

HEXAWARE

TIBCO BW to Java Springboot



Introduction

Top of mind for customers using TIBCO

- Complex, inflexible architectures with **87% of executives** citing outdated systems & **technical debt** as major barriers
- Customers feel trapped by **vendor lock-in**, facing up to **4x higher costs** and limited flexibility
- Rising operational & support fees, with **94% of IT leaders** struggling with **hidden middleware costs**
- TIBCO systems hinder cloud adoption, with **72% of enterprises** citing **lack of automation** as a top barrier

TIBCO market insights in 2026

Gartner

Peer Insights – Platform Reviews

Tibco scores **lower on Integration flow monitoring and management**

FORRESTER

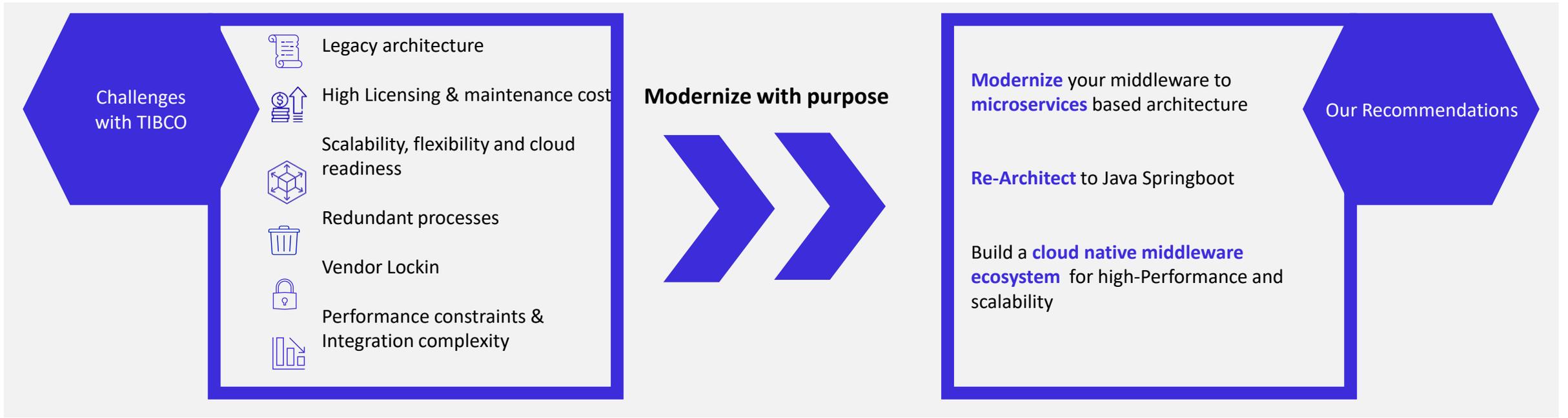
The Forrester Wave

Growing preference for **open-source and cloud-native integration** platforms, impacting traditional players

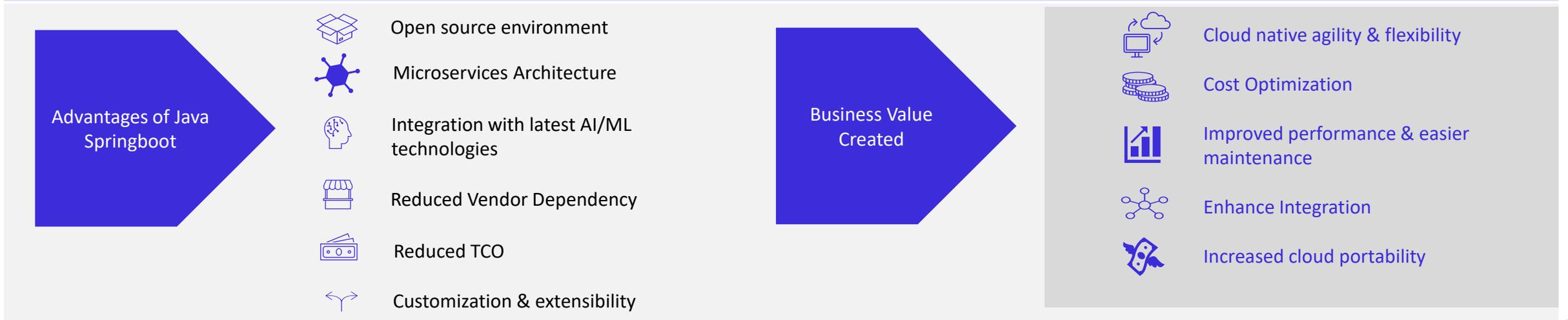
Gartner

Peer Insights – Platform Reviews

- **1.9%** difference in **breadth of services** from market average



Why Moving from TIBCO to Java Springboot is a Smart Business Strategy?



Our Goals

By migrating critical TIBCO-managed processes to Java Spring Boot microservices, clients **will eliminate licensing costs and cut down operational costs by reducing operational downtime by 40% and accelerating feature deployment cycles by 50%**. This transition also promises faster business responsiveness, scalability with cloud-native agility, and empowers teams with modern tooling to drive continuous innovation

Values Created

Fully modernized, cloud-native application landscape with scalable Java Spring Boot

Eliminating TIBCO licensing and lowering infrastructure expenses

Resilient, fault-tolerant microservices

Flexible, modular platform that supports faster feature releases and seamless integration

Containerized deployment and orchestration on cloud platforms.

Key Solution Highlights

Amaze® Led 70% Automated approach to achieve results at scale using standardized methods, reusable patterns, and AI powered automation.

