

Hexaware Response to Trustmark Benefits Platform RFP

Technical Solution Proposal



June 05, 2020

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1. HEXAWARE APPROACH & EXECUTIVE SUMMARY

We would like to thank Trustmark for giving us the opportunity to present our proposal. Hexaware has been servicing Trustmark since 2004 and over the years the relationship has matured. Trustmark is one of our top 3 strategic customers in the Healthcare & Insurance space and we pride ourselves in providing services to Trustmark across BPS, applications and operations. Hexaware recognizes this is a pivotal time for Trustmark and its business which has been indeed overemphasized by the current COVID scenario. On one hand, Trustmark has been working over the past few years to reduce its technical debt with varied success. On the other hand, we believe that Trustmark has finally truly pivoted to a modern solution and strategy that will ensure Trustmark's success in the long term.

In addition to taking the important step of embracing organizational change, Hexaware believes that the IT decisions and strategies identified by Trustmark and reiterated below will ensure that Trustmark is truly ready for the future:

- A cloud first strategy to reduce the dependency on the on-prem data centre
- A modern BPM platform for workflows in Pega
- A microservices architecture based on a modern digital cloud architecture
- Decoupling from and strangling the mainframe and legacy applications, to reduce technical debt
- A strong data foundational direction based on a modern cloud-native data architecture
- A modern CRM, potentially on Dynamics

For a partner to succeed in this new ecosystem the adjacent imperatives & paradigms are critical:

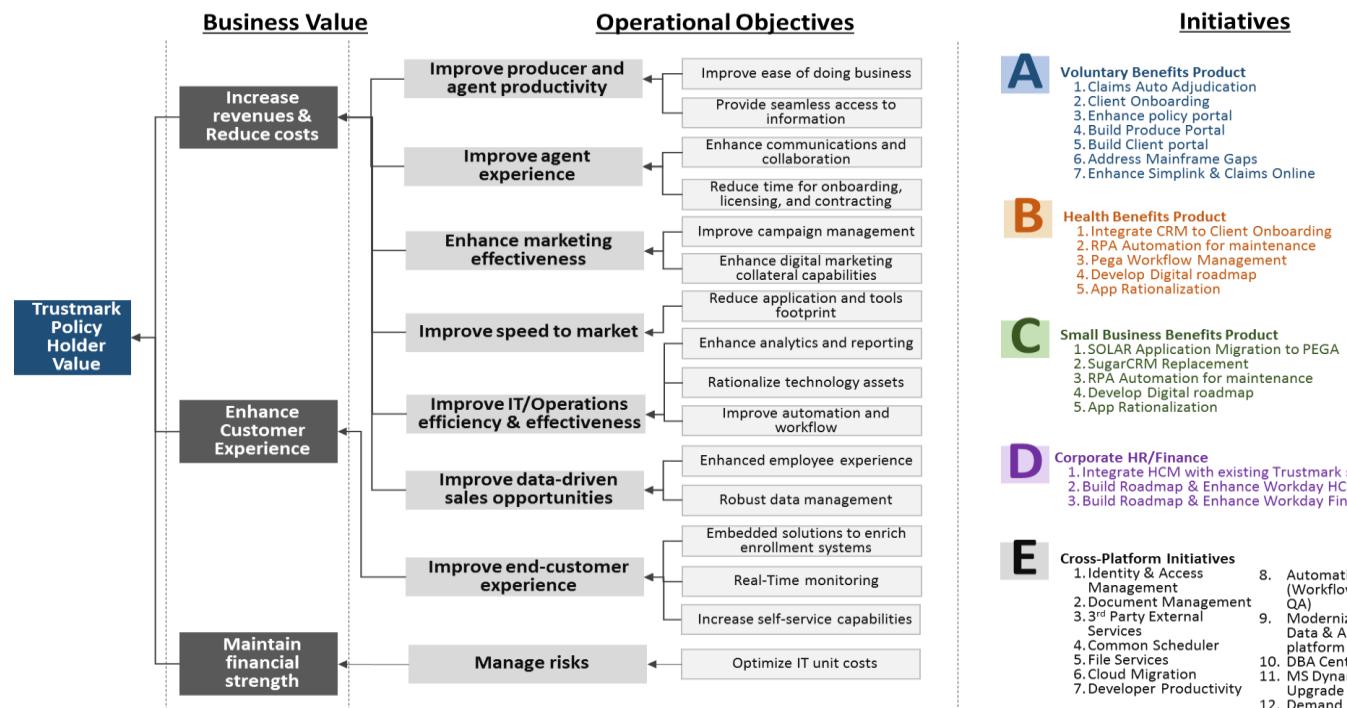
We believe that we are the right partner for Trustmark in this next phase and would like to present our point of view.

Partner Imperatives for True Success			
Technical Expertise Partner who can provide technical and thought leadership in each of the Future State Technology Platforms & Architectures (FSA).	Deep Business Understanding of Trustmark Each of Trustmark's LoBs are unique and complex, and successful transformations will continue to be dependent on strong insight of existing business & legacy nuances.	Deliver on E2E commitments Important for the partner to lead & ensure E2E implementations and not just silo into the contractual scope for the partner.	Executive Sponsorship With adoption of digital increasingly blurring IT Apps & Ops scope, partner must be able to drive through all silos to ensure program success
Trustmark Direct Outcomes			
Optimized Cost of Delivery Ability to significantly shrink IT Run costs so that the budget benefits can be passed to Transformations. At the same time, deliver on MVPs & Epics towards transformations on a committed, risk ownership FPP model – on time, and on budget.	Own the Create to Retire / Sunrise to Sunset product lifecycle Reduce the huge technical debt, eliminating & consolidating redundant applications within a BU and across the enterprise and moving to an enterprise shared FSA platform. Leverage strangulation and microservices patterns.	CX at its core Experience First approach with customer centricity, including responsive design and intuitive UX at its heart for all transformations.	

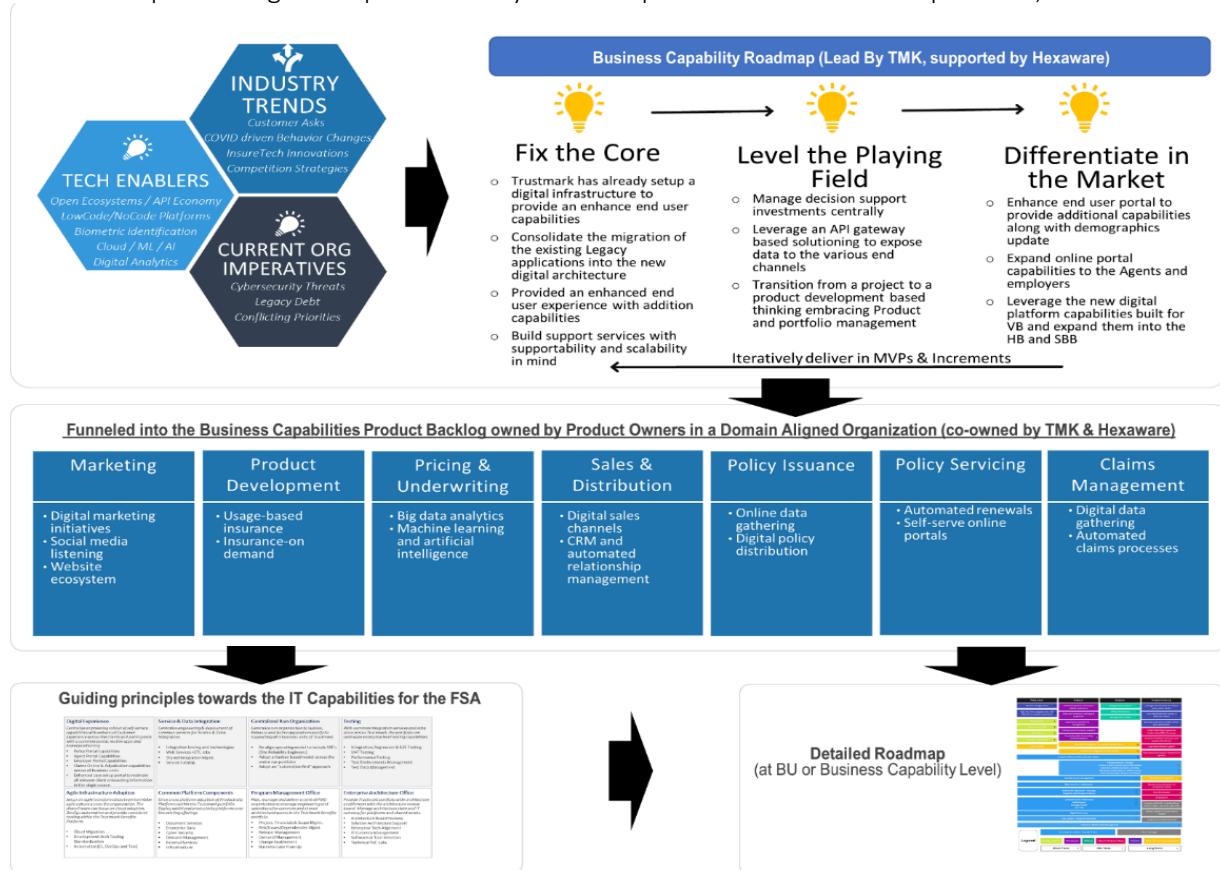
A. We have deep appreciation of the Trustmark business - *Technology is not the risk for successful DX implementation at Trustmark; rather, knowledge of business & application nuances is the risk.*

Trustmark, like most other Benefits companies, is saddled by legacy debt and the tight coupling of systems. This makes it difficult for Trustmark to be flexible enough to meet changing market needs. In the meantime, competitors in the Benefits space are setting new expectations for end-customers such as Next-Day-Pay, and we are also seeing a lot of cross-industry coupling of solutions such as the Domino's Pizza Tracker that inspired AFLAC's claims tracker.

Please find below our view for Trustmark to succeed in this new world and create business value:



We believe that for Trustmark to succeed, Trustmark needs to fix its core IT ecosystem first, to level the playing field and allow for bringing in differentiated solutions (for example: seamlessly embedding all TMK functionality into broker enablement systems). We are glad and proud to be associated with TMK's reprioritized IT focus over the last 24 months and believe that the next phase of maturity will come with alignment to a domain driven organization. Hexaware will have a co-owner for each domain, which will help in driving subsequent delivery of the requisite business and IT capabilities, as shown:



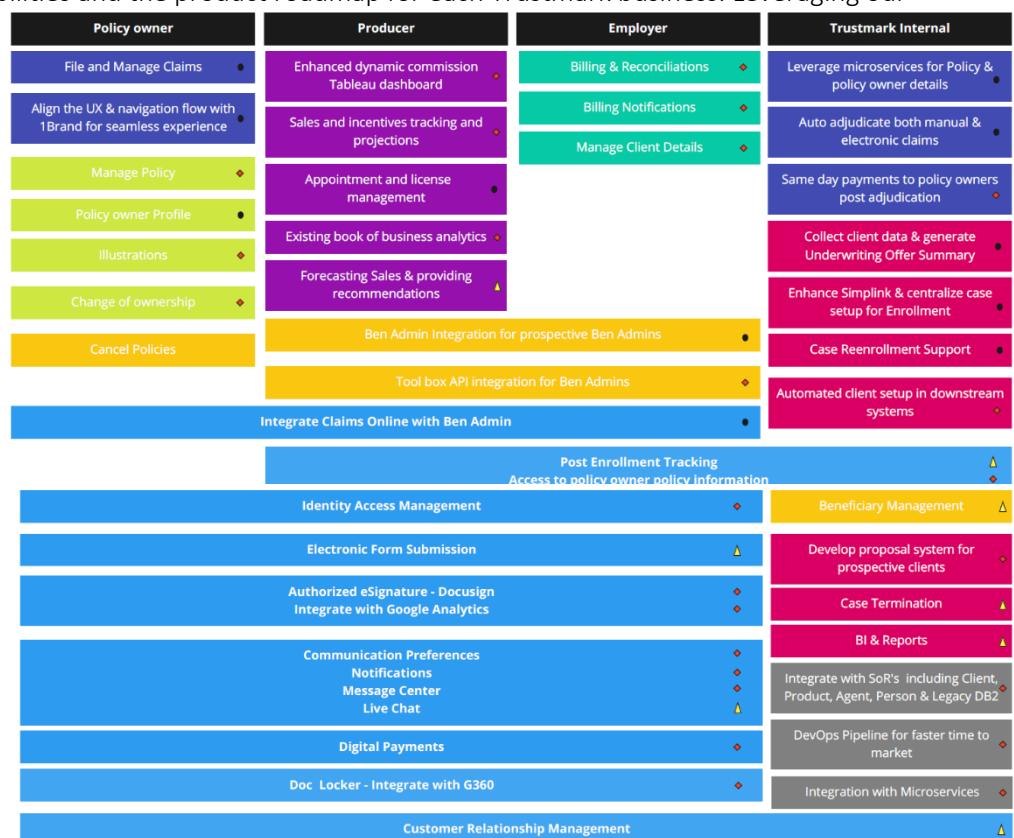
Rather than consolidating platforms, the focus is on common components on the front and back-end, including common portal, a platform agnostic enterprise service tier, and a common, cross-platform data architecture. To support the new architecture, Trustmark will need to evolve from a platform-centric organization structure to strategic competency centres aligned with new platforms.

Hexaware believes that the proposed delivery model should encapsulate the key IT capabilities as envisioned by Trustmark. Based on our understanding, below are the key IT capabilities which need to be imbibed into Hexaware's proposed delivery model in partnership with Trustmark.

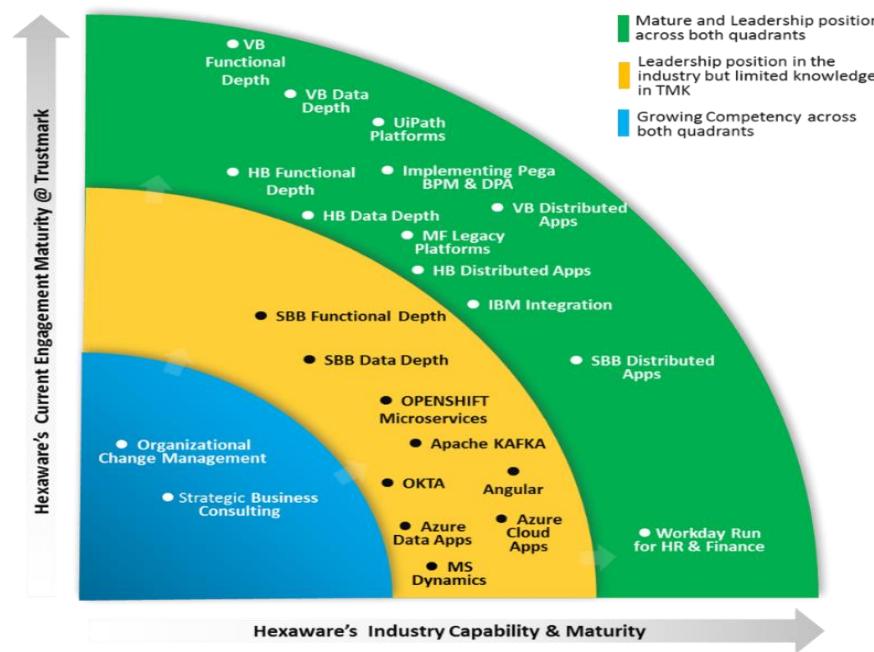
Digital Experience	Service & Data Integration	Centralized Run Organization	Testing
Centralize engineering rollout of self-service capabilities with enhanced Customer Experience across the clients and participants with a common portal, mobile apps and brand positioning. <ul style="list-style-type: none"> Policy Portal Capabilities Agent Portal Capabilities Employer Portal Capabilities Claims Online & Adjudication capabilities across all business units Enhanced case setup portal to maintain all relevant client onboarding information in the single source 	Centralize engineering & deployment of common services for Service & Data Integration. <ul style="list-style-type: none"> Integration tooling and technologies Web Services +ETL Jobs Shared Integration Mgmt. Service Catalog 	Centralize run organization to Sustain, Enhance and Retire applications portfolio supporting all 3 business units of Trustmark. <ul style="list-style-type: none"> Re-align operating model to include SRE's (Site Reliability Engineers) Adopt a Kanban based model across the entire run portfolio Adopt an "automation first" approach 	With common integration services and data store across Trustmark, the portfolio can centralize enterprise level testing capabilities. <ul style="list-style-type: none"> Integration, Regression & E2E Testing UAT Testing Performance Testing Test Environments Management Test Data Management
Agile Infrastructure Adoption <p><i>Setup an agile transformation team to imbibe agile culture across the organization. The shared team can focus on cloud adoption, DevOps automation and provide consistent tooling within the Trustmark Benefits Platform.</i></p> <ul style="list-style-type: none"> Cloud Migration Developing Arch Tooling Standardization Automation [CI, DevOps and Test] 	Common Platform Components <p><i>Drive cross platform adoption of Productivity Platforms within the Trustmark portfolio. Deploy additional productivity platforms over the existing offerings.</i></p> <ul style="list-style-type: none"> Document Services Enterprise Data Cyber Security Demand Management External Services Infrastructure 	Program Management Office <p><i>Plan, manage and deliver a central PMO organization to manage engineering and operations for common and shared architectural assets in the Trustmark Benefits portfolio.</i></p> <ul style="list-style-type: none"> Project, Financials & Scope Mgmt. Risk/Issues/Dependencies Mgmt. Release Management Demand Management Change Enablement Business Case True-Up 	Enterprise Architecture Office <p><i>Provide Trustmark portfolio wide architecture enablement with the architecture review board. Manage architecture state and IT currency for platforms and shared assets.</i></p> <ul style="list-style-type: none"> Architecture Board Reviews Solution Architecture Support Enterprise Tech Alignment IT Currency Management Software or Tool Selection Technical PoC Labs

This would finally translate to capabilities and the product roadmap for each Trustmark business. Leveraging our knowledge of VB, we recommend the below roadmap across the four major personas:

- Policy owners
- Producers
- Employers & employees
- Trustmark internal stakeholders



B. Low risk transition with Hexaware's understanding of 72% of the RFP scope



Hexaware has built its relationship and engagement with Trustmark on the principles of expertise, transparency, and ownership.

