



HEFMA 2026 · GABORONE

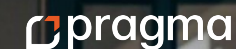
You can't digitise chaos.

The maturity journey to a smart campus

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PRAGMA AT A GLANCE



A proud heritage. A future focused.

Enterprise asset management, engineered through people, processes, technology and data.

1990

ESTABLISHED



Global

DELIVERY



Trusted partner

to institutions across South Africa



Deep sector experience

in higher education and research



Proven expertise

in asset management, facilities and operations



A lasting impact

through people, processes and technology



PARTNERSHIPS

Our pedigree is built on partnerships that matter.



NORTH-WEST UNIVERSITY
NOORDWES-UNIVERSITEIT
YUNIBESITHI YA BOKONE-BOPHIRIMA



University
of Cape Town

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA



UNIVERSITY OF
THE WESTERN CAPE

IYUNIVESITHI YASEWESI KAPA
UNIVERSITY OF THE WESTERN CAPE



UNIVERSITY OF NAMIBIA

Trusted by leading institutions. Built for what's next.

Three capabilities. One connected way of working.

Align strategy, people, processes, systems, data and daily work.



Pragma Services

Practical support to improve asset and maintenance performance

- Asset management strategy
- Work management and reliability
- Managed services and focused improvement



Pragma Academy

Capability building for individuals, teams and organisations

- Public and corporate training
- Learning pathways and qualifications
- On Key and asset-management training



On Key

Best-of-breed enterprise asset management platform

- Software development and support
- Implementation and integration
- Licensing, training and application support

YOU CAN'T DIGITISE CHAOS.



Maintenance Requests

Space Bookings

Asset Records

Compliance

FACILITIES MANAGEMENT

CAMPUS OPERATIONS

HIGHER EDUCATION

CAMPUS OPERATIONS

Assets

Maintenance

Work Orders

Space & Buildings

Compliance

Reports



Safe Campus



Efficient Operations



Optimised Assets



Better Student Experience

LEARN
GROW
ACHIEVE



Better
Campuses.
Brighter
Futures.



WHAT WE ALL DESIRE

A compelling promise.

Connected assets. Predictive insight. Seamless experiences. Better decisions.



Responsive services

Work requests resolved with visibility



Resilient infrastructure

Risks anticipated before disruption



Sustainable operations

Energy, water and waste managed with evidence



Informed investment

Lifecycle data shapes capital priorities



The outcome is not purchased. **It is built.**

THE UNCOMFORTABLE REALITY

Chaos in the environment.

The foundations beneath many FM and AM environments.



1

We don't know what we own

Missing assets · duplicates · inconsistent names

2

We don't know where it is

"AC in admin" · outdated locations · no hierarchy

3

Knowledge lives in people

WhatsApp · spreadsheets · paper · memory

4

We are constantly firefighting

Breakdown · urgent call · repair · repeat

5

We can't trust the history

"Fixed" · "done" · no cause or failure data

6

Decisions become opinion-driven

CAPEX and priorities debated without evidence

This is the chaos we are trying to digitise.

**Technology does not fix poor foundations.
It digitises them.**

"We are trying to put AI on top, while still arguing about what the asset is called."

Technology amplifies maturity. It does not create it.

If process, data and accountability are weak, digitisation makes the chaos faster and more visible.

WEAK FOUNDATIONS

× Inconsistent process

× Poor asset and work data

× Unclear accountability

AMPLIFIED BY DIGITAL SCALE

➤➤ Faster incorrect reporting

➤➤ More visible process failure

➤➤ Faster bad decisions

➤ First mature. Then digitise.



BENEATH THE SURFACE

The hidden roots of a smart campus.

The visible digital experience depends on invisible operating discipline.



Strategy

Clear intent and outcomes



Process

Standard ways of working



Data

Trusted asset and service information



People

Roles, capability and ownership



Governance

Priorities, controls and learning

AVOID DIGITAL TUNNEL VISION

A holistic view prevents digital tunnel vision.

Campus FM maturity must be assessed across the whole operating system.

17

connected Key Performance Areas

Weakness in one area usually affects several others.



