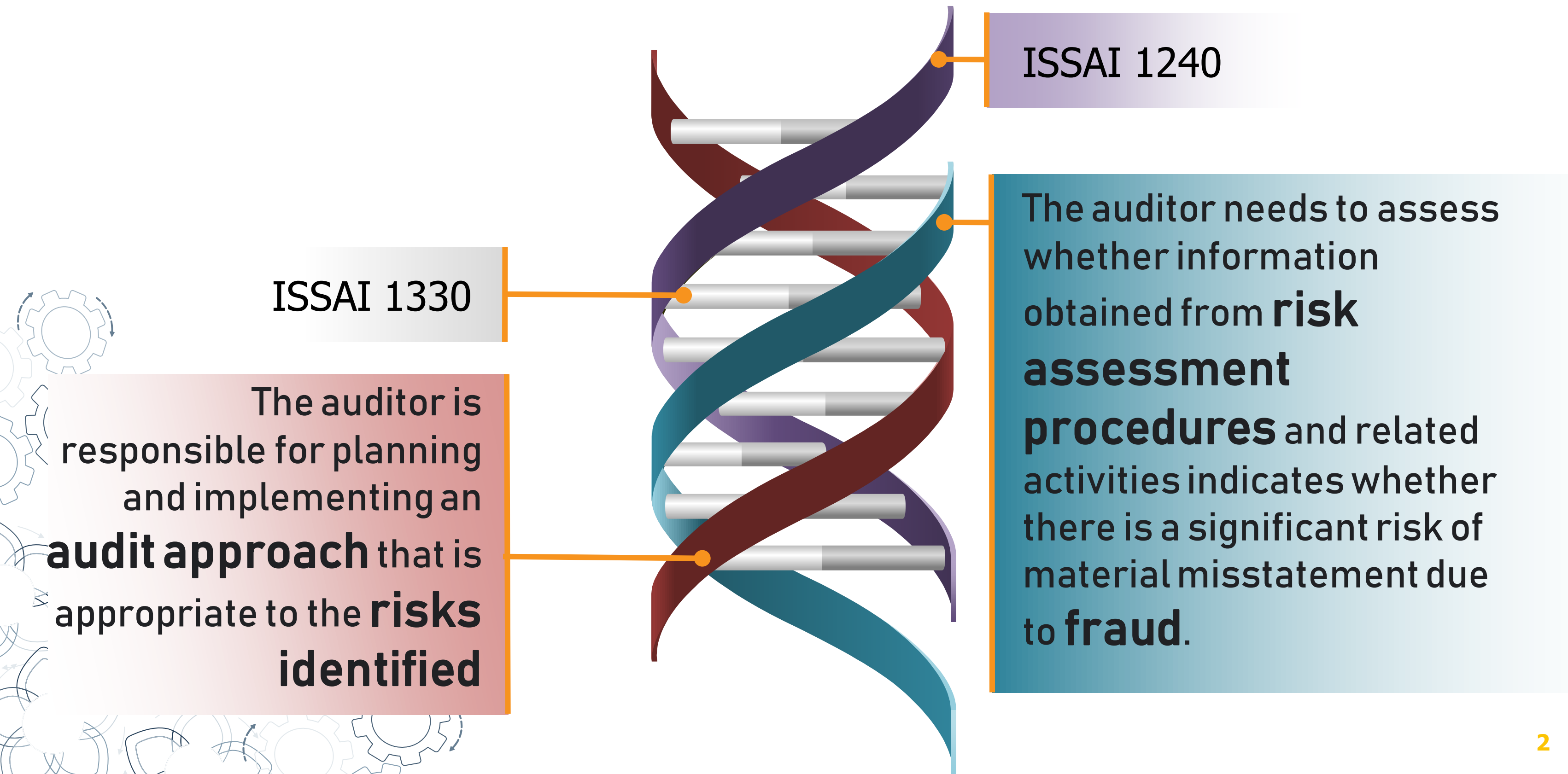




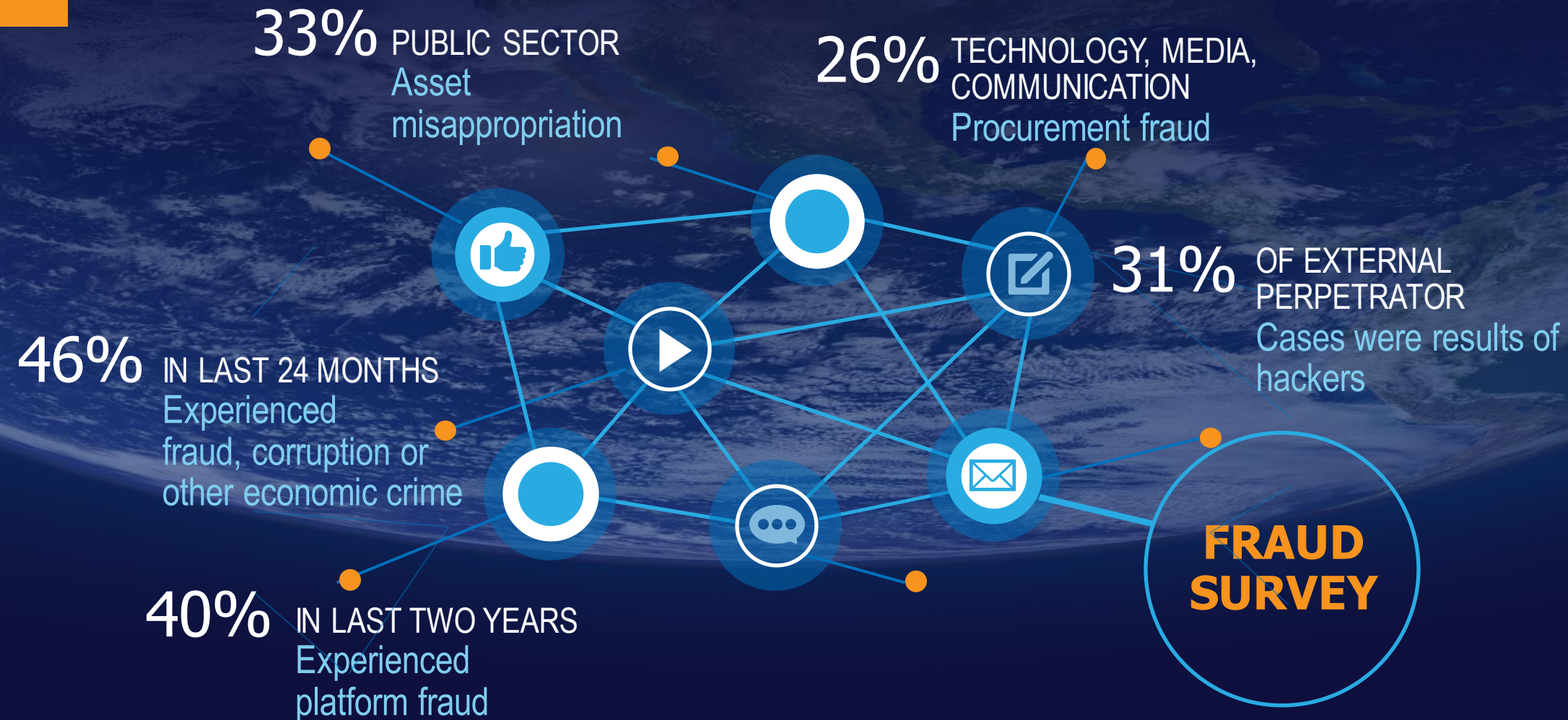
THE
AGE
OF

DIGITAL AUDIT

IDENTIFYING RED FLAGS: TRANSFORMING
AUDIT RISK ASSESSMENT APPROACH THROUGH
DATA DRIVEN ANALYTICS



GLOBAL ECONOMIC CRIME AND FRAUD SURVEY



POINT OF ENTRY

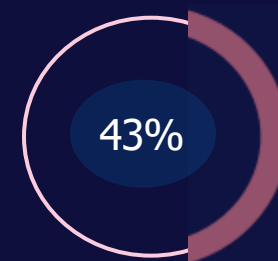
Digital platforms such as social media, online services, e-commerce opened doors to external fraudster and economic crime risk.

