datacentrix showcase'24
Changing lives through technology

From Megabytes to Megaflops: The evolution of your Data's AI-dentity

Phil Anderson
Sales Manager: Digital Business Solutions, Datacentrix

Arno Hanekom
Digital Strategist, Digital Business Solutions, Datacentrix

Presenters: Arno & Phil

Biography

Arno: Digital Strategist & Carbophobe

Phil: National Sales Leader & Philanthropist

Agenda

Introduction

Data footprints in history

Maslow's AI Hierarchy

Ethics of AI
Data Management/ Governance
Platforms
Human Element
Scaling MVP's
Business Value

Our AI Menu

End to End Architecture
Full Stack Delivery
Grow with you

Get your Aidentity

Power Up & Engage with Datacentrix

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Data Evolution

Brief history of data journey through history

Decision Making

Increasing importance of having correct data interpreted for evidence-based decisions

Stop selling me hype

Less hype and waste – more tangible and taste

Map your Success

Datacentrix pioneering mistakes to learn from

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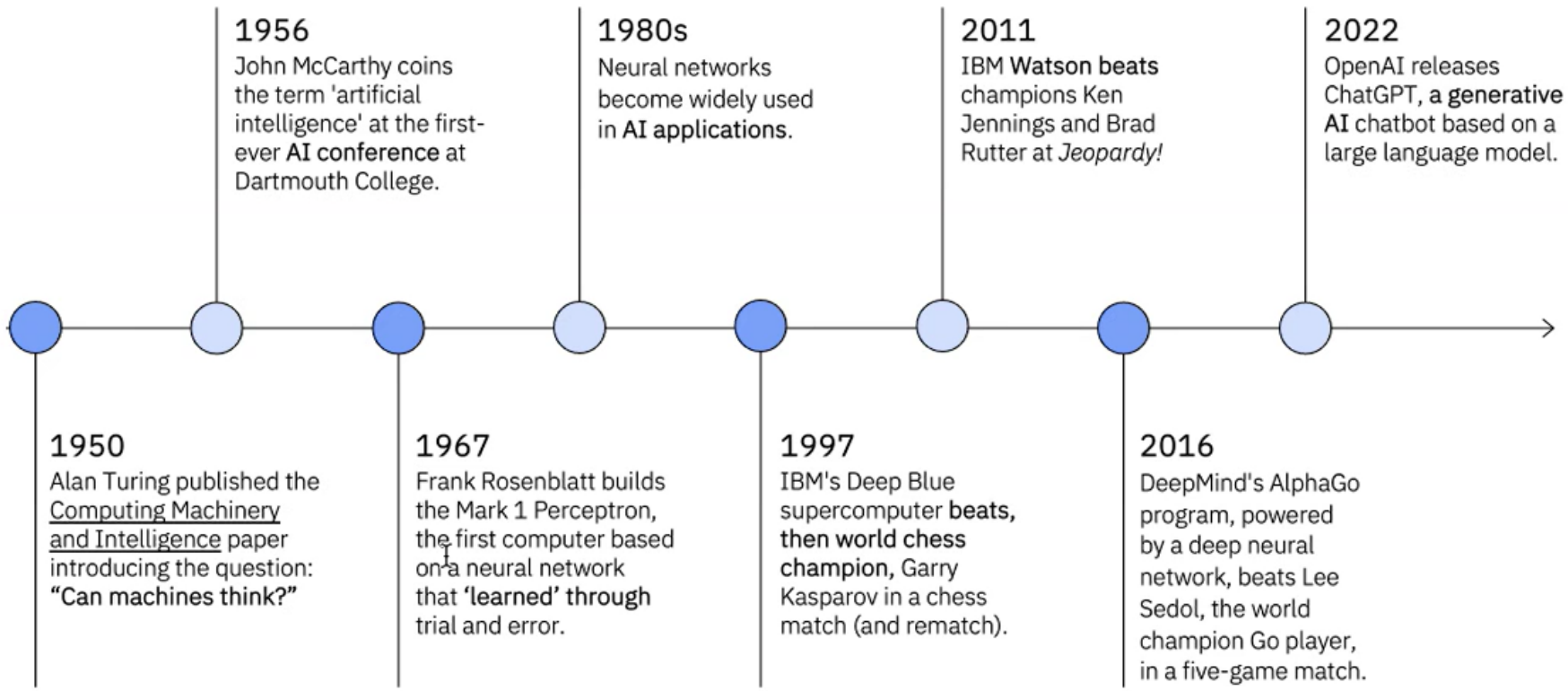
Ethics of AI

