



# Leading with Innovation

## RFID Chute Implementation and Alma Integration University of the Free State

**Presenters:** Tsholofelo Maleho & Sifiso Banda



*Inspiring excellence, transforming lives  
through quality, impact, and care.*

VISION **130**  
*Renew and Reimagine  
for 2034*

UNIVERSITY OF THE  
FREE STATE  
UNIVERSITEIT VAN DIE  
VRYSTAAT  
YUNIVESITHI YA  
FREISTATA



**UFS**



# Outline

- Introduction
- UFS LIS Context
- Traditional drop box vs RFID Chute (Sapphire 24/7 book drop)
- Investigation & feasibility study
- Infrastructure setup and technical requirements
- Operational workflow of the chute system
- Staff and student training
- Challenges encountered and lessons learned
- Value added and next steps



# UFS in numbers



**121** years old  
**3** campuses  
**7** faculties  
**39 639** total students  
**3%** distance-learning students  
**5 018** staff members  
**3 707** international collaborating institutions

## UFS IN NUMBERS



Established in 1904



**3** campuses



**7** faculties



ECONOMIC AND  
MANAGEMENT SCIENCES



EDUCATION



HEALTH SCIENCES



THE HUMANITIES



LAW



NATURAL AND  
AGRICULTURAL SCIENCES



THEOLOGY AND  
RELIGION



BUSINESS SCHOOL

Students  
(2025 registrations)  
**39 639**



Students  
(2024 graduates)  
**9 250**



Registered  
contact

**97%**

**3%**  
distance



# Introduction

## Strategic Alignment for RFID Chute Implementation

Library services  
reimagined

UFS Integrated  
Performance  
Plan (ITP)

Vision 130:  
Innovation &  
impact

User centric  
approach

# Traditional Drop Box vs RFID Chute

Traditional drop box

Physical check-in

Risk of forgotten check-in

No email confirmation

No integration



Real-time check-in

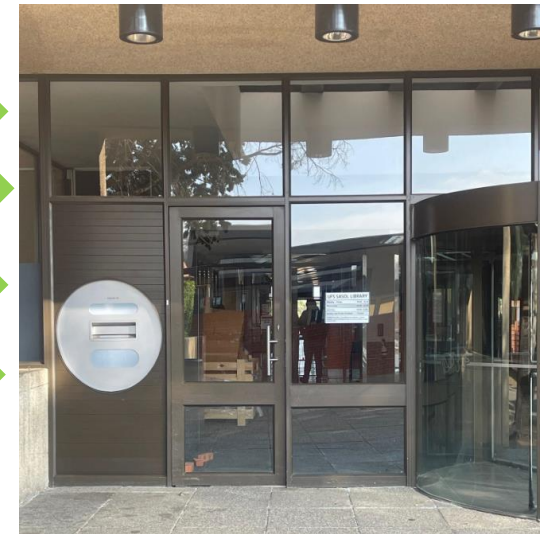
Automated scanning

Email confirmation

Fully integrated



RFID Chute





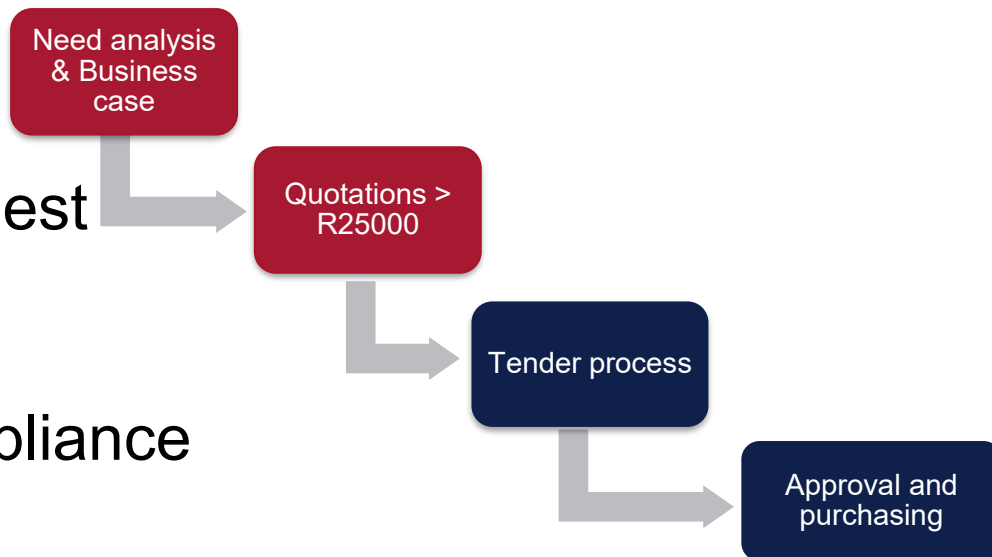
# Investigation and feasibility study

- Benchmark - International trends
- Assessed vendor options and costs
- Stakeholder engagement
  - ICT, Facilities, LIS Exco, LMC, Vendors, Librarians
- Tailored solution for each site – *Not a one size fits all*



