global teams working from different locations. We also maintain frequent touch points at various levels of the organization to ensure that progress is not only monitored at an operational level but also at the strategic level, which ensures maximum value realization.

Any potential issues would be communicated between the Project Lead and Business Analyst during the weekly meetings

Our Esteemed Clients

Below are the examples of our work in delivering transformative contact center solutions leveraging AWS services:

IVR Migration to Amazon Connect	
Client Introduction	The Client is a leading provider of bulk transportation and logistics services company
Challenges	The client had an IVR solution that runs on an outdated system

Faced	which was not adapt to answer different customer queries and was also causing security and infrastructure compliance issues
Quantiphi's Solution	Quantiphi built an IVR solution on Amazon Connect with defined contact flows to help fuel pump operators update fuel readings. The solution also has SMS integration to allow for omnichannel experience to operators
Business Outcomes	● Improved operational efficiency of gas stations by 50% ● Achieved 20% increase in customer satisfaction scores

Real Time Call Center Analytics	
Client Introduction	The client is an award winning consumer healthcare navigation company in the US which provides management support services to healthcare institutions
Challenges Faced	The client received over 200K calls every month and their agents manually summarized calls, identified customer information, searched through records to answer customer queries
Quantiphi's Solution	Quantiphi built an end to end automated pipeline for real time transcription. This solution is capable of capturing caller information & specific keywords, perform sentiment analysis and shows the result on an interactive UI to help agents respond to customer queries
Business Outcomes	● The solution generated valuable insights on customer sentiment ● Transcription accuracy improved by 20% ● Improved end client response time by 30%

Employee Assistance Voice/Chat Bot	
Client Introduction	The Client is a major player in electric power holding industry within the United States
Challenges Faced	The Client wanted a chat/voice bot for their internal users to address specific support issues and reduce the workload on support resources

Quantiphi's Solution &	Quantiphi built a 24*7 virtual assistant that allows employees to raise support tickets and respond to queries. The bot is integrated with different client's internal applications such as Avaya and BMC remedy - ticket creation solution, and is able to handle around 17,000 user sessions annually. The solution also has integrated with Amazon Connect to enable outbound calls to employees for identify verification purposes.
Business Outcomes	● This solution enables automated ticket closure for ~30% of requests ● 40% reduction in overall cost involved in employee assistance

The response is a testament to Quantiphi's capabilities to address the different needs of the State of West Virginia and help achieve their desired objectives. Quantiphi is more than happy to answer any questions the State has on our response.

Quantiphi Inc.
State of West Virginia Request for Proposal (RFP) For
Virtual Call Center
RFP No. 1388009

S. No.	Bidding Document Reference(s) (section number/ page number)	Content of RFP requiring clarification	Points of clarification Required
1	Section 19(pg 17)	The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract.	Request the State to modify the clause to make it a mutual clause and also allow the breaching party a cure period of thirty business days in event of such non-conformity and if such non-conformity is not cured or incurable, the party can terminate the contract by providing written notice of thirty days.
2	Section 28(pg 18)	Warranty	(i) Request the warranty be limited to 30 days after the delivery if applicable for the services being provided under the agreement. (ii) Quantiphi would disclaim all implied warranties of merchantability, and fitness for a particular purpose. Quantiphi does not guarantee that (a) the services or deliverables will be performed or will perform error-free or uninterrupted, or that consultant will correct all errors in the services or deliverables, (b) the services or deliverables will operate in combination with client materials, or with any other hardware, software, systems, services or data not provided by consultant, or (c) the services or deliverables will meet any requirements, specifications or expectations.
3	Section 30(pg 18)	Privacy & Confidentiality	Request the confidentiality obligation be made mutual and the information of the Vendor is required to be protected by the State during the term of the contract and the survival period of three years post the term.
4	Section 36(pg 20)	Indemnification	(i) Request Vendor's liability is limited to direct damages, and subject to a mutually agreed cap on liability and all indemnification obligations to be limited to only third party claims. (ii) Vendor to be liable to only injury or damages that are sustained or real and not alleged. (iii) Vendor to be liable only when such damages have happened for reasons directly attributable to Vendor.
5	Addition	Not present in the Contract, we are proposing addition of these clauses	We request to add the following provisions in the Contract: 1) We request the University to consider giving Q the basic market standard indemnities for breach of confidentiality obligations, IPRs, wilful misconduct and gross negligence. 2) We request to add payment related terms and payment to be made to Vendor within 30 days of invoice receipt. 3) Request addition of industry standard language to protect Vendor's intellectual property and any third-party intellectual property 4) Vendor's termination rights for convenience. 5) We request to add service acceptance provisions.