Maslow's Hierarchy for AI

The Evolution of AI

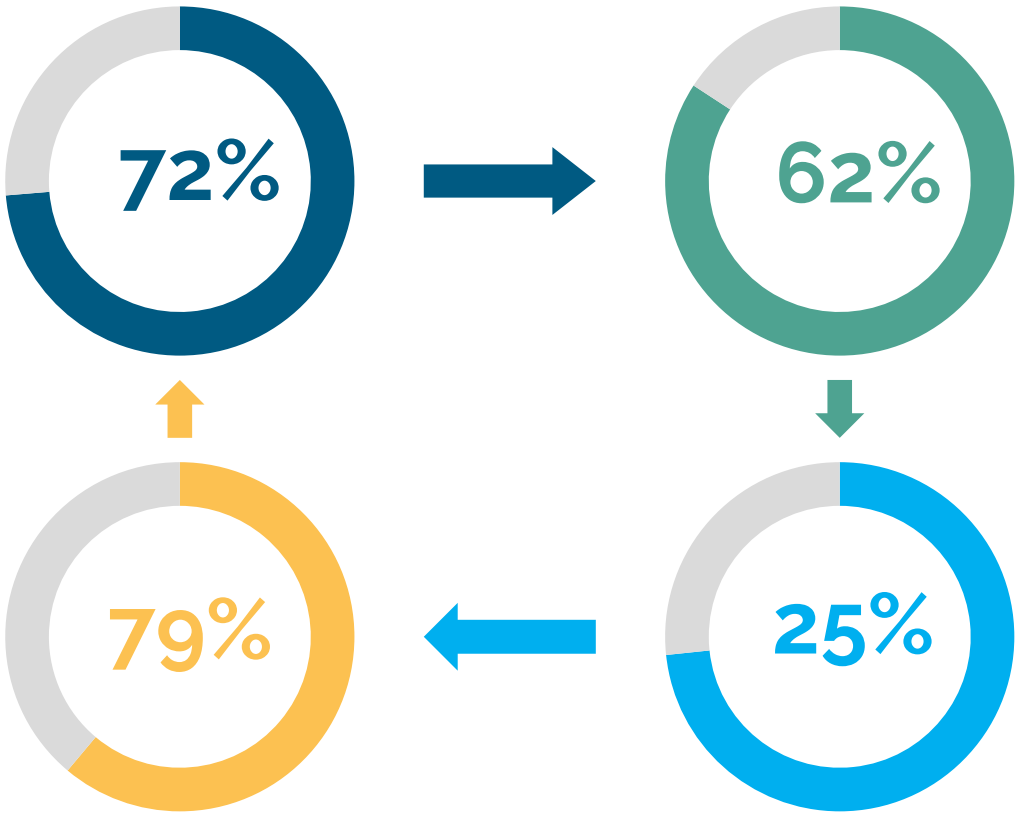
The journey of AI to date it has been more of a technical journey…..
……now with the power that has been developed it's becoming a real Ethical conundrum

AI Milestones



Why is this important

of leading CEO's believe that competitive advantage depends on who has the most advanced AI



say they will need to rewrite their business playbook to succeed

Less than 25% have operationalised a set of common principles within their organisation

of executives believe ethics is important in their approach

We would argue that in the African context your approach to Ethical and Responsible AI is even more critical!

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Data Management &Governance

Data Management & Governance

Accuracy

Definition: The degree to which the data correctly represents the real-world values it is supposed to model
Measurement: Compare the data against a known, trusted source to identify errors or discrepancies.

Consistency

Definition: The degree to which data is uniform across different datasets and systems.
Measurement: Ensure that data is consistent across various sources and that there are no conflicting values.

Data Lineage & Provenance

Data Lineage: Tracking the journey of data from its source to its final destination, including all transformations and processes it undergoes.
Provenance Information: Documenting the origins of data, how it has been processed, and any modifications made, which helps in verifying data integrity and reliability.

Completeness

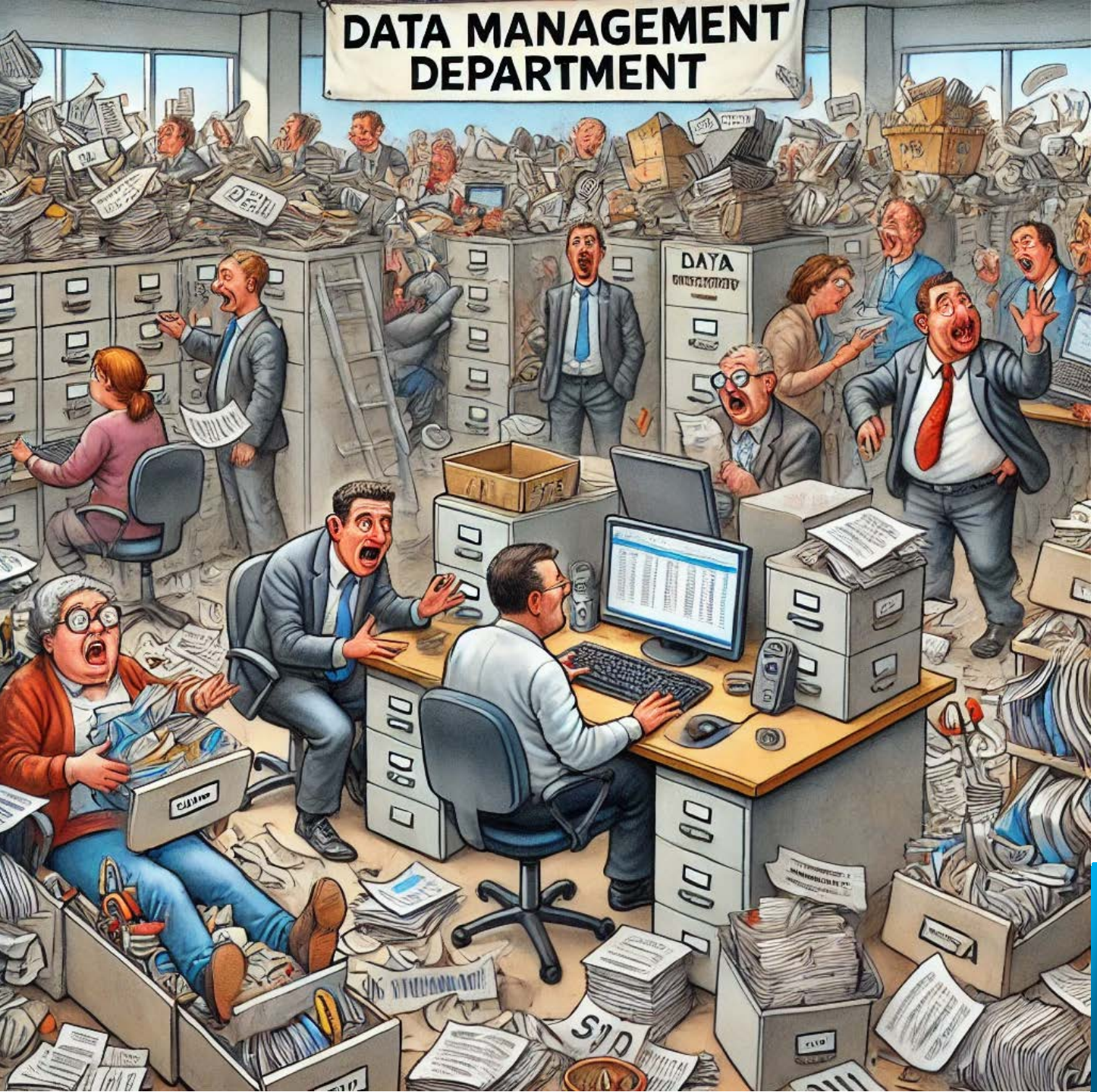
Definition: The extent to which all required data is present.
Measurement: Check for missing values or gaps in the data that the AI model relies on.