Continuing with that philosophy, Hexaware would like to present its capabilities and self-analysis to Trustmark for the current RFP scope (refer to the adjacent picture):

Our ability to manage E2E scope

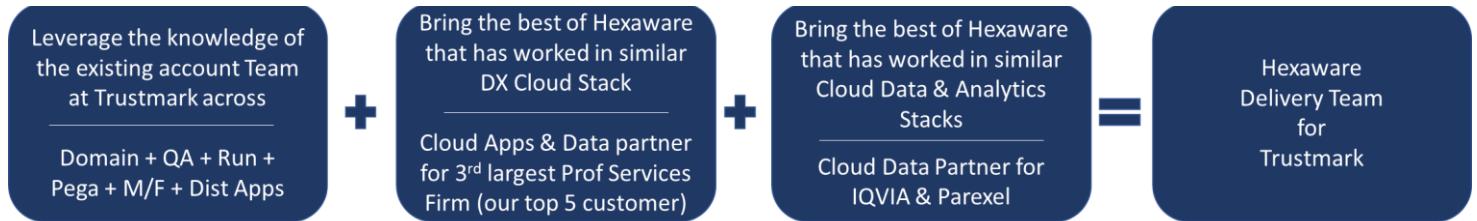
Hexaware has successfully delivered all complex transformation projects worth \$3.8M in 2019 with significant inherent legacy risks on an FPP model – with ZERO budget deviations/CRs (including due to TMK or other external dependencies)

Mature and Leadership Position across both industry & Trustmark quadrants (Green)	<p>Consolidate & leverage the joint advantages to move to a higher maturity Level</p> <p>Analysis:</p> <ul style="list-style-type: none"> Hexaware has strong understanding of the business functional understanding of HB, SBB, and VB and application & data knowledge of HB and VB This is across the current legacy (mainframe and distributed applications) and also on the recent implementations on Pega and UiPath. <p>Focus during KT:</p> <ul style="list-style-type: none"> Consolidate the knowledge and revalidate the SOPs and Knowledge Repositories During the KT, leverage the knowledge advantage and instead focus on aligning the Hexaware teams to the Target Operating Model
Leadership Position in the Industry, but limited knowledge in Trustmark (Yellow)	<p>Bring Hexaware's industry leading strengths to Trustmark and rapidly take over</p> <p>Analysis:</p> <ul style="list-style-type: none"> Hexaware has a strong Azure Cloud practice for Data and Applications with close to 400+ associates working for leading customers in the technology stack identified in the FSA for both Service Category 1 in DX and Service Category 2. Hexaware is an industry leader in Workday support for both HR and Finance for the past 15 years. Hexaware is also recognized as a major contender for Implementations on Workday. <p>Focus during KT:</p> <ul style="list-style-type: none"> Rapid transition for the VBS DX application and Workday applications For SBB, leverage the business knowledge from the Business operations team and rapidly move to take the ongoing sustain scope. For the current Dynamics support, Hexaware is already supporting it and can quickly take over the full support scope
Growing competency across both quadrants (Blue)	<p>Recommend Trustmark taking the lead and/or work with another Partner</p> <p>Analysis:</p> <ul style="list-style-type: none"> Hexaware believes that while we can support Trustmark in the Business Strategy Roadmap consulting, it is best done by a Consulting focused organization. Also, for the OCM scope, Hexaware recommends working with a partner such as ISG to implement it at Trustmark <p>Focus during KT:</p> <ul style="list-style-type: none"> Hexaware will create a Transformation & Architecture Team (see Target Operating Model) that will support Trustmark or Trustmark's partner for Business Strategy and OCM

C. Commitment to build a delivery team combining best of the existing TMK engagement PLUS the best of Hexaware from other accounts

From our existing Trustmark engagements, we believe Hexaware has gained deep knowledge of the Trustmark Business, specifically VB and HB including Support, Run, and Sustain services for the existing IT landscape. Additionally, we have experience successfully delivering complex transformation and development projects on Pega and Mainframe.

From our larger Hexaware customer ecosystems, we wanted to share that we are the digital partner for the third largest professional services firm globally, building applications and codifying the Infrastructure on a very similar stack on Azure as Trustmark's FSA with over 250+ associates working on Azure stacks. Also, we have been Cloud data partners for two of the largest global Healthcare Data services companies, IQVIA and Parexel, also aligned to the Data & Analytics stack that TMK has chosen. IQVIA is the world leader in data, technology, advanced analytics for Healthcare leveraging the full capabilities of cloud data & and we are a proud partner with over 175 associates working purely along data associated projects.



Our promise - We will be bringing the combined experiences from all of the above engagements including key personnel from these engagements to ensure program success.

D. Investment in a Transformation Leadership including dedicated leads from our BPS, Apps & Infra service lines – truly embracing BizDevOps

Hexaware is the only vendor-partner that can truly deliver on the promise of BizDevOps, due to our incumbency in providing the services for Business Operations, IT Application Development, and IT Operations. This allows for implementing NoOps, DevSecOps, an Integrated L1.5 layer between Apps & Ops – allowing Trustmark to focus on outcomes rather than spending time in facilitating between various vendors.

We will set up a Transformation Team that will have the following roles:

Team from Outside the current Hex-TMK Engagement

1. Digital Transformation Lead
2. Agile & BizDevOps Evangelist
3. "Experience First" Architect
4. Cloud and Microservices Architect
5. Cloud Data & Analytics Architect

Team from within the Existing Hex-TMK Engagement

6. IT Engagement Lead.
7. BPS SMEs from each of HB, SBB & VB BUs
8. IT Ops Engagement Lead

E. Obsessive focus to retire & simplify legacy stack: Rationalize. Modernize. Retire Legacy Debt. *With no fear of Revenue Cannibalization.*

Hexaware has been instrumental in digital transformation and process automation, even if it means revenue cannibalization for Hexaware in another service line (ex: Claims AA impacting BPS revenue). We intend to continue this approach:

- **Portfolio Analysis:** Bottom-up application analysis, leveraging the knowledge of the support and BA/QA team to identify criticality and relevance of each application and potential retirement strategy.
- **Implement APM:** to identify top-down application usage, user base, usage insights aligned to an Application Rationalization strategy, leveraging tools such as ServiceNow CMDB and ServiceNow APM.
- **Move to DX (Cloud, Pega & MS Dynamics):** Post mapping of the user journey, designs and experience API abstraction along with the microservices design, Hexaware will also identify legacy applications that do not add value in the end-state design/journey. Hexaware will also proactively identify incremental user stories that might need to be added to fully retire the application and to enable Trustmark leadership to make the right decision.
- **Mainframe Gaps** Hexaware has been aligning with the Trustmark strategy of minimizing new development and complexity on the mainframe. Minor quick fixes will be logged into a backlog and delivered using an agile/DevOps model in sprints that will be planned for a 3/6/24 month horizon.
- **Mainframe Enablement** The development will be shifted entirely to MicroFocus tools (MicroFocus Enterprise Developer, Enterprise Analyzer, and Eclipse IDE) which permit the use of automated code reviews (e.g. Sonar COBOL),

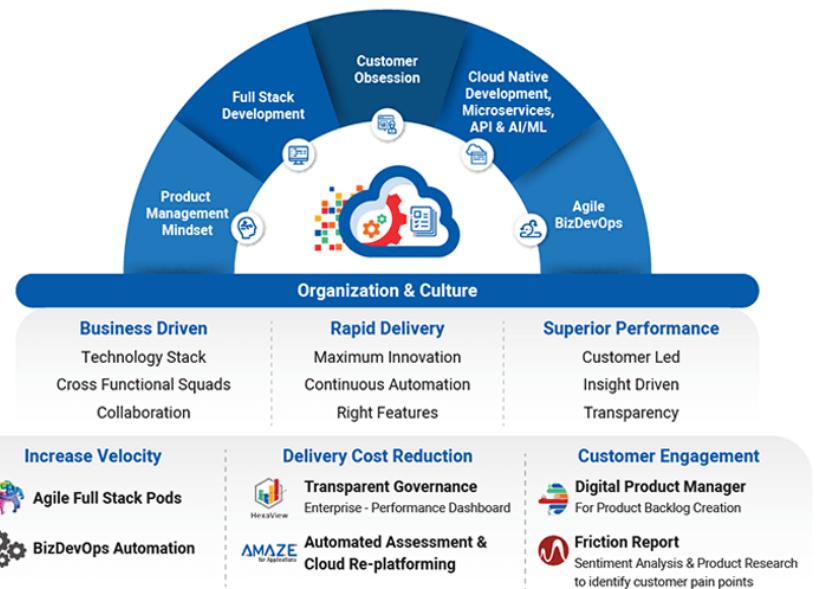
automated code testing (MicroFocus Unit Testing) and Integration pipelines with Jenkins and MicroFocus WorkFlow, enabling a shift-left approach to speedier delivery.

- **Mainframe Takeout** Hexaware is also working on an approach and solutioning to retire the entire mainframe from IBM hardware and moving it to Azure (on Microfocus).

F. Embrace Agile and co-development with Trustmark in a Modern Delivery Model

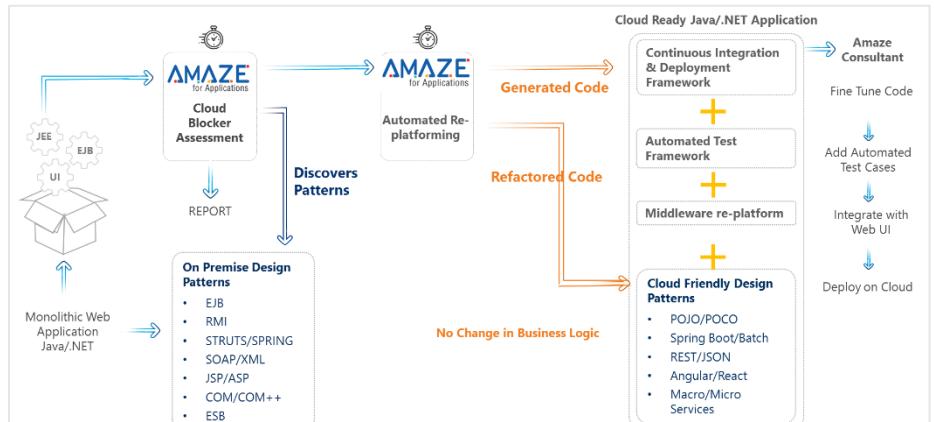
Hexaware has been foremost in initiating the Agile journey in Trustmark's VB division with the Simplink initiative. Over the last 18 months we have matured the Agile adoption, including aligning to TMK recommended tool stacks. We are also currently implementing DevOps and rolling out Agile to all projects including Run (using Kanban). Hexaware is also committed to the co-innovation and co-development strategy at Trustmark.

We intend to use our intelligent Modern Delivery approach that is architected to help organizations leapfrog digitally, without compromising on efficiency and quality. Along with delivery of features in rapid succession, it is enabled for remote working while ensuring that critical systems and projects are uninterrupted, even in unprecedented times like a pandemic or a natural disaster.



G. Leverage Amaze (IP pending) to migrate to cloud – the ONLY platform in the market that does true re-platforming of legacy web applications to Azure:

While Hexaware understands that Trustmark has been leveraging a lift and shift approach to migrate its legacy applications to Azure cloud, the true potential of cloud will be leveraged only if it moves to a micro-services & containerized architecture. Hexaware has built **Amaze**, a transformation platform to help customers to quickly re-platform their on-premise legacy Java/Weblogic and .Net applications to Cloud with substantial cost savings and ability to scale in the micro services architecture. The transformation platform helps middleware technologies and databases to re-platform to be cloud friendly, and even the most complex monolithic applications can be re-platformed into micro services architecture and deployed into cloud within 6 weeks' time with high quality. We believe that this IP will be of significant value to Trustmark in its cloud journey.



H. Hexaware's Relevant Experience

Hexaware offers a complete range of services to Financial Services, Employee Benefits, Investments, Life, Worksite, P&C and Health Insurance companies worldwide, such as customer experience transformation, process transformation, application development and support, infrastructure and business process services.

<p>Enrich Customer Experience Leading airline in US</p> <ul style="list-style-type: none"> Passenger systems revamped using Microservices based architecture Touch screen-based interface with real-time updates of arrivals / departures and passenger information. Biometrics and facial recognition used to modernize the boarding process. <p>✓ 23% Y-o-Y increase in revenue ✓ 40% cost reduction in Flight Crew work experience ✓ customer service improved by 55%</p>	<p>Digital Transformation Leading Professional services Company</p> <ul style="list-style-type: none"> Scalable Azure PaaS based solution using Azure Data Factory, Azure Function App, Azure DevOps, Azure Data Lake Storage, Azure Data Analytics, SQL Data Warehouse. Web based data and scalable analytical environment provisioning <p>✓ improved the customer onboarding experience from 2 weeks to 2 hours ✓ Less Operational Expenses</p>	<p>Journey to Cloud Secondary Mortgage institution in US</p> <ul style="list-style-type: none"> Reengineered 20+ Legacy Applications by using Hexaware's IP (Amaze) Source system Spring Boot Micro Services moved on Private AWS cloud <p>✓ 40% Reduction in TCO due to Replatforming, ✓ 30% increase in productivity due to Automation. Time to Market reduced by 40%.</p>
<p>Modernizing Data warehouse Ecosystem Leading international mining giant in US</p> <ul style="list-style-type: none"> Teradata to Snowflake DW using Microsoft Azure Databricks All data other than streaming data was loaded in Snowflake DW Data from IOT devices was routed to Databricks via event hub for real time analytics <p>✓ Snowflake DW provided capacity expansion solved their data growth issues ✓ Predictive maintenance capabilities through Databricks solution</p>	<p>HR Transformation Leading Global Insurance Company</p> <ul style="list-style-type: none"> Workday HCM roll out 80+ countries HCM, Recruiting, Benefits UK Payroll, NA Payroll, Absence, Time Tracking Migration of 64,000 employees to the Workday platform <p>✓ Reduction in cost by 50% over 3 years in Run the Business (RTB) for HR-IT ✓ Significant Improvement in HR Service delivery ✓ Reduction of HR Time for non-core activities by 38%</p>	<p>Agent and Customer Experience Transformation Transformation for a global insurer</p> <ul style="list-style-type: none"> Migration from Legacy system to Dynamics and Power Apps Agency on-boarding, licensing and service Agency and Customer 360 Quoting and Binding of direct and agency-based policies Omni-channel Customer service using Dynamics and Power Apps <p>✓ Single source of truth of all provider data with integration to customer-facing portal</p>

Hexaware, once again, would like to thank Trustmark for this opportunity. We are very keen to continue partnering with Trustmark in this strategic initiative and continue to align and be relevant to you as we have been for the last 15 years. This RFP scope is at the sweet intersection of our best performing and leading service lines – **Automate Everything, Cloudify Everything, and Customer Experience Transformation** – with our **Healthcare & Insurance Services** vertical, which is one of our largest and certainly our best performing vertical. Hence, we are confident in our capabilities to match and exceed Trustmark's business objectives and the value that can be created through this partnership. We look forward to committing to this journey with Trustmark.

Thank you for your time, effort, and interest in working with Hexaware. Please feel free to contact me to answer any questions you may have.

Sincerely,

For Hexaware Technologies Ltd.

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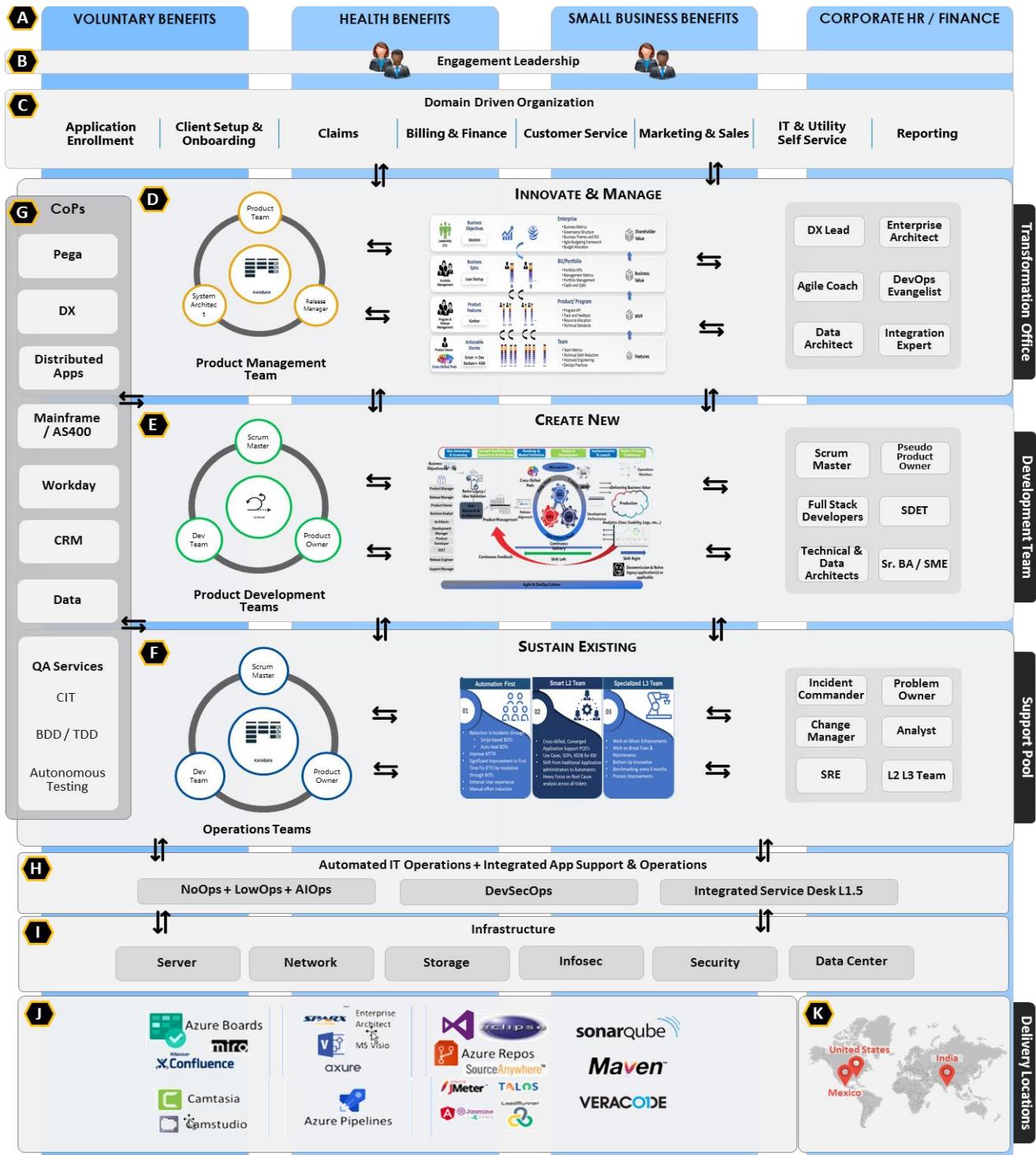
Neil Fox

Neil Fox
Proposed Transformation Steering Head for this Engagement
CTO – Hexaware | nielf@hexaware.com

2. DELIVERY MODEL FOR ENTIRE LIFECYCLE

2.1 Target Operating Model

In the proposed target state architecture, the Trustmark portfolio will exist with multiple IT assets that are shared and not owned by a single platform. We have aligned our vision for the Hexaware organization to provide support for development and maintenance of these shared components. The Target Operating Model (TOM) outlined below depicts the alignment of different service delivery teams and their touch points with internal and external stakeholders.