Direction

- FM policy and strategy
- Risk and continuity
- Maintenance plans
- Budget and cost



Control

- New infrastructure
- Service delivery
- Sustainability
- Space utilisation



Delivery

- Maintenance work
- Safety and health
- Performance Management
- Focused improvement

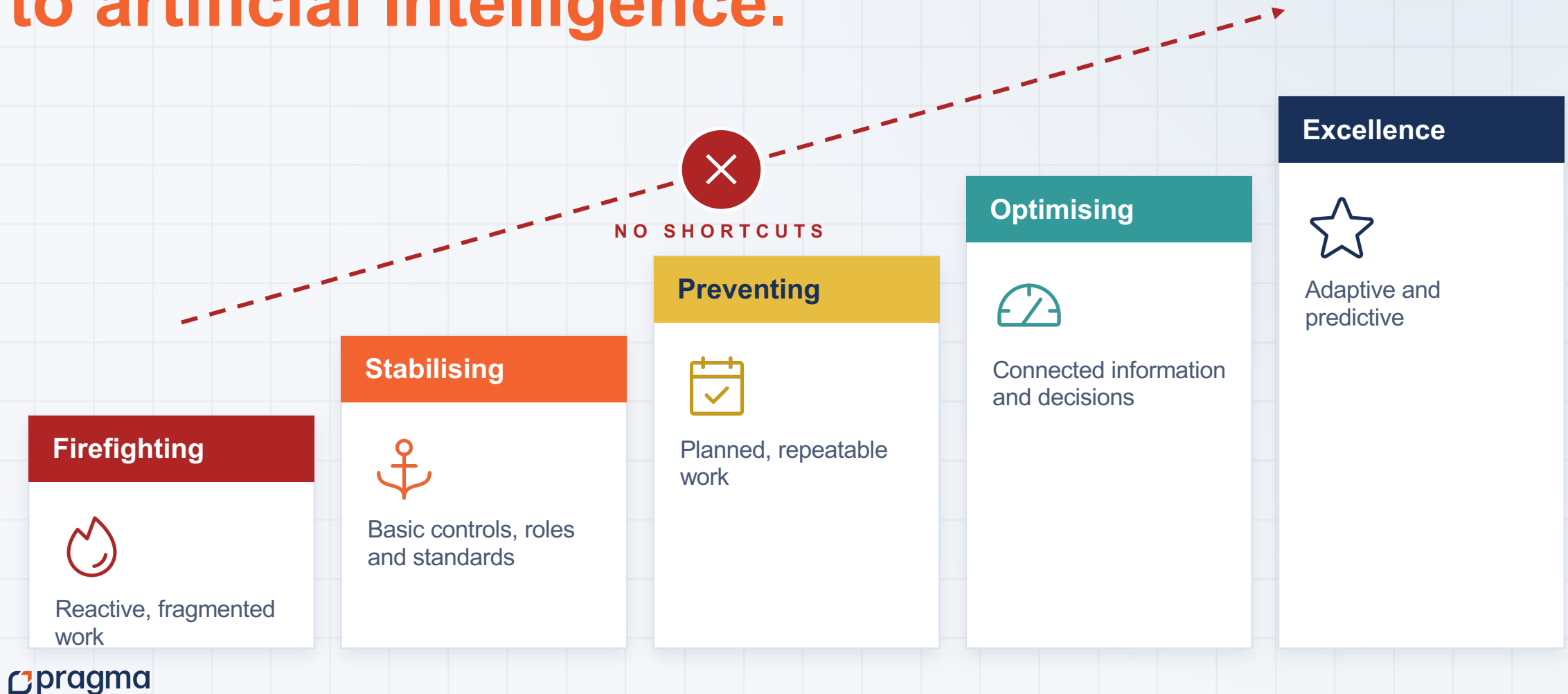


Enablement

- Asset information
- Technology and information
- Material management
- People management
- Contractor management

THE MATURITY JOURNEY

Do not leap from firefighting to artificial intelligence.



Five non-negotiables.

They don't all need to be perfect. But if they are unclear, it isn't a software project.

01

Shared service model

Scope, service levels and accountabilities are explicit.

02

Governed asset hierarchy

Assets, spaces and criticality are defined consistently.

03

Controlled work process

Identify, plan, schedule, execute, close and learn.

04

Decision-grade data

Ownership, quality rules and verification are established.

05

Management rhythm

KPIs trigger action, escalation and focused improvement.

PEOPLE FIRST

Transformation is a people journey, enabled by technology.