Compliance & Security

Importance: Ensuring data governance practices comply with legal and regulatory requirements is critical, especially with increasing data privacy laws like GDPR, CCPA, and POPIA.

Data Stewardship & Accountability

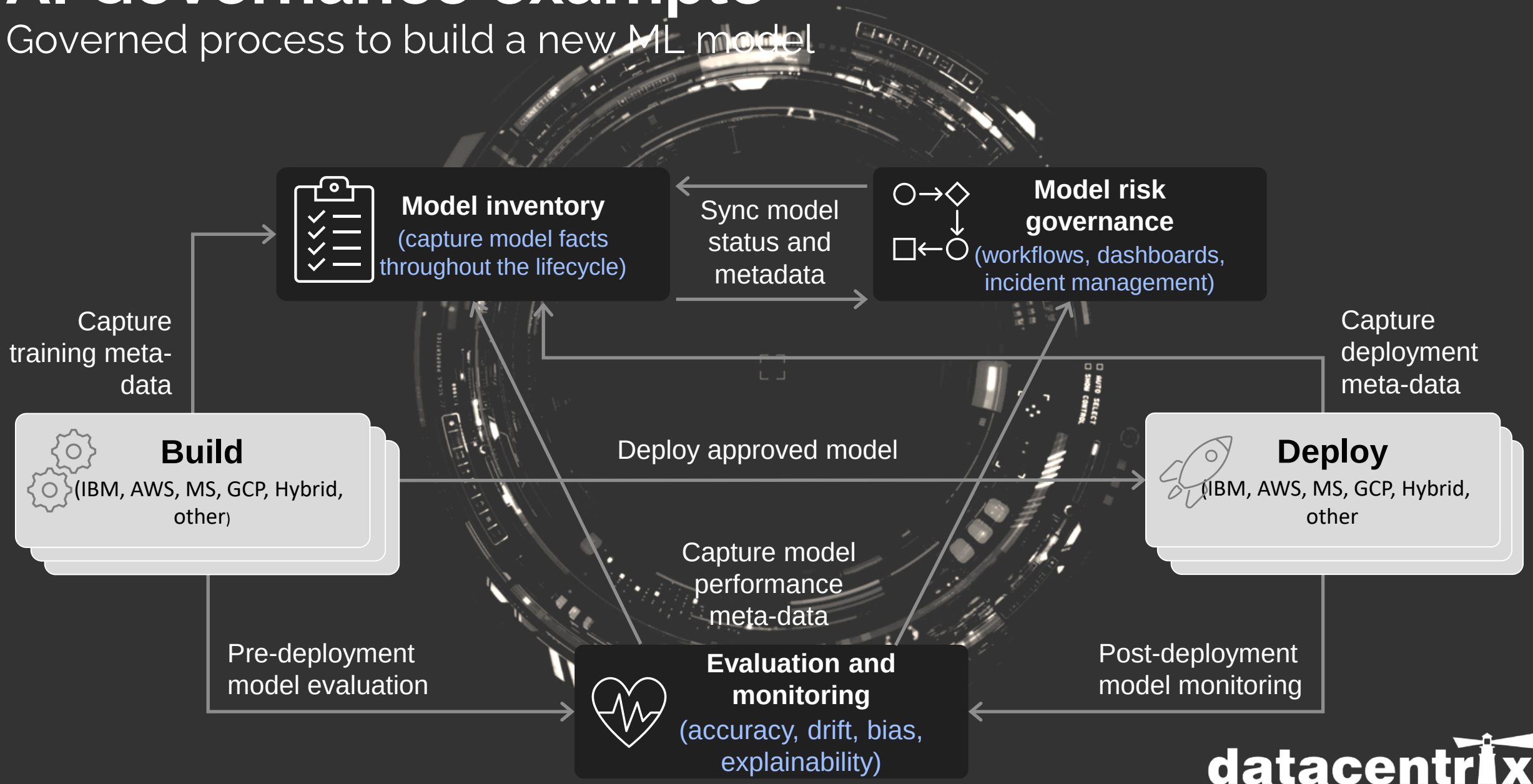
Assigning clear **ownership** for data assets to specific individuals or teams who are responsible for the data's quality, security, and compliance.
Role Based Access Controls based on individual supposed access rights & needs



