

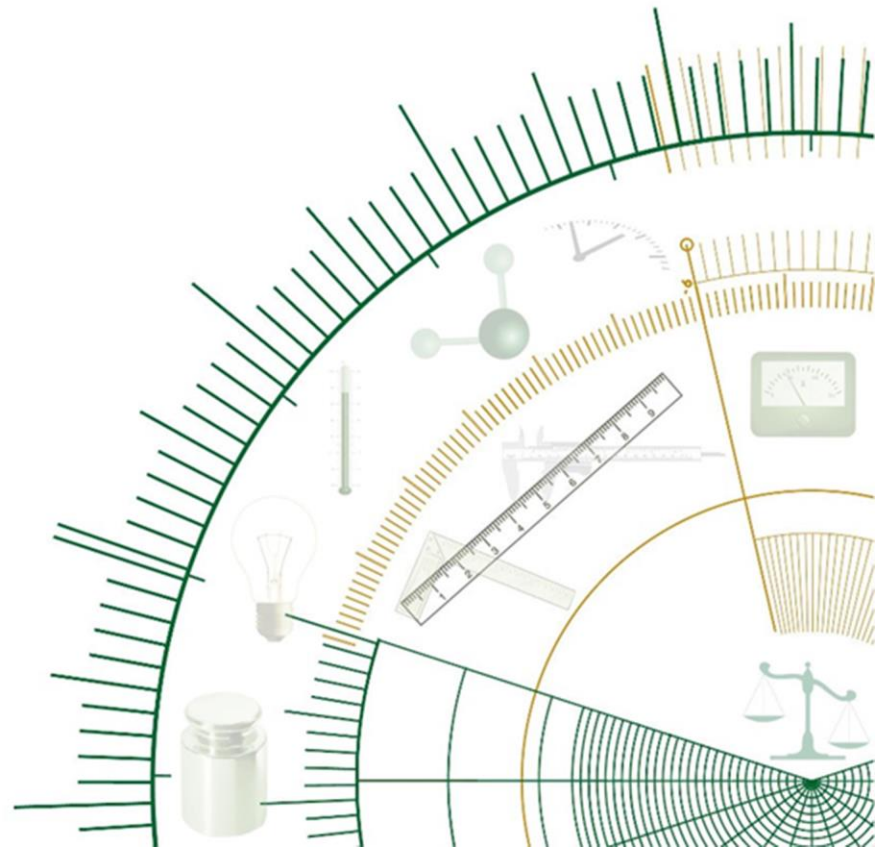
# Digitilisation in the SADC region

NMISA

Pritesh Jivan  
[pjivan@nmisa.org](mailto:pjivan@nmisa.org)

AFRIMETS 2023  
Egypt, Giza

**Your measure of excellence**



# Overview

- What is Digitilisation
- Digitilisation Vs Digitisation
- Digitilisation at NMISA
- Customer Management System CMS
- Enterprise Resource Planning ERP
- Project Service Automation PSA
- Challenges facing digitilisation
- Future Work

# What is Digitilisation

- What is digitilisation?
- The enabling/improving of processes by leveraging digital technologies and digitized data.
- For e.g.
  - Online shopping stores e.g. amazon
  - Digital payment methods such as paypal, google wallet
  - Online learning platforms.
- Digitilisation as a driver for technological change and advancement in the current and foreseeable future.