01

Consensus

A shared view of today's reality
and the outcomes we need



02

Standard work

Agree how the work is done, and
who owns it



03

Technology

Configured to support the agreed
process



04

Continuous improvement

Review, adapt and keep the model
alive



THE TECHNOLOGY TRAP

One platform for everything often means compromise everywhere.

One system to

- × Broad but shallow
- × Heavy customisation
- × Slow upgrades and
- × Vendor lock-in
- × Operational complexity

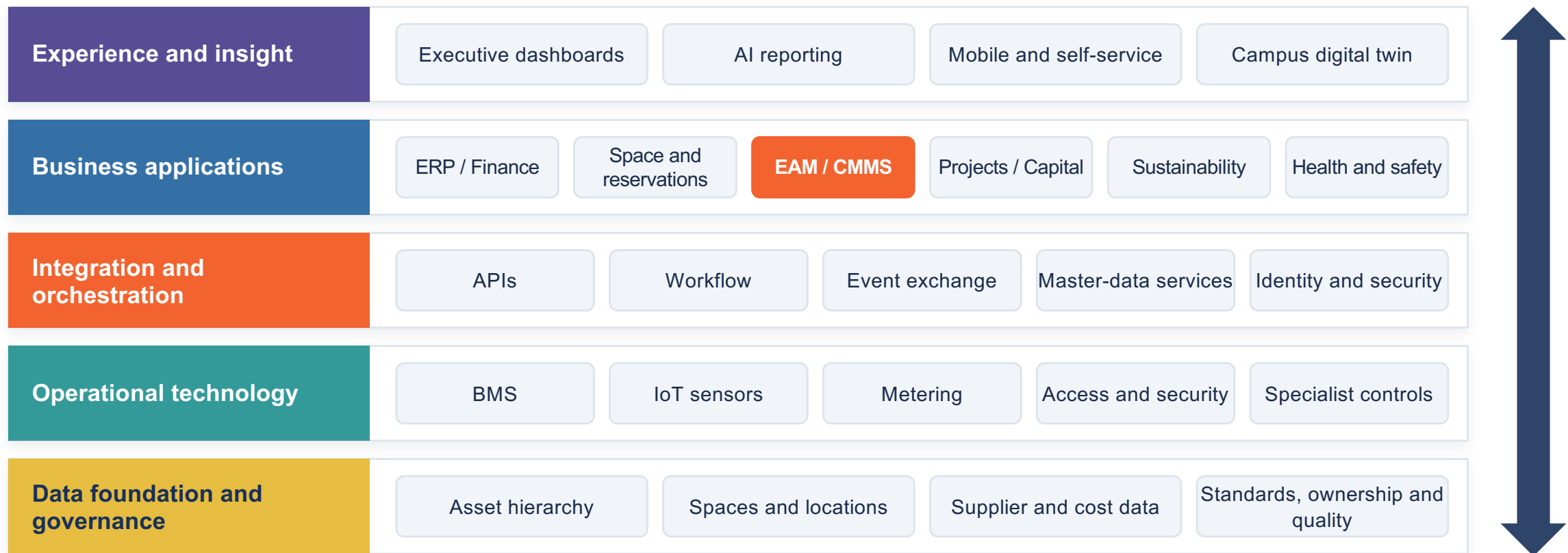


right job

eed it

THE SMART CAMPUS LANDSCAPE

A layered ecosystem, not a single application.



ON KEY CMMS

Asset data, turned into operational decisions.



From trusted information to consistent execution and learning.

MEET THE TWO CAMPUSES

Same campus. Same three years of work.
Recorded two different ways.

BOTH: a real On Key system · 15 buildings · Oct 2023 – Oct 2026 · the same AI

	Acacia Mature process	Baobab Typical process
Asset records complete	150 of 150	12 of 150
Planned (preventive) work	71%	34%
Breakdowns with a cause	100%	12%
Work orders captured	1 678	1 403 incl. duplicates
Money actually spent	R6.1m	R6.1m same work
Spend captured in On Key	R6.1m	R3.80m R2.3m missing