2.2 Alignment to the Business Units

A The current Trustmark portfolio is aligned to various business units such as VB, HB, SBB and Corporate HR/Finance. To ensure coherence and alignment, Hexaware will assign individual service leads for each of these business units to ensure vertical focus

2.3 Engagement Leadership

B

Engagement Sponsors	This group forms the highest level of management control. This group is responsible for the overall governance of the engagement between Trustmark & Hexaware and issuing key directives to the Strategic Steering Level. Key stakeholders from Hexaware: <ul style="list-style-type: none"> • CEO • Cloudify Head • Healthcare & Insurance Head
Engagement Leaders	The Engagement Leadership group concentrates more on strategic management at a program level. This group will be staffed by leads of all key participants in the engagement and will have representation from the Transformation Office. <ul style="list-style-type: none"> • Engagement & Client Partner • Service Delivery Head • Transformation Steering Head • Insurance Head for Americas
Transformation Office	The Transformation Office will consist of the following roles: <ul style="list-style-type: none"> • Digital Transformation Lead • Agile & BizDevOps Evangelist • “Experience First” Architect • Cloud and Microservices Architect • Cloud Data & Analytics Architect • IT Engagement Lead. • BPS SMEs from each of HB, SBB & VB BUS • IT Ops Engagement Lead

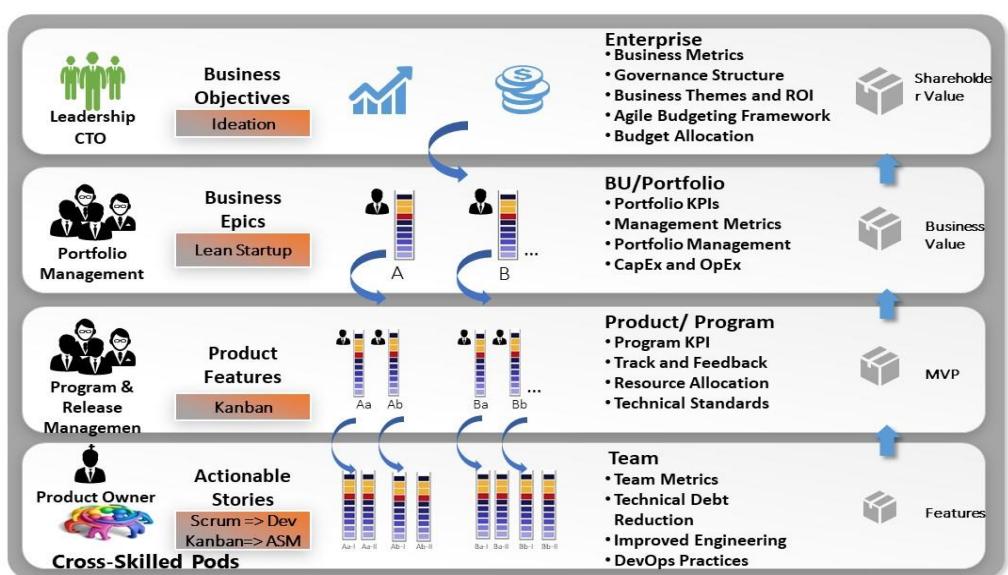
2.4 Domain Driven Organization

C Hexaware appreciates and understands for the Trustmark enterprise to succeed, Trustmark needs to move to a common business capabilities model championed by Domain aligned owners for the enterprise. Hexaware will identify key individuals within the Hexaware delivery team that will also be aligned to each domain to enable this shared mission. These individuals are not full time on this role and will have other responsibilities but will play a key role in the Transformation as it happens in each domain.

Application Enrollment	Client Setup & Onboarding	Claims	Billing & Finance	Customer Service	Marketing & Sales	IT & Utility, Self Service	Reporting
Enrollment, Product, Client, Agent SORs, Eligibility Validation Available Plans, Effective Date Calculation, UW Guidelines	Account management, Client Onboarding – Case Setup, Product, Client, Agent SORS, Generating UW Summary, POA Summary	Claims, Product, Submitting Health and Wellness Claims, Adjudication, Same Day payment, Instant Claim Notification	Billing, Premium collection, payroll deductions, Billing for network partners, commissions, and other payments to brokers/agents	Applications for CSRs, benefit & rider lookups, document retrieval and letter printing, new PO and other portals	Portals for business partners, sales enablement applications, partner contract, appointments	Mashups, audits, imaging, security related applications, other utilities	Claims & eligibility reports, ad-hoc & operational reports, client reporting, dashboards, Interfaces

2.5 TBP Product Journey and Roadmap - Innovate & Manage

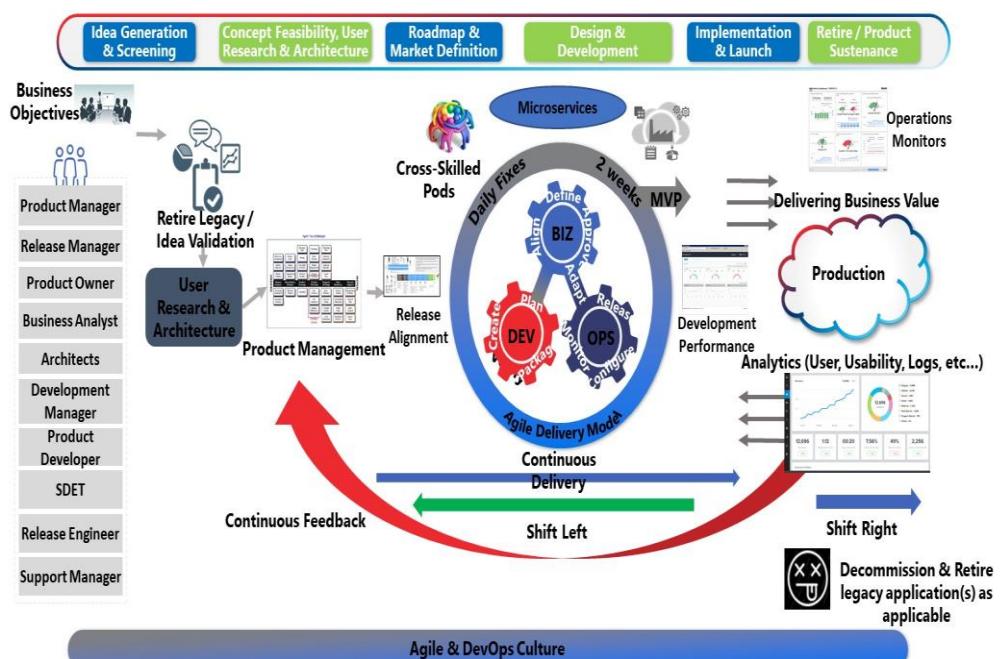
D TBP product development is envisaged to be multi-level at project, program, and portfolio levels consisting of HB, SBB and VB products. Specified here is how the flow from project level to the portfolio level will happen. Given the multi-level nature of the engagement, Hexaware recommends Azure Boards or Jira Align for strategic and product planning. It allows portfolio, program and product views and enables direct correlation between business strategic planning, portfolio management, program management and product management while integrating with Azure Boards, JIRA for real-time updates of progress, risks, and dependencies.



Product Management Team	The Product Management Team will focus on market study, innovation & ideation, defining a roadmap and prioritizing the same in the Product Backlog by leveraging the Kanban framework which enables product development with continuous delivery. This co-innovation team operating at the Enterprise level will work to ideate, validate, and then release product PoCs, as well bring in the latest technology on a regular basis.
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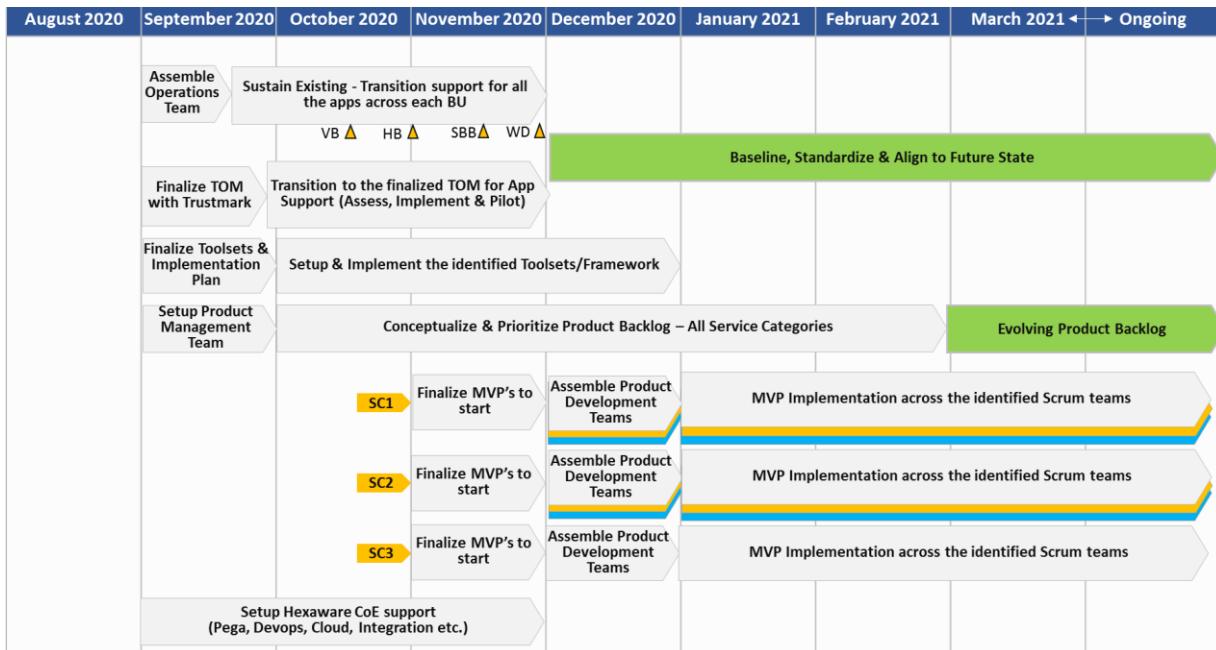
2.6 TBP Product Journey and Roadmap – Create New

E Hexaware proposes transitioning from project to product development thinking, embracing product and portfolio management right from ideation leveraging techniques such as design thinking, customer experience, value stream mapping and optimization, and using reusable assets such as user stories, architectural patterns, and cloud component repositories. It would essentially allow Trustmark to fund 2-week MVPs, release them quickly, fail quick and cheap and accommodate ever changing requirements in addition to embracing new technologies and move to cloud achieving optimization of efforts and costs at all levels. The diagram below depicts the end-to-end product journey for TBP.



Implementation Journey & Key Milestones

The below diagram depicts the key timeline and milestone view on how Hexaware will manage the overall Transition for apps and bring in the new Target operating model into practice across the various entities within the engagement.



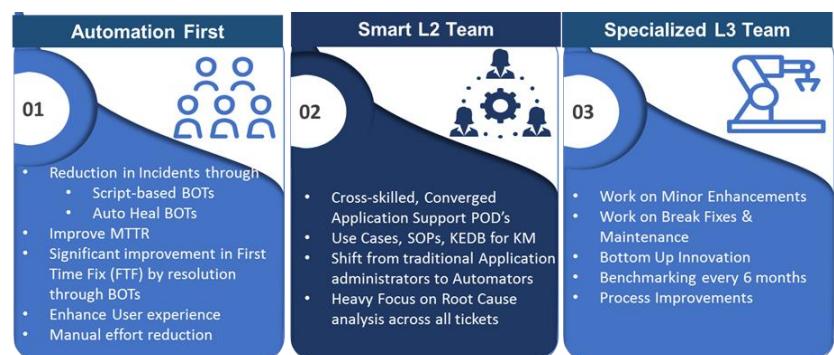
Product Development Team	The Product Development Team will focus on providing business value by operating in the Agile Scrum framework and frequently delivering potentially shippable increments to Production. The Product development team will adopt co-execution and work collaboratively by adding expert team members from both Trustmark & Hexaware pool of resources as required for building the product.
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2.7 TBP Product Journey and Roadmap – Sustain Existing

F Hexaware proposes to an Automation First approach for the Sustain scope

Automation First Approach

Hexaware through "Automation First Approach" has been able to adapt to these changing delivery models by completely moving to 'Shift Left Methodology' aided primarily by automation and by implementing a culture of continuous integration. An Automation First mindset focusses on implementing Script-Based & Auto Heal BOTs to resolve incidents and significantly improving the First Time Fix (FTF) thus reducing the manual effort in conjunction with enhancing user experience. With the necessary automation toolsets largely in place (AppD + ELK + Arago) we believe we are ready for the next stage of Run disruption.



Smart L2 Support

This group will consist of application support analysts who will provide incident resolution and fulfillment services for issues / requests escalated by the level 1 team. The support teams are structured by the application towers and all repetitive / standard tasks will be delivered in a shared service model. Through Shift Left Methodology, this group systematically will create and update the Known Error Database (KEDB) and Solution Database for quicker resolution and enable to create L1.5 team. Activities that do not require core SME skill set will be taken up by the L1.5 team and eventually will be consolidated

with the helpdesk team. This will help to accelerate the turnaround of standard service requests and known incidents apart from huge cost savings for Trustmark.

Specialized L3 Support

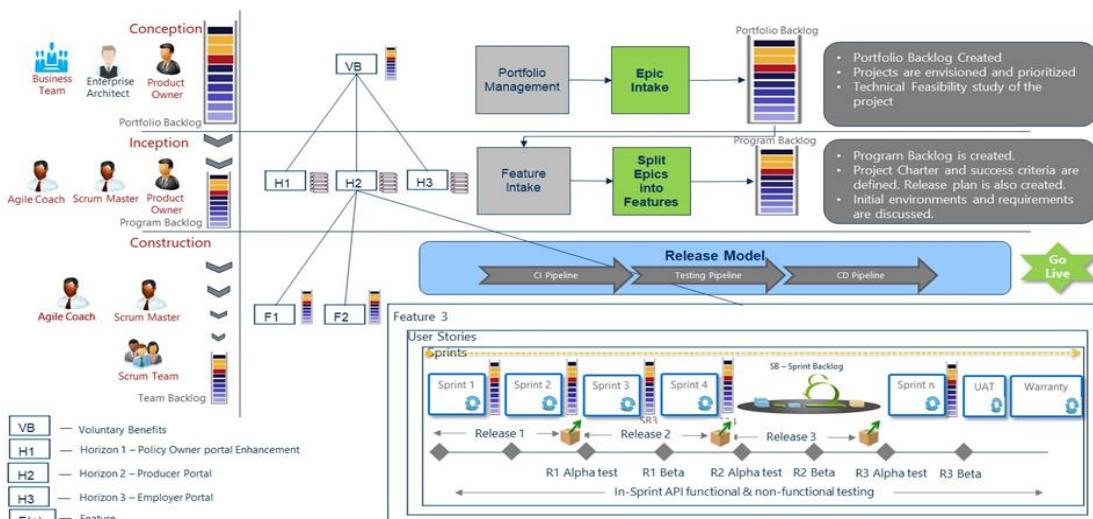
This group will be aligned by technology clusters/applications or a mix of both within the application towers and will resolve complex unknown incidents escalated by the level 2 teams. Hexaware understands that there are same applications with some customization used across operating segments. This team will also hold the responsibility for enriching the knowledgebase to enable Knowledge Artifacts use by the Level 1 and Level 2 functions. At the same time the team will look for process improvement opportunities and implement them alongside the Trustmark Business & technical team.

Besides the bug fixes and support requests, this team will also perform minor enhancements related to

- Generating Ad-Hoc reports
- Minor Business changes
- Regulatory, weekly, monthly and year end updates (if any)
- Maintenance
- Documentation
- Minor enhancements

2.8 Agile Transformation – Modern Delivery Model

G Hexaware has proven experience and expertise in industry leading Agile Scaling Frameworks like SAFe, DAD, Nexus & Spotify. We have extracted the best elements of these together into Hexaware's "Modern Delivery Model" and recommend the same to Trustmark. It would facilitate inculcation of a product mindset and provide a framework of co-execution with Trustmark. The focus will be on creating hyper-productive cross-skilled squads consisting of full stack developers.



The model is depicted in the diagram below with a reference to Voluntary Benefits. The same model will be leveraged across all the different business units.

- Hexaware proposes a target operating model with enterprise wide agile adoption for product ideation, development & operations leveraging Agile Scrum & Kanban methodologies which will be ably supported by the Trustmark Enablers Team, co-executing CoPs teams & Hexaware CoEs.
- **Communities of Practices (CoPs)** approach will allow us to develop standards and best practices across the board and will help resolve development issues quickly, all through sharing information. This will be supported by Hexaware CoEs.
- Governance will be facilitated by implementation of **HexaView**, which integrates easily with tools like AZURE BOARDS, JIRA, and ServiceNow among others to bring out the true status at the project, program, and portfolio levels at the click of a button.
- BizDevOps is the technique Hexaware has used successfully in creating Claims PoCs and an Enrollment Widget, and to enable DevOps adoption right from the product ideation phase.
- The above delivery model would enable a changeover to a "product mindset". It will enable TMK to fail quick and cheap, deliver value more rapidly, and create a culture of continuous improvement and customer obsession, while helping the business win in the market.

