

Broker Deal Accounting (BDA) Modernisation Project Update to Clients

November 2025



let's connect



AGENDA

1. Project Background

2. Indicative High-Level Timeline

3. Stakeholder Participation

4. High-Level Impacts

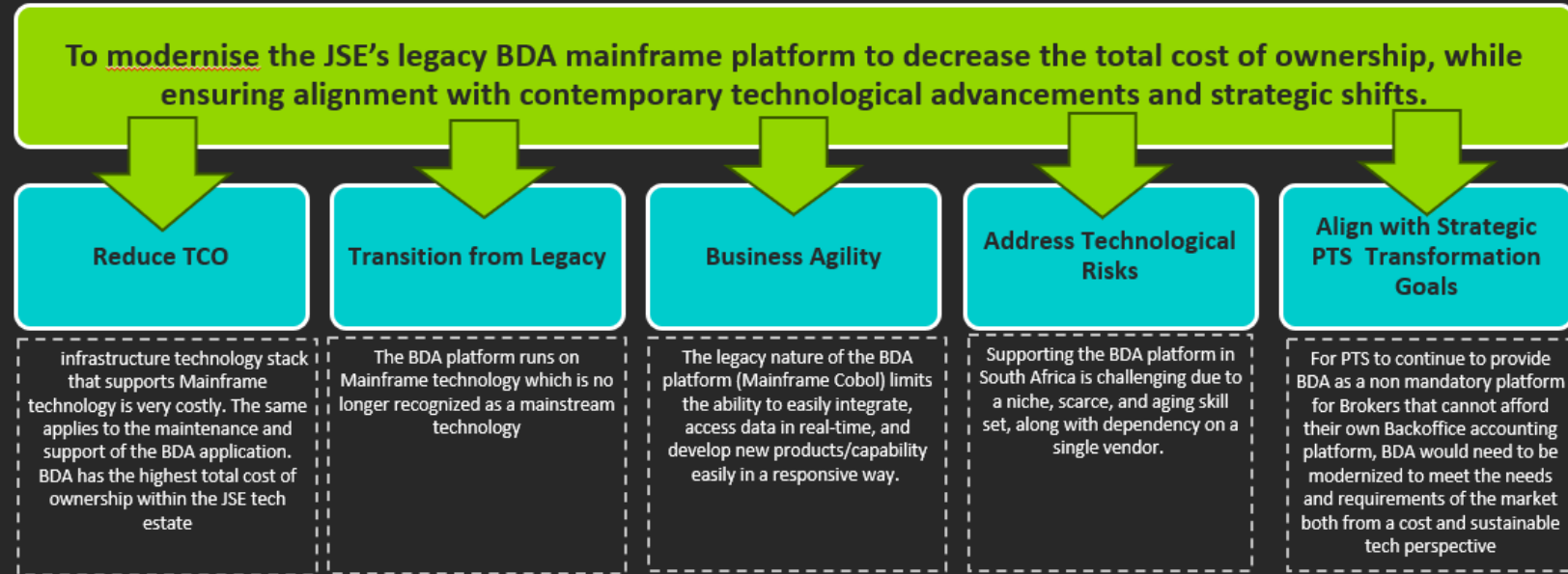
5. Questions

1. Project Background



Strategic Imperative

- Hosted in AWS Cloud
- Modernised technology architecture
- High level of application resilience
- Reduced TCO
- Appropriate Operating Model
- Minimal impact to the BDA user ecosystem
- Increased time to market future business requirements
- Original system logic and process maintained





Broker Deal Accounting System:

BDA:

- A bespoke in-house developed application to meet the specific needs of the JSE business and stakeholders
- Built on legacy Mainframe technology
- Evolved business capability over the years
- Critical system enables the JSE to perform its fiduciary functions as a regulator





Modernisation of BDA

Why:

- BDA over 30 years old
- High total cost of ownership (TCO)
- Outdated legacy technology underpinning BDA (Cobol / Ideal CA / Datacom)
- Technical key skills limited
- Heavy dependency on 3rd party vendors
- Flexibility and scalability is very limited
- New business functionality and enhancements limited

Complexities

- Bespoke application developed in conjunction with the brokers
- Multiple legacy software languages
- Complex tightly coupled monolith application with interdependencies
- System domain knowledge is very scarce
- BDA user ecosystem is extensive



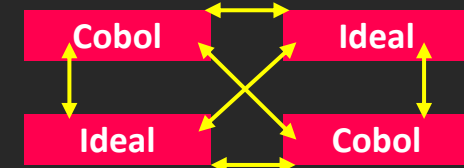
41 Stockbrokers access
BDA daily
+- 1000 active users

5,3 million lines of code
(Cobol / Ideal)
~550 application
screens
(External/Internal)
+25 TB storage