# The procurement journey

- Needs analysis
- Business case
- **Funding:** Special request
- Quotations > 250 000
- Formal approval
- Final sign-offs for compliance







# Scoping and planning

## UFS Stakeholders:

- Alma Administrators
- Librarians
- Library Executive
- ICT
- UFS Estates
- Dialog ID (vendor)
- UFS Finance

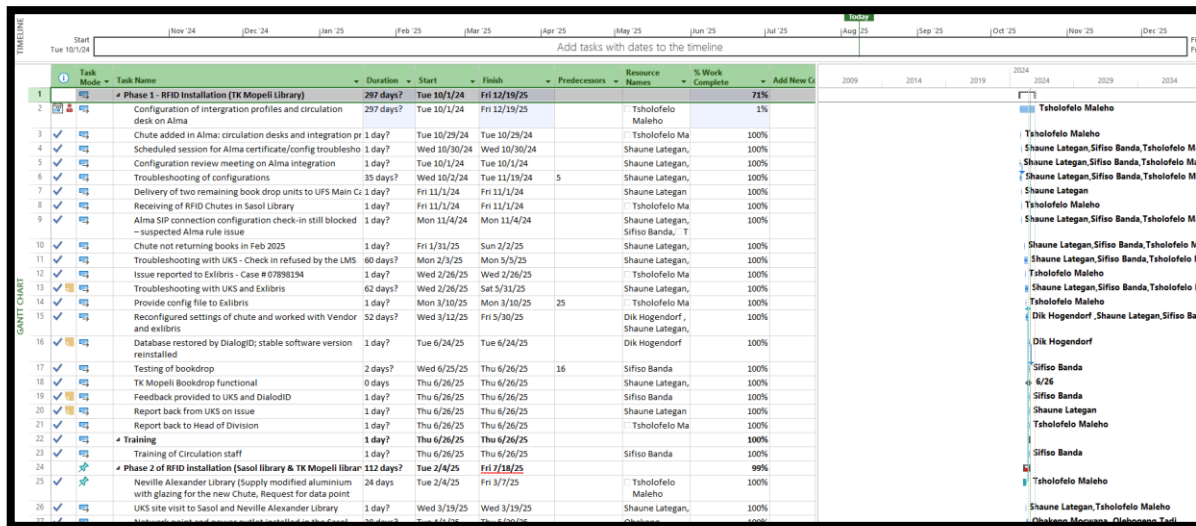






# Scoping and planning...cont

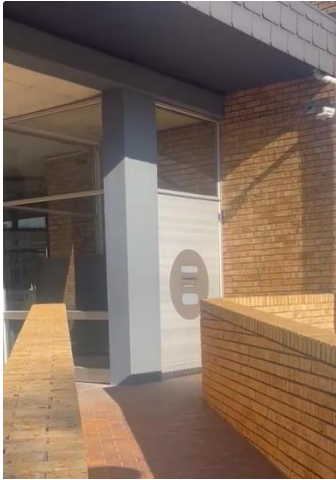
## Project Plan





# Scoping and planning..cont

## Tailored infrastructure needs



Neville Alexander Library



Sasol Library



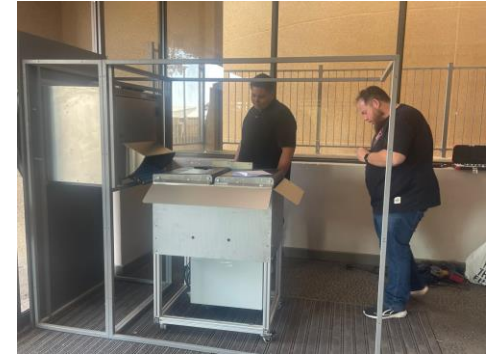
TK Mopeli Library



# Infrastructure requirements

## Physical components:

- Steel frame
- Lockable cabinet
- UPS



## Technical requirements:

- Power outlet and network point

## Network configuration:

- Static IP





# Chute components

## Physical components

### Exterior

- Chute frame

### Interior

- Chute cabinet
- Computer
- Screen (when needed)
- Keyboard and mouse
- Bin (size varies)
- UPS



