

**PERSIDANGAN AKAUNTAN SEKTOR AWAM KEBANGSAAN KE 30 TAHUN 2022**

***NATIONAL PUBLIC SECTOR ACCOUNTANTS CONFERENCE (NAPSAC)***



## **The Emergence of Robotic Process Automation (RPA) in Public Sector**

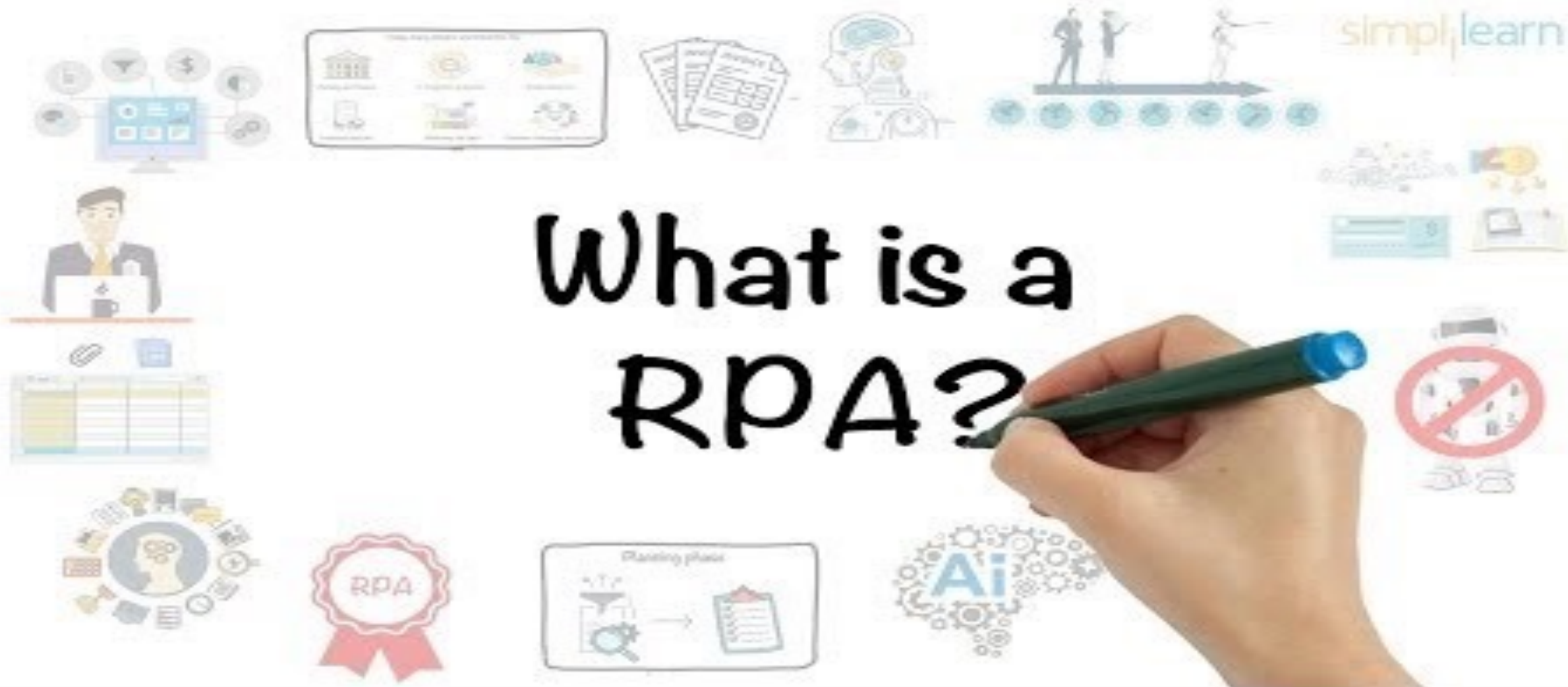
**SESSION 6 – 19 MAY 2022**

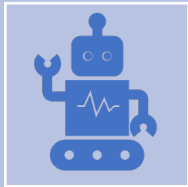
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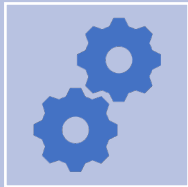
# What is a RPA?