EXAMPLE · THE LIBRARY CHILLER

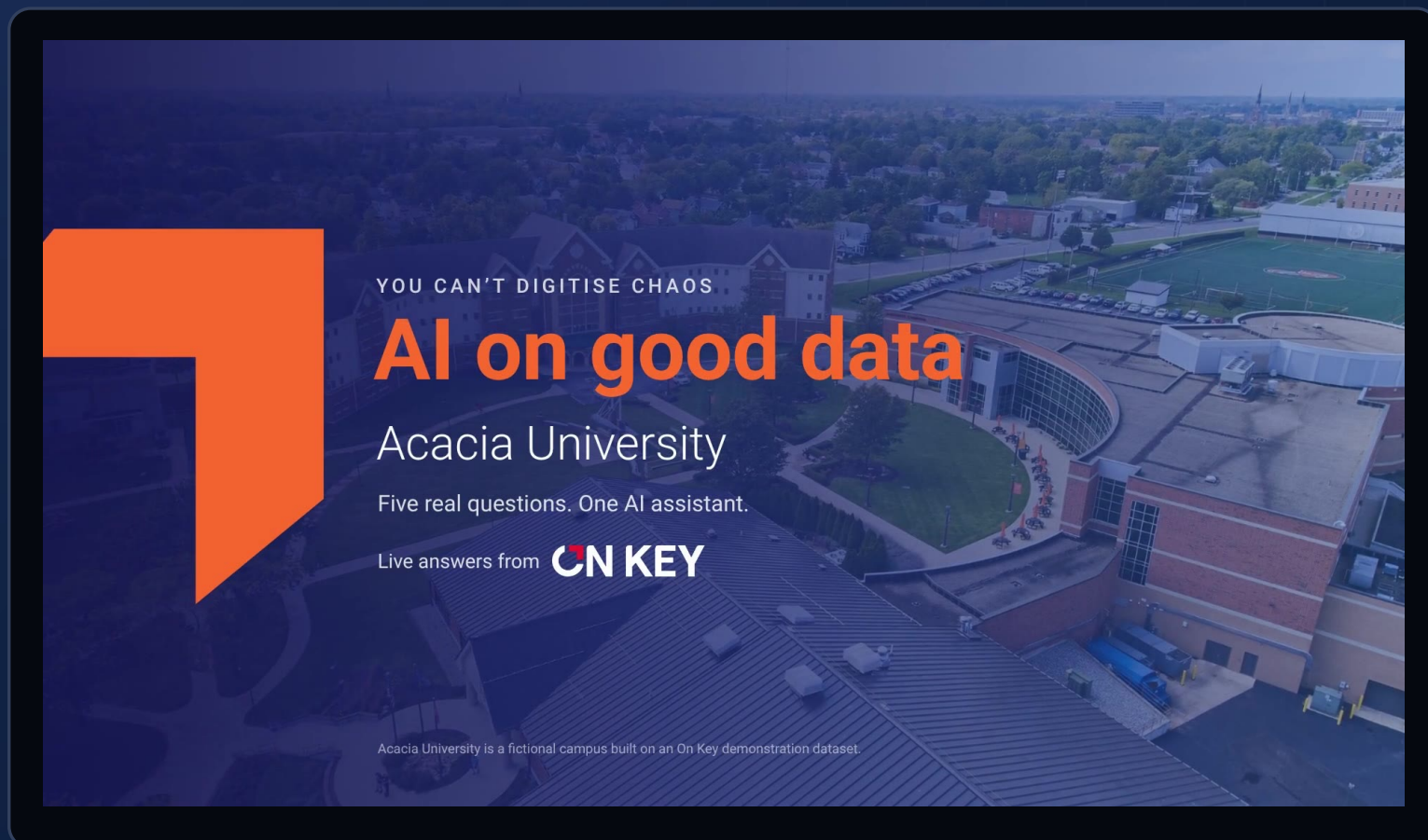
Acacia: 1 complete record
Chiller 01 – Morula Library
✓ York YCAJ · serial YOR297536
✓ Installed Mar 2004 · ✓ Criticality A
✓ Every repair booked to this asset

Baobab: the same chiller, 3 partial records
“Chiller 2” ✗ no make ✗ no install date ✗ no criticality
“Library chiller” ✗ no asset type
“CH-02” filed under the plant room
Many repairs booked to the library building instead

Acacia and Baobab are fictional universities built on an On Key demonstration dataset. Recorded figures are live from On Key; “money actually spent” is the scenario’s ground truth.