Communities of Practices

Pega	DX	Distributed Apps	Mainframe/ AS400	Workday	CRM	Data
PEGA LBA, LSA, Developer and SQL Developer	Azure DevOps, Angular, Java SE, Java Spring, OpenShift Kubernetes, IBM CloudPak (incl IIB) and Kafka, IBM MQ	C#, ASP.net, Net Framework, SQL Server, PowerBuilder, MS Access/VBA, Java, JEE, ColdFusion, Kentico, RedDot, SSIS, Trelix, WebFOCUS, WebSphere	Cobol, JCL, PROC, VS, DB2, VSAM, RPG	Workday Studio – HR & Finance	MS Dynamics 365 (CRM, Customer Service, Sales & Marketing), Power Platform, Dynamics 365 Insights Platform	ETL (Datastage, ADF), Databases (SQL, SQL-DWH, Cosmos, Snowflake, ADLS), Reporting (WebFOCUS, Tableau), MDM (Informatica)

QA Services across each service category

Hexaware has analyzed the testing requirements for Trustmark for all service categories. Based on the analysis Hexaware has identified various tools and accelerators which would best fit to provide the functional, automation and performance testing solution for each service category. The below table will provide the overall view of various testing imperatives and recommended tools and accelerators which will provide appropriate test solutions.

Testing Imperatives	Hexaware QA Solutions / Frameworks / Accelerators	Service Category 1			Service Category 2	Service Category 3
		Voluntary Benefits (VB)	Health Benefits (HB)	Small Business Benefits (SBB)	Data Management & Analytics	Work Day
Agile Testing	• Integrated Design to Execution Automation (iD2E) • TALOS BDD Framework	X	X	X	X	X
MS Dynamics, Workday & Pega Test Coverage Optimization	• Test Design Automation through MBT (iD2E)	X	X	X		X
Regression Automation coverage	• Mainframe & AS400 UFT Automation Accelerator • Selenium Test Accelerator – TALOS	X	X	X		X
Web-services/API Testing	• SoapUI API automation framework	X	X	X	X	X
Integrated Multi-channel / Compatibility Testing	• Multi-Platform Integrated Test Automation Framework - TALOS • Multi-configuration Cloud Device Test Lab	X	X	X	X	X
Test Data Automation / Management	• GenRocket - Synthetic Test Data Creation Framework	X	X	X	X	X
Data centric Testing	• Jumbo for ETL/Data testing • HexBI for Reports Testing	X	X	X	X	X
Performance Testing & Engineering	• HexaJAWS Performance Eng.. Framework	X	X	X	X	X
Micro-services Testing	• PACT Contracts Testing • E2E Microservices Test Framework • Resiliency Testing – Chaos Orchestration Model	X	X	X	X	X
Reusable test repository	• Hexaware's WOTS (Workday) • Hexaware's JARVIS kit for MS Dynamics	X	X	X		X

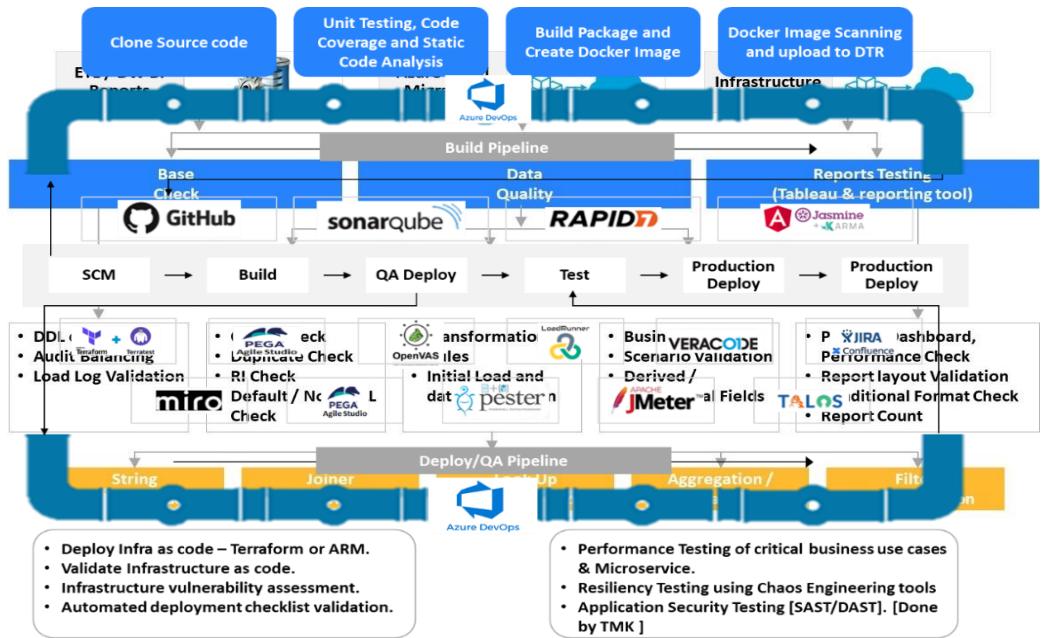
Refer Annexure "Hexaware Trustmark Benefits Platform RFP – Annexure 15 – Digital Assurance Capability_200605" for further information on Hexaware's QA capabilities.

Test Approach and Execution for Service Category 1 (VB, HB and SBB)

Legacy Platform (VB, HB & SBB	Mainframes, VB.NET & AS400 <ul style="list-style-type: none"> Test Automation Manual Functional Testing Functional Regression 	Tool Set: <ul style="list-style-type: none"> UFT/Selenium for test automation HP ALM/Azure Boards for test management TALOS for VB.NET
Digital Platform (VB, HB & SBB	Continuous Testing in Azure DevOps pipeline <ul style="list-style-type: none"> Infrastructure Testing (as applicable) Automated Functional Regression Resiliency Testing for Micro services Performance Testing Security Testing (Done by TMK) Shift Left Testing (In-Sprint) <ul style="list-style-type: none"> Contract testing for Micro services Manual functional testing (SIT) API/Micro services validation Load tests with minimum volume PEGA Testing & MS Dynamics <ul style="list-style-type: none"> Manual Functional Testing Test Automation Performance Testing 	Tool Set & Frameworks: <ul style="list-style-type: none"> Hexaware's TALOS test automation framework for Functional test automation LoadRunner/JMeter for performance testing Agile Studio for Pega Jira and Confluence for Test Management Postman for API testing OpenVAS, SonarQube, Veracode and Raid7 for security testing Pester and Terratest for Infrastructure testing

Testing Approach for Digital

Hexaware's Autonomous testing approach with a continuous testing framework as shown here enables easy integration into the existing Azure DevOps pipeline with automated build and deployment for faster time to market. Apart from that, Infrastructure testing is another important element to ensure Infrastructure as code works as designed and all components are available in the desired state. Existing Security testing can be integrated as well. The following build and deployment pipeline view illustrates how testing is integrated in an Azure DevOps pipeline as applicable for VB, HB and SBB.



Testing Approach for Legacy

Apart from manual functional testing, Hexaware's Mainframe & AS400 accelerator will be implemented for mainframe and AS400 test automation. **Automation Hybrid Framework** is comprised of a defined folder structure and inbuilt functions. The accelerator framework helps the tester to accelerate test automation processes more easily and efficiently. Hexaware leverages the below differentiators in the Automation framework to reduce testing time, cost, and risk:

- **UI Scanner** - Components can be created automatically by scanning and capturing the objects of application under test with the help of UI scanner which can save 30% test development time.
- **Components Library** - Design test scripts easily using inbuilt library functions.
- **Framework Reusable components** - Reusable actions help to design test scripts easily and reduce test maintenance. Each test script produces a customized HTML report as well as a detailed, user friendly text log.

Test Approach and Execution for Service Category 2 (Data Management and Analytics)

Hexaware will bring in a scalable test framework that helps test across Database, ETL layer, SQL Server DB, Azure cloud and Reporting tools, covering the entire spectrum of ETL testing, data interface testing and data migration testing.

Our data tests are aimed at ensuring completeness (Count, Min/Max, Avg. Sum checks), correctness (Uniqueness, Not Null), and referential integrity to validate synchronization of data is accurate and remove unwanted duplicate elements across multiple layers like Staging, ODS, Data vault, and Data Lake.

We have accomplished this through our **in-house solution Jumbo**, and commercial tools like Informatica DVO, and QuerySurge. With JUMBO, we envisage a significant efficiency improvement for data intensive testing with the ability to run different validations/comparisons like XML to DB, DB to XML, Flat File to Flat File, Database (DB) to File, Flat File to DB, DB to Hive, DB to DB, Hive to Flat files to ensure the data quality parameters are met.

JUMBO enables report validation in data migration (legacy DB to Azure Cloud) and DB upgrade testing and is capable of validating 100% pre and post reports. This will also add value to report testing for reporting tools like tableau and other data reporting tools for Trustmark.

Test Approach and Execution for Service Category 3 (Workday)

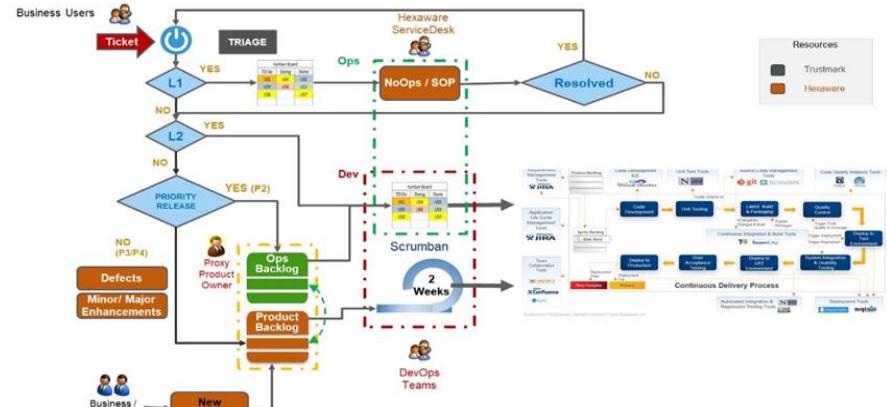
Hexaware has developed an end-to-end fully automated test repository for Workday HCM and Financials (WOTS) based on its model-based testing solution called ID2E which can be used along with Hexaware's TALOS to execute the tests in DevOps.

2.9 Automated IT Operations + Integrated App Support & Operations

H NoOps Model

Hexaware developed cloud setup and applications shall run on a “NoOps” model with AIOps, DataOps, and CloudOps. Essentially, this will not require L-1 support beyond resolving user queries, if any, and hence we expect very little L1 support. The auto-remediation will work as follows:

- Any anomalies or incidents either in the application or infrastructure will be auto detected through AIOps and CloudOps.
- Based on the severity of the incident, a ticket will be created in ServiceNow and assigned to an auto-remediation process.
- Auto remediation will resolve the issue with a status update in ServiceNow and if not resolved, an issue will be created in the respective Azure Boards / JIRA Align Project.
- The issue will be assigned to the developer for a manual fix and patch with the fix applied through Azure DevOps pipeline to the production environment after it passes quality gates.
- Root cause analysis and corrective measures will be performed by DataOps using AI and ML.



Operations Team	The Operations Team consists of squads for services of Sustain, Enhance and Retire supporting all 3 business units of Trustmark. This team will operate in the Kanban framework and deliver incremental value to production based on the priorities defined by the Product Owners.
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2.10 Infrastructure

I Hexaware will leverage the existing Infrastructure Servicedesk team to extend and enable them to service L1.5 including applications Operations as well as detailed in Section H.

2.11 Tools

J Based on Hexaware’s deep understanding of the Trustmark landscape and to align with the current Trustmark corporate strategy, Hexaware propose to leverage the azure toolsets in conjunction with Hexaware’s In-House toolsets. To align with Trustmark’s toolsets, Hexaware propose the use of “Azure DevOps” which is part of Azure platform for Portfolio/Program management capabilities. We also propose the use of our In-House “HexaView”, an Enterprise Dashboard using Business Intelligence to gain insight into an organization’s operations and performance for Application Development & Maintenance as well as Infrastructure engagements. Refer attached diagram with the list of toolsets planned to be leveraged for this engagement. During Wave 0, we would discuss with Trustmark stakeholders and finalize best tool considering factors like tools already available with Trustmark and TBP Digital tech stack.



2.12 Delivery Locations

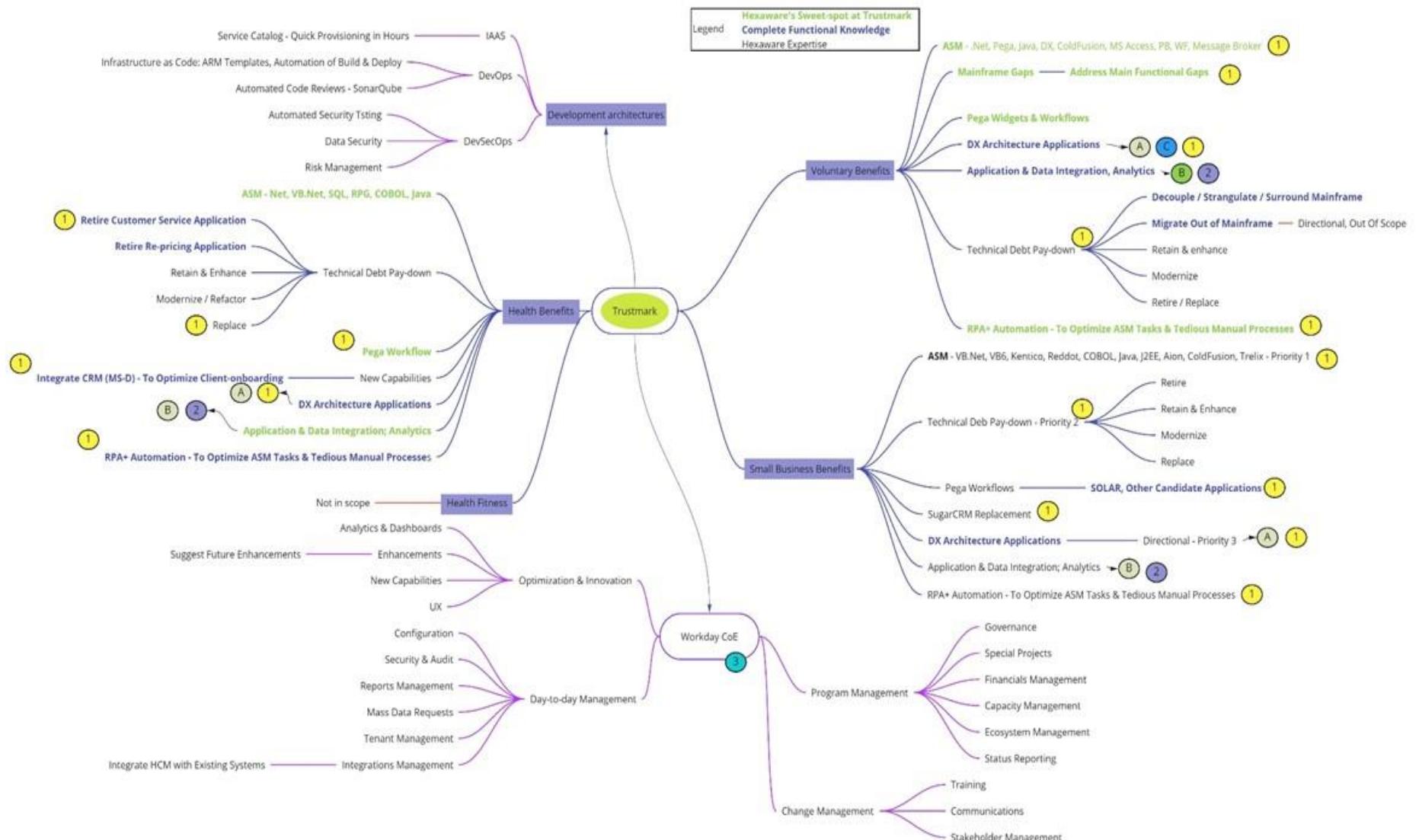
K Hexaware shall continue to leverage its India, Mexico, and Trustmark offices in the USA for delivery.

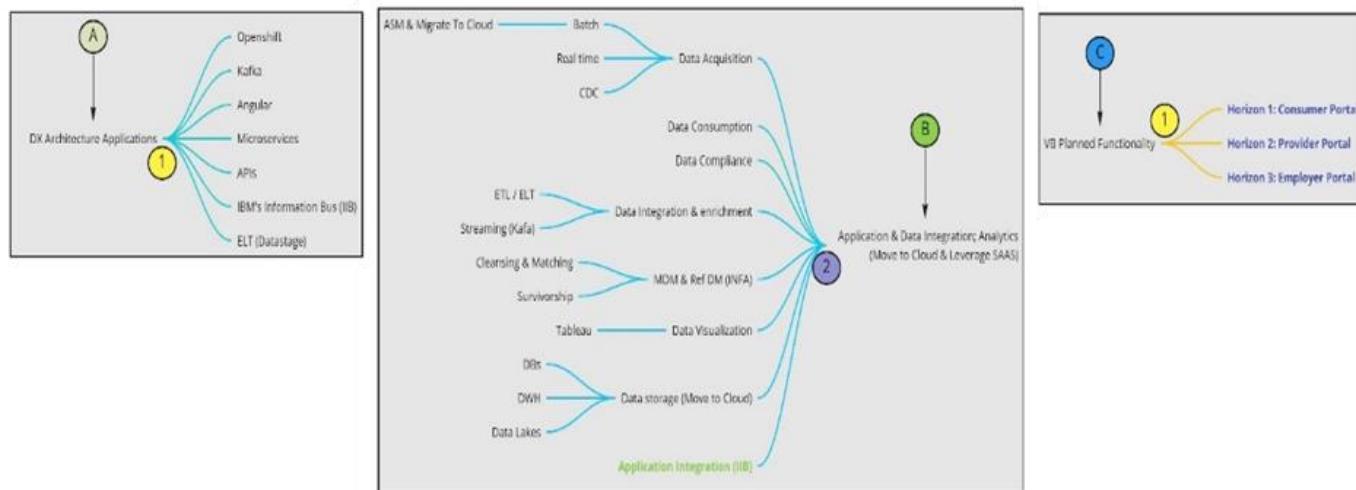
- Round-the-clock development and support optimizing the delivery timelines and costs
- Access to functional and technical knowledge / talent across all locations including Hexaware CoEs
- Dedicated links in place including Disaster Recovery capabilities

- Hexaware recommends a 5 to 15% onsite model for the Run and Sustain teams and up to 10 to 25% onsite for Create to maximize the advantages of offshoring. To facilitate collaboration across teams, various measures like “good to talk” time, collaboration tools like video calls, Miro, Skype, Teams, WebEx, etc., as well as effective knowledge management across these locations will be implemented.
- Roles such as User Experience Architect, Business Analyst, Cloud Architect, Pega Architect, Solution Architect, UX Lead, Azure Specialist, Automation lead and Proxy Product owner will be deployed in the USA to ensure maximum collaboration with business teams.
- Most of our development roles like full stack developers, testers, and scrum masters will be deployed from our offshore locations.
- Given the current situation, Hexaware has plans in place to conduct all transitions, development, and discussions from its onsite/offshore/nearshore locations with the Hexaware team providing an overlap with or covering the entire US-CST working hours from their locations as needed.