The quiet yet familiar face of Data Management & Governance practices

AI Governance example

Governed process to build a new ML model



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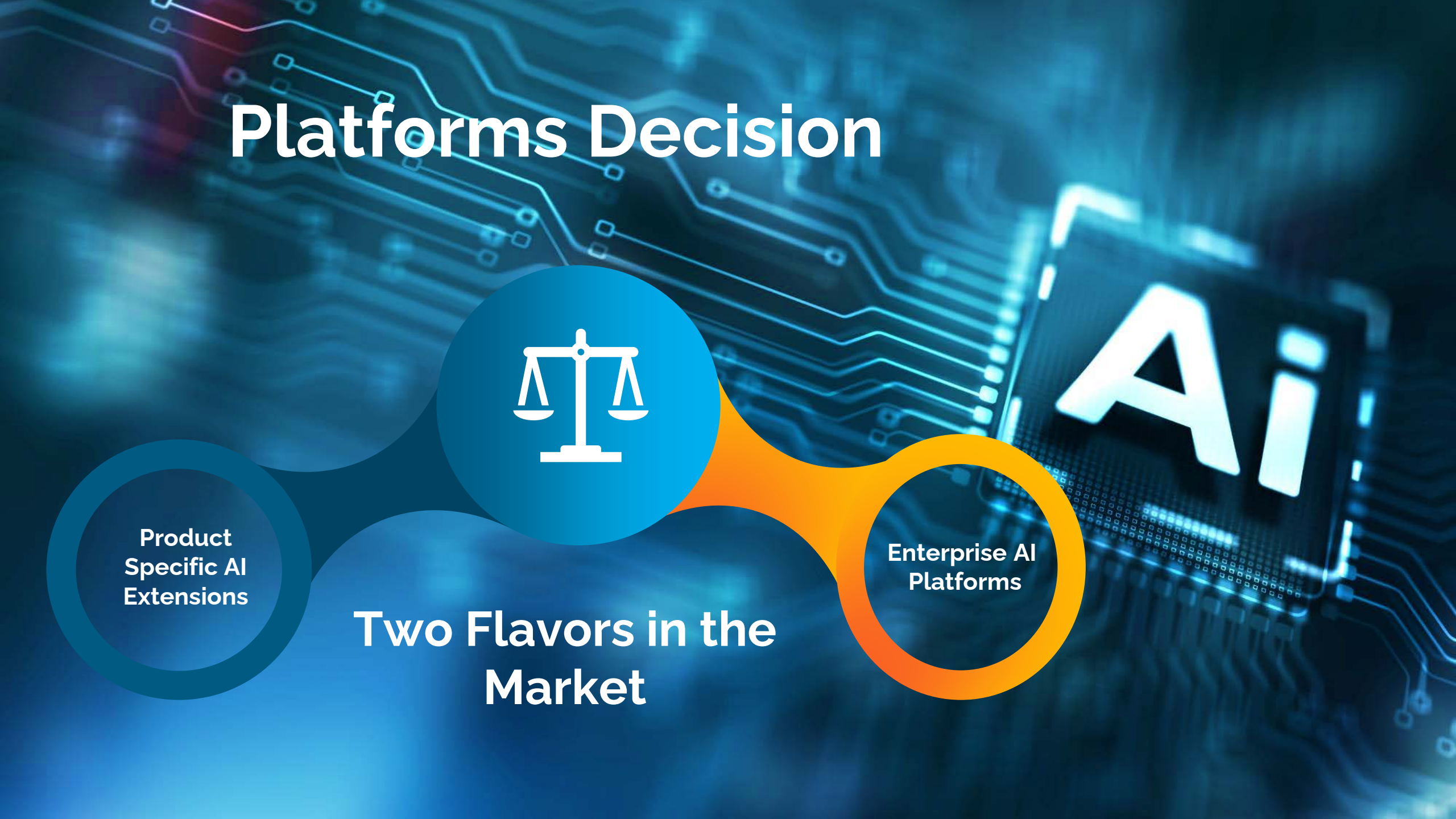
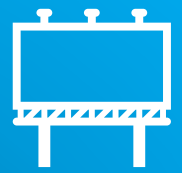
Platforms Decision



Benefits & Challenges

	Product Specific	Enterprise Platform
Benefits	 • No new integrations or skills • Simple to implement – fast time to value • Use cases pre-defined	 • Any source – any location • Huge flexibility – no limitations on the breadth of potential use cases • Govern and manage and exploit ALL data
Challenges	 • Additional licence costs (in most cases) • Use cases specific to product stack • Can only use the data the product see's directly	 • Cost of entry can be high • Use Cases require careful thought and planning • Requires a change in operating model and new skills

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Human Element

Certified

Recognised knowledge specific to the discipline

Experience

Track record, credibility and trust

Relevant to You

Deliveries similar to what the client specific need is – make him feel valued and understood