Equity Market: (avg
p/day)
700 million messages
300k matched trades
R25+ billion

BDA Application interrelationships

BDA Languages –
Cobol / Ideal / Assembler / DB2 / Datacom



Multiple languages 'call' each other to
generate business functionality

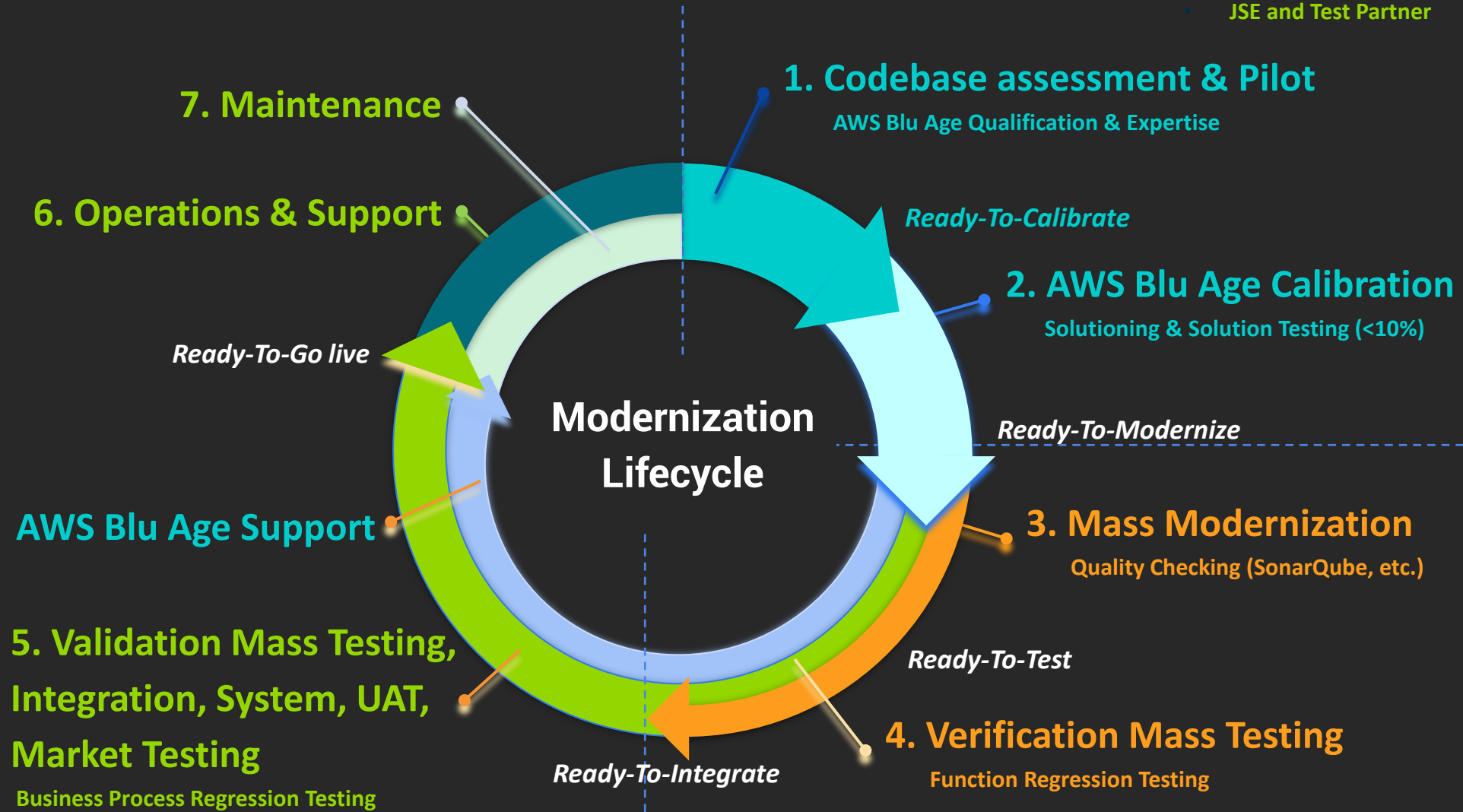


Delivery Model

Captions:

- AWS Professional Services, Blu Age Practice
- AWS Professional Services, Blu Age
- JSE and Test Partner

JSE,
Testing
Partner,
and
Market
participants



AWS Professional Services,
Blu Age

AWS Professional Services,
Blu Age





What will the **success** look like

- Target end-state **architecture** requirements are met
- Reduced **TCO**
- Limited Broker impact
- Building blocks in place for future application **enhancements**
- **Scalable** application
- Limited skills **risk** mitigated

Modernised infrastructure provides a strong foundation to transform the Equity Market operating model