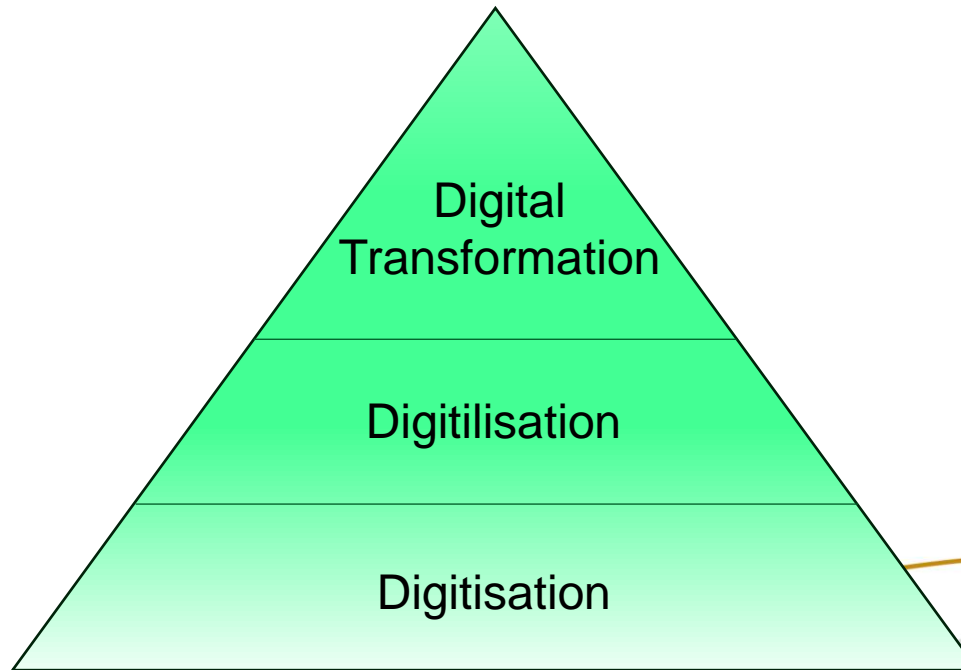
# Digitisation Vs Digitisation

- **Digitization**

The creating of a digital representation of a physical object or attribute for example  
Converting an analog readout to a digital readout.

Some examples are:

- data such as numerical data from sensors
- Videos such as movies and TV shows



# Digitilisation at NMISA

## • CMS – Customer Management System

- Central go to point for customers to access all of NMISAs' offerings
- Easy access to customer database, including contact details, address etc
- Access to data such as Turn Around Times (TAT), lead times, UUT details etc.
- Financial details of calibration jobs as well as customer accounts
- Metrologist/s assigned to specific jobs

## • ERP – Enterprise resource planning

- Central point for all internal processes, these include
  - HR functions such as leave, training requests and courses
  - Financial requests such as travel claims, petty cash

## • PSA – Project Service Automation

- Central point for project plans and proposals
  - Collate data on HR and project finance

## • Digital Certificates

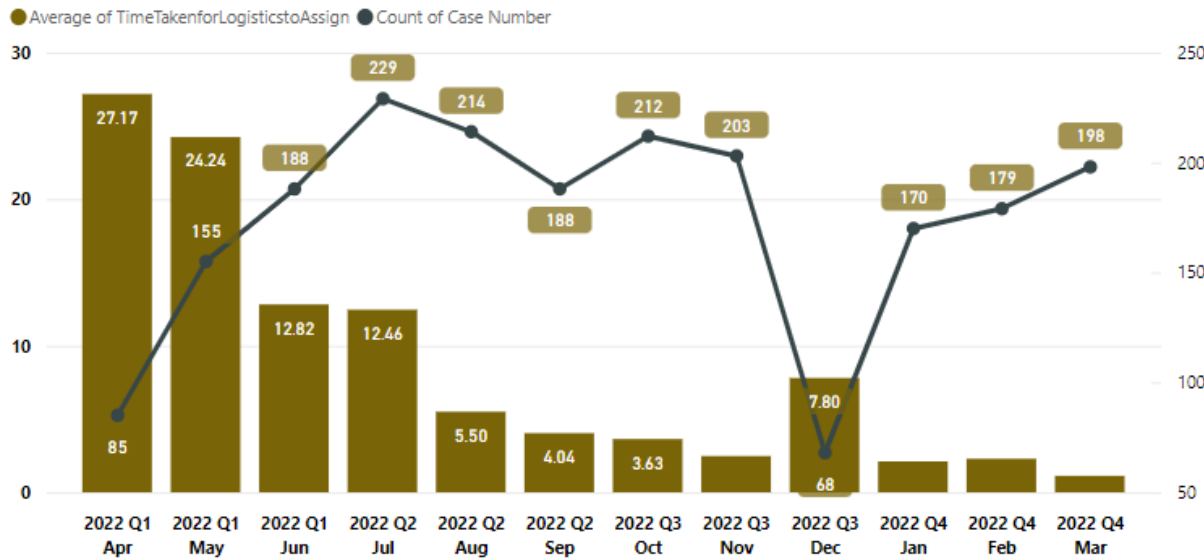
- QR codes and digital signatures

# Customer Management System

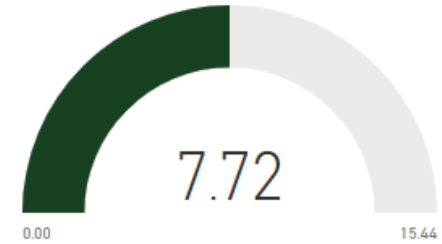
Fiscal Year, Quarter, ...