Our Teams Journey

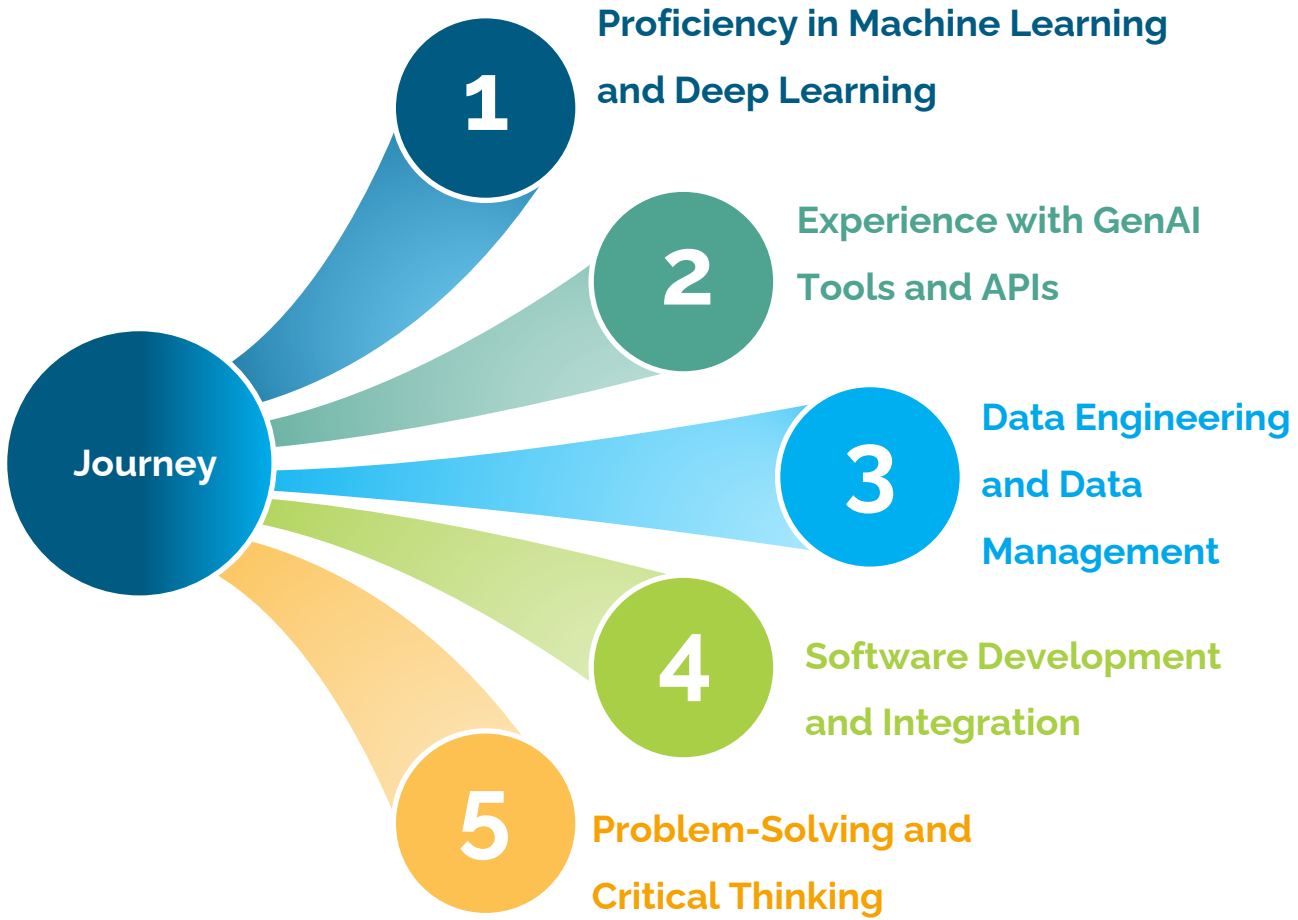
Practical Application: Datacentrix GenAI Team

Training and Certification: Provide training programs and encourage certification in relevant tools and other relevant technologies.

Hands-On Projects: Engage engineers in hands-on projects and hackathons to build practical experience.

Collaboration and Mentorship: Foster a collaborative environment where engineers can learn from each other and from more experienced mentors.

Continuous Learning: Encourage continuous learning and staying updated with the latest advancements in AI and related fields.