## Robotic Process Automation (RPA)

User interface automation that conducts repeatable business processes using software robots and existing applications



## IT-Automation (ITPA)

The monitoring of status changes for key ICT services to automate responses to keep the service optimised and available.





# The Three Phases of Automation

## Stage One

### Unoptimised Automation

Processes are automated but haven't been refined to maximise benefits

## Stage Two

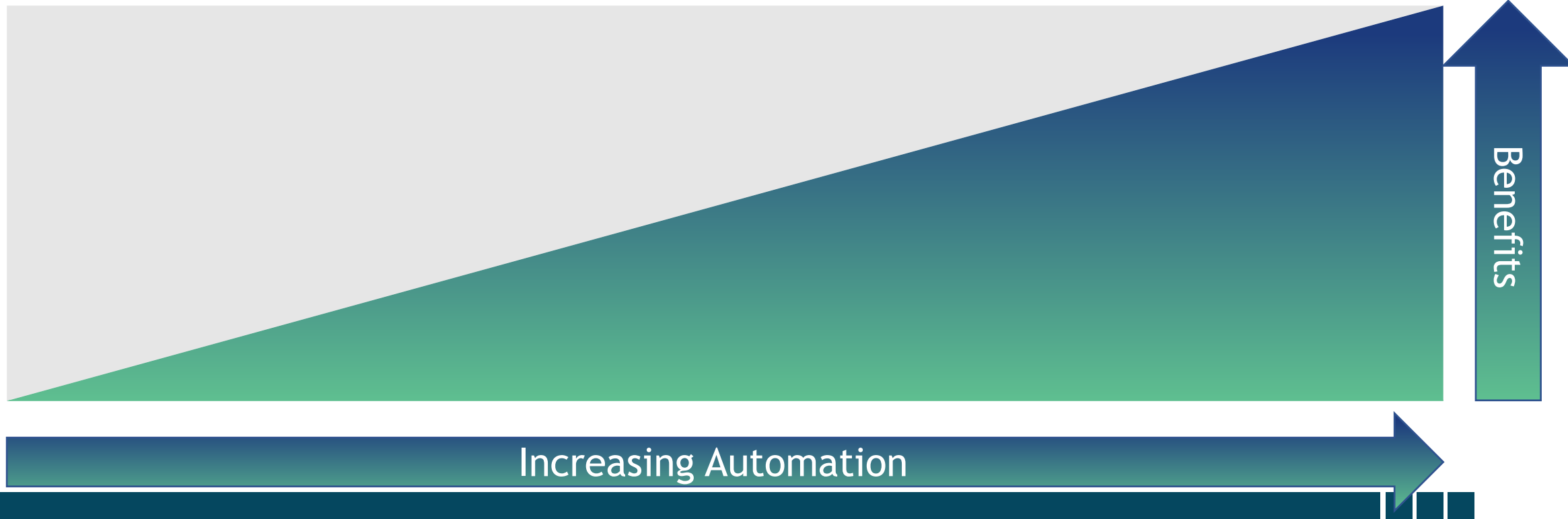
### Optimised Automation

Business Processes have been adapted to take advantage of RPA technologies

## Stage Three

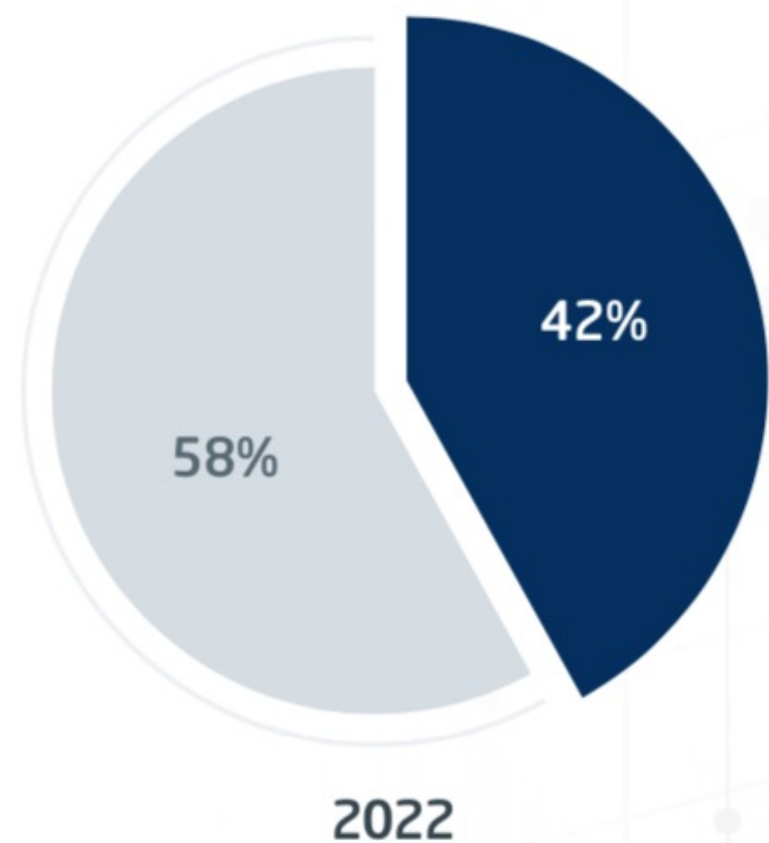
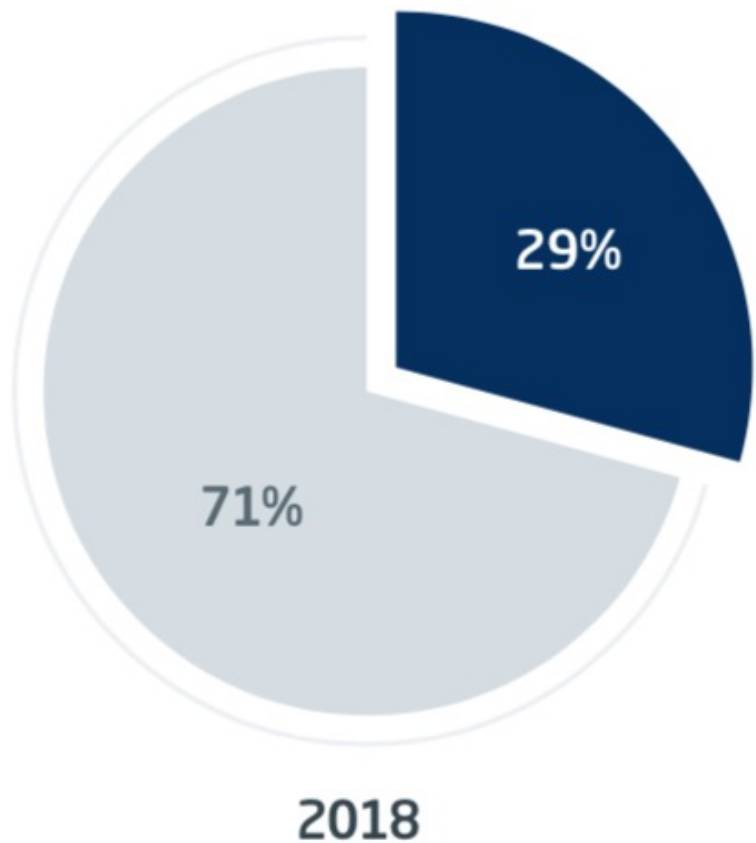
### AI Enabled Automation

Automated decision making and cognitive data analysis enables RPA to make knowledge based decisions