Average of TimeTakenforLogisticstoAssign and Count of Case Number by Fiscal Year, Quarter and Month

- Select all
- (Blank)
- 2022
- Q1
- Q2
- Q3
- Q4
- 2023
- Q1
- Q2
- Q3
- Q4



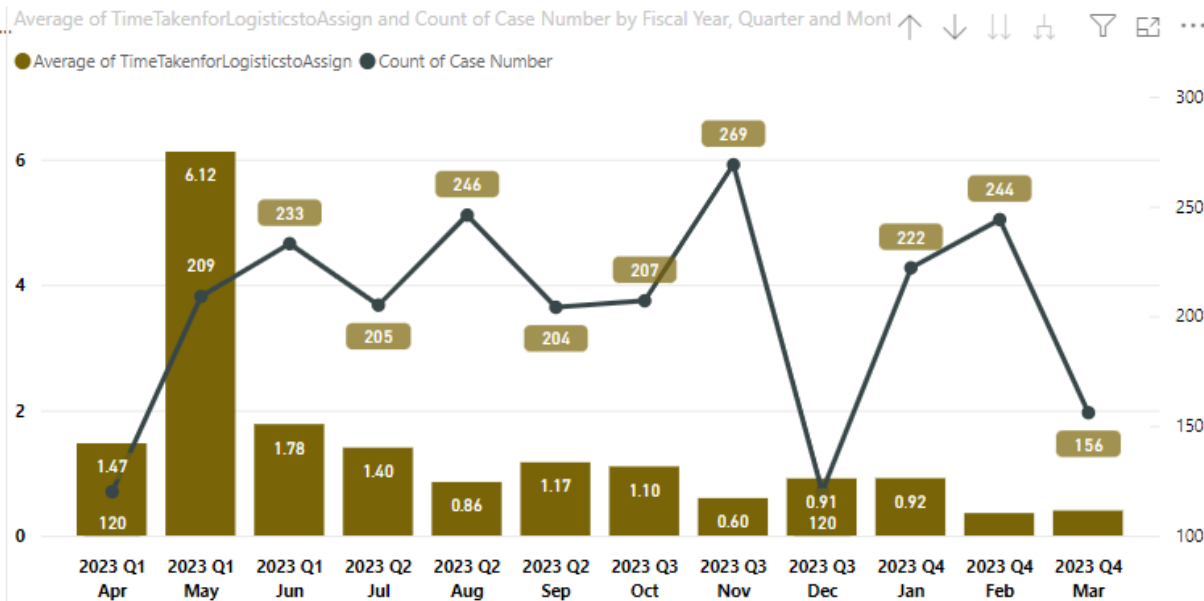
Average of TimeTakenforLogisticstoAssign