Description	Specification	Estimated Monthly Cost	Estimated Annual Contract Amount
AWS Services per 2,000,000 minutes connect charge	4.1-4.4	36000	$432,000
AWS Services per 1,000,000 minutes inbound	4.1-4.4	18000	$216,000
AWS Services per 1,000,000 minutes outbound	4.1-4.4	18000	$216,000
AWS Services per 500,000 chat messages	4.1-4.4	2000	$24,000
AWS Services Contact Lens per 1,000,000 voice minutes	4.1-4.4	15000	$180,000
AWS Services Contact Lens per 500,000 chat messages	4.1-4.4	750	$9,000
AWS Services Storage	4.1-4.4	$100.00	$1,200
TOTAL AWS SERVICES ESTIMATED COSTS	███████████		$1,078,200

Description	Specification	Estimated Monthly Cost	Total
Cloud Assured Managed Services (monthly)	4.5	$5,000.00	$60,000.00

Description	Specification	One Time Fee	Total
Transfer or setup costs (one-time)	4.6	$45,000.00	$45,000.00

Description	Specification	Estimated Hours	Hourly Cost	Total
Professional Service Hours (PM)	4.7	100	$70.00	$7,000
Professional Service Hours (Junior Developer)	4.7	100	$60.00	$6,000
Professional Service Hours (Senior Developer)	4.7	100	$80.00	$8,000

GRAND TOTAL	$1,204,200.00

Note: The estimated quantity is for evaluation purposes only. Actual volume is undetermined. No future use of the contract or any

VENDOR'S NAME: Quantiphi Inc

VENDOR'S REPRESENTATIVE: Brian Herndon, Public Sector Leader

VENDOR'S PHONE & EMAIL: (407)716-0966 , brian.herndon@quantiphi.com

Description	Specification	Estimated Monthly Cost	Estimated Annual Contract Amount	
AWS Services per 2,000,000 minutes connect charge	4.1-4.4	36000	$432,000	
AWS Services per 1,000,000 minutes inbound	4.1-4.4	18000	$216,000	
AWS Services per 1,000,000 minutes outbound	4.1-4.4	18000	$216,000	
AWS Services per 500,000 chat messages	4.1-4.4	2000	$24,000	
AWS Services Contact Lens per 1,000,000 voice minutes	4.1-4.4	15000	$180,000	
AWS Services Contact Lens per 500,000 chat messages	4.1-4.4	750	$9,000	
AWS Services Storage	4.1-4.4	$100.00	$1,200	
TOTAL AWS SERVICES ESTIMATED COSTS			$1,078,200	

Description	Specification	Estimated Monthly Cost	Total	
Cloud Assured Managed Services (monthly)	4.5	$5,000.00	$60,000.00	

Description	Specification	One Time Fee	Total	
Transfer or setup costs (one-time)	4.6	$45,000.00	$45,000.00	

Description	Specification	Estimated Hours	Hourly Cost	Total
Professional Service Hours (PM)	4.7	100	$160.00	$16,000
Professional Service Hours (Junior Developer)	4.7	100	$180.00	$18,000
Professional Service Hours (Senior Developer)	4.7	100	$225.00	$22,500

GRAND TOTAL	$1,239,700.00

Note: The estimated quantity is for evaluation purposes only. Actual volume is undetermined. No future use of the contract or any individual item is guaranteed or implied.

VENDOR'S NAME: Quantiphi Inc

VENDOR'S REPRESENTATIVE: Brian Herndon

VENDOR'S PHONE & EMAIL: (407)716-0966 , brian.herndon@quantiphi.com