PROTECT THE PARAMETER

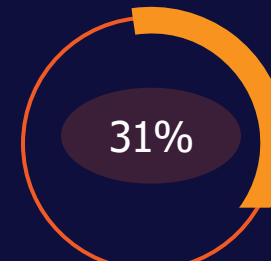
Identify fraudster exploit – understand end to end process cycle
Combine technology, strategy and process to strike proper balance
Centralised platforms to orchestrate data and create meaningful alerts

MAIN PERPETRATOR

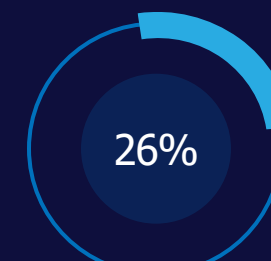
Main perpetrator of the most disruptive or serious fraud experience found rising threats from external perpetrators.



EXTERNAL
2020: 41%



INTERNAL
2020: 38%



COLLUSION BETWEEN
INTERNAL AND EXTERNAL
2020: 21%

1,296

EXECUTIVES

53

COUNTRIES
AND
REGIONS



**USE
CASE**

AUTOMATED FINANCIAL AUDIT RISK ANALYTICS

Data driven analytics to identify risk area which could rise red flag to mitigate risk of fraud, leakage of public fund and malpractices

RED FLAGS



**RM3.068 bil/
USD0.69 mil**

2018 – 2020



EXCESSIVE

Equipment purchased
but not used



WASTAGE

- Payment made for unimplemented works/unreceived supplies
- Procurement: projects not completed/late completion