Business Continuity & reliability
Containerized microservices reduces operational downtime by 40%, reducing downtime-related revenue loss

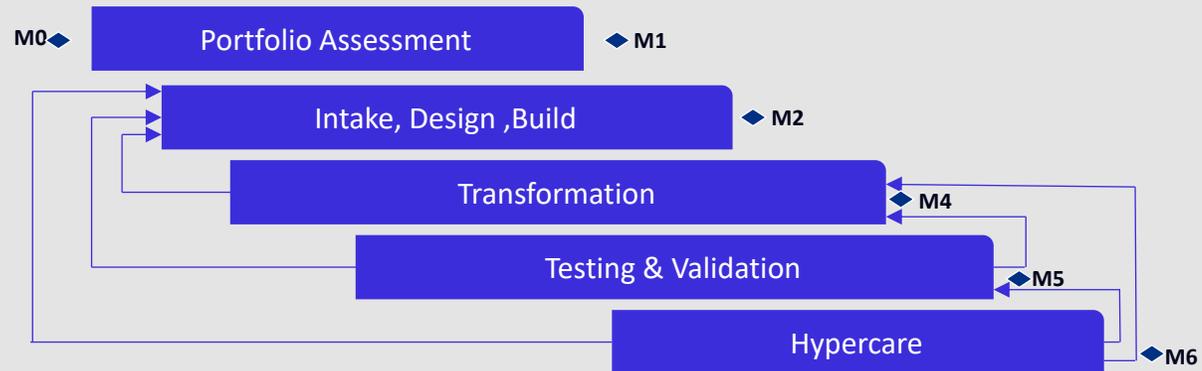
Scalable Architecture for Future Growth
adapt to market changes without expensive re-architecture or system downtime

Improved Developer Productivity
Standardized, modern tech stack & reusable code frameworks reduce development effort by 30%

Business Outcomes
50% reduction TCO, and 50% faster feature deployment cycles

The transformational Journey with Hexaware

Powered by **amaze®**



An Introduction to **amaze**® Assessment & Transformation Platform

Our patented, home-grown purpose-built accelerator solution that helps in tech debt elimination

For Infrastructure

For Application

For Middleware

For Data

TECHNOLOGY WE HELP MODERNIZE

← ASSESSMENT →

← TRANSFORMATION →

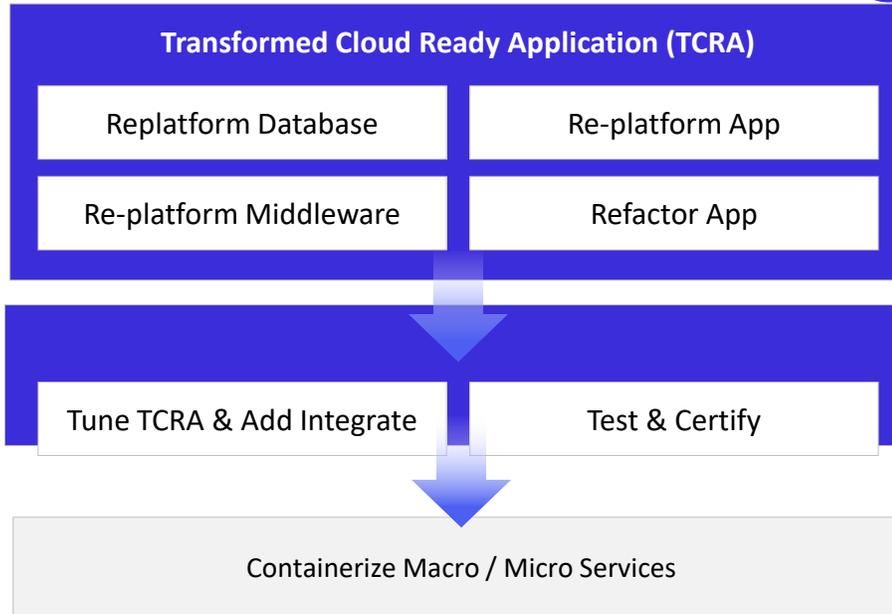


- Transformation Readiness
- Transformation Type
- Transformation Complexity
- Transformation Effort