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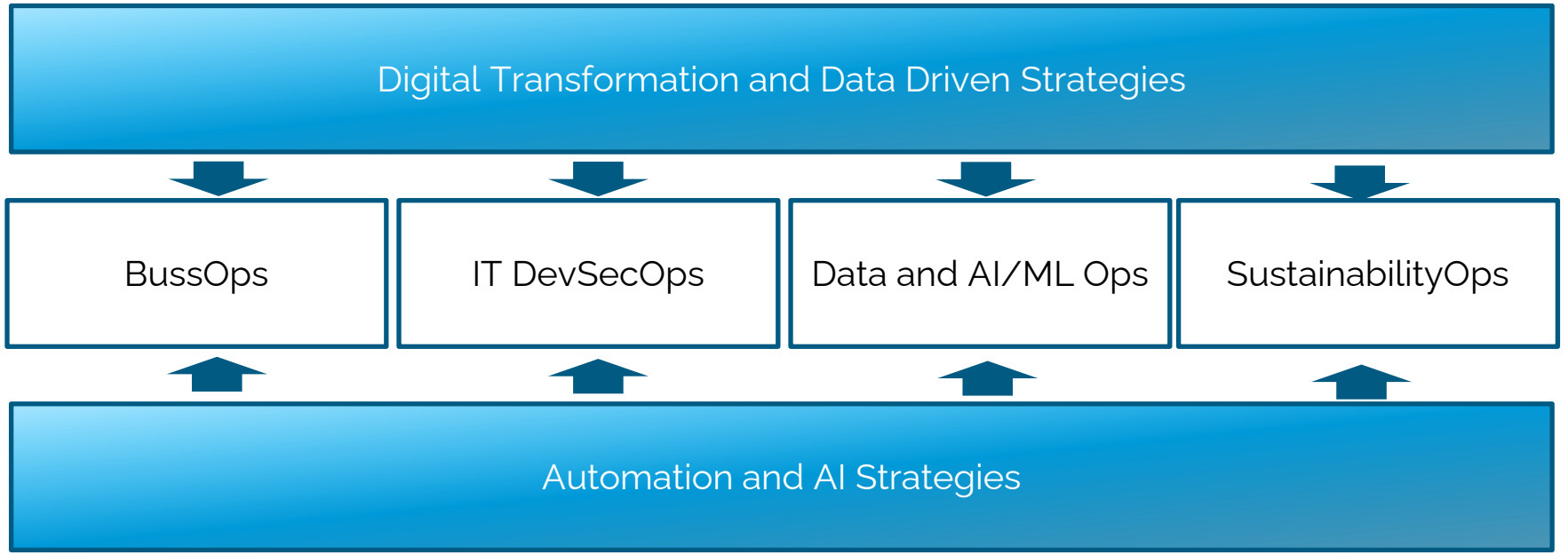
Takings MVP's To Scale

Taking MVP's to Scale

Value for all

Strategies, funding and change projects must be defined for all Operating domains ensuring a well orchestrated roadmap.

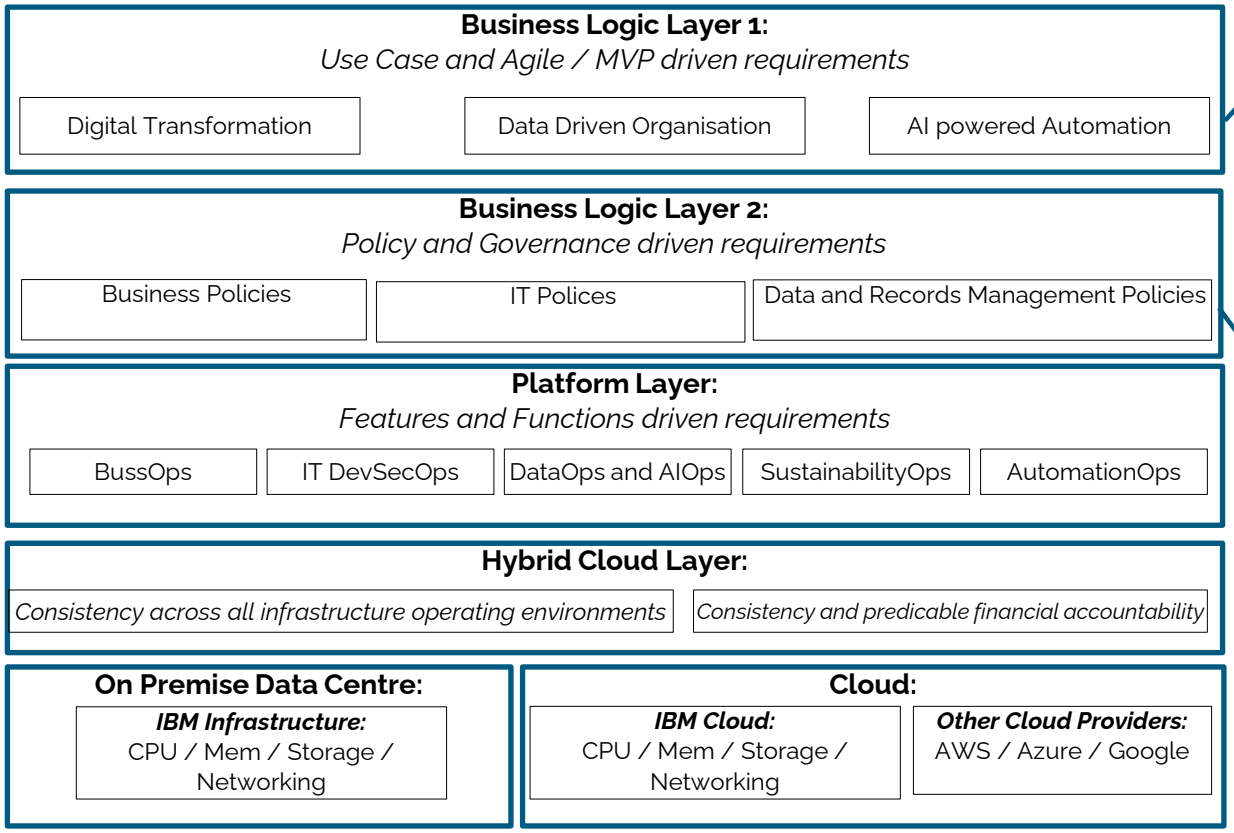


Under investment in one domain will have a significant negative impact on the formula for success.