IRREGULAR PAYMENT

- Off-contract payments
- Deceased person



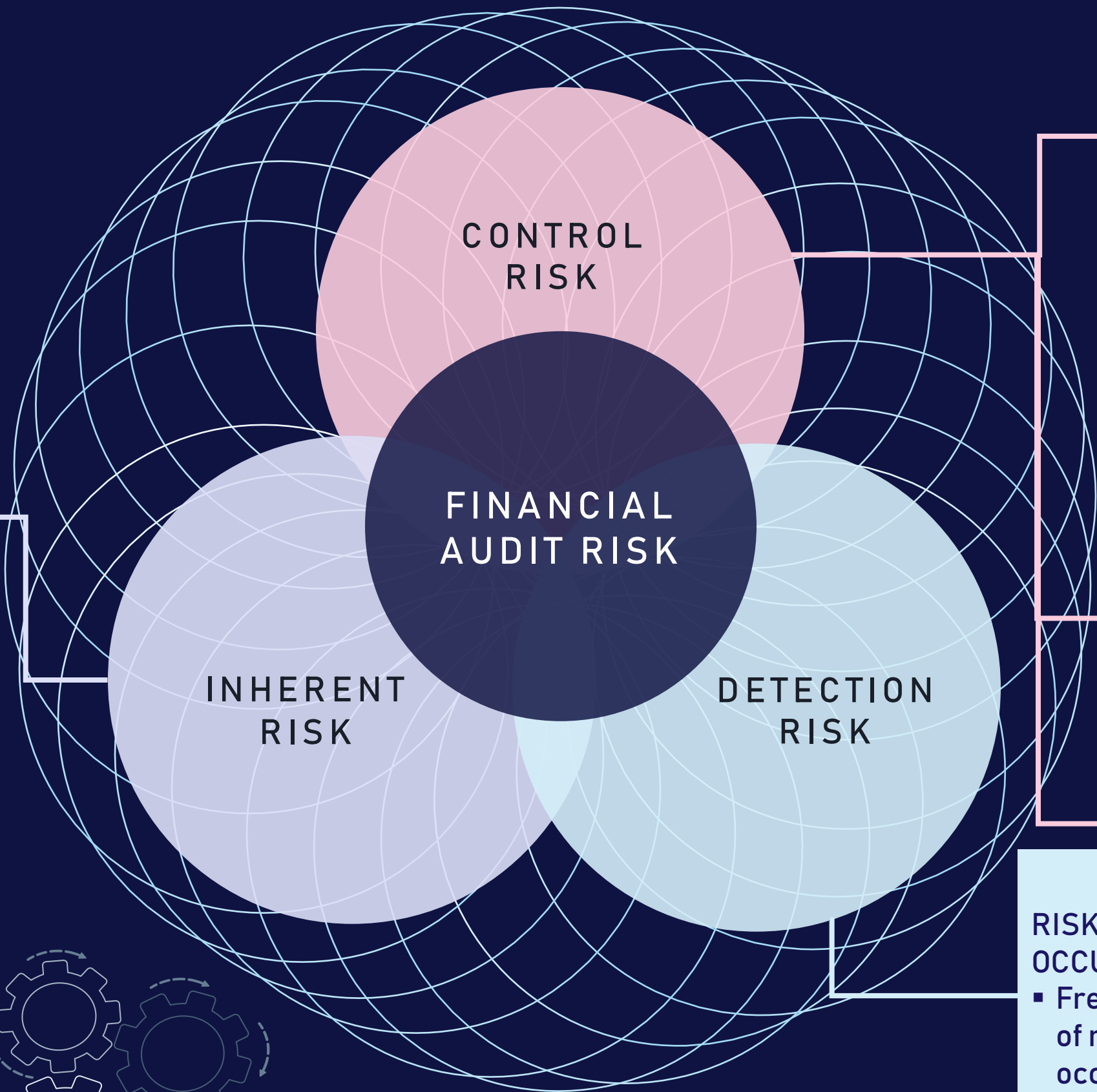
LEAKAGE OF PUBLIC FUND

Uncollected revenues

AUDIT RISK MODEL

RISK FACTORS

- Financial stability and external factors
- Organisational structure
- System and infrastructure
- Laws and regulations
- Previous unresolved and current issues
- Accounting and transactions
- Policies and internal control processes
- Enterprise risk assessment



RISK REGISTER

- Allocation
- Property, plant and equipment
- Investment
- Lending
- Cash and bank balances
- Loans and advances
- Receivables
- Payables
- Revenue
- Expenses

RISK PROFILE ASSESSMENT

- Risk existence
- Risk likelihood
- Risk impact

CONTROL RISK ASSESSMENT

- Establish controls towards identified risk
- Auditors' confidence level towards established controls
- Significant risk of misstatement due to fraud
- Level of control risk