### Exterior

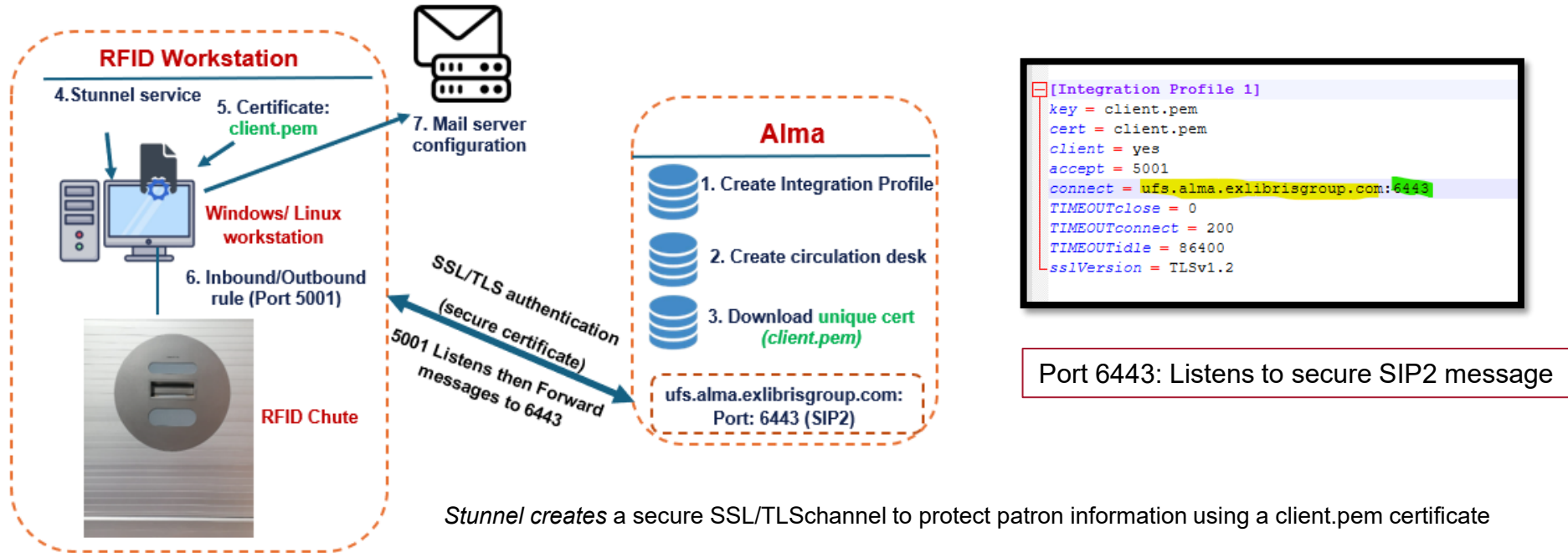


### Interior



# System integration with Alma

The chute system connects to Alma using the SIP2 protocol.







# User Training & Support

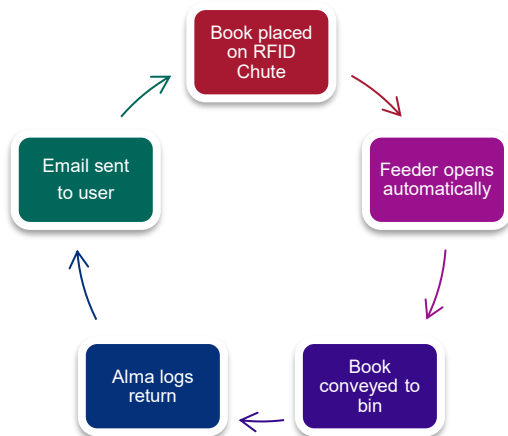
- Training of staff and students
- [Training video](#)
- [How-to-guide](#)
- Communication to UFS community



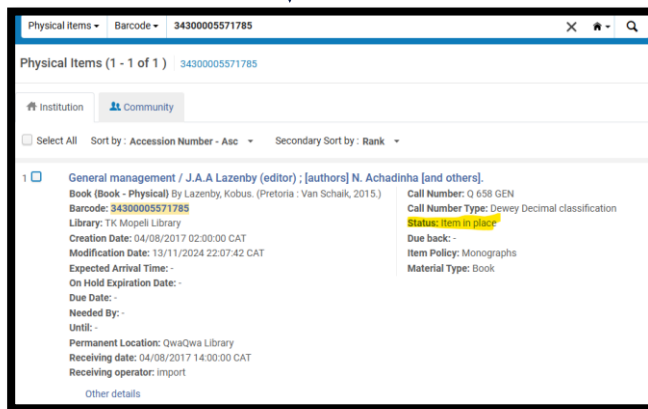


# Chute workflow

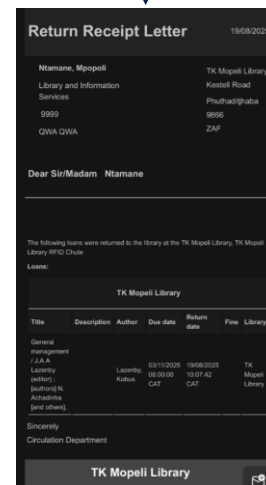
1. Book placed on RFID Chute
2. Book is conveyed into the bin.



3. Item is checked in on Alma



4. User receives an email confirmation







# Learning through challenges

- Initial project estimation was 4 months.
- Remote access for vendor by ICT
- Chute software updates required reconfiguration
- No block flag
- Remote vendor support via VPN
- Time zone and structural complications
- UPS required due to load shedding
- Tailored Infrastructure



# Recommendations

- Feasibility study essential
- Engage all stakeholders in initial planning
- Plan for structural requirements (Not a one size fits all)
- Plan for power failure / (UPS)



# Conclusion

## Objective

- Enhanced user experience
- Seamless, fast, book returns
- Reduced manual labour

## Next step

- User experience
- Second Chute in the Sasol Library



# Thank you

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