App / DB Transformation

AUTOMATION

70%



90%

Reduction in SME time

<1 Week

To Target State Architecture

60%

Cost & Effort Savings

10x

Increase in Success Rate

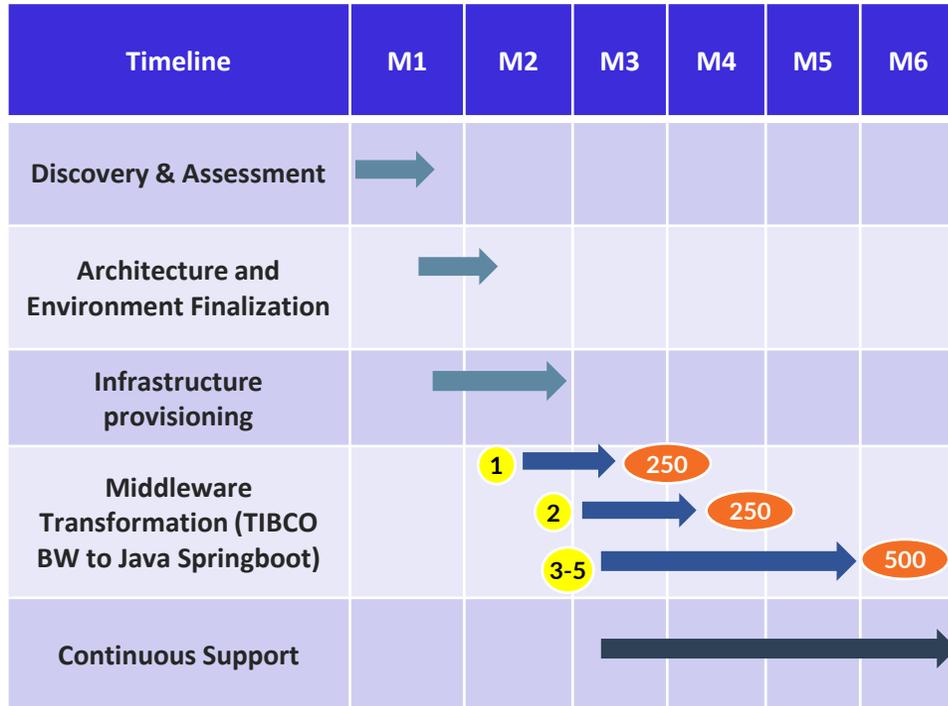
Business Benefits

- Zero Impact to Business Functionality
- Decomposition of Monolith resulting in improved **business agility and faster enhancement releases**
- Technology stack upgrade for Java & .NET resulting in **license remediation & technical debt remediation and reduced TCO**
- Database re-platforming from SQLServer, DB2, Sybase and Oracle to opensource PostgreSQL as part of **Remediation of license cost and divert the cost to business enhancements**

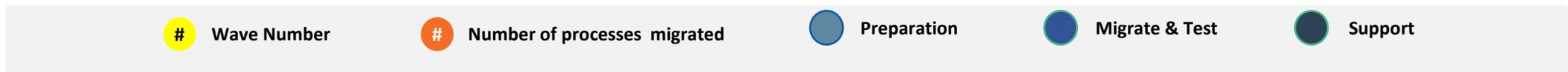
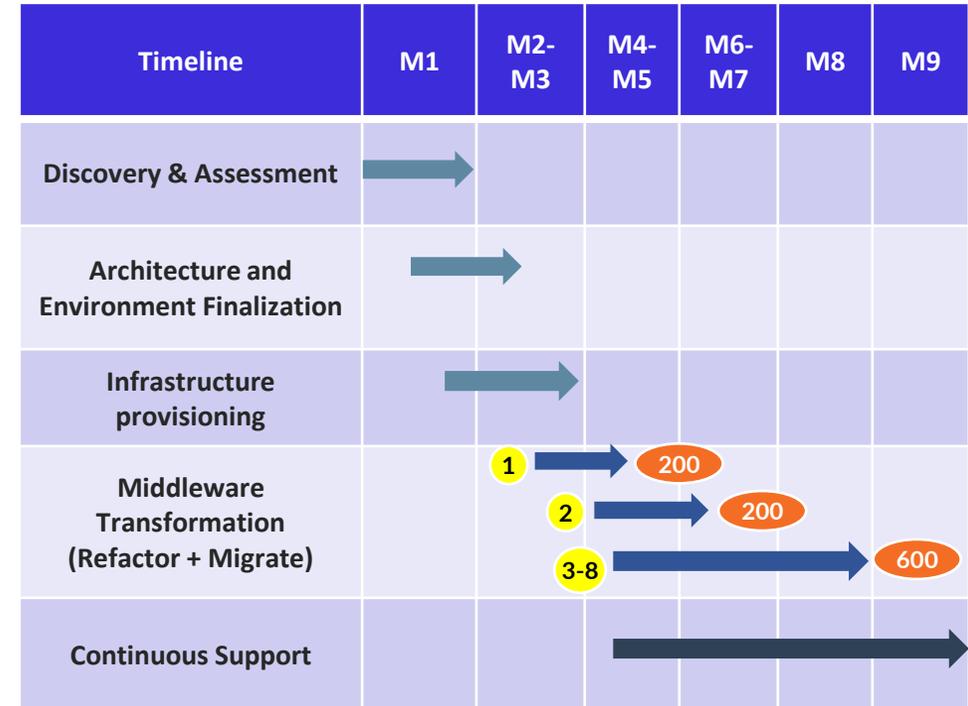


<p>Activities</p>	<ul style="list-style-type: none"> • Understand process model • Execute Assessment • Assessment report, target state architecture, security patterns, application dependency • Review & finalize approach 	<ul style="list-style-type: none"> • service mapping & process optimization • Detailed security architecture • delivery plan and scope based on changes identified 	<ul style="list-style-type: none"> • AMAZE Transformation • Micro service creation • Environment setup & requests • Critical test case execution • process into application integration 	<ul style="list-style-type: none"> • SIT, UAT & PERF test execution • Bug fixes • Deployment support • Production readiness
<p>Deliverables</p>	<ul style="list-style-type: none"> • High level current & future state architecture • Future state process flow • Detailed SOW document 	<ul style="list-style-type: none"> • Process to Microservice mapping • Finalized future state architecture diagram • SOW update if needed 	<ul style="list-style-type: none"> • Transformed source code • Integrated pipeline with functional test cases for generated API 	<ul style="list-style-type: none"> • Detailed Knowledge transition document including • Known issues & resolution log

Replatforming to Springboot



Refactoring with Springboot Integration



- Hexaware has assumed 1000 processes to derive the above wave groupings and Project Plan.

Execution Models	Refactoring with Springboot Integration	Replatforming to Springboot
Description	Transforming and redesigning the business logic by leveraging Spring Integration frameworks during migration	Reusing the existing business logic as-is from TIBCO BW
Pros	<ul style="list-style-type: none"> • optimized architecture • Improved scalability & performance • Introduce best practices • Easily integrated with modern technologies 	<ul style="list-style-type: none"> • Faster migration • Lower upfront cost and resource requirements • Less disruption to existing business
Cons	<ul style="list-style-type: none"> • Longer migration timelines • Higher initial development cost • Deep understanding of both source and target platforms • Potential risk due to complexity 	<ul style="list-style-type: none"> • Legacy inefficiencies remain unaddressed • Limited flexibility for advanced Spring Boot features • Potentially less optimized performance • May require follow-up modernization
Applicability	<ul style="list-style-type: none"> • Business logic is outdated • Benefits of microservices and event-driven architecture • Long-term scalability 	<ul style="list-style-type: none"> • Business logic is stable • Quick migration is a priority • Limited budget or resources • risk minimization and continuity

Why choose Hexaware?