Taking MVP's to Scale

Business Logic Layer 2

In an Agile / MVP orientated world we find that scaling MVPs from ideation to production is taking significantly longer.



Business Logic Layer 1:

- Use Case MVPs are typically designed without any constrains ensuring rapid delivery.
- To move MVPs to production, it's required they comply to the requirements defined in the Business Logic Layer 2

Business Logic Layer 2:

- Non-compliance to these requirements often lead to re-design, significant additional development effort and funding to achieve compliance.
- These requirements can add months to any timeline, especially when Governance forums rejects approval requests.

Taking MVP's to Scale

The Value it brings – Where to start?

An organisation's Policy Framework provides clear direction on how the organisation envisage to operate.

It's the richest source for identifying where AI powered Automation will be invaluable for the organisation.

Business Logic Layer 2:

Policy and Governance driven requirements

- Operational Risk Management Policy
- Records Management Policy
- Regulatory Reporting Policy
- Compliance Management Policy
- Cyber Risk Management Policy
- Technology Risk Management Policy
- Resiliency / Business Continuity Policy
- Cloud Risk Management Policy
- Data Management Policy
- Financial Crime Risk Management Policy
- Information Security and Privacy Policy
- Climate Policy
- Incident Response Plan Policy
- Quality Control System Policy
- Planning and Budgeting Policy
- Model Risk Management Policy

- This Layer defines business requirements, business rules, standard process, procedures, RACI's and awareness training content.
- Understanding all these policies provides clarity where AI powered Automation can be leveraged to:
  - Fast-track delivery and productionalisation
  - Ensuring augmentation of knowledge workers with AI where is will be most effective
  - Simplify complex workflows and reduce or eliminate time-consuming tasks

Key objectives of policies:

- Drive consistency across all business units
- Drive quality of products and services
- Ensures regulatory and legislative compliance
- Ensures accountability is assigned appropriately
- Give guidance for decision-making, and streamline internal processes
- Consistent monitoring and governance
- Reduce risk and liability

Illustrative value:

- 40000 people working in the organisation
- Working 200 days of the year for 8 hours a day
- Average blended rate per hour of R650
- 10% optimisation and efficiency gains through AI powered Automation

Total value by eliminating process **wastage**:

- **6.4M hours at a value of R4.1B**

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Business Value

Business Value

Customer Care

Call Centre Optmisation

Help Desk Support

Health, Retail,

Manufacturing

Knowledge Bots

Data Repository Learning

Real Time Access to

Information

Immersive Assistant

Integrations to Current Platforms

Elevate with Service on

Demand

Connected Data Insights

Extended Client Reach

In House

Natural Language

Processing

RAG Models

Integration & Modernisation

Data Insights & Reporting

Partner Strategy

Multilingual Support

Model Fitting

Opensource Framework

Cross Functional Designs

Industry Expertise

Multiple Industries with

off the shelf deployments

Platform Agnostic

Sizing & Deployment

flexibility

Global Support Network

Support multi jurisdictional

deployments with Datacentrix

Support Services

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Customer-Centric Outcomes

Hybrid ICT Solutions Provider & Systems Integrator

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Professional Services

- Technical Consulting & Advisory Services
- Strategic Consultation
- Software Consulting & Advisory Services
- Architectural Services
- Project Management
- Implementation & Commissioning
- Data Analytics
- Adoption & Change Management

Managed Services Provider

On-Premise / Co-located

Technology Solutions

- Hardware & Cabling Solutions
- Networking
- Servers & Data Storage
- Software & Application Solutions
- Cyber Security
- Datacentre
- Edge Computing
- Building Management Services
- Managed Print Solutions
- Infrastructure & Application Monitoring
- Service Management
- IT Service Management (ITSM)
- Hardware Services (Repair Services)
- Field Service Management
- Banking & Finance Solutions

Digital Business Solutions

Data-driven intelligence

- Data Management (AI & Analytics)
- Web & Mobile (Omni-Channel)
- System Integration
- Database
- Business Networks
- Content Services
- Blockchain
- Internet of Things
- Smart Process Automation
- ERP
- Customer Experience
- Identity & Access Management

Resource Augmentation

Consumption-Based **Cloud Services** (XaaS)

Datacentrix as a Service

Consumption-Based Services

- Datacentrix IaaS
- Datacentrix PaaS
- Datacentrix SaaS
- BaaS
- DRaaS
- Voice (VaaS)
- FWaaS
- Datacentre (Colocation)
- Telecommunication
- SOC
- Hyperscaler Services