RISK OCCURRENCE

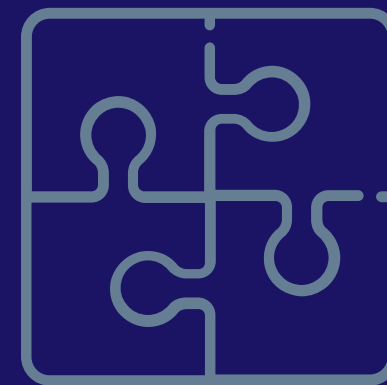
- Frequency of risk occurrence

Excel
workbook data
analysis

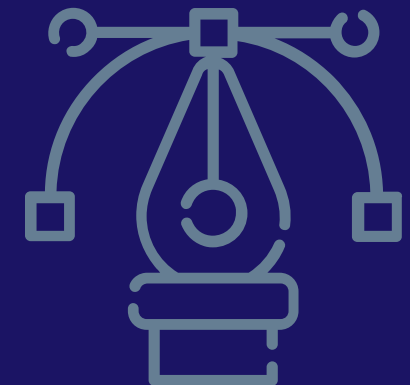


Manual
data input

Comprehensive
working paper



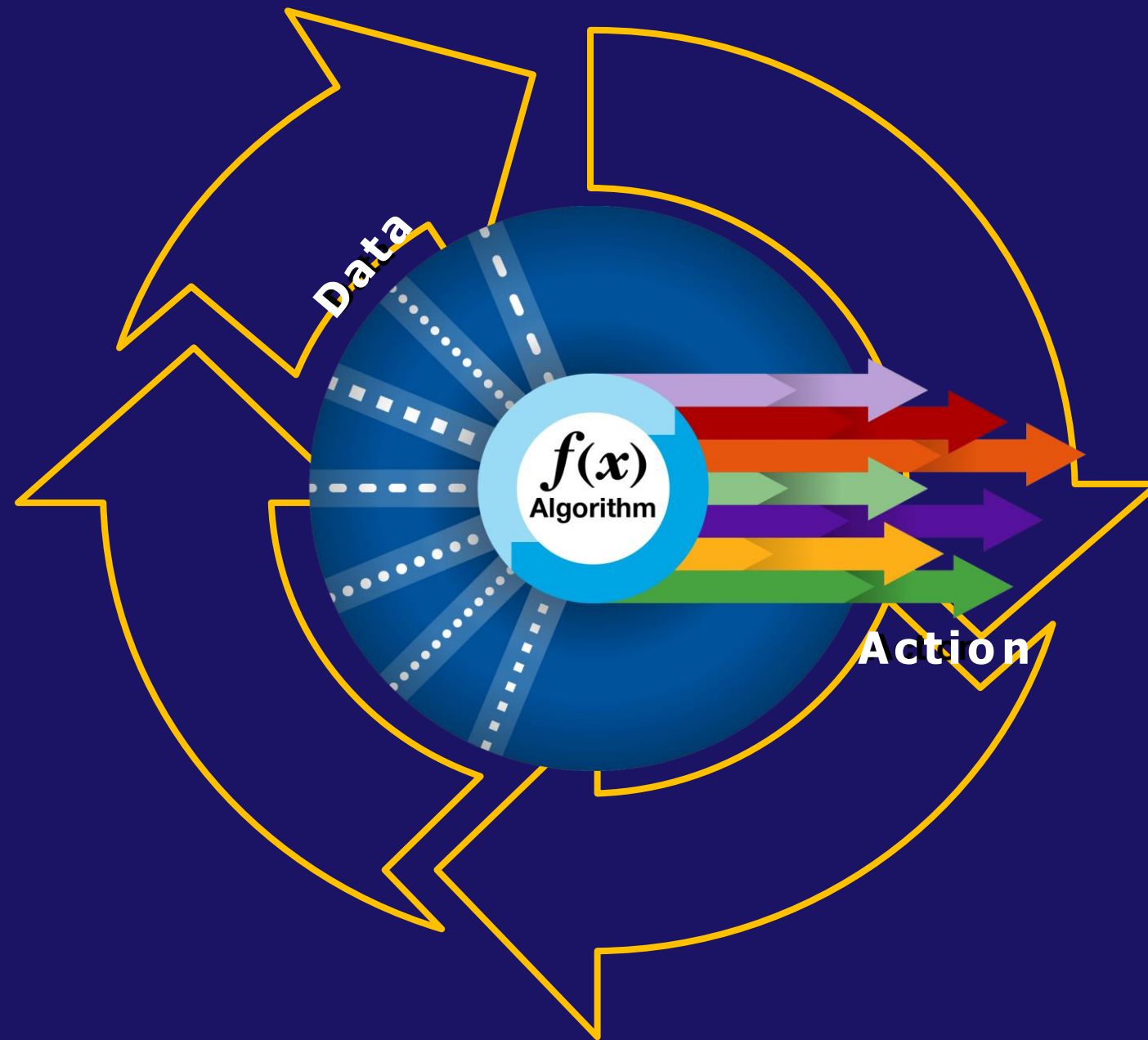
Time
consuming,
less efficient



Decentralised
analysis
results



AUDIT PHASE



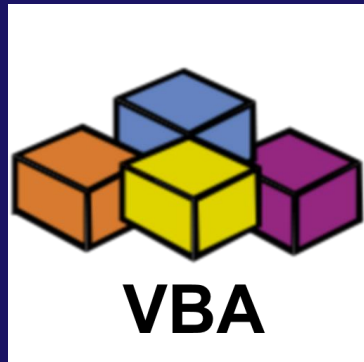
- Dynamic Cycle
- Risk area revisited

Planning

Execution

Insight

TOOLS AND TECHNIQUES USED



VBA Macros



ACL
Analytics



SSMS
Microsoft SQL
Server
Management
Studio



Business
Intelligence
Tools

BENEFITS OF USING INTELLIGENCE ANALYTICS



**Identify risk to
mitigate red flags**



**Greater confidence
in risk analytics**



**Informed decision for
automated professional
judgement through
machine learning**

BENEFITS OF USING INTELLIGENCE ANALYTICS