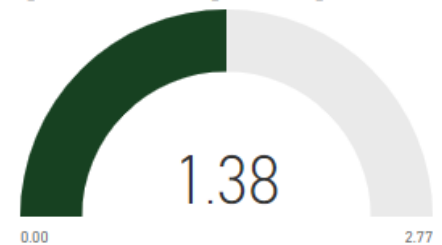
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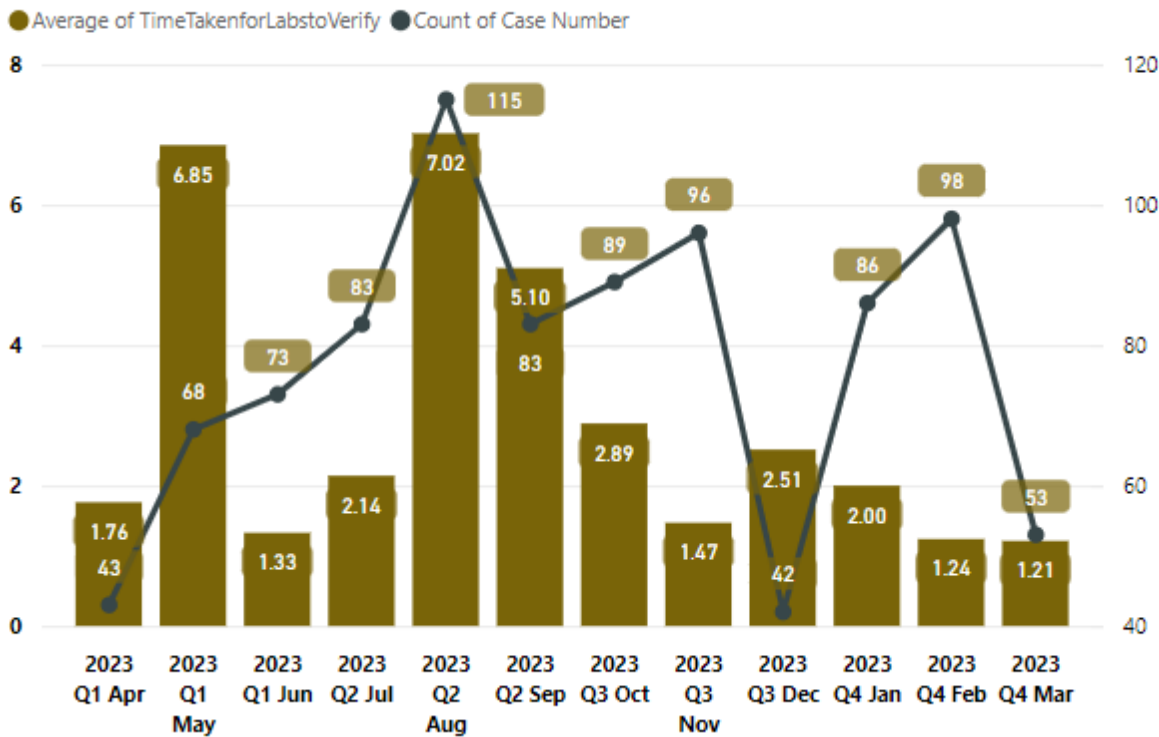


# Customer Management System

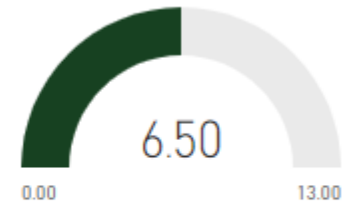
Fiscal Year, Quart...

- Select all
- (Blank)
- 2022
  - Q1
  - Q2
  - Q3
  - Q4
- 2023
  - Q1
  - Q2
  - Q3
  - Q4

Average of TimeTakenforLabstoVerify and Count of Case Number by Fiscal Year, Quarter and Month



Average of TimeTakenforLabstoV...