Upto 70% automation with **Amaze**[®]

Amaze[®] integration with leading DevOps & CI/CD

Proven case studies in both regulated and non-regulated industries

Our expertise ensures compliance, security, and innovation tailored to your industry needs.

Dedicated **Centers of Excellence** for various hyperscalers

Accelerated cloud adoption and maximum value from hyperscaler investments.

Hybrid Skillsets Across Middleware & Microservices

End-to-End TIBCO & Java Spring Boot Mastery

Approx. **1000** TIBCO experts

11000+ certified cloud consultants

hands-on experience to design, implement, and support robust integration and automation solutions

500+ transformations executed

1400+ microservices generated

scalability, flexibility, and faster time-to-market

Cost Category	Using TIBCO (Annual)	Using Java Spring Boot (Annual)
Operational Cost	High licensing fees (~\$150,000+)	Minimal licensing (open-source)
Maintenance Cost	15-20% of licensing fees (~22,500–30,000)	Lower maintenance (~10000–15,000)
Support Cost	Vendor support fees (~10-15% of license) ~15,000	Internal or third-party support (~8000–12,000)
Transformation Cost	N/A (no transformation)	One-time cost: approx. \$144,000
Infrastructure Cost	Moderate to High (proprietary hardware/software)	Flexible cloud/on-prem infrastructure, potentially lower cost
Total Estimated Annual Cost(approx.)	\$187,500+	18,000–27,000 + transformation cost

Highlights

- For 40 processes, the transformation cost = \$144000
- Total cost for year1 – \$162000- \$171000(lesser than the total spend with TIBCO)
- From year 2 onwards: cost to company = \$18000- \$27000
- Cost savings for year 2 = \$169500- - \$160500(i.e , Full cost of transformation would be recovered within 1 year) based on cost savings
- ROI in the first year is (~13%) as transformation cost is fully accounted.
- After the year1 , the investment is recovered, and from year two, the organization benefits from substantial cost savings, which will significantly increase ROI over time

Helping a Leading US Mortgage Firm to Cloud Modernize TIBCO Business Works App with 50% Lesser Implementation Costs

Business Problem:

The client was looking to leverage a cloud native platform to make its business more agile, resilient, and customer-focused. The project was all about hitting the database, getting the related data, and writing into a file.

- The primary bottleneck was a legacy application developed 12 years ago on TIBCO Business works 5.0
- This business-critical application integrated many upstream and downstream applications
- The customer wanted to reduce the footprint of TIBCO and move to an open-source solution
- Cloud migration of the application as a lightweight cloud native application was needed for high performance

Solution:

Hexaware solution proposed was amaze®, a proprietary automated application replatforming product suite for cloud mass migration. Amaze® is designed primarily for Java, .NET, and TIBCO BW applications. An initial assessment was performed to understand the associated risks, cost, timeline, and inter-dependencies, and define the best-fit application modernization strategy. The automation-led holistic approach involved the following well-defined methodology

Application Inventory: 2 main processes, 32 subprocesses, and 181 activities involved

- The TIBCO Businessworks application replatformed as Java cloud native application, TIBCO BW processes replatformed as Java microservices with REST endpoints
- Transformed the existing TIBCO BW processes to reusable Spring Boot microservices
- The process now started by using JMS inbound and ended by sending message to JMS outbound to trigger other application flows
- The events replatformed to Spring Boot events, connectors replatformed to Spring Boot integration adapters, schemas and the related mappers replatformed to XML objects and mappers
- All the business processes along with their sub-processes refactored as independent macro applications with all the dependencies
- The service REST API endpoints secured with OAuth 2.0
- An automated testing generated for all the macro services
- Containerization scripts and CI/CD pipeline generated for each macro service
- Fully deployed in the cloud

50%

Reduction in TCO

50%

Faster migration

40%

Less implementation costs due to automation



You are Modernizing with Hexaware

Supercharge with Amaze

Activate Amaze automation within your environment to fast-track your transformation

Next Steps



Client

1. Shout out for discovery workshop
2. Access to TIBCO environment

Hexaware

1. Assessment of Tibco processes
2. Assessment Report
3. Migration POC for 10 processes
4. Roadmap for complete migration

Contact [Hexaware](#) for a personalized consultation and roadmap to your cloud-native future.

Email :
Website
Ph:

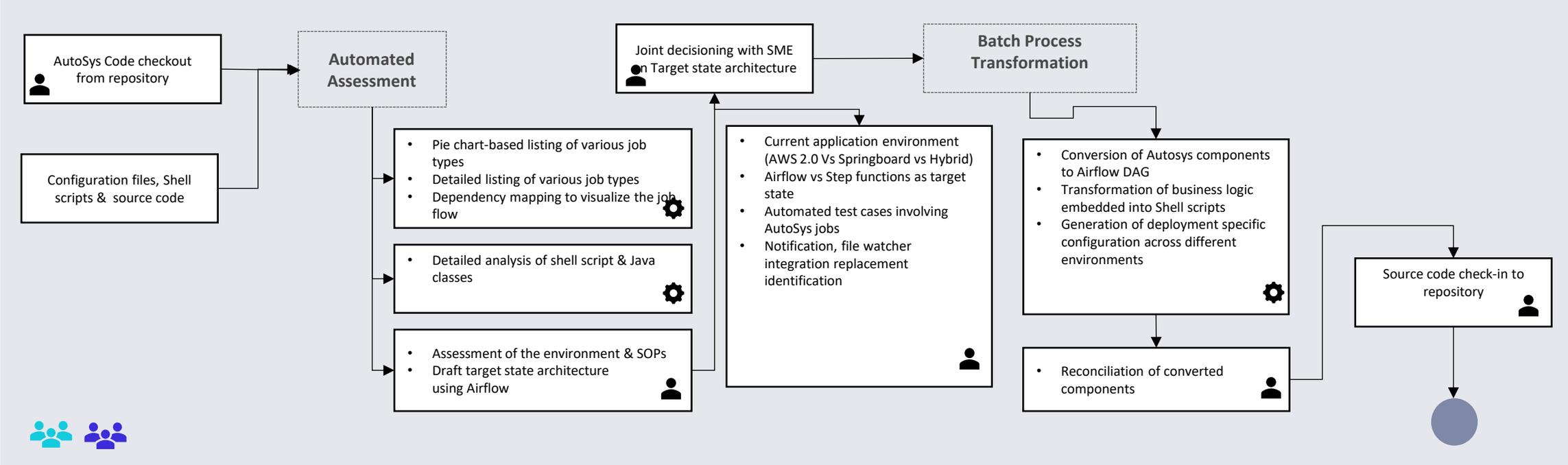




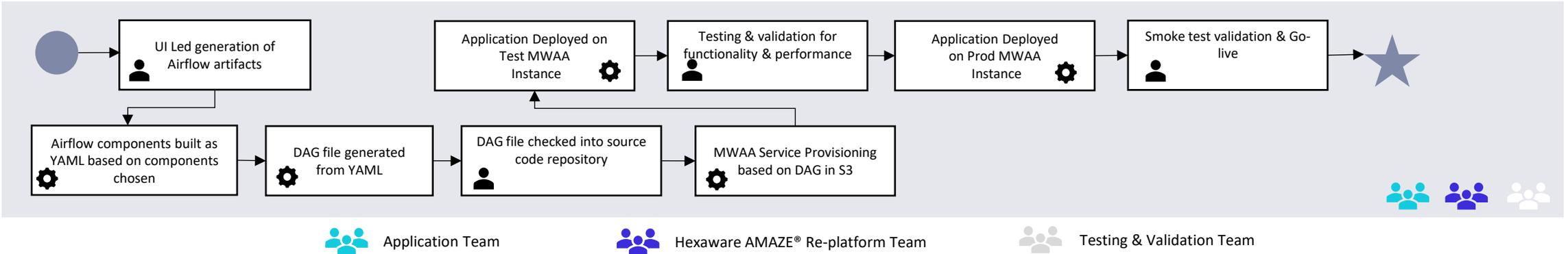
Technical Workflow

AutoSys Assessment & Transformation Process Flow using AMAZE®

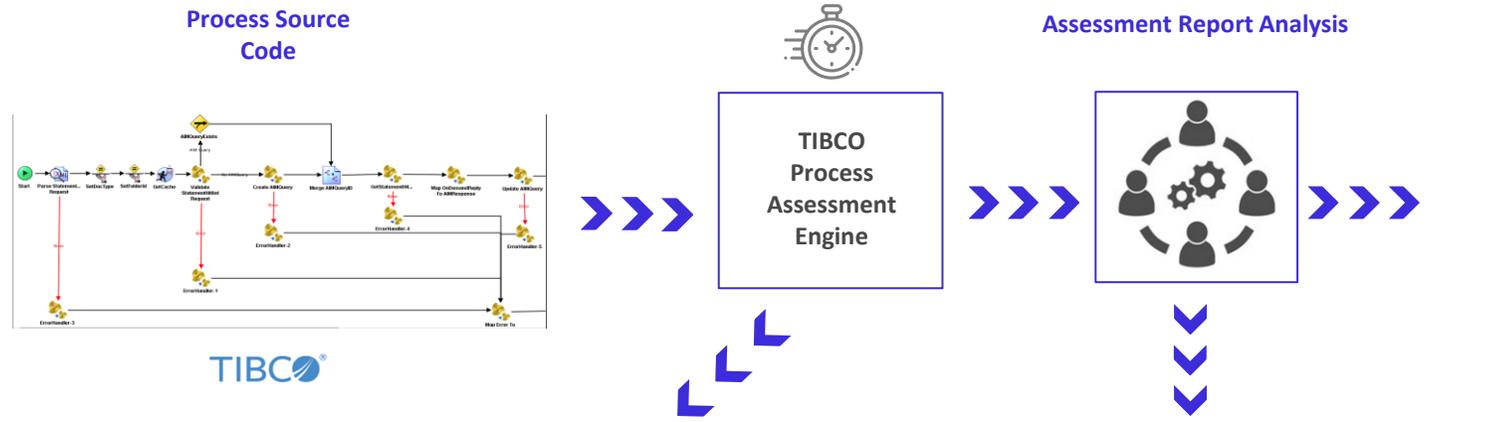
App Modernization Process



Airflow Application Onboarding



Automated Assessment of TIBCO BW Processes



Automate Customer specific changes in the assessment report

- Unused XML attributes within all the process/activities
- Business logic, Report link with Tibco business logic (XSLT) for each process/activity to help business understand & finalize the target state logic
- Total occurrences the Tibco processes/activity referred, to identify the common component & pattern used within the service

Process mining, match identification, Connector mining

Detailed process mapping for all parent & sub-processes

Detailed process & sub-process analysis including input/output identification and business logic mining

Identifying dependencies between processes

Database Queries linking process details

Independent and Unused Process Details

TIBCO Activities & TIBCO Libraries

Assessment Report

Cloud Transformation Readiness Assessment

- Application Snapshot with detailed insights into the existing application architecture