3. TECHNICAL SOLUTIONS

Illustrated below is our understanding of the overall Technical requirements across each of the service categories and Hexaware's approach and existing knowledge & expertise.



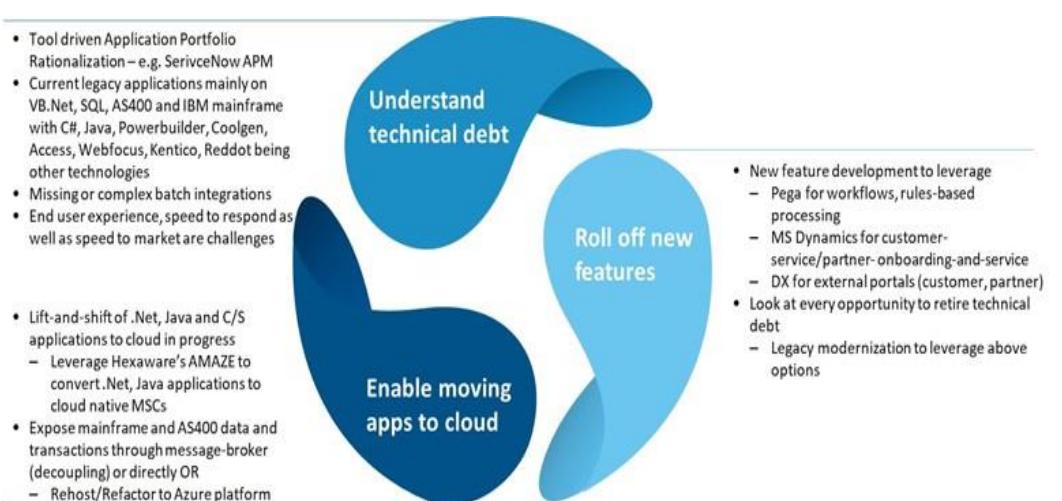


The following sections explain our Point of View and approach for each of the Service Categories for the Current State, Enhancements and FSA.

3.1 PoV on Service Category 1 - Current state

With its deep knowledge of Trustmark applications and its vast experience in building digital services, Hexaware has developed a PoV on Trustmark applications, the key tenets of which are:

- An Application Portfolio Rationalization exercise to be carried out using a tool like ServiceNow APM to help decide whether to modernize/retain/retire applications. Results of Hexaware's preliminary APR for VB applications are provided in the sections below.
- Enhance mainframe/AS400 applications - move functionality out of these platforms as much as possible; enhance only to bridge functional gaps and till then expose functions and data through services/APIs for the digital ecosystem

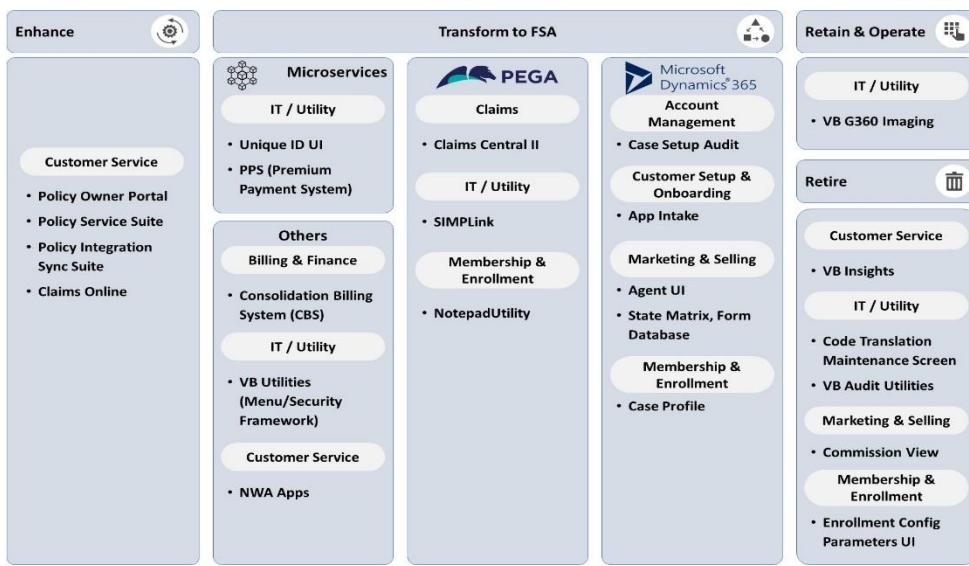


Laid out in detail below is the strategy based on the key points stated above followed by Hexaware PoV on adopting and extending the code base along with its views on DevSecOps and associated issue tracking and release processes.

Refactoring existing applications

Applying the above stated outline to Trustmark IT portfolio would translate to:

- Applications with significant workflow and/or rules-based processing common in Claims, Client onboarding, Membership & Enrollment, Billing & Payments and Self-service could be considered for BPM (Pega) based modernization.
- Applications in the business domains of Customer Service, Agent/broker Onboarding, Sales & Marketing could be candidates for CRM technology (MS Dynamics) based modernization.



- Leverage DX architecture for all customer / partner / employee facing portal-based applications with widgets developed in Pega and MS Dynamics embedded/integrated in these portals.
- Existing applications developed in Java or .Net could straightway be converted to microservices using Hexaware's AMAZE™ solution within a short span of 6~8 weeks to be hosted in DC or on the cloud.
- Mainframe/mid-range-based core applications - please refer below for further details.

Hexaware has carried out a preliminary portfolio analysis of the Voluntary Benefit applications on this basis

Hexaware currently supports 19 of 25 applications and has full functional

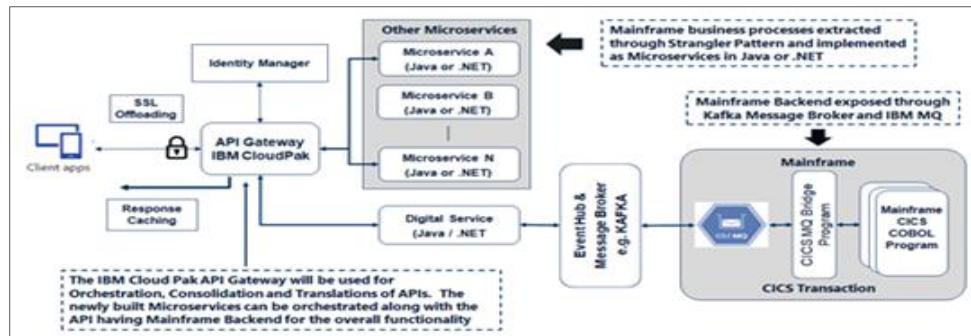
knowledge of all. Based on this knowledge, the Hexaware team has carried out a preliminary APR assessment which is based on Business Value (criticality, user experience, flexibility, adaptability and coverage) and Technical Value (complexity, technology, skills availability and vendor support) and maps the applications to one of the 4 APR categories, viz., Enhance, Transform, Retain and Retire. The diagram above shows Hexaware's assessment by Business Function.

Mainframe and mid-range-based applications - There are 2 ways to handle mainframe and AS400 in the new digital world:

I. Expose mainframe data and processes through APIs. This could be achieved in 3 ways:

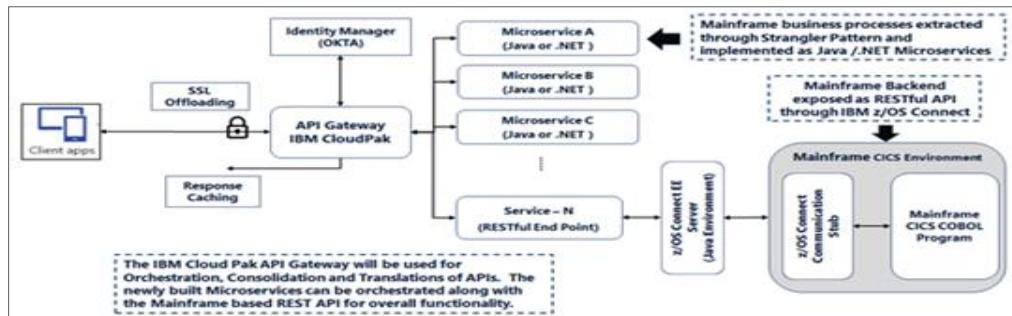
a) Leverage Kafka as a message broker for mainframe/AS400 communication (decoupling).

While the diagram below shows mainframe, conceptually the architecture for AS400 would be similar.



b) Exposing mainframe/AS400 code as REST APIs

For mainframe – through z/OS Connect



c) Develop APIs on the DB2 tables by accessing them directly through IIB using ORM or JDBC connection

II. Shift out of mainframe/AS400: This can be achieved in 3 ways:

a) Rehosting out of mainframe/AS400:

Could be achieved by leveraging a complete platform solution like Microfocus (MF) Server hosted on Azure. It can be done in 9~12 months for Trustmark.

- Recommended solution to lower mainframe costs and lower development efforts and costs
- Will help in establishing 50% faster and flexible test cycles along with 70+ to 90% reduction in costs along with combining deployments on DevOps pipelines for Mainframe/AS400 as well.

b) Replace with a COTS product:

While Trustmark had limited success “replacing” current VB product portfolio to COTS, this would work well for augmenting additional products at Trustmark, e.g., Group Insurance for VB. This allows a green-field implementation with limited dependency on legacy debt and instead aligning to an MVP approach for integration to current legacy portfolio to ensure a consistent CX for TMK’s end customers & stakeholders.

c) Re-engineer the entire mainframe/AS400 code to develop a new system based on DX/COTS/Pega architecture:

Hexaware does not recommend this option, as it's very time and effort consuming with a high probability of failure.

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 11 – Application Transformation Management Capability_200605” to understand more details about Hexaware’s Application Transformation capabilities.

Adopting and extending code base

Once the transition is complete and the code base is baselined, dependency on an existing vendor will be nil. Thereafter this code base will need to be extended for the normal support and enhancements. Hexaware proposes to reduce the technical debt of the code base through following SOPs like branching and merging, code reviews, automated testing, etc. This is best achieved using DevSecOps techniques which also help in efficient issue tracking and release processes. For further details on these topics, please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 1 – Extending Codebase; Leveraging DevSecOps_200605”.

3.2 PoV on Service Category 1 – Enhance

Hexaware strongly believes that all new feature development must have 1 element: Customer Obsession. In line with this, Hexaware has been leveraging an Experience First Methodology for Design for multiple customers with huge success. Specified below is this approach followed by details of its architecture and design elements.

Experience First Methodology for Design

Hexaware has been adopting its “Experience First” methodology for coming up with solid actionable research, creating comprehensive customer journeys, and conceptualizing game changing solutions and bringing them to life through world class design solutions. Through Mobiquity – Hexaware’s independent arm dedicated to customer experience transformation – we generate a Friction Report that delves deep into the customer sentiment leveraging our domain expertise and lays out Top 10 pain points being faced by the customers. We plan to leverage this report for Trustmark to help identify the pain points.

Mobiquity works with a set of templates during workshops to develop these personas. With the help of these personas and Design Thinking models, Hexaware will help Trustmark stakeholders to understand user journeys.

Architecture and Design Elements for Enhance (DX)

New feature planning, management, development, testing, production rollout and support will be performed using agile development methodologies combined with AIOps, CloudOps and DataOps for NoOps support. While the aspects of development like Application Lifecycle Management, TDD/BDD, DevSecOps, NoOps Support have been addressed elsewhere in the document, the section below focuses specifically on the design elements of microservices, database, and integration.

Designing and developing new microservices:

- Developed using custom coding in Java, Spring Boot or using ASP. NET MVC Core WebApis.
- Microservices will be equipped with a “sidecar” using ServiceMesh which will be implemented using Istio, Kiali, Jaeger.

The below table shows the patterns which will be used to develop the microservices:

Pattern	Usage
Anti-Corruption Layer	This pattern will be used to create a wrapper for other systems running in Trustmark OnPrem data center
Choreography	This pattern will be used to make decision in a business transaction workflow

Circuit Breaker	The pattern will be used to handle faults that might take a variable amount of time to recover from, when connecting to a remote service or resource.
Compensating Transaction	This pattern will be used to undo the work performed by a series of steps, which together define an eventually consistent operation, if one or more of the steps fail.
Event Sourcing	This pattern will be used to record the full series of actions taken on a domain data.
Saga	This pattern will be used to manage the transactions span across multiple services.

The design elements and components used in the microservices development are shown in the below table.

Component	Description
Envoy	Service Proxy
Istio	Traffic Management, Observability, Service Identity and Security, Policy Enforcement
Kiali	Distributed Tracing, Service Discovery
Jaeger	Distributed Transaction Monitoring, Route Cause Analysis, Distributed Context Propagation
OpenShift	Docker Cluster
Azure DevOps	For implementing DevSecOps
Azure Git	Source Code Management System
IBM API Connect	For API Management
IBM App Connect	To integrate services with Pega and Trustmark On Prem Applications

Database

Both RDBMS and NoSQL Databases will be used to store the records. Azure SQL Database will be used to store RDBMS records. Azure Cosmos DB will be used to store NoSQL records.

Integration

Integration layer will be designed and developed using Kafka, IBM App Connect and custom build anti-corruption layer.

- Applications to be Integrated using IBM App Connect and Kafka to be used for message-based integrations with legacy
- An anti-corruption layer will Be built as broker between IBM App Connect and Kafka topics and will work as

Architecture and Design Elements for Enhance (Pega)

Hexaware has implemented a Pega-based solutions for Trustmark in enrolment, rating and claims functions in VB. Hexaware recommends that Pega can be leveraged in building new capabilities or modernizing legacy applications having significant workflows and/or rules-based processing especially in the functional areas of **Claims, Client onboarding, Membership & Enrolment, Billing & Payments and Self-service** in all 3 business units at Trustmark.

For design considerations for Pega based development, please refer to "[Future State Architecture \(FSA\) – Pega: – Hexaware recommendations on FSA](#)" below.

3.3 PoV on Service Category 1 – Future TBP Architecture

Hexaware has outlined its point of view on the Future State Architecture for Trustmark in this section. Hexaware foresees that there are 4 main technologies and platforms that will play a crucial role in Trustmark going ahead - DX Platform, Pega Platform, MS Dynamics Platform and the UiPATH RPA platform. The sections below detail out Hexaware's PoV on each of these platforms.

Hexaware recommendations on FSA for DX

Hexaware appreciates the simplicity and scalability of the DX architecture. From an architecture perspective, digital experience for Trustmark's "customers" will be delivered through a digitally decoupled microservices layer which will unlock data and "Business Capabilities" from legacy systems and make it available to current and future channels. While the principles are sound, Hexaware would like to offer practical insights towards implementation of these principles based on our experience with other clients who we have worked with on similar journeys.

FSA Recommendation 01 - Think Reactive

We recommend using concepts and tools from reactive programming that help write cleaner and more robust performing applications designed and developed using CQRS. We also recommend using RxJS to decouple the views and model state and applying minification to reduce the html file size and reduce multiple round trips across networks to improve page load times.

FSA Recommendation 02 - Distributed monoliths are not microservices

If not developed properly, microservices can become complex Distributed Monoliths. We recommend development team to work closely with Domain Experts to get the bounded context and context maps right and then break it into micro building blocks (entity, value object, aggregate, aggregate root) each having its own database.

FSA Recommendation 03 - Focus on instrumentation for Observability, Resilience and Security

We recommend implementing a lite version of the Service Mesh using Istio, Kiali, Grafana and Jaeger to provide cross cutting capabilities through: - intelligent routing, Load balancing, Service discovery, Policy enforcement, In-depth telemetry, Circuit breaking and retry functionalities, Logging, and Monitoring

FSA Recommendation 04 - Invest in Anticorruption Layer

We recommend implementing Anticorruption Layer to abstract the Underlying Core Systems and improve the flexibility and extensibility of additional coupling /decoupling of System. The Anti-Corruption layer would be created as a bridge between Cloud apps on Azure and VB apps in DC/COLO. It will help decouple dependencies and simplify communication with services.

FSA Recommendation 05 - Build backends for frontends

For teams with multiple UIs (Web, Android, iOS etc..), we recommend implementing “backends for frontend” design to allow parallel development and for teams with smaller number of UIs, we suggest using single top-level API gateway.

FSA Recommendation 06 - Prioritize Elastic scalability in the architecture

Cache Layer

We recommend caching the information in the Service Layer using Azure Redis Cache improving the performance by reducing the calls to core systems for configuration data, apps sqlesion data, master data that would not change often etc.