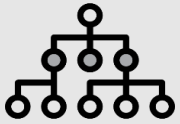
3. Indicative High-Level Timeline



Project Phases

Assess Phase

High-level assessment



- Assess and verify the BDA code is appropriate

Complete

Pilot Phase

Pilot with milestone objectives



- Subset of code (500k LoC)
- Specific milestone deliverables to confirm accuracy of transformed code
- Validate code and system functions
- Go / no-go checkpoints

Complete

Mass Modernisation Phase

Mass modernisation full scope



- Mass code modernisation (4.5M LoC)
- Ecosystem success verification
- Functional Equivalence Test (FET), System Integration (SIT), User Acceptance Testing (UAT)
- Market Testing and Readiness
- Operational handover

2025 – 2026 – 2027

Project 1 Mass Modernisation

		2025				2026				2027	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
JSE					Mar Mass Modernisation Code Delivery	Apr - May Mass Testing Iteration 1	Jun - Aug Mass Testing Iteration 2	Sept - Nov Mass Testing Iteration 3		User Acceptance & Readiness	
					Freeze Period				Freeze Period		
External Stakeholders							Strate Early Integration Testing	Strate / CSDP Early Integration Testing		End-To-End Integration Testing	
								Data Migration Testing			
								Parallel Testing			



Project Pilot

Successfully completed conversion and testing of 500 000 lines of code which included the following:

- **BDA On-line functions:**

- TRADS / DIRAL / DLDIR / DLEXT / DLPRE / DLADJ / DLVAL
- Testing included receiving trades from Equity Trading system
 - Validating all trades are received and updated with correct information as received from the trading system
 - Validating all trades are displayed on DIRAL and AVE price is calculated correctly
 - Testing multiple trades from trading system at different intervals during a day and validating all information and calculations updated correctly
 - Performed allocations on DIRAL and validated average price calculations based on allocations at actual and average price
 - Extensive testing on DLPRE/DLADJ including back dating, reversals, and adjustments
 - Calculations of fees and charges on use of DLPRE / DLADJ
 - Contract Notes via BCNTL (PDENOT / PDANOT):
 - Original from DLPRE / DLADJ
 - History Notes
 - XML Contract Notes
 - MT515

- **Batch**

- Updating and processing of all allocations not released
- Calculations of fees and charges during batch

- **Pilot sign-off**

5. Stakeholder Participation





Stakeholder Participation

- All stakeholders are critical to the success of the modernization initiative
- Collaboration on testing and validation throughout the various project stages will ensure we maintain market integrity and build confidence in a successful go-live
- We anticipate market engagement and readiness activities to commence during H1 2026 with regular checkpoints and communication sessions
- Focused testing with market representatives will be conducted on site at the JSE prior to the start of broader market testing
- As per the indicative timeline, stakeholder testing is anticipated to commence in Q3 2026 and will continue through to the go-live in 2027

4. High-Level Impacts





High-Level Impacts to Stakeholders

- Our primary objective is to ensure **backward compatibility as much as possible!!**
- We anticipate – minimal impact to brokers and expect no impact to all other stakeholders

Category	Impact Description
Connectivity via the Mainframe	Connectivity to the JSE will remain via existing Client Access Network (CAN) however BDA application login will be via a private browser-based URL
Authentication and Authorization	We are replacing the JSE's authentication with a new cloud-based authentication solution BDA Role based authorization <u>will not</u> change and be managed by compliance offices as usual
Screen scraping	We need to <u>engage stakeholders</u> currently using screen scraping to understand how and what they use it for so that we can assess and manage the impact
File Transfer Protocol (FTP) for downloads and uploads	All file FTP transfers (upload and download) will change to secure FTP (SFTP) All EOD dissemination files remain as is via IDP
BDA reports (batch and real-time)	Report formats and content will not change How reports are received by clients <u>may</u> change – still being confirmed
Testing and Signoff	Stakeholder participation in scripted regression testing, user acceptance and dress rehearsal testing and signoff will be required



Key Contacts Required

As part of the Mainframe Modernisation Project, we aim to ensure seamless coordination of all tasks, activities, and user readiness requirements throughout the project lifecycle.

- We require stakeholders to identify key business and technical contacts within your company to support and assist the JSE team in coordinating relevant project tasks
- Key contacts will be responsible for coordinating all project activities, communication and deliverables for signoff
- Key contacts will ensure appropriate participation from your company in working group sessions and communication sessions as required
- **TO ACTION:** Kindly submit key contact details by the end of November via the link below:

<https://forms.office.com/r/vLQjCTUZSb>

Should you have any questions or require clarification, contact us via the project email group

BDAM@jse.co.za

Thank you for your cooperation and partnership in driving this important initiative forward

BDA Modernisation Project Key
Contacts



Scan QR code to submit key contact details

Questions?

JS

Thank you

let's connect

JSE