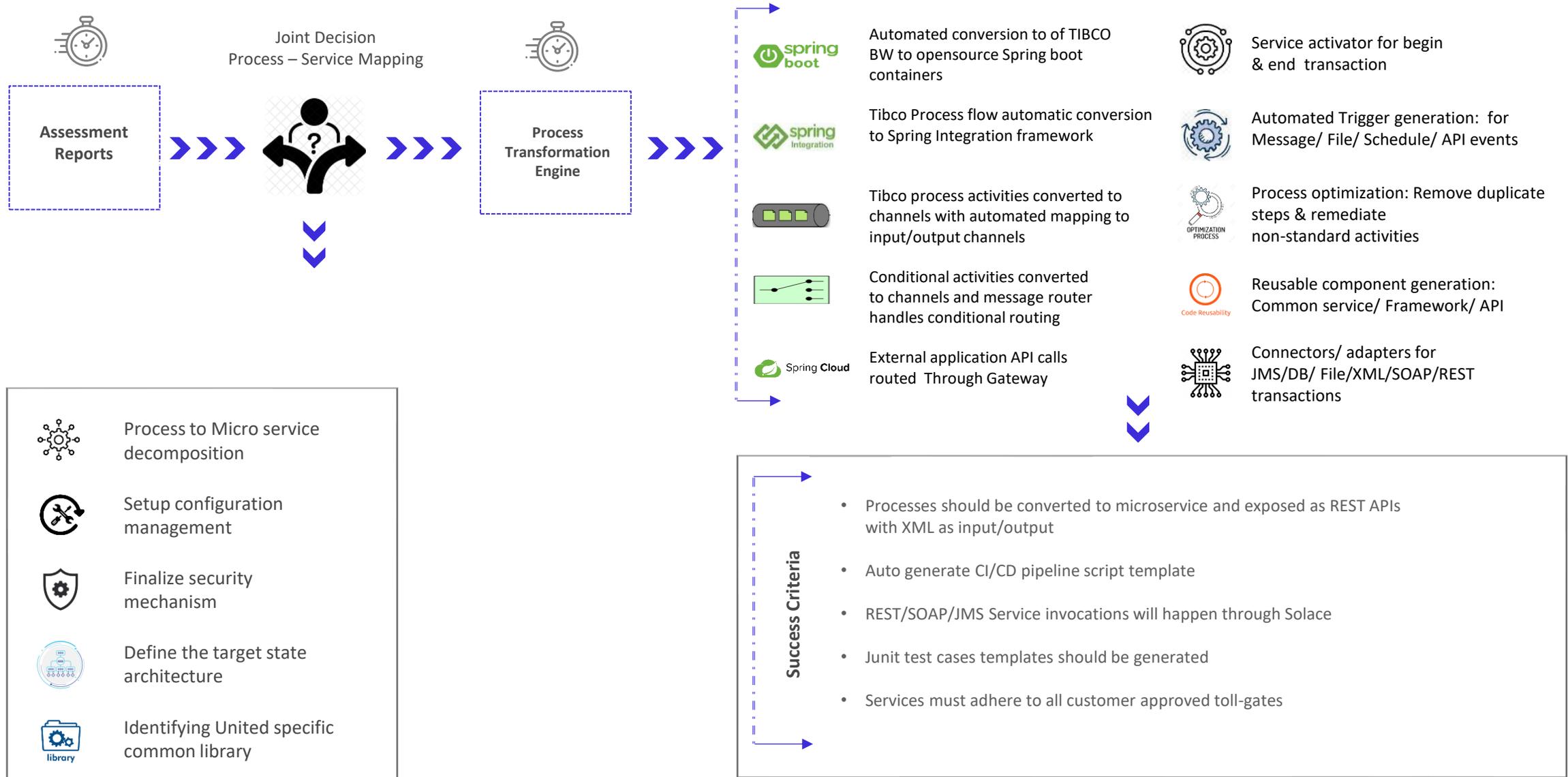
Application Category Report

- Application Complexity with parameters
- Automation Level

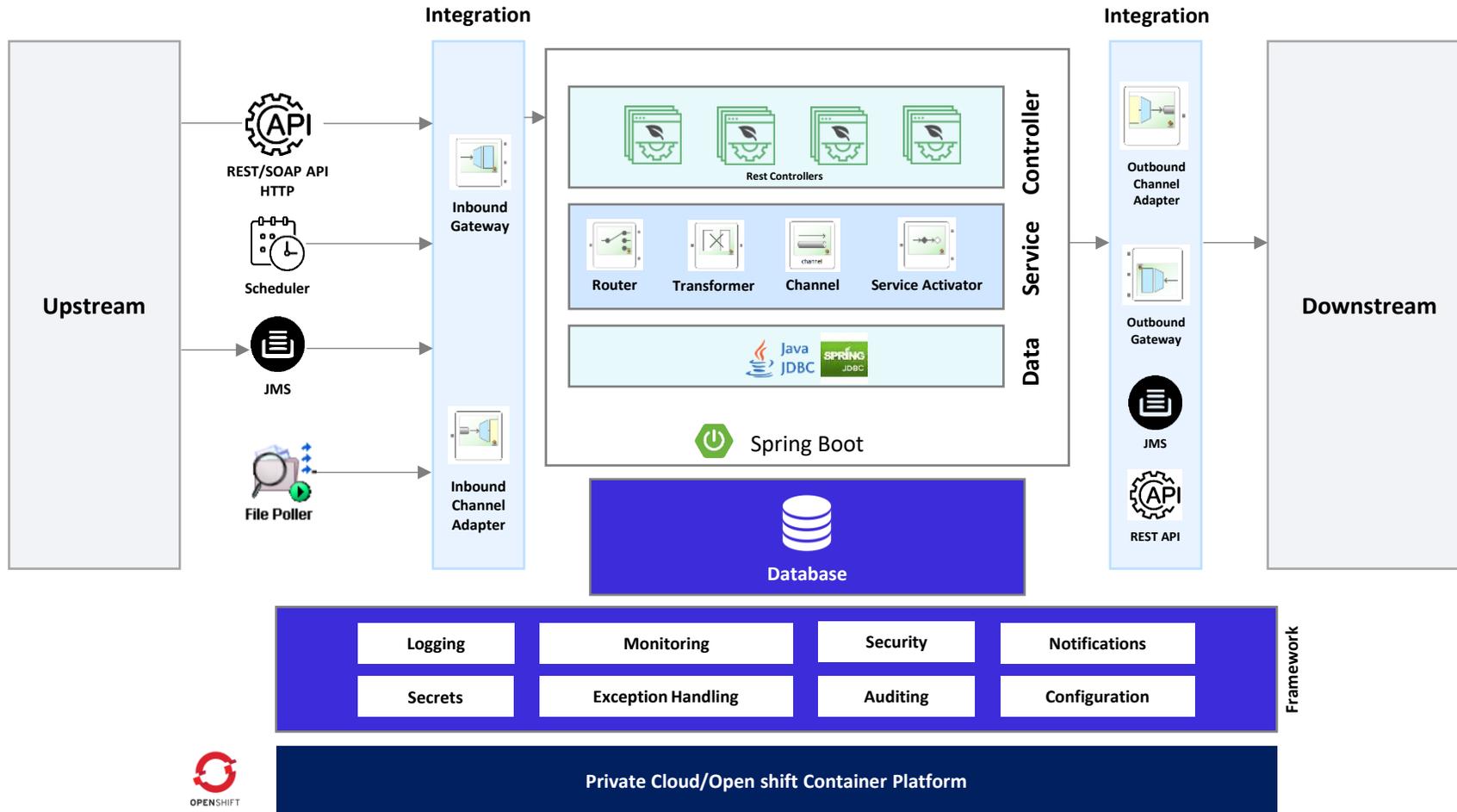
Success Criteria

- Faster Turnaround Time:**
 - 95% faster understanding of the TIBCO process from the Assessment Report

Automated Transformation of TIBCO BW Processes to Springboot Microservices



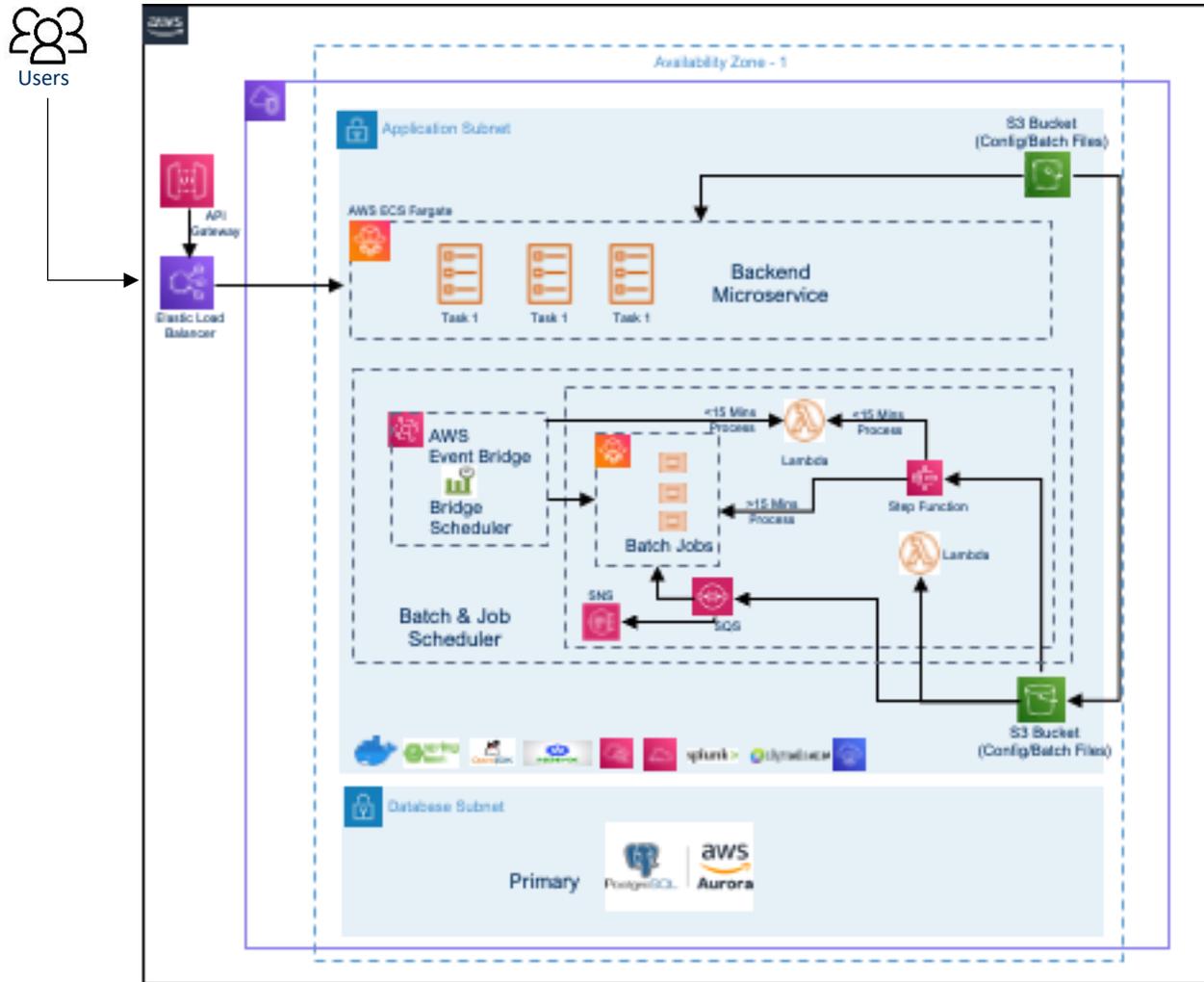
AMAZE® led Transformation Architecture



- **Router:** Based on condition forward the request to specific channel
- **Transformer:** Convert one form of XML/JSON message to another XML/JSON. Xml transformation happens using XSLT and for JSON using Spring JsonConvertors.
- **Channel:** Bridge/Pipe/Connector between two process.
- **Service Activator:** Holds all business operations and transactions. Runs in both Sync and Async mode
- **Inbound Gateway:** Entry point for the system. All input communication starts from here
- **Inbound Channel Adapter:** Implementation of Inbound Gateway. Each input type(FTP, MQ, Feed, Http, JDBC, Mail etc) has its custom adaptor.
- **Outbound Gateway:** Exit point/External communication for the system. All communication to external system happens from this process.
- **Outbound Channel Adapter:** Implementation of Outbound Gateway. As like Inbound Channel Adapter, it has equivalent output types