Scalability

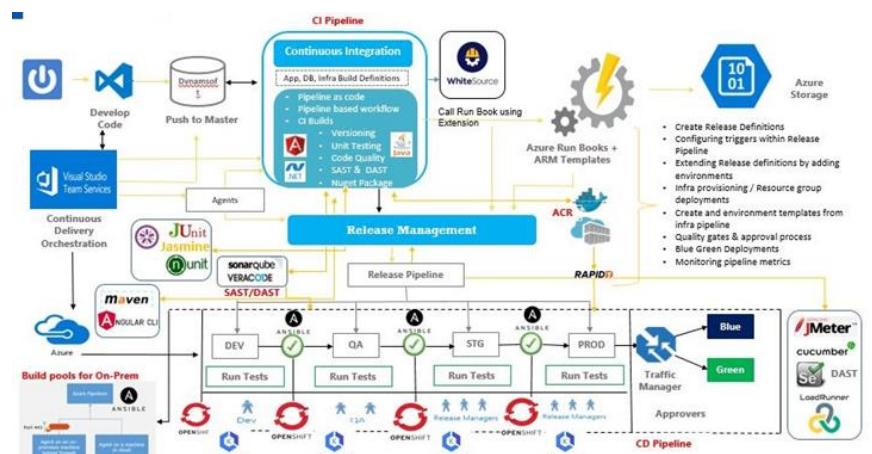
Our specific recommendations are:

- Ensure scale-out capability of each microservice logic itself as an example by externalizing app data and state which are typically supported by cloud services. Data could be put in Azure SQL/NoSQL databases and state in Redis Cache and leverage auto scaling provided by openshift.
- Leverage microservices invocation services of Azure and ensure proper load balancing provided by Azure
- Leverage scalable database like Azure’s Cosmos DB appropriately to avoid making data layer a bottleneck
- Leverage BASE transaction strategy for non-transactional data (user reviews, tags etc...) on NoSQL cloud databases

FSA Recommendation 07 - Dedicate energy to Support frequent changes

- Future state Azure DevOps for Azure cloud and On-prem
- Future state Development Process driven by Azure DevOps
- Future state architecture of DevOps is expected to take care rapid release, time to market, integrate testing and deployments as a part of the DevOps pipelines.

Refer Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 14 – DevOps Capability_200605” for more information on Hexaware’s DevOps capability.



FSA Recommendation 08 - Separate Read Models with CQRS

Combine CQRS with Event sourcing techniques to ensure loosely coupled microservices driven completely through event-based model.

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 12 – Azure Capability_200605” to understand more details about Hexaware’s Application Transformation capabilities.

Future State Architecture (FSA) – Pega: – Hexaware recommendations on FSA

In the earlier section, we have highlighted how Pega based development could lead to consolidation of legacy applications in specific business functions. In the section below, we explain the design elements that will be leveraged by Hexaware for further development on the Pega platform.

- We believe that Pega can be the enterprise workflow platform integrating all systems for Internal Operations as well as for customer facing workflows with integration with fit-for-purpose enterprise technical platforms at Trustmark
- Pega Infinity platform will be leveraged for further development which unifies Customer Engagement and Digital Process Automation. Hexaware shall leverage its main features like Real time Omni-channel AI, End to end Automation, Journey – Centric Rapid Delivery, Situational Layer cake and Cloud capabilities for further development.
- Hexaware will automate processes like Email, get next work, Capacity management, Transfer work, Cascading approvals to help Trustmark reduce the dependency on the different personas
- Pega Micro-services:
 - Expose data and case management assets by publishing APIs for other microservices to consume
 - Enhance Rating Engine to provide micro-services for other applications to consume
- Pega Integrations:
 - Pega applications to be integrated through its EAI layer (APIs) with the CMS at Trustmark (G360)
 - Handling of hard copy forms in Trustmark could be digitalized through the use of OCR technology. Pega provides its own OCR and also integrates with OCR solutions like ABBY through Flexi Capture Connector enabling automated data entry for hard copy forms and hence a quick turnaround for end customer.
 - Pega applications will be well integrated into DX and MS Dynamics eco system in addition to the legacy applications in Trustmark. As an example, Pega based client onboarding application needs to be integrated well with MS Dynamics based Customer Service application to enable real-time and quick customer service.
 - Pega framework supports its own RPA solution, but also integrates well with UiPath enabling automations where services/APIs are not available for integrations
- While Pega can deliver portals on its own, in the new design paradigm that Hexaware is proposing, widgets/mashups will be developed in Pega which will be embedded in DX based portals
- Since Trustmark has finalized Azure as the cloud setup of choice, Hexaware would like to propose that Trustmark migrate its Pega applications from AWS to Pega-Azure. This should be straightforward and be enabled by Pega Inc., Hexaware would work closely with Pega and Trustmark to enable this and also setup Azure Pipeline for Pega.

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 2 – Pega Platform Overview_200605” for further details on Hexaware’s PoV on Pega Platform and Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 3 – Pega Capability_200605” for Hexaware’s Pega capability.

Future State Architecture (FSA) – MS Dynamics: – Hexaware recommendations on FSA

MS Dynamics is already implemented in VB where it can be extended further. Hexaware proposes that Trustmark implement the same for HB and SBB businesses allowing consolidation of customer and agent service as well as onboarding aspects and a massive ability to cross-sell and up-sell. As discussed earlier, applications in the business domains of **Customer-service, Agent/broker onboarding, Sales & Marketing** could be candidates for MS Dynamics based development/modernization.

Hexaware has a strong and thriving practice on Ms Dynamics, is a GOLD partner of Microsoft with MS resident architects and has extensive experience of implementing MS Dynamics with leading BFSI and Big-5 consulting organizations and has developed a set of offerings to bridge product white-spaces as also a set of accelerators.

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 4 – MS Dynamics Capability_200605” for details on Hexaware’s MS Dynamics capability and relevant case studies.

We have analysed Trustmark Application portfolio and recommend that Trustmark to consolidate Customer engagement functions into Dynamics 365 Low code/no Code Power based “**Orchestrated Customer Experience Platform**” for all 3 business units. Apart from significant savings on time and cost, this can bring in a huge value to Trustmark enterprises in both the aspects of customer engagement i.e. **Customer Experience** and **Customer Service** as explained below.

Customer Experience

Platform will enable streamlined real-time dynamic experience for all touchpoints, across the entire engagement lifecycle for multiple personas like agent /broker, employer, provider etc....in an **omnichannel manner**. **Hexaware proposes to**

- Integrate Dynamics with Customer Data to enable **customer profiling** – Power Automate has multiple connectors to social media data and will be leveraged to create a 360-degree view of customer based on the Trustmark internal data and the authorized social media data. This can help improve customer interaction tremendously.
- Integrate with okta to enable permission-based mechanisms and access controls.
- Leverage Power Automate for simpler workflows and Pega for complex ones in the processes

Some of the portals in the Customer Experience arena like the Producer and Employer portals could be developed in MS Dynamics or be developed in DX technology stack. In the latter case, data and processing of the data could still be a part of MS Dynamics and the integration with DX portal could be done through services/APIs as also through widgets embedded in the portal. Described below are personalized journeys for possible external stakeholders.

Producer Engagement (functions which could be enabled in addition to the ones in Appendix 1)

- Provide seamless quoting, enrolment and renewal experience as also ease of operation through prefill feature
- Sharing of performance related data and trends related to **quoting, onboarding, renewals, claims, commission** along with recommendations where they need to improve or focus to increase conversion
- **Knowledge base** for brokers /agents will be enabled on portal which they can easily refer in discussions with customers and provide recommendations for cross-sell and up-sell of Trustmark products and services
- Empower brokers/agents to **change information** related to their staff, security and permissions
- Simplified Sync of information between Trustmark system and Agency's management system to keep all information current and relevant.

Provider Engagement

- Self-service related to step by step enrolment and submission process.
- Streamlined processing, credentialing, re-enrolling and other tasks to engage and support providers.
- Providers can easily and quickly initiate, monitor and maintain their status.
- Access to all provider clinical and administrative, payer and member related information
- Sharing of authorized Insured information quickly for increase in efficiencies and claims processing.
- Sharing of reports and dashboards related to provider key metrics to increase transparency and reduce support calls
- Personalized communication between providers and payers for eligibility checks, claims status checks, remittances, avoiding of duplicate transactions and payments to right claims.

Employer Engagement (functions which could be enabled in addition to the ones in Appendix 1)

- Easy access of Employers and their employees to Trustmark products and services.
- Streamlined and simplified eligibility, enrolment and renewal processes for employees
- Easy Sync of information between Employer and Trustmark on Employees and related impact - Current state of onboarding-joining-leaving employees, services, renewals, Insurance product liked and disliked by employees, Support requests and their status
- Enable cross-sell or Up-sell opportunities - product comparisons and recommendations

Customer (Policy Owner) Engagement (functions which could be enabled in addition to the ones in Appendix 1)

- Provider search, planned/emergency hospitalization, hospital visits
- Online submission of documents required for underwriting / onboarding / renewals (as required)
- 360-degree view of customer engagements – copays, other costs, payments, claims, surveys
- Information on other Trustmark services like Wellness, benefits – eligibility and subscriptions
-

Customer Service

MS Dynamics will enable Trustmark provide attention that the policy holders and agents/brokers expect with extremely quick responses.

- **Customer Engagement** – Support efficient claims and issue capture, routing and resolution across all channels, automate resolutions to a large extent
- **Enhance PO and Agent 360-degree views** with additional information like
 - Enhanced view of customers past, present and future life events to enable CSRs to up-sell/ cross-sell with ease
 - Provide additional information about customer, policy, claims, payments and help them in closing claims quicker and reduce case turnaround times. E.g. some additional policy features which can be enabled
 - Benefit riders along with description
 - Payment mechanisms (salary deduction/ bank deduction/credit card etc.)
 - Number of payments pending along with amount and month related information,
 - Current and maturity values of their policies (important for new policies like universal life policy)
 - Calculate and understand “Customer Life-time Value”
- **Claims Notifications** – Support timely service notifications to boost customer satisfaction with Notification engine having Out of box integration with Outlook

- **Service Collaboration** – Bring company experts together to resolve customer issues with service collaboration tools like Power Virtual Agent, TEAMS
- **Knowledge Management** – Ensure issue resolution on first contact with effective knowledge management and access to information
- **Service Management Analytics** – Gain real-time insights into service performance with powerful analytics and intuitive dashboards for real-time decisions and performance improvement
 - **Next Incident** - Predict the likelihood of a customer experiencing an incident so that you can deliver proactive service to your customer
- **Sentiment Analysis and Interest Analysis** – Gain insights into customer sentiments, life-time events and interests to deliver personalized in-the-moment experiences
 - **Propensity to Escalate** - Predict the likelihood of a customer escalating a case to social media and try to resolve it quickly

By enabling efficient services and empowering agents to provide guided, intelligent service and support, Trustmark will be able to

- Increase customer satisfaction, loyalty and advocacy
- Increase customer base and revenue
- Adapt quickly to rapidly changing environment, product and service requirements and support

At Architecture Level

MS Dynamics comes along with aptly named “Power” platform which provides a set of comprehensive tools which would be leveraged for Trustmark as described below.

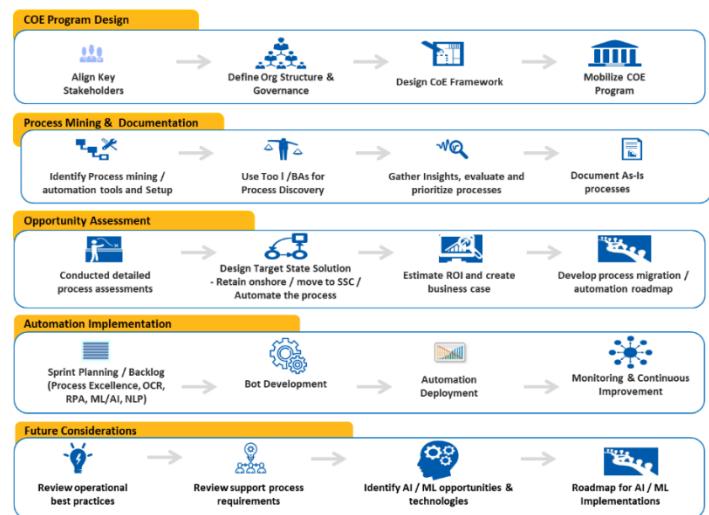
- **Common Data Services**, will enable a common data layer - API enabled data services which can be consumed by interfacing applications
- **PowerApps** will be leveraged for building simpler responsive apps. Some of the current CSR and look-up apps could be modernized using PowerApps
 - **Canvas Apps** will be leveraged to provide users higher control over the UX and to make it clean and intuitive.
 - **Model-driven Apps** will be leveraged when custom design is not needed and all the data is in the CDS. Extremely fast development with almost no code and can empower business users to build their applications.
- **Power automate** will be leveraged to build simpler workflows with no or low code and to build API based integrations with other applications. Power Automate is now enabled with UiPATH which will help with bot based integrations where interfaces/APIs are not available
- We propose to leverage **Dynamics Insights** to build AI models very quickly to carry out forecasting activities e.g. forecast #calls expected in the next day, month, quarter etc...
- **Power Virtual Agent** will be leveraged to build and enable chatbots on Portals, This, we believe can help Trustmark automate certain functions in Customer Service enabling cost optimizations as also very quick resolutions resulting in higher customer satisfaction.
- The data generated from chatbot, voice interactions could then be analysed using apps built on AI Builder to further improve customer interaction in an automated manner

Future State Architecture (FSA) – RPA Automation

This section details out Hexaware’s suggested methodology for adoption of automation and development of the same at **Trustmark**. This is followed by a product backlog (use cases) that Hexaware has already identified for RPA+ automation.

RPA Approach and Strategy for Trustmark

Overall Program Design: Having developed approx. 1000+ Bots across industry verticals, Hexaware has a mature RPA practice with over 500+ consultants. We are already supporting TMK in claims adjudication space and have developed few bots for Trustmark using UiPATH. We are thoroughly familiar with Trustmark’s IT systems and integration architecture and hence already have clear thoughts on initial set of use cases for automation. For the scope of this RFP, we will set up a **Automate Trustmark** sprint team which will identify and prioritize opportunities along with Trustmark stakeholders and then execute to an agreed plan mainly leveraging technologies like UiPATH and others.



Product Backlog Identified for **RPA+ Automation** is provided in Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 10 – RPA-ProductBacklog_200605”. Refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 13 – Business Process Service Capability_200605” for further details on Hexaware’s BPS capability.

3.4 PoV on Service Category 2 - Current State

Hexaware brings in two decades of business intelligence and analytics experience – we believe adoption should be an iterative and enabling create-retire framework of these phases a) land safe b) transform by business priority while allowing room for upgrades c) enable lean cloud operations

Land safe

Hexaware has successfully taken through large enterprises across industry in transforming their legacy data and analytics landscape to a modern cloud architecture.

Transform by business priority

Hexaware strongly believes adopting to cloud-native tools like ‘Azure Data Factory, Data Flow’ to inherently address the scalability, availability and disaster recovery coupled with subscription-based pricing that will lead to efficiencies. Please check the section below which details our viewpoint for Trustmark.

Lean Cloud Ops

IaaS/PaaS/SaaS hosting models disrupted the traditional supporting models offering scope for automation at the center stage with touchless operations. These are “must have” than “nice-to- have”. Hexaware’s Amaze for Ops platform is our critical enabler. See section below for our detailed viewpoint on this.

Striking a balanced approach towards Master Data, Metadata Management and Data Governance is a key decision organization must consider so that adoption to innovation is enterprise wide.

Enabling business and IT users for self-service is a step towards creating a lean/NoOps environment and for that consolidation of IT tools would be necessary. The low hanging fruit for Trustmark is to enable business on Tableau and refactor legacy reporting systems on cloud. Please see more details in below section on Hexaware’s viewpoint.

The last mile on the transformation journey is to go beyond the data intelligence available into predictive/prescriptive analytics for creating next generation data driven organization. Although the data engineering transformation is a precursor, but it alone will not suffice. The data science practices, tools, best practices, and modelling require a methodical and iterative approach. For Hexaware’s expertise and experience in the same, check our viewpoint in the sections below.

3.5 PoV on Service Category 2 - Enhance

Explained below are a set of relevant case studies basis which Hexaware would then elaborate its approach.

Managed Services for the global biopharmaceutical services company with the scope to expand to cloud operations

Use Case: L2, L3 support for BI apps (Informatica, Oracle, Hyperion, Spotfire, OBIEE, Microsoft BI) with SLAs. Migration to cloud is to be planned and executed

Hexaware Solution:

1. Chose appropriate cloud environment (Azure)
2. ETL processing shifted to ADF
3. Data objects to be built to ADLS
4. Data Vault Objects to be migrated to Cloud SQLServer
5. Reporting moved to PowerBI
6. Azure Analysis services tabular model was leveraged
7. Attenuity was used to Compose and Replicate aspect

For Trustmark, Hexaware would recommend a similar move to cloud for existing data as with new data coming in from new capabilities being launched in digital technologies would increase the number and size of data streams creating overheads. Cloud migration in such a case would optimize costs and allow scalability and performance along with proper security.

Hexaware with its **Amaze for Data & AI Platform** with built-in accelerators and framework has helped its customers in their cloud transition/migration journey by providing end to end solution across cloud platforms like Azure, AWS & GCP and cloud natives services like Snowflake, Databricks, HVR.

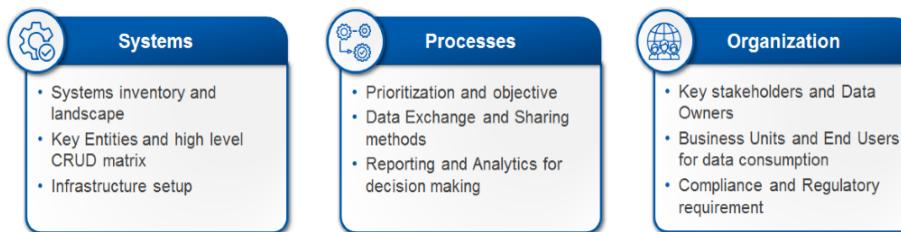
3.6 PoV on Service Category 2 - Future TBP Architecture

Hexaware was involved in providing Trustmark a viewpoint earlier on refactoring a few legacy BI reporting assets. We are completely aligned to Trustmark's diligent efforts to increase the cloud estate foot print and leverage the wealth of integrations, flexibility and in turn optimize the support cost and transform from a data siloed organization to a more centralized data & analytics powered by AI organization to create immersive consumer experience. To meet to these needs, Hexaware proposes following viewpoints across following key levers to help strengthen the FSA.

Master Data Management and Data Quality

As Trustmark Business initiatives with the new integrated data platform will impact the decisions that are related to the key stakeholders like Customers, Agents, Partners and Brokers, it's very critical that the business gets a single 360-degree view of the stakeholders from across the business lines. Master Data Management is the foundation platform that will enable that view and as well deliver other business demands to Trustmark like customer retention, cross-sell, up-sell, personalization, improved risk & fraud management.