**Reduce time to
reconcile data**

**Technology driven
for convenient user
interface**



**Holistic approach
of centralised
data warehouse
for better insights**



**Efficient data
management to
enable advance
analytics**

MACHINE LEARNING – HOW TO TEACH AN INTELLIGENCE ALGORITHM TO THINK LIKE AN AUDITOR

EXPLORATION
Architecture and
technologies

AUTOMATION
Continuous
auditing and
augmented data
patterns

**DATA DRIVEN
ANALYTICS**

**INTELLIGENCE
COMBINED**
Auditors' professional
judgement and machine
artificial intelligence

HOLISTIC APPROACH
Centralised disparate
data and technologies
for audit tools and
techniques

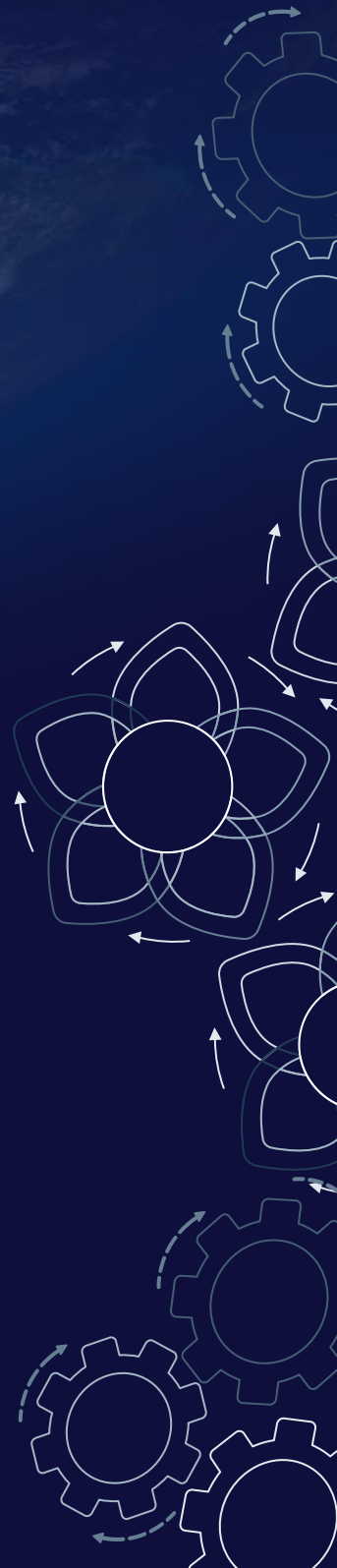
**DIGITAL
FORWARD**

NEURAL NETWORK TECHNOLOGY

Algorithm

**Recommend
Action**

Automation





CONCLUSION

EMPOWERING

DIGITAL WORLD

Q & A



THANK YOU

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