First, give AI something it can trust.

Same AI. Same organisation. Mature foundations. Decision-grade decisions.

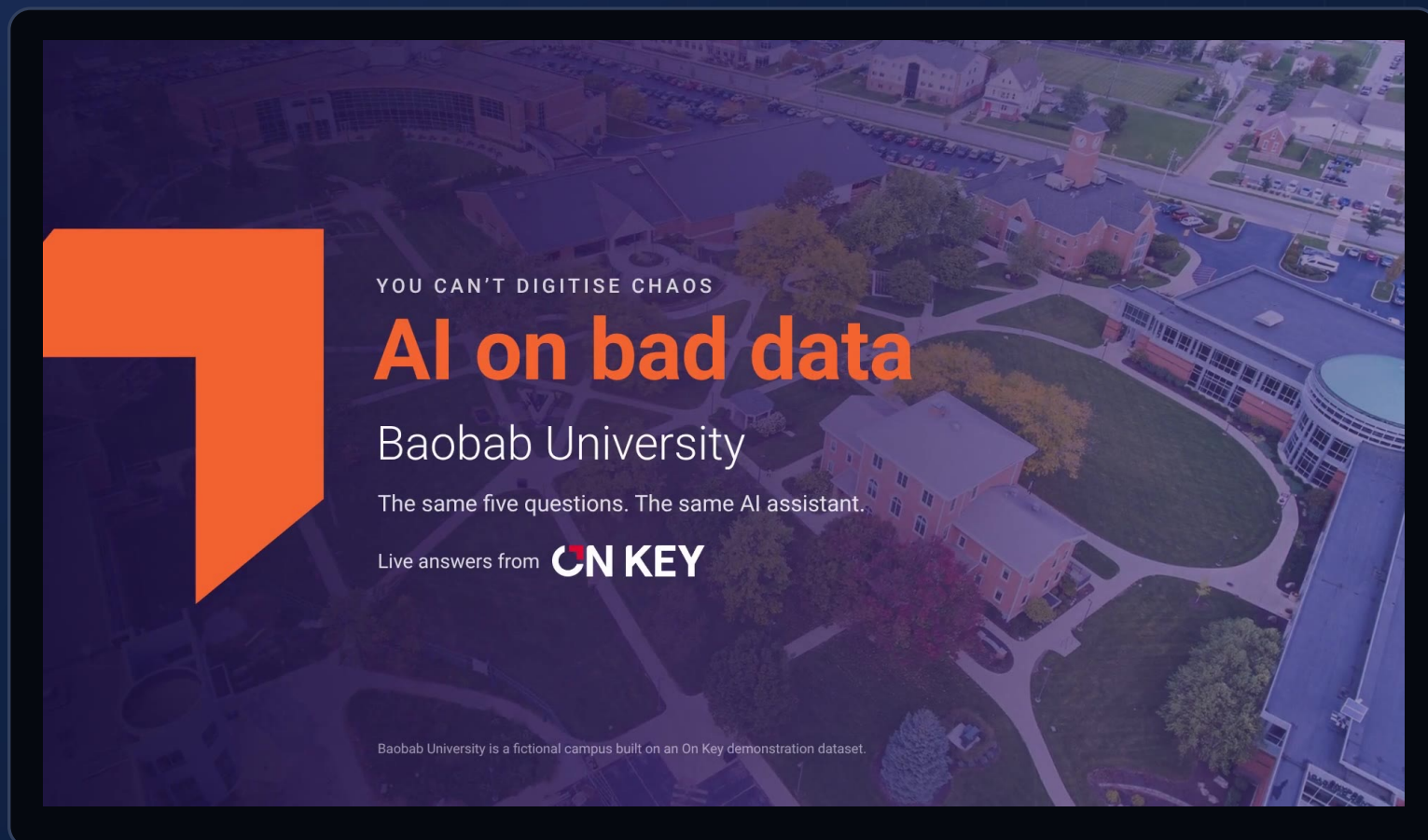


Trusted data

- ✓ Governed asset hierarchy
- ✓ Consistent work classification
- ✓ Complete failure codes and cost history
- ✓ Verified ownership and controls

Now watch AI learn from chaos.

Same AI. Same organisation. Poor foundations. Faster bad decisions.