Informatica MDM cloud needs to bring in customer data from CRM, Policy and Claims applications across all 3 businesses to create a golden copy. In the future state architecture, Informatica MDM should deliver the golden copy records to the analytics and as well to the transaction applications.



- Identifying the data owners and users

Hexaware will deliver MDM platform and has identified following as the key items that needs to be finalized for defining the MDM Roadmap in terms of Systems, Processes and Organization.

- Identifying key business areas and data entities
- Finalized systems inventory and data complexity

Data Governance into Future Architecture of TBP

Hexaware is aware that Trustmark is considering Informatica as your data governance tool of choice. However, it is important to understand that tying all applications to common practices and strict enforcement will lead to slow adoption to innovation. It's important to democratize data (pl. refer to the section "Remove Data Silos and transition to having data democratization" for Hexaware's PoV). Although data governance encompasses a whole set of processes, tools and technology standardization, we recommend implementing key tenets such as data governance, data quality and metadata management as base build is pivotal for "traceability, reliability, and automation" of data pipelines and consumption. Informatica Data Governance for data cataloging and creating a Data Marketplace. Informatica DG integrates well with the MDM and DQ platforms.

We recommend Trustmark to initiate well-crafted data governance to democratize data to business users. Trustmark will greatly benefit by leveraging Informatica Data Governance and associated suite of products to enable the data governance both at operational/transactional levels and analytical/aggregated level across VB (Policy, Producer, and Employer), HB and SBB. It will enable self-service, consistency, and standardization across all 3 businesses.

- Discover and Cleanse data with strategy defined for auto-profiling, delegation of data cleansing and extending quality
- Organize data in business glossary, enable access through lineage, empower masking and curation by business
- Automate data pipelines and enable data access, automate dataflows using AI/ML and allow search-based access

Hexaware success Story (Data Governance): -

Hexaware has successfully implemented an end to end data governance process through Collibra data governance center at one of the leading global bank and asset management firm. The bank faced challenges like broken data lineage across different applications, data redundancy and lack of standard data dictionary and definitions, lack of trust in the data assets and ultimately higher GTM for new products.

Hexaware delivered a solution consisting of assessment, Collibra implementation for DG, helped establish data stewards, automated approval process. Hexaware also setup Collibra connectors to import data from the data lake through Clodera; built business glossary, data definitions, setup the workflow for update and approval of data definition etc...

Remove data silos and transition to having data democratization

In a large organization like Trustmark, it's quite common to have multiple technologies addressing the same problem and developing tool specific data manipulations and aggregations leading to data silos, data duplications and inadvertently contributing towards poor data quality and master data issues. Hexaware is aware of the Webfocus reports being leveraged in Trustmark benefits and lack of a centralized data store like a data warehouse or data mart is a challenge.

- Hexaware recommends building a data-lake as a priority project to host all data assets in a centralized location and move the loads to analytical data store built on Azure Synapse in a more phased manner aligned to business priority.
- Identify the data sources for each reporting application and reverse engineer the semantic layer logic
- Hexaware's Amaze for Data platform can greatly support the speed to market by extracting the metadata, semantic layer logic and refactoring into your BI tool choice (Tableau)
- Configuring the real-time/near real-time workloads will enable business to take advantage of raw data for quick insights and data science community to harness the data & do predictive and prescriptive analytics
- Finally, removing data silos is a journey and the great starting point would be an efficient and smart data lake strategy.

Move towards metadata based reusable ingestion/CDC job loads

Although there is a lot of emphasis and discussions on metadata, its importance is gaining momentum in designing automated solutions around that. Organizations are inadvertently developing lot of hardcoded and not so repeatable workloads. This is because there is a wide gap exists between the rate at which innovation happens and Organizations catching up on the skills needed to take full advantage of the features. We fully appreciate your decision of leveraging ADF as batch and CDC solution, in fact a better choice in Azure. Hexaware has a fully automated ADF based metadata ingestion framework which can orchestrate all batch/micro batch ingestions into storage accounts or SQL/NoSQL DBs with less coding/more configurable options. The greatest benefits we see are:

- Support cost optimization significantly
- Self-healing in terms of error handling and recovery
- Relieves bandwidth of key technical SMEs to refocus on more complex data engineering pipelines
- Scalability to new data sources will be cost friendly

Transition to event based, serverless, consumption based flexible architecture

Having a decoupled flexible architecture is a key for extending the cloud footprint without worrying about changes to the point to point integrations made. An event driven architecture can use a pub/sub model or an event stream model.

Hexaware recommends a combination of the below key patterns to suite the different needs which requires a careful thought through on the architecture:

- Pub/sub
- Event streaming
- Simple event processing
- Complex event processing
- Event stream processing

Data Integration Consolidation

Much of the business logics of validation, transformations are embedded in the ETL process, getting them right as part of the migration to the cloud services like ADF, Data Flow is very important. Hexaware recommends Trustmark to migrate ETL to ADF which enables code-free, serverless environment leveraging spark and scales to any data size.

Hexaware recommends to carry out a comprehensive assessment and determine before-hand which of the existing DataStage ETL process requires redesign and which of those can be retained AS IS, then automation with highest quality and accuracy in the migration process from other ETL platforms to ADF on the cloud can be considered.

Hexaware platform Amaze for Data and AI is a one stop solution to cloudify the legacy on-premise Datawarehouse, analytics and BI layers to modern cloud stacks. A Six-step Approach to migrate to Azure Mapping Data Flow from IBM DataStage JOB:-

BI Consolidation

Trustmark BI application landscape is distributed across multiple technologies which includes legacy WebFOCUS, ad-hoc SQL generated, SAP BO and Tableau. In most cases, Trustmark leverages transactional data as source for creating internal and external facing reporting applications which has high user access patterns (around 2K users).

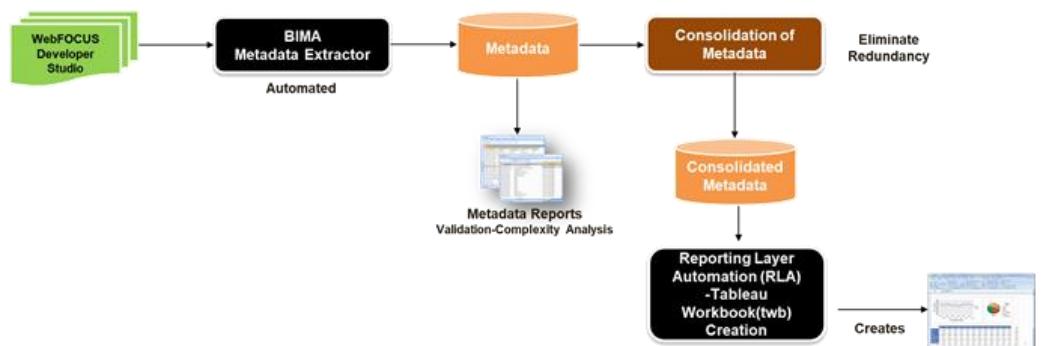
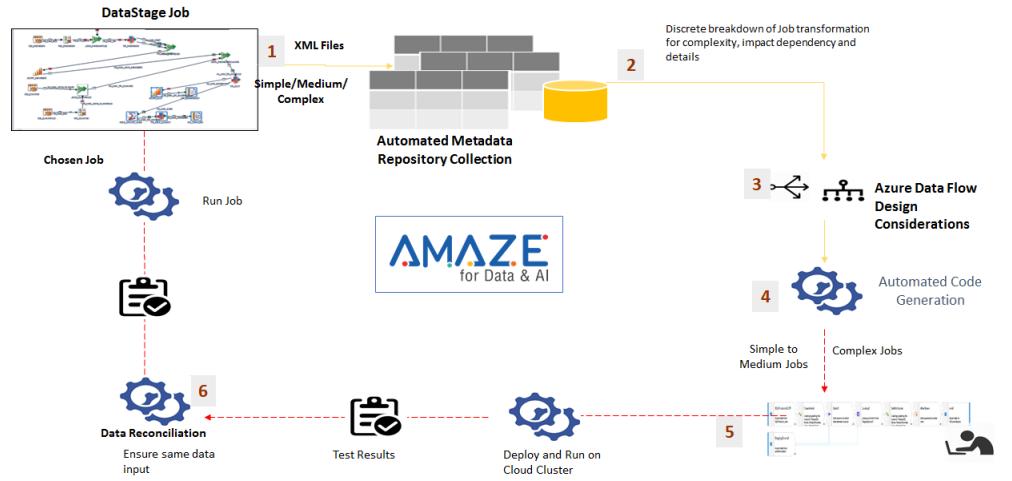
It is very evident that application like ICE reporting has complex logic, which is built directly in WebFOCUS, SQL, HOLD making it very difficult to add additional functionality. This in turn has implications to address code changes as the dependencies and lineage analysis has gaps. Similar challenges exist for applications such as 'ECHO TPA Claims', 'State Reporting Claims and Eligibility' in SBB line of business. These are mostly tabular reports in EXCEL (90%+) with historical data being kept on server, access being controlled through an access list and finally using HTMK based parameter selection for reporting and scheduling.

Based on our analysis, we recommend Trustmark to move to a Tableau as a single unified reporting platform and enable business self service capabilities and derive below key benefits to the business and reduce overall support costs in future.

Refactoring current WebFOCUS reports to Tableau:

Hexaware's Amaze for Data (an enterprise platform) has an inbuilt business intelligence metadata analyzer (BIMA) component (as shown in the figure)

which can extract the metadata of the WebFOCUS reports to generate an analysis report. System analyst/business analyst can leverage the metadata analyser report and make any customizations required which can be an input to another Amaze for Data component 'Reporting Layer Automation (RLA)' which will generate the Tableau workbook/dashboard. Hexaware's RLA can convert about 50% of the reports to new BI platform. However, there will be a few configurations/designs needs to be addressed manually. This approach can quickly bring Trustmark's legacy reports to single unified platform and address business challenges in the future state architecture.

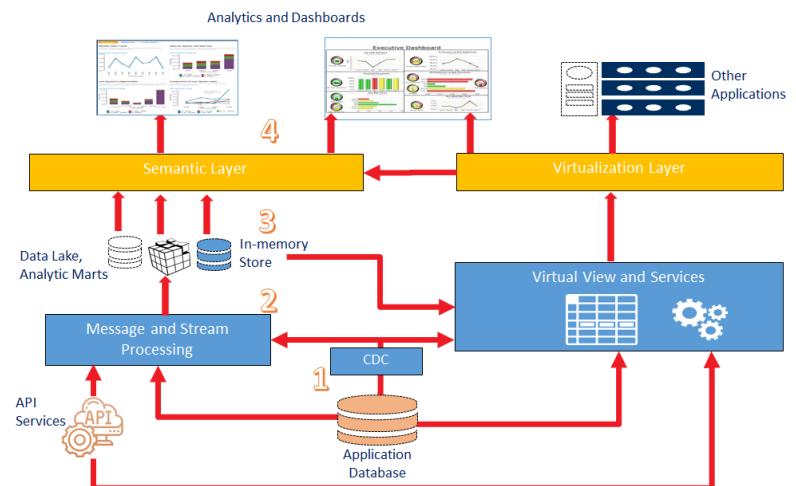


Stream data integration

Delivering current information to the agents to their context enables quicker and effective decision making in their daily operations. To get access to data in real-time there are 4 key technology aspects to be built as part of the architecture as in the architecture here:

- Determine the changes happening in the application database
- Ability to capture the data as a message and process it as a stream
- Store, manage and process data in-memory
- Integration of the accessed information into the application or dashboard

Technologies leveraged are Change Data Capture (CDC), message queues (MQ), stream processing, in-memory processing and virtualization.



Hexaware has built end to end real-time data management by leveraging CDC platforms like HVR, IBM Infosphere, Informatica and MQ; stream processing platforms like Kafka, Event Hub, Kinesis, Spark, ELK and Virtualization platforms from Informatica, Composite (Tibco), Denodo.

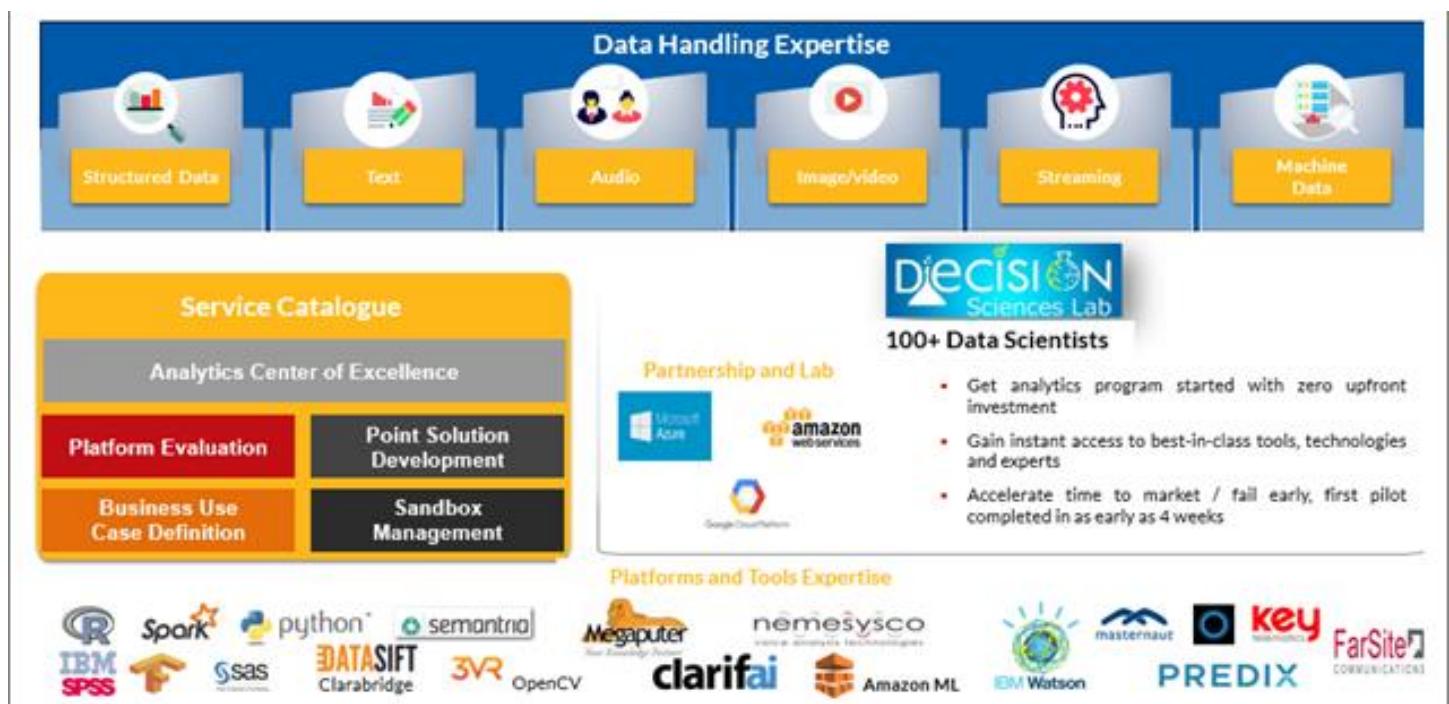
We understand the platform of choice for Trustmark are IBM Infosphere CDC, Kafka, Event Hub. Virtualization software (Denodo) should also be considered as an option as they bring in a unique capability of defining a common semantic layer for federated seamless data access across multiple applications in real-time.

As part of the assessment and design of real-time architecture, following are to be considered

- Source application ability to push changes
- API interface from the source application
- Incremental data volume and the frequency
- Business logics, rules to be applied and data window

Machine learning adoption

Hexaware recommends Trustmark to leverage Azure ML stack along with Jupyter and Python. Hexaware would work with Trustmark on AI/ML front through its Decision Sciences Lab services. Through DSL Hexaware works with its clients to test business cases in the lab in sprint mode before full-fledged development is done as also to help the client setup its CoE for AI/ML. This service has been used by 25+ customers so far.



The screenshot displays the Hexaware Decision Sciences Lab service catalogue and expertise areas:

- Data Handling Expertise** (represented by icons for Structured Data, Text, Audio, Image/Video, Streaming, and Machine Data).
- Service Catalogue**:
 - Analytics Center of Excellence**:
 - Platform Evaluation
 - Business Use Case Definition
 - Point Solution Development**
 - Sandbox Management**
- Partnership and Lab**:
 - Microsoft Azure
 - amazon web services
 - Google CloudPlatform
- 100+ Data Scientists**:
 - Get analytics program started with zero upfront investment
 - Gain instant access to best-in-class tools, technologies and experts
 - Accelerate time to market / fail early, first pilot completed in as early as 4 weeks
- Platforms and Tools Expertise** (listing various tools and partners):
 - IBM SPSS, Spark, python*, semantria, Megaputer, nemesysco, OpenCV, DATA SIFT Clarbridge, 3VR, Amazon ML, clarifai, Amazon Watson, masternaut, key technologies, PREDIX, FarSite COMMUNICATIONS

Address data security as core component (after all Data is the real treasure!)

We understand that security is really key and should be addressed at the enterprise level. As you embark your journey towards cloud, following key aspects in terms of data security (assuming that you have clearly defined VNET, Subnets, firewalls, NSG and WAF and other networking components in your secure private VNET) is pivotal to have a smooth cloud transformation

- Leverage cloud native encryption for all SQL DBs, either Transparent Data Encryption or Always Encrypted.
- Implement dynamic data masking solution for all PII fields and use AAD, RBAC controls to administer just in time and granular permissions.
- All SQL/NoSQL/Data lakes require an audit and an end-to-end monitoring solution to detect, govern and take corrective actions to protect data.
- Hexaware recommends a real-time monitoring solution using EventHub, Azure Analytics and Blob storage and access groups for alerts.

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 6 – Business Intelligence and Business Analytics CaseStudies_200605” for Hexaware case studies for each of the areas above and Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 5 – Business Intelligence and Business Analytics Capability_200605” for Hexaware capabilities.