An Architecture View of the Modernized Application on AWS with TIBCO BW Process



Future State Description

- The current high-level architecture depicts the application in one availability zone.
- The backend application will be decoupled from the monolithic application and will be deployed on AWS Fargate as an ECS task
- The UI Angular based application will be deployed on S3 buckets and will invoke the REST API methods for the transformed backend application
- **Job Conversion:**
 1. Each Autosys job is mapped to a corresponding **Lambda function** or an AWS service (e.g., Batch, ECS task).
 2. Dependencies between jobs are represented as states in the **Step Functions state machine**.
- **Orchestration with Step Functions:**
 1. Step Functions manage the sequence of job execution, handling retries, parallelism, and error handling.
 2. Complex workflows are modeled using state types like **Task**, **Choice**, **Parallel**, and **Wait**.
- Configuration files for the Spring Boot application will be hosted in the S3 bucket
- **S3 Event Notifications** used to handle lightweight file processing tasks
- Replace MQ/EMS to SQS/SNS for TIBCO message processing in target state Spring Boot Application deployed in ECS
- **Amazon CloudWatch** integrated with **Splunk** will be utilized for comprehensive monitoring, logging, and observability of the application and infrastructure.
- **Amazon API Gateway** to enhance security by acting as a front layer for the backend services

Complexity Matrix For Identifying Change Timeline

The Below Complexity Matrix provides guidance to identify effort based on complexity of business process.

Complexity Parameter	Object Type	Weightage	Simple	Medium	Complex
Business Services	No of Child Processes	10%	<= 10	11 – 25	>25
	No of Activities	35%	<= 100	101– 250	>250
Integration Services	No. of DB	5%	<= 5	6 – 10	>10
	No. of JMS	10%			
	No. of SOAP API	5%			
	No. of REST API	5%			
Technical Components	No. of Java Library Calls/ Java Class	5%	1-3	4-5	>5
	No. of Tibco Functions in XSLT	10%	1-5	6-10	>10
	XSL LOC	15%	1-2	3-5	>5
Development Duration in Weeks*			2	3	4
SIT Duration in Weeks*			2	3	3

** Duration is based economies of scale (on at least 50 business processes).



Success Stories & Delivery Track Record

Unlocking the Value of Cloud Migration with Automated Replatforming for a Leading Financial Firm

Business Problem:

- A complex Java web application developed 12 years ago on WebLogic (App Server and WebLogic MQ)
- The business-critical application controlled key financial processes; was built using Session EJB, Entity Bean, Struts, JSP, etc.
- Unavailability of the key SMEs who developed this application

Solution:

- Hexaware proposed amaze®, a proprietary and automated application replatforming solution for mass cloud migration, primarily designed for Java and .Net applications.
- The application broken into web front end and service back end
- The back end EJBs (Session Beans) re-platformed to independent Spring Boot Service Apps with REST endpoints
- The web front and each service app then deployed on Tomcat in separate containers on Kubernetes
- The service REST API endpoints secured with OAuth 2.0
- Automated testing done for all macro services
- Containerization scripts and CI/CD pipeline generated for each macro service and web front

50%

Reduction in TCO

50%

Faster time-to-market, migrated to production in 6 weeks which would have otherwise taken 9 months

50-70%

Reduction in manual effort due to automation



Helping Large US Bank with Modernization & Remediation of TIBCO business process to opensource Spring Framework



Customer Profile

A leading Fortune 500 Banking firm in North America

\$2.3+ Tn
Net Worth



Challenges

The client was looking to leverage a cloud native platform to make its digital processes more agile, resilient, and customer-focused. It had a TIBCO workflow that used to accept JMS message input and then start processing the input document type. It would validate the document from the IBM on-demand server and send the response to JMS Queue. In between, the process used to create queries based on the document type, retrieve document information and update current transactions.

- The primary bottleneck was a legacy application developed 14 years ago on TIBCO Business works 5.0
- This business-critical application integrated many upstream and downstream applications
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- Cloud migration of the application as a lightweight cloud native application was needed for high performance

Solution

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Rapid cloud migration in just 6 weeks



50% faster migration as compared to manual efforts



50% less TCO due to containerization and the elimination of TIBCO Business works



50% less implementation cost due to automation



Modern and cloud-friendly technology stack



Better scalability and flexibility of the application on the cloud



Cross-platform deployment support and improvement in performance



Legacy libraries and frameworks upgraded to the latest cloud native standards

Helping a Leading US Mortgage Firm to Cloud Modernize TIBCO Business Works App with 50% Lesser Implementation Costs



Customer Profile

A leading mortgage company and publicly-traded firm in North America

\$20+ Bn
Net Worth



Challenges

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Rapid cloud migration in just 6 weeks



50% less TCO due to containerization and the elimination of TIBCO Business Works



50% less implementation cost due to automation



50% faster migration than manual efforts



Business processes can now be grouped and broken down into small components and deployed as macro services



Easy scaling in and scaling out based on the load



Faster time-to-market – For any change in the process, the entire application need not be tested again

Thank You

Please direct all inquiries to person@hexaware.com

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