Poor quality data

- ✗ Duplicate and missing assets
- ✗ Misclassified work orders
- ✗ Incomplete failure codes
- ✗ Costs allocated inconsistently

Same AI. Same questions. Different foundations.

THE SAME QUESTION

✓ Acacia University

Mature process · trusted data

✗ Baobab University

Typical process · typical data



Lecture hall air
conditioners



Fix **1 leaking unit**, reinstate 4 coil
cleans



Replace all 6 units: **R1.58m**



Fire pumps before exams



2 tests overdue → **2 work requests
raised**



“All compliant” → **no action**



Capital priority



Morula Library chiller, **R499 940** →
replace



‘HVAC General’ catch-all, **R427 320**



Can we trust the answer?



High: every answer traces to work
orders



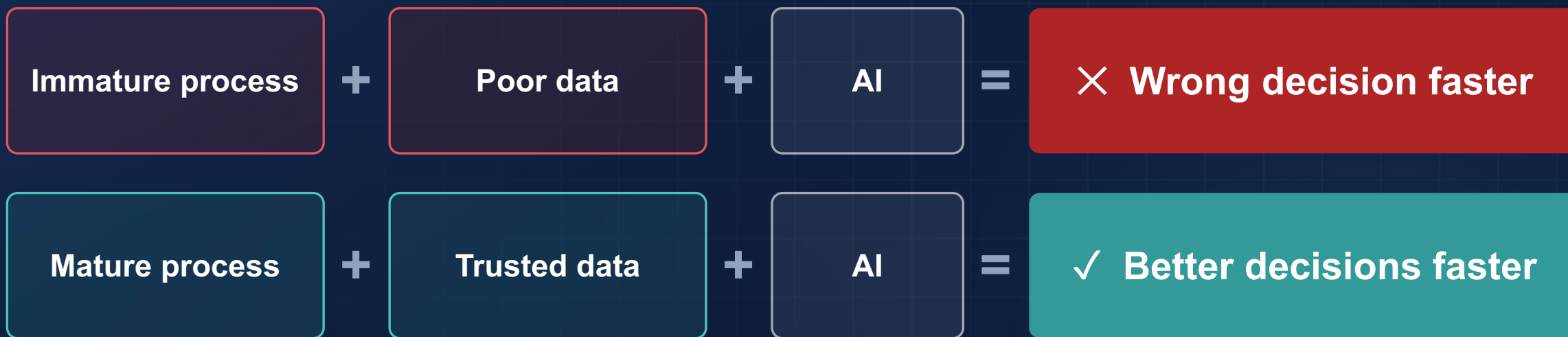
Low: the AI says so itself

Acacia gets a **targeted fix**. Baobab gets a **R1.6m guess**.

THE EQUATION

AI doesn't replace maturity. AI rewards it.

The same accelerator produces very different outcomes.



"Do we have data the institution is prepared to trust when making a consequential decision?"

BEFORE YOU APPROVE

Five questions before approving the next 'smart' investment.

See On Key in action at the Pragma stand

01

Which campus outcome and risk does this capability improve?

02

Is the underlying process stable enough to digitise?

03

Is the required data owned, accurate and maintained?