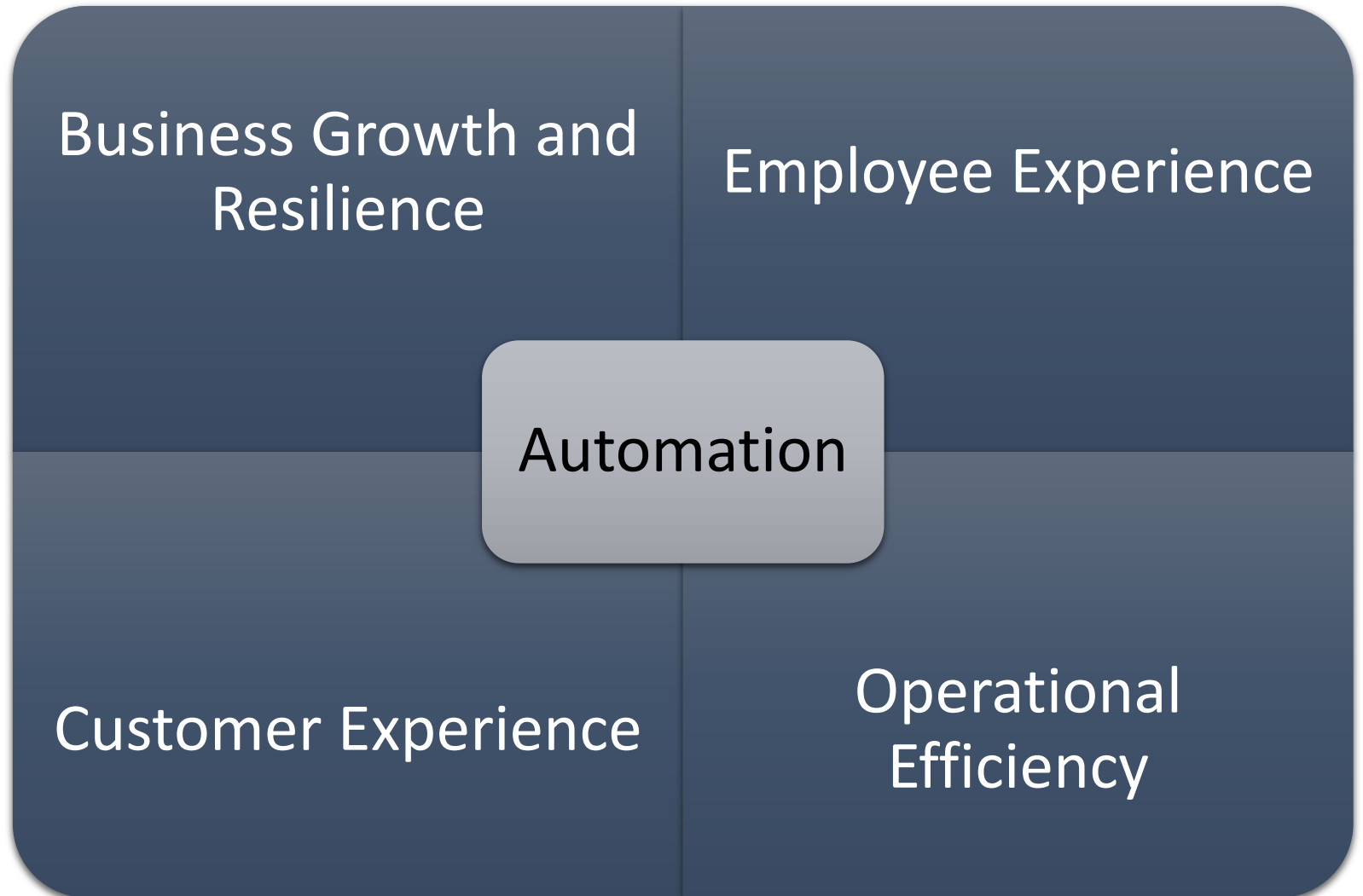


## Increase in robotic task hours between 2018 and 2022





Business leaders worldwide now see RPA as the second most important transformational technology.