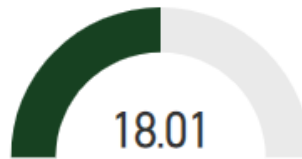


# Customer Management System

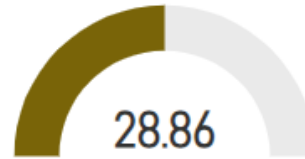
Fiscal Year, Quarter, Month

- Select all
- 2022
- 2023
  - Q1
  - Q2
  - Q3
  - Q4

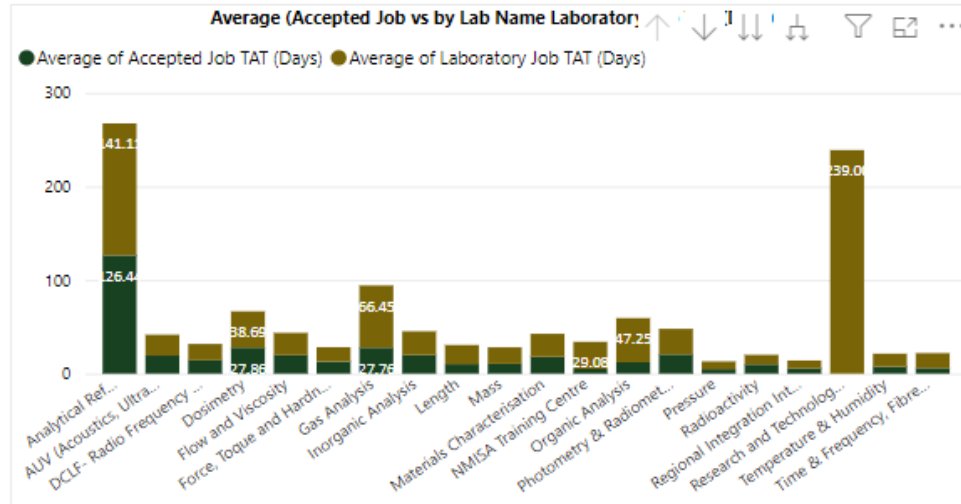
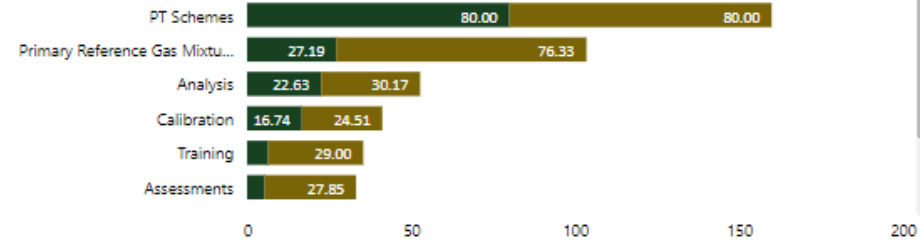
Average of Accepted Job TAT (D...



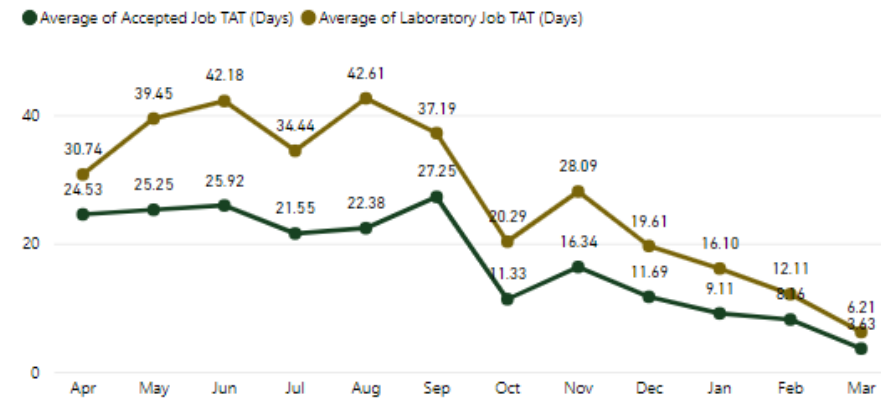
Average of Laboratory Job TAT (...)



Average of Accepted Job TAT (Days) and Average of Laboratory Job TAT (Days) by Service Type



Average of Accepted Job TAT (Days) and Average of Laboratory Job TAT (Days) by Month