Governance, Risk & Compliance

Project Management

Service Desk Management **24/7**

IT Operations Management **24/7**

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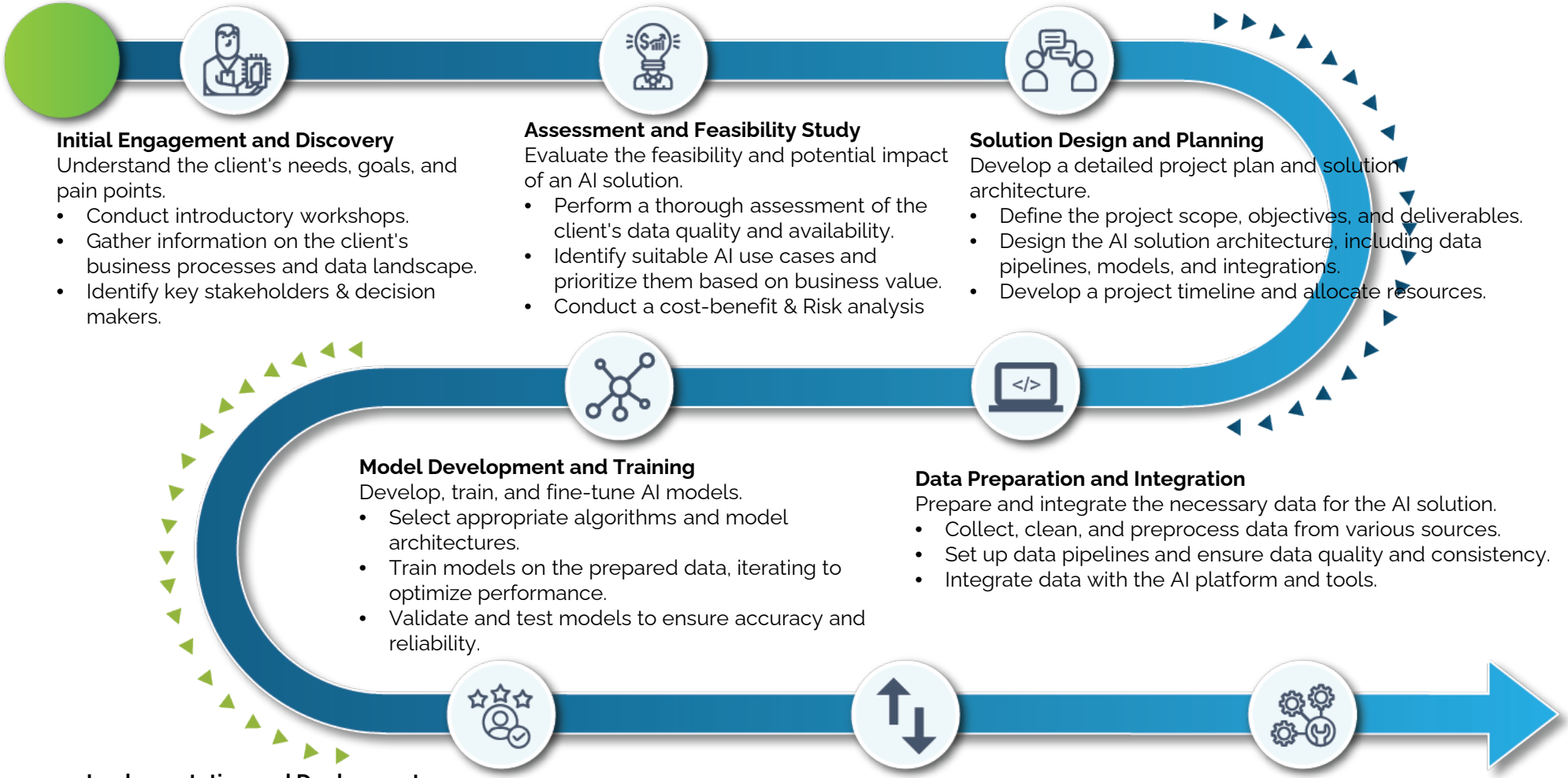
Our successful AI Client Journey



Initial Engagement and Discovery
Understand the client's needs, goals, and pain points.
- Conduct introductory workshops.
- Gather information on the client's business processes and data landscape.
- Identify key stakeholders & decision makers.

Assessment and Feasibility Study
Evaluate the feasibility and potential impact of an AI solution.
- Perform a thorough assessment of the client's data quality and availability.
- Identify suitable AI use cases and prioritize them based on business value.
- Conduct a cost-benefit & Risk analysis

Solution Design and Planning
Develop a detailed project plan and solution architecture.
- Define the project scope, objectives, and deliverables.
- Design the AI solution architecture, including data pipelines, models, and integrations.
- Develop a project timeline and allocate resources.

Data Preparation and Integration
Prepare and integrate the necessary data for the AI solution.
- Collect, clean, and preprocess data from various sources.
- Set up data pipelines and ensure data quality and consistency.
- Integrate data with the AI platform and tools.

Model Development and Training
Develop, train, and fine-tune AI models.
- Select appropriate algorithms and model architectures.
- Train models on the prepared data, iterating to optimize performance.
- Validate and test models to ensure accuracy and reliability.

Implementation and Deployment
Deploy the AI solution into the client's environment.
- Implement the AI models into the client's systems + workflows.
- Proper integration with existing applications + infrastructure.
- Conduct thorough testing + validation in the production environment.

Monitoring and Evaluation
Monitor the AI solution's performance and make necessary adjustments.
- Set up monitoring tools and dashboards to track model performance
- Collect feedback from users and stakeholders.
- Refine and retrain models as needed based on performance data

Finalisation and Ongoing Support
Finalize the project and establish ongoing
support mechanisms.
- Conduct a final review and handover
- of the AI solution to the client.
- Provide training and documentation.
- Establish a support plan for maintenance, updates, and future enhancements.

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In Summary

Client Briefing

- Discussion & Custom demo of Gen AI Capabilities
- Understand Gen AI leveraged in your business

2-4 hours (FOC)

Design Thinking for AI

- Design Thinking for AI
- Define & prioritise the highest impact use cases for your organisation

1.5 Day

MVP/POC

- Developed with AI engineers.
- Use Case Specific
- Tangible Value product

4 - 12 Weeks

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Changing lives through technology

Thank you

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