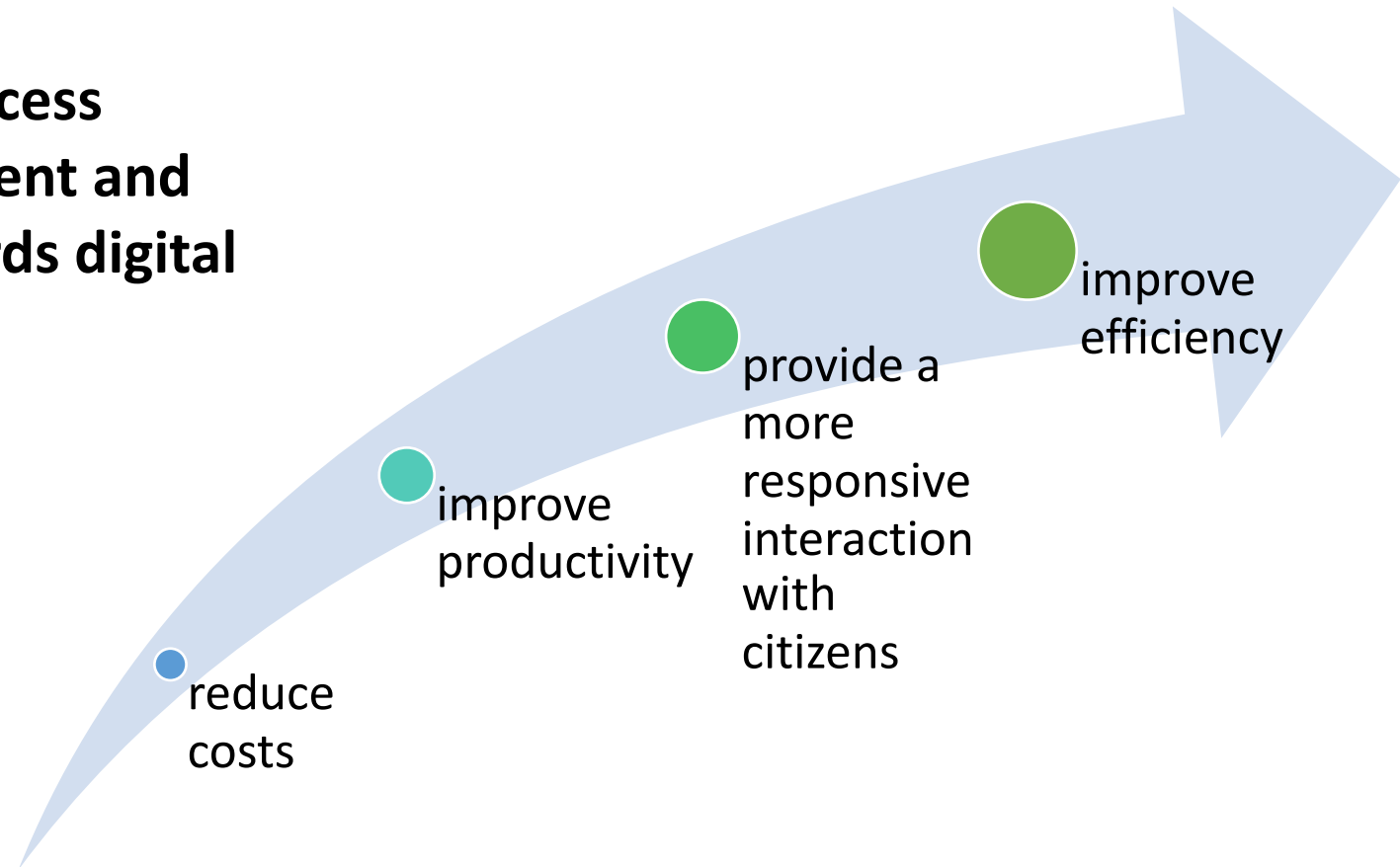
# Challenges Faced in Government Sector

- Budget Constraints, Overburdened employees, Transactional bottlenecks and ever-evolving compliance requirements
- A growing backlog of work, and limited capacity to tackle it. Government agencies are heavily burdened by forms and processes
- Lack of agile interactions with citizen services, shifting workforce demographics and frequent policy changes that need to be integrated into business practices.
- Shifting employees priorities from low-value to high-value work and eliminating the burden of mundane, repetitive tasks to help public institutions focus on citizen related processes
- Federal and state workers often have to dedicate a large portion of their time in operational tasks such as collecting, moving, cleaning and re-purposing data. While strategic tasks such as data integration and analysis are left in the back burner.



# Role of RPA in Public Sector

The adoption of robotic process automation in the government and public sector is a step towards digital transformation







## Key areas to target and measuring outcomes

Document handling and validation

Automated document scanning and data entry into business systems

Reconciliation and reporting

Error checking on internal audit reduced

Form processing

Reduced front end data entry for business applications

HR tasks

Reduced new starter processing time by 70%

Financial management and audit trail

Improved invoice processing time and quality





### Federal Government

Universal credit and benefits calculations, tax calculations, anti-fraud checks, license application processing.