3.7 PoV on Service Category 3 – Current State

Our understanding of current Trustmark Workday state

We understand that Trustmark has recently implemented Workday HCM (Core HR, Benefits, Compensation, Payroll, Time Tracking and LMS) and is in the process of implementing Workday Financials (Core Financials, Expenses, Procurement, Projects, Projects Billing and Adaptive Insights) and Prism Analytics.

Hexaware will provide the following Workday application support services to Trustmark for both Workday HCM and Workday Financials (in future) – ticket and request resolution, reporting and analytics, integrations, mass data loads, tenant management and migration, implementing new Workday release in addition to status and SLA reporting.

Hexaware proposes a two-pronged approach for progressively maturing the level of support resulting in year-on-year benefits for Trustmark.

Standardize or Streamline process

Based on its experience and expertise, Hexaware plans to help Trustmark follow the best practices, resolve common post go-live issues such as (a) access and password reset issues, (b) data upload issues, (c) post tenant refresh issues, (d) security policy issues, (e) integration monitoring, (f) payroll related issues – wrong tax elections, payment elections etc. We will also help Trustmark in optimizing business processes, integrations and reports in Workday HCM and Finance applications. Our consultants will identify areas for Cost savings through process improvements, efforts reduction and automation.

In addition to the above Workday Support services, Hexaware recommends some of the key options that can be considered to streamline the current operations followed by Trustmark:

- **ITSM Standardization** – Hexaware will integrate ServiceNow with Workday to standardize ticketing and SLA process and setup auto remediation of a set of tickets. ServiceNow will be used as the repository of Knowledge artifacts, SOPs in addition to the KADs and KEDB. Trustmark can also leverage Hexaware’s induction kit for new project joiners.
- **Training** – Hexaware can provide training to Trustmark as needed and shall conduct joint sessions to understand features of Workday as also to leverage new features and functionalities from Workday.
- **CoE Setup:** Hexaware’s Workday CoE will provide access to product experts, best practices, methodologies, and innovations to Trustmark, help Trustmark build its Workday CoE, and help better **leverage Workday Community and Workday Learning Center** among other things.
- **Workday Version Updates and new feature adoption:** We will support Trustmark in implementing version updates as detailed in “POV on Service Category 3 - Enhance” section.
- **Workday Best Practices:** Based on our Workday implementation and support experience, we will provide Workday best practices to Trustmark to better leverage Workday HCM application for employees. We will work with Trustmark to adopt intuitive self-service features and Workday innovation services and optimize custom reports and integrations for better performance. For e.g., We can help Trustmark to (1) incorporate Payroll dashboards to view regulatory updates that are delivered by Workday, (2) consolidate payroll frequency to better manage timely payment to employees, (3) adopt self-service transactions related to Payroll such as payment elections, tax elections etc. and (4) help develop Payroll audit reports for reconciliation and compliance, (5) configure alerts and notifications, integration

dashboards to view job failures for Payroll critical integrations, (6) build State W2 Tax forms in Workday, (7) implement IP Whitelisting and Multi-Factor Authentication in Workday, (8) create SCORM compliant Learning courses, define security roles for learners and administrators and structure the courses and topics etc. as per best practices.

Intelligent Automation

As a part of our efforts at continuous improvement through automation and tools deployment, we have built 25+ use cases for automations in Workday strongly believe that we will be able to leverage them for Trustmark Workday landscape:

- Automatic creation of Cost-center in Workday from a case in ITSM tool for a Large Insurance Company.
- Automatic business process configuration in Workday using UIPath
- Automated loading of configurations (for different Workday modules) into Workday tenant, Automation of alerts and notifications on failure of jobs, automatic password reset in Sandbox post refresh.
- Automated regression test cases for Workday updates across HCM and Financial modules

Hexaware has already developed automation tools on Workday platform to speed up data loads, integrations, migrations, tenant management and releases and shall continue to develop more tools in addition to implementing these tools.

3.8 PoV on Service Category 3 – Enhance

Hexaware will enable Trustmark to realize full value from Workday releases by configuring/enabling new features that benefit the business, improve user experience and increase user adoption. Workday releases for new features (released twice a year) will follow the below approach

- Hexaware team will socialize the mandatory and optional features that are delivered as part of the update and carry out a detailed impact analysis. Upon agreement, these features will be enabled for Trustmark.
- Hexaware shall enhance WOTS, Workday test automation accelerator to reflect testing for these features
- Hexaware will help Trustmark in identifying the retired functionalities in Workday and enable to implement an equivalent functionality delivered by Workday or provide a work-around.

For Phase-X rollouts for deploying additional functionalities such as Recruiting, Advance Compensation, Talent and Performance, Financials, Hexaware will work alongside Trustmark following all the steps in Workday methodology right from Discovery Sessions.

Knowing Trustmark's Workday HCM landscape, there are opportunities to implement other Workday functional areas such as Recruiting, Advanced Compensation, Absence Management, Talent and Performance for better employee engagement, user experience and process optimization. With our rich experience in implementing Workday Phase X for different customers, we recommend implementing the above HCM modules in Trustmark Workday landscape in the following order:

- Recruiting – Since, Trustmark has Core HR, implementing Recruiting would be an immediate value addition. It would enable tracking recruiting and staffing in a unified application to provide better candidate and recruiter experience.
- Absence Management – As time tracking is already present in the landscape, we recommend that Absence Management be implemented as it would give Trustmark the ability to track time-offs and leaves
- Talent and Performance, Advanced Compensation – We recommend implementing them together to enable employee review ratings to flow into Advance Compensation to calculate bonus pay-outs which can flow into payroll.
- Here are some challenges that are likely to be faced and possible solutions during implementation.

Module	Challenges	Possible Solution
Recruiting	Integration with job boards and background verification vendors	Better planning and coordination with external vendors
Absence Management	Regulatory compliance for absences	Build complex calculated fields for absence calculation
Talent and Performance	Performance Calibration, creating customer specific performance letter layouts	Change Management initiative for managers to perform calibration process, Standardize performance review
Advanced Compensation	Leadership bonus calculation	Build integration and reports to calculate bonus percentage appropriately

We will also support Trustmark in **Workday Financials implementation** by helping build integrations by leveraging our integration factory and providing functional expertise in modules such as Procurement, Expenses, Supplier Contracts, Customer contracts, Projects etc.

Modules	How we can help?
Core Financials	Configure Accounting Structure, Journals, Ledgers, financial reporting and analytics.

Expenses	Configure expense items, credit card setup, travel booking setup, expense rates.
Procurement	Configure requisitions, purchase orders, procurement cards. Build integrations and reports
Projects	Configure Resource Management, Project Management, Project Tracking, Metrics, Reports and build integrations
Projects Billing	Configure pricing and billing, revenue recognition, billing reports and build integrations
Supplier Contracts	Configure suppliers, invoices and payables. Build integrations and custom reports
Customer Contracts	Configure customers, receivables, payments, refunds. Build integrations and custom reports
Business Assets	Configure asset tracking and maintenance, depreciation and accounting. Build custom reports

Employee Experience

- **Self-service and Innovation Features** – Hexaware will help Trustmark in providing personalized user experience by enabling them to adopt self-service features in Workday as a part of People Experience and give them consumer-like experience at work.
 - **Workday Assistant** (Chatbot) will enhance the employee experience for self-service transactions. Hexaware has implemented our own Chatbot on Teams called COCO and would be happy to showcase and build a similar solution for Trustmark
 - **Workday Talent marketplace** will provide users with suggestion on open jobs matching to their skill-set.
- Touchless Employee Experience – Workday has come up with new solutions in the wake of Covid-19 scenario with respect to digital experience for users. We will enable Trustmark in identifying appropriate solutions that provide an enhanced touchless experience to its employees –
 - Digital Reference Letters for employees and Mass letter distribution
 - Moving instructor led classroom training to Webinars
 - Work from home – Engaging Employees
 - Push notifications to employees to update their contact information and emergency contact information
 - Trigger Benefit events to workers placed on leave
 - Tracking essential services worker
 - Payroll - Calculate Employee Retention credit
 - Payroll - Stop deductions during Social Distancing period

3.9 PoV on Service Category 3 – 3.1 Future TBP Architecture

We have extensive experience in building Workday integrations with Benefit service providers and have Workday certified CCB consultants. At Hexaware, we have built 3000+ integrations and connectors for Workday of which 200+ are benefit package connectors across providers and different products for multiple customers. **We strongly believe that this repository could be leveraged for Trustmark.** We have expertise in working on many complex connector integrations across Benefits, Retirement savings Contribution, Loan & Deferral, Defined Contributions, Stock grant & COBRA Initial Rights & Qualifying Events Integrations to name a few. We have also developed integrations with providers such as E-Verify, DocuSign, Skillsoft, Salesforce.com, ADP, Broadbean, etc. Specified below are some of the relevant connectors that we have built: -

Integrations	Tools Used	Third Party System
Employee Data	Core connector, EIB, Studio Integrations	Tress, SFDC, PS EPM, PeopleSoft, SAP
Recruiting	Core Connector, Studio Integrations	PeopleFluent, Taleo, SuccessFactors, Broadbean, Job Boards
Learning Management	Studio Integrations	SABA, Cornerstone
Payroll	Cloud Connect, PICOF, EIB, Studio Integrations	ADP, NGA, Talent2, OBIC (Countries - UK, Italy, Germany, Japan, Australia, Malaysia etc.), Vanguard
Benefits	Studio Integrations, Cloud connect for Benefits, Core Connectors	Open enrollment statements, Aetna, Cigna, Fidelity, Allstate, MetLife, Stonebridge
Financials	Core connector, EIB, Studio Integrations	Prologic, ACH, Bill.com, Bank of Montreal, Lockbox, Webster
Expenses	Core connector, EIB	Concur, AmTrav, Credit card – JPM, BOA
Authentication	Studio Integrations	Active Directory, IDM
Ticketing Tools	Core connector, Studio Integrations	SFDC, ServiceNow

We propose to leverage Workday web-services/APIs to build a **benefit connector** between Workday HCM and TBP providing tremendous flexibility, Workday Connectors are known for. Hexaware will work with Trustmark in gathering requirements, finalizing templates, setting up file transfer methods etc. to build integrations (inbound / outbound). We will perform multiple cycles of integration testing such as Transport Testing, Layout and Initial Data Testing and Scenario Testing to confirm the working of benefit connector between TBP and Workday.

Customers	Integrations Delivered	Vendor Names
Fortune 100 Insurance Company	Over 1500 integrations across 80+ countries were built using Core Connectors, EIBs, PICOF and Studio	UNUM, UBS, Mercer, Bswift, HMRC, TALX, Concur, Master Tax etc.,
Leading Outsourcing Company	Over 200 integrations were built using Core Connectors for Benefits, EIBs, PICOF and Studio	Cigna, Allstate, MetLife, Stonebridge, Fidelity
Leading Healthcare Data Provider	Over 250+ integrations using Core Connectors, Studio, EIB	ADP, Ceridian, Fidelity, Kronos, FieldGlass

Please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 7 – Workday Capability_200605”.

3.10 Security and Risk Management

Public Cloud providers provide for the physical and environmental security of the underlying infrastructure, network, platforms and services they offer. Hexaware Cloud security starts where the Cloud provider's in-built features stop. Hexaware looks at security from the standpoint of five key objectives Security, Privacy, Agility, Resilience, and Governance. While forward thinking security posture is vital, addressing compliance is a necessity and to ensure all our processes are compliant to security requirements applicable to Trustmark. We ensure that we map security controls from regulatory requirements and align them to the above objectives. To achieve this, we identify controls from regulatory requirements such as ISO27001, PCI DSS, SOX, SOC2, HIPAA, GDPR, CCPA among others and the objectives listed above and map them to the NIST Cybersecurity Framework v1.1 (CSF).

An organization needs to continually assess and manage the risks associated with its setup. Hexaware provides complete Governance, Risk and Compliance (GRC) and Security management services to manage the overall security governance and compliance.

For further details on Security and Risk Management, please refer to Annexure “Hexaware Trustmark Benefits Platform RFP – Annexure 8 – Hexaware Security and Risk Management _200605”.

4. ADDITIONAL PROCESSES AND METHODS

4.1 Continuous Improvement Process

We commit ourselves to objective and measurable continuous improvement of software engineering processes through the following strategies. The first step is to agree on measures of improvement. There are 2 dimensions of effectiveness. The first is building software in the most efficient and effective process possible. The second is to ensure that the work delivered meets the needs of the business.

The challenge that we envisage in this engagement is that there will be disparate data sources wherein the Production Support Tickets may be tracked in ServiceNow and the Development metrics will be tracked in Azure Boards / Jira Align and there will be certain qualitative SLAs that may be tracked by the Account Management outside these systems.

To comprehend this scenario and ensure all stakeholders have a single view, we will implement our accelerator 'HexaView' and it will serve as the Enterprise-wide Service Management Dashboard for this engagement.

HexaView can be accessed through a browser and provides drill-down capabilities to allow stakeholders (with appropriate access) to delve into the last level of detail on near real-time information. We will endeavor to report the various service levels asked off us in Attachment 3-A Service Level Matrix.xlsx through HexaView.

During the due-diligence phase of this engagement, we will work with Trustmark IT stakeholders to finalize the measurement & reporting needs of this engagement and put together an implementation plan to derive them from HexaView.

For more details on HexaView dashboard, please refer to Annexure "Hexaware Trustmark Benefits Platform RFP – Annexure 9 – HexaView _200605".

To ensure continuous improvement on the projects, Hexaware has a bottoms-up innovation initiative called BrainBox through which it encourages customer value adds resulting in process improvements and/or cost optimizations for our customers.

Innovation and Crowd Sourcing (BrainBox)

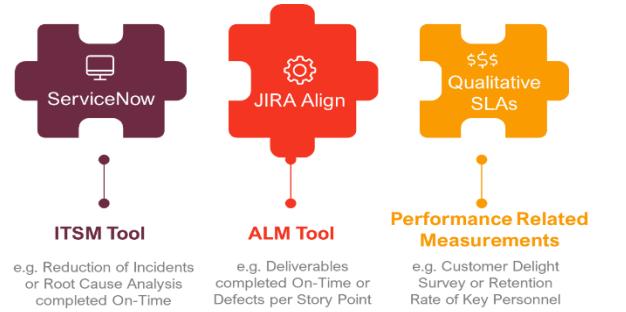
With strong focus towards Innovation – we promote innovations at grassroot level to identify areas of Innovation which will be transformed into ideas and executed. We commit to invest about 3-5% of our annual revenue from Trustmark towards multiple innovation and POC initiatives.

1. Bottom-up Innovation
 - a. Bottom up innovation ideas captured at enterprise level to leverage crowdsourcing for innovation.
 - b. Drive account level innovation through grass root level idea generation.
 - c. KPIs for account teams and leadership linked to CVA Outcomes measured in \$ terms.
2. Invest in Co-Innovation Lab
3. Setup Co-Innovation labs for Joint research projects, solution conceptualization, evaluate & build POC and collaborate on delivering value to customer to improve agility

4.2 Build-up and Preservation of Know-how in the Team

Hexaware proposes following ways in which knowledge is built and preserved in the team:

- Anyone joining Hexaware's Trustmark team is expected to work on the engagement for a period of 24 months at least
- Form a knowledge repository of the knowledge gained – Hexaware already has in place the Trustmark Learning Academy (TLA) which is the "knowledge holder" through which all newcomers are inducted into the team. This will



be extended to the applications developed in DX stack. TLA is accessible only to consultants working on Trustmark projects

- Encourage Hexaware consultants to learn and get certified on new age methodologies like SAFe Agilist and technologies like Kafka, IIB, Angular etc....to convert them to full stack developers. Since they already enjoy deep knowledge of Trustmark ecosystem, their ability to start on new work will be much faster
- Create back-up for key personnel to preserve the knowledge

Trustmark Learning Academy

It's an end to end knowledge management system built specifically for Trustmark.

- It has content specific to - a) Domain – Life and Health insurance – made Trustmark specific, b) Technical documentation - design diagrams, functional diagrams, write-ups videos, recorded WebEx sessions of sessions taken by Trustmark or senior Hexaware consultants on applications, c) Information Security Awareness, d) Process & Tools
- Some of the Mandatory training include awareness of Information Security and HIPPA process.
- As a part of Account On-boarding, each consultant must go over the Induction material (Documents / PPT / WebEx Recordings) available in TLA
- The TLA also contains assessment tests for inductees – these are updated once a year to make them more relevant
- Mentorship - Each incoming consultant is mapped to a mentor for any technical and functional support and mentoring

5. GOVERNANCE AND TOOLS

5.1 Sub-providers and third-party vendors

Hexaware has not planned to involve or sub-contract work to any third-party / vendors while execution of described services. However, Hexaware may bring independent contract consultants for specific project needs. The compliance requirements for independent contract consultants would be same as our employees.

In the event Hexaware engages with sub-contractors to deliver some portion of the services; Hexaware will do so in mutual agreement with Trustmark. Hexaware will continue to own responsibility of maintaining project / deliverable quality, cost and schedule. Hexaware will remain to be the single point of contact and will have complete accountability for all the services.

- Hexaware will remain to be the single point of contact and will have complete accountability for all the described services
- Hexaware maintains authorized list of vendors. In case an independent contract consultant is deployed; consultant will be from authorized vendor only
- Subcontractors will be made aware of all the requirements (e.g., quality, timeliness, compliance, complaint handling)
- Monitor / oversight sub-contractor performance. Key performance indicators are established to determine an activity to be 100% complete and ready for the next activity to begin. KPI defined are in-line with Trustmark SLAs and delivery expectations
- Sub-contractor resources will go thru onboarding process like Hexaware employees
- Hexaware will receive / review copy of subcontractor progress, post-inspection reports, accreditation, etc.

5.2 Implementation of Service Management and Governance

- Governance model proposed by Hexaware, aims to provide transparency and predictability of performance and ensure that organizational strategies are aligned.
- Hexaware has proposed HexaView as service dashboard tool. HexaView will report SLAs, Metrics and KPIs related to production support, new development and operational aspects related to Hexaware engagement. We will report all SLAs and KPIs given in Appendix 3A – Service Level Matrix
- Refer to “Hexaware Trustmark Benefits Platform RFP – Annexure 9 – HexaView _200605” for details in HexaView

Hexaware proposes the below multi-level governance and the interactions between Trustmark and Hexaware delivery teams at the various levels. Model ensures that communication flows both vertically as well as horizontally.





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thank you

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