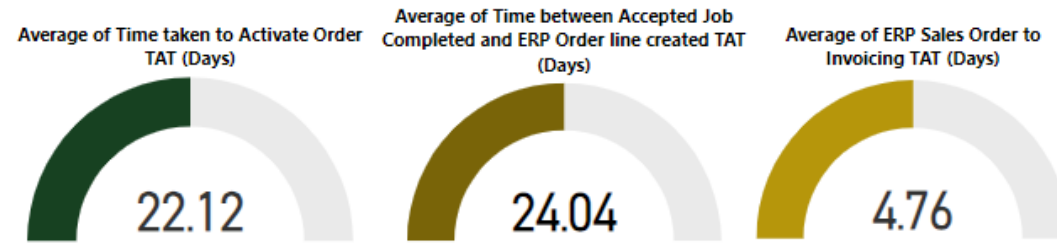




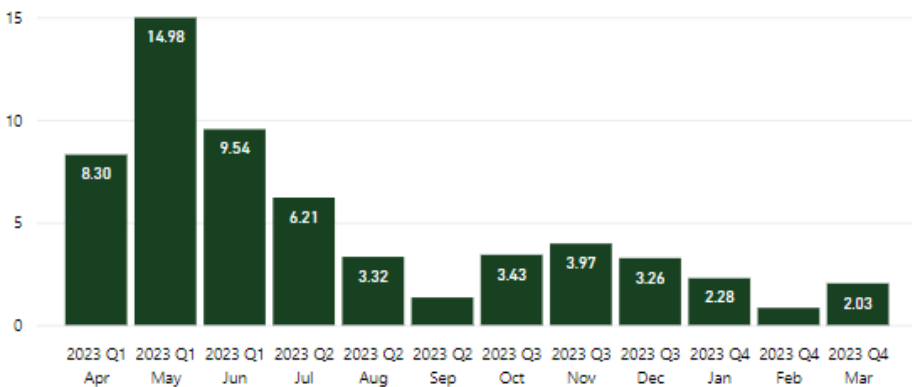
# Customer Management System

Fiscal Year, Quarter, ...

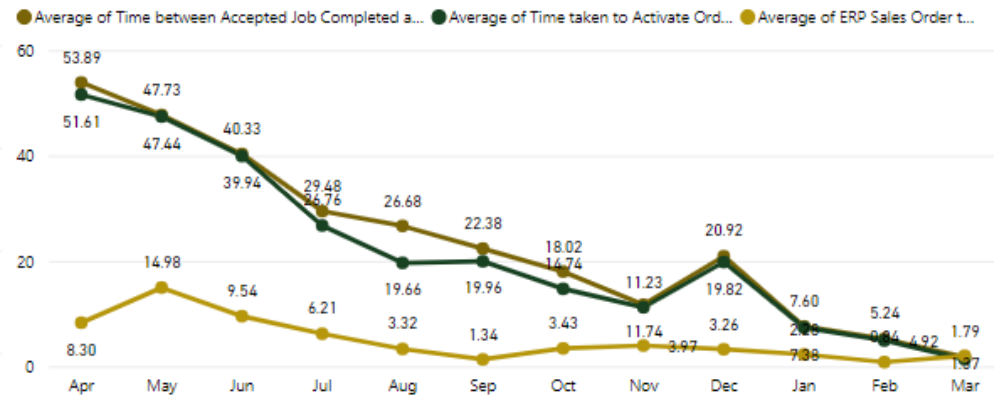
- Select all
- 2022
- 2023
  - Q1
  - Q2
  - Q3
  - Q4



Average of ERP Sales Order to Invoicing TAT (Days) by Fiscal Year, Quarter and Month



Average of Time between Accepted Job Completed and ERP Order line created TAT (Days), Average of Time taken to Activate Order TAT (Days), Average of ERP Sales Order to Invoicing TAT (Days) by Fiscal Year, Quarter and Month



# Digital Certificates



## Certificate of Calibration



Private Bag X34, Lynnwood Ridge, Pretoria, 0040  
 CSIR Campus, Meiring Naude Road, Brummeria, 0184  
 Logistics office: +27 12 841 4623  
 Reception: +27 12 841 4152  
 Fax: +27 12 841 4458  
 E-mail enquiries: info@nmisa.org  
 www.nmisa.org

<b>Calibration of:</b>	Precision Rubidium Oscillator
<b>Manufacturer:</b>	Microg Lacoste
<b>Model number:</b>	-
<b>Serial number:</b>	FG5X-261
<b>Calibrated for:</b>	NMISA-AUV Building 5 MEIRING NAUDE ROAD

Custom Portal

Home > [QRCertificates](#)

## QRCertificates

### Certificate information

Certificate number	NMISA-TIM-2023-4421
Manufacturer:	Microg Lacoste
Model number:	FG5X-261
Serial number:	FG5X-261
Calibrated for:	NMISA-AUV