### Local Government

Revenue collection, permit applications, incident reporting, case management, contract administration.



### Health

Coding, diagnostics, discharge processing, outpatient clinic outcomes, cashing up.



### Policing

Fixed penalty processing, intelligence reporting, crime reporting, firearms license processing and replacing the need for officers to double key the same information into different systems.



### Education

Managing admissions and enrolments, student timetabling and estates utilisation, student finance management, course assessment data handling, alumni database maintenance.



# Enabling RPA in the Public Sector

1

Identify opportunities that are achievable and measurable

2

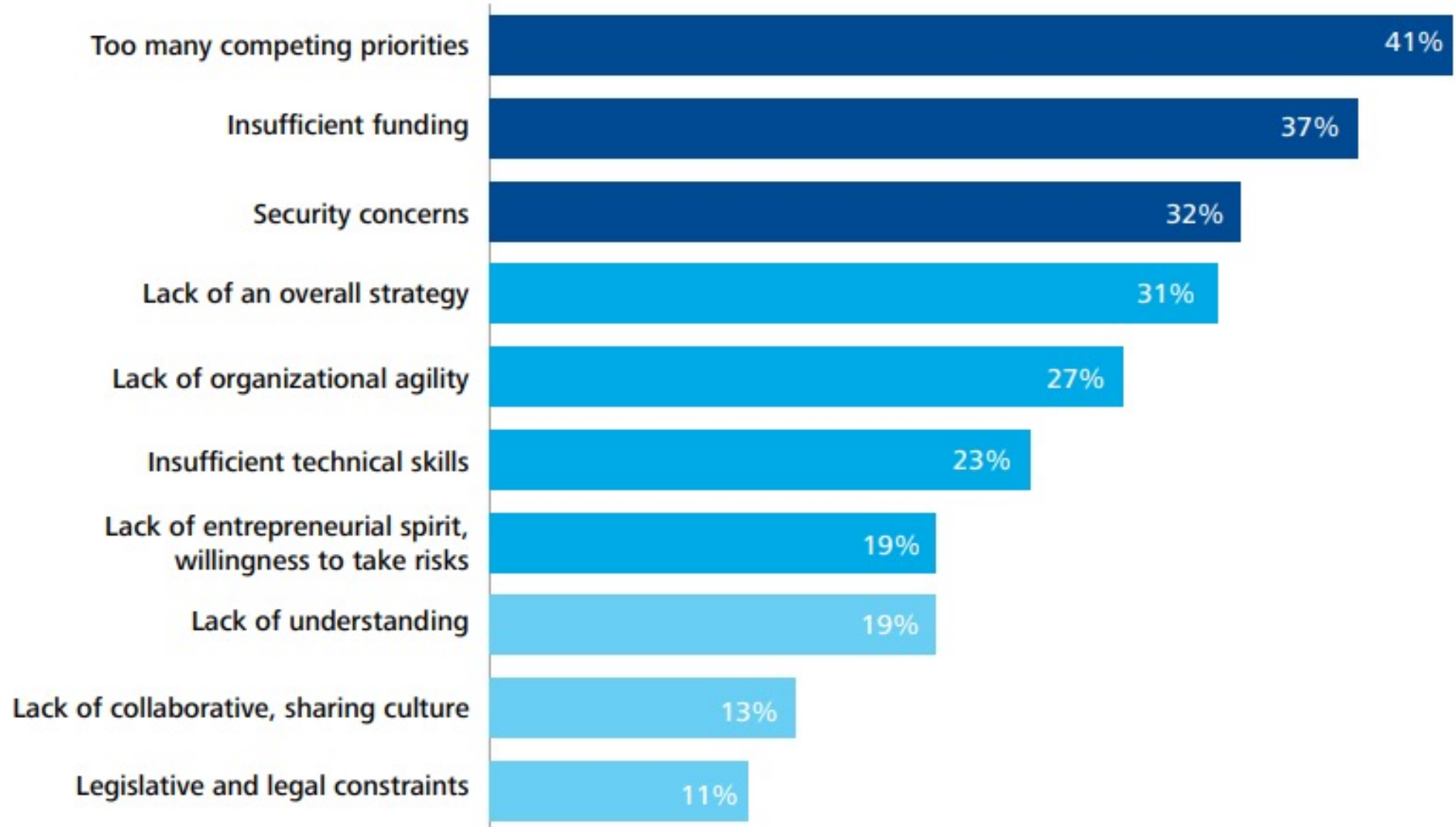
Implement a clear governance structure and delivery team