04

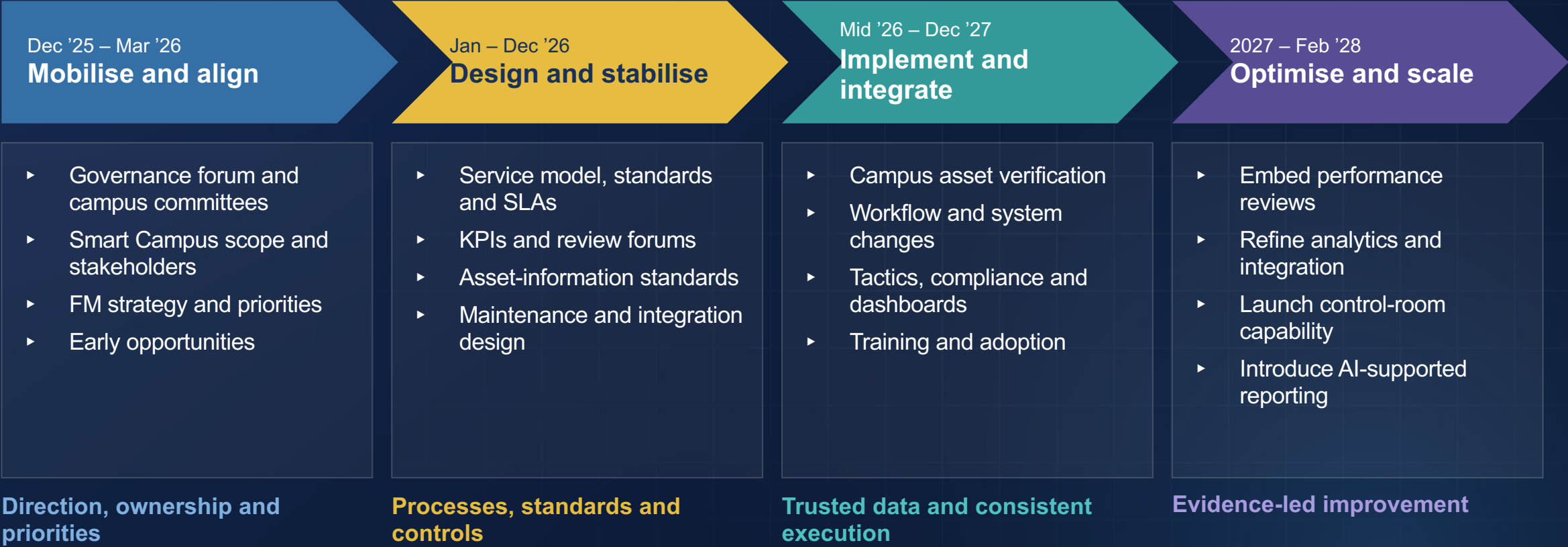
Does this need enterprise breadth or specialist operational depth?

05

How will it integrate, be governed and improve over time?

From assessment to sustainable transformation.

A realistic university improvement journey spans governance, procurement, budget and implementation cycles.



An assessment takes weeks. Sustainable institutional capability takes years.

The smartest campus...

is not the one with the most technology.

It is the one with the **most mature decision-making.**

01

Mature the operating model.

02

Choose the right systems.

03

Integrate deliberately.



Thank you.

You cannot buy a smart campus.
**You build the maturity that allows
one to emerge.**

Tertius Janse van Rensburg

Strategic Solutions Executive

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Visit us at the Pragma stand

 **pragma**

 **CN KEY**

WHY ON KEY

Why On Key fits higher education.

Deep asset-management capability.
Open smart-campus integration.

See On Key in action at the Pragma stand



01

Asset performance

Visibility of critical infrastructure, condition, risk and reliability.



02

Maintenance control

Standard work identification, planning, scheduling, execution and feedback.



03

Mobile enablement

Technicians, inspectors and service providers connected at the point of work.



04

Decision support

Maintenance history, costs and failures turned into evidence for priorities.



05

AI readiness

Consistent classifications, ownership and history that AI can trust.



06

Open integration

Exchange information with ERP, IWMS, BMS, IoT and reporting platforms.

Transformation happens across parallel workstreams.

Progress comes from coordinated waves of change, not from a single system implementation.

	Mobilise 2025 – early 2026	Design 2026	Implement 2026 – 2027	Embed 2027 – Feb 2028
Governance and strategy	Forums and priorities	Roles and standards	Delivery oversight	Embedded accountability
Smart Campus	Scope and stakeholders	Control-room and integration design	Procure, build and initialise	Launch and enhance
Performance	Align objectives	KPIs, targets and reviews	Dashboards and forums	Analytics and AI insight
Service delivery	Services and owners	Standards and SLAs	Close performance gaps	Periodic service reviews
Maintenance	Process and resources	Planning and feedback standards	Workflows, training and rollout	Reliability improvement
Asset information	Gaps and ownership	Hierarchy, tagging and attributes	Verify and update registers	Maintain trusted data
Compliance and sustainability	Define requirements	Assessment methods	Assess and prioritise actions	Monitor and improve
People and change	Stakeholder impacts	Communication and training	Adoption support	Reinforce behaviours

WHERE A SPECIALIST EAM CREATES DEPTH

Depth across the whole maintenance lifecycle.

An example: On Key within the broader campus ecosystem.



Specialist depth. **Open integration.**