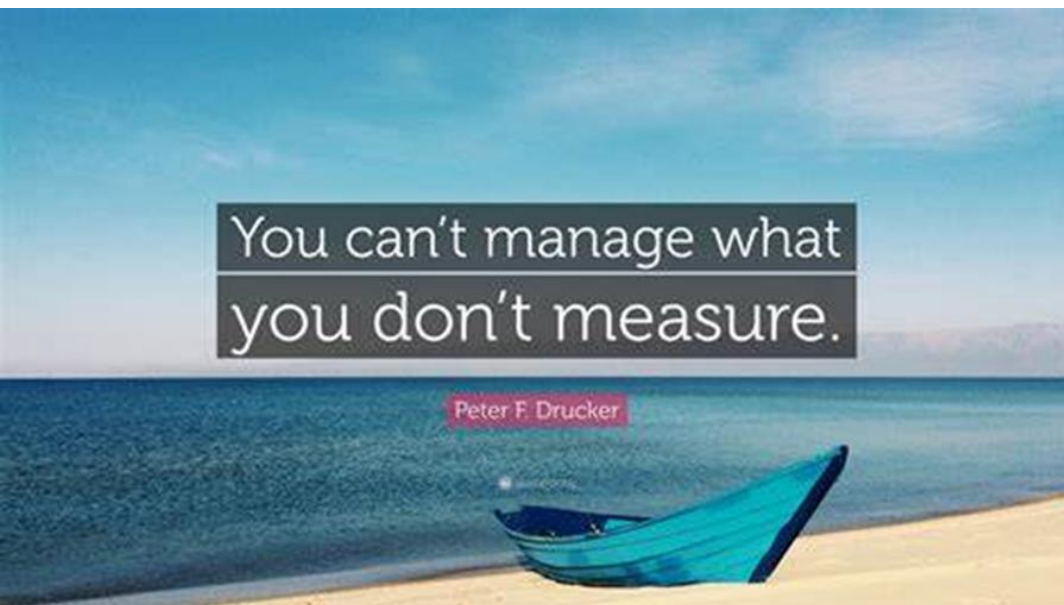
## Challenges faced

- Shortage of HR/skill
- Prioritisation of resources
- Prioritisation of finances
- Stable electricity and internet connections
- Inertia and fear of change
- Inefficient usage of technology and lack of training


# Future Work

- Remote calibrations
  - Artificial Intelligence
  - Machine Learning
  - Blockchain
- Automated calibration systems
- Completion of digital certificates
- Continued Participation in TC's and collaboration

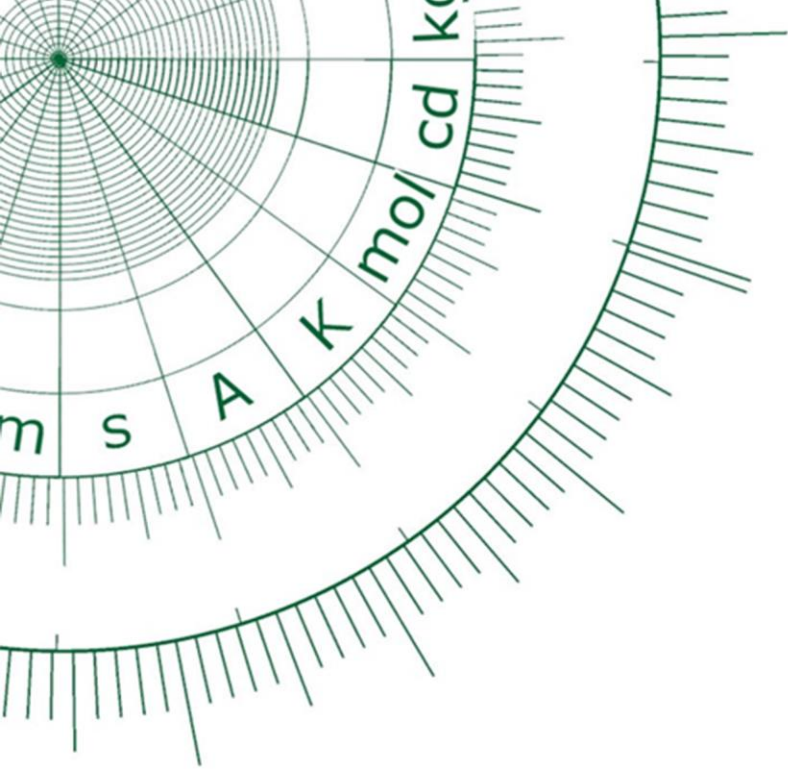
## Questions and Comments



One accurate  
**measurement**  
is worth  
**a thousand**  
expert opinions



**WHATEVER YOU CAN  
MEASURE, YOU CAN IMPROVE.  
WHATEVER YOU CAN IMPROVE,  
YOU CAN ACHIEVE.**



Thank You

We measure what matters