3

Bring employees on the automation journey and deliver with them, not to them



# Challenges Facing the Public Sector





# Digital Skills Gap



of the population in Malaysia  
have **basic ICT skills**



of the population have  
**standard ICT skills**

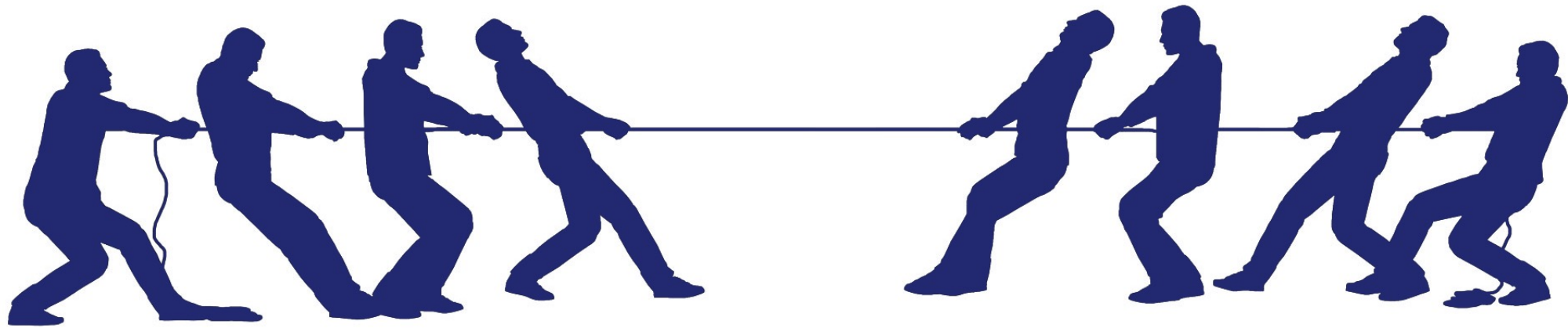


of the population have  
**advanced ICT skills**

Source: Measuring Digital Development: Facts and Figures, ITU, 2019



# Conflicting priorities



Employee resistance and the fear of change

Mismatched Expectations

Resourcing the analysis and implementation

Enabling staff to perform higher value activity

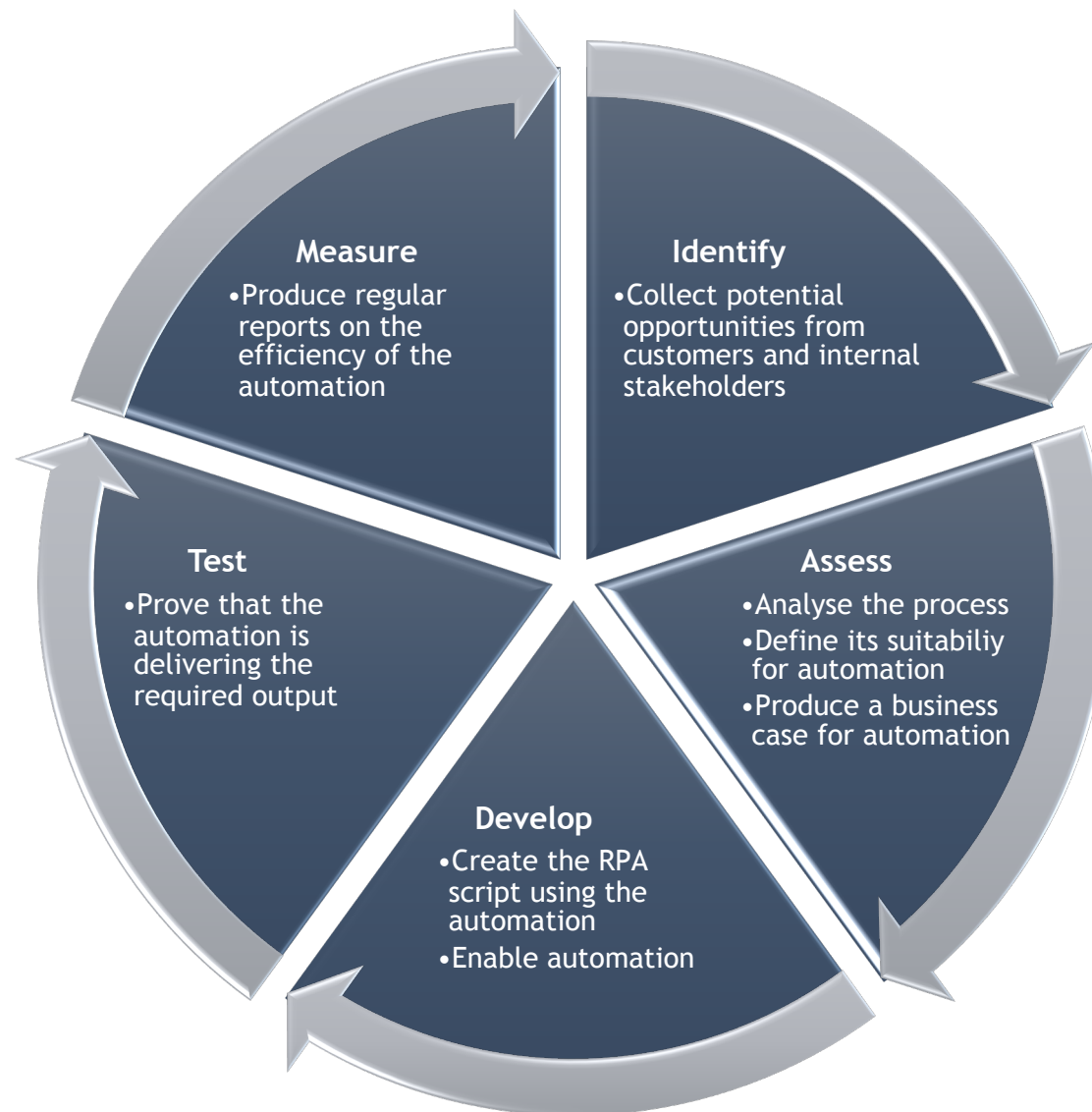
Improving the data quality of delivered processes

Reducing time to deliver





# Automation Lifecycle



# Use cases in Malaysia's Government Linked Companies (GLCs)





## Pos Malaysia

Integrated RPA into existing Standard Operating Procedures (SOP) for both front-end and back-end processes of our cargo operations at the Kuala Lumpur International Airport (KLIA).

Pos Aviation, a subsidiary of Pos Malaysia that handles in-flight catering and cargo has implemented Robotic Process Automation (RPA) to assist the cargo handling operations team.

These robots act as a digital workforce to streamline operations and expedite key business activities thus ensuring efficiency.

The human workforce can focus on more valuable work as the system automates repetitive mundane task and increase productivity that are compounded across thousands of transactions.



# Telekom Malaysia

Robin - the RPA bot augmented with artificial intelligence capabilities. By the end of 2021, Robin had automated a total of 70 processes covering areas such as network technology, customer experience, finance, HR and procurement, saving more than 270,000 annual hours, equivalent to 91 full-time employees, and about \$2m (8 million ringgit) in costs.

In payroll reconciliation, for instance, the HR team was able to save more than 4,000 hours and improved their execution speed. Robin has also improved the accuracy in resolving errors in call data records by 90%. And while it took 3.5 hours to reconcile each record manually, Robin could do so in less than 20 minutes.

What makes the Robin project unique is its strong buy-in from TM employees who have been picking up new skills and taking on RPA projects on their own. Out of the 70 projects, 40 were undertaken by internal teams, including 11 RPA-certified staff. This has reduced the outsourcing cost equivalent to almost \$640,000 (2.7 million ringgit) worth of professional services.



Any ideas? Feel  
free to share.

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