

KELLOGG PCPM · CAPSTONE PROJECT

SMART ACCESS

Selected scenario: one platform for building access, security, operations and sustainability — built for small-to-medium organisations.

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EXECUTIVE SUMMARY.

The Problem: Director's of Building Operations of medium size buildings struggle keeping up with all the stakeholders interests: lowering costs, security, building systems maintenance, air quality, sustainability... there are big solutions out there but none that cater to their size or help manage all of their corners.

Smart Access unifies security, building operations and sustainable practices in one platform for seamless building operations, cost savings practices and sustainable impact.

The Mission: We will create smart systems that will support people by optimizing their living, working, and cultural spaces. We will combine IoT, software, AI and analytics to offer an advanced solution for your building.

The Bet: IoT-sourced building data that gets more accurate the longer it runs — which makes each client's history a switching cost competitors cannot copy.

The Expectations: Our clients want to reduce building operations costs, extend the life of the building systems, and an easier way to manage people and access. What the tenants want: to feel safe, work in a healthy environment and easy access to the building.

The Strategy: We want to unify operations for a more efficient, secure and sustainable building by automating as many processes as possible with the help of AI and you will only need to open one window, log-in to one account.

VISION, MISSION AND STRATEGY.

North Star: To create safer, healthier environments for people, and a more sustainable world for everyone.

VISION

To bring peace of mind to all the people who inhabit buildings with our technology in place by making their space more sustainable, safe and healthy.

MISSION

We will create smart systems that will support people by optimizing their living, working, and cultural spaces. We will combine IoT, software, AI and analytics to offer an advanced solution for your building.

ARENAS

Directors of Operations of Commercial buildings, Cultural buildings, Government Buildings, Research Centers, Multifamily Buildings, Offices, Warehouses and Data Centers.

BETS

Betting on AI models to collect information on-site in order to manage the building with minimal supervision in the near future. Investing time and research into working with the best IoT hardware for collecting data, and the AI models that process it.

Values: privacy and safety first — real-time monitoring, internal networks, encryption, centralised policy. Metrics: client operating-cost savings, customer satisfaction, CAC and revenue.

03 · CUSTOMER

MELISSA MORI

Director of Facilities and Operations, 45, Los Angeles. A 4,000-person research and laboratory campus; 15+ years, BA and MBA.

Success is a facility that runs efficiently and sustainably, and keeps everyone safe, healthy and comfortable.

Her pain point: fielding concerns from across the building — security, guest entry, rising utility costs, air quality.

JOBS TO BE DONE

- ✓ **Verify every guest arriving for meetings across departments, without getting in the way of the people who work here.**
- ✓ **Monitor indoor air and ventilation in real time, and decide fast.**
- ✓ **Show live building performance and predicted maintenance in stakeholder meetings — and keep their trust.**

PRODUCT OPPORTUNITY BRIEF.

THE PROBLEM

Access, security and health concerns frustrate the people who live and work in a building.

THE SOLUTION

One advanced platform: security unified with building performance and sustainability.

WHY US

Security giants overwhelm mid-size clients. We serve 1,000–6,000-employee organisations personally.

RISKS

Early involvement in new construction, retention until install, hardware supply, security breaches.

BUSINESS MODEL.

SUBSCRIPTION

Three tiers, recurring access.

Predictable recurring revenue; clients upgrade as needs evolve.

AFFILIATE

IoT hardware referrals.

Commission per sale influenced; the client skips the due diligence.

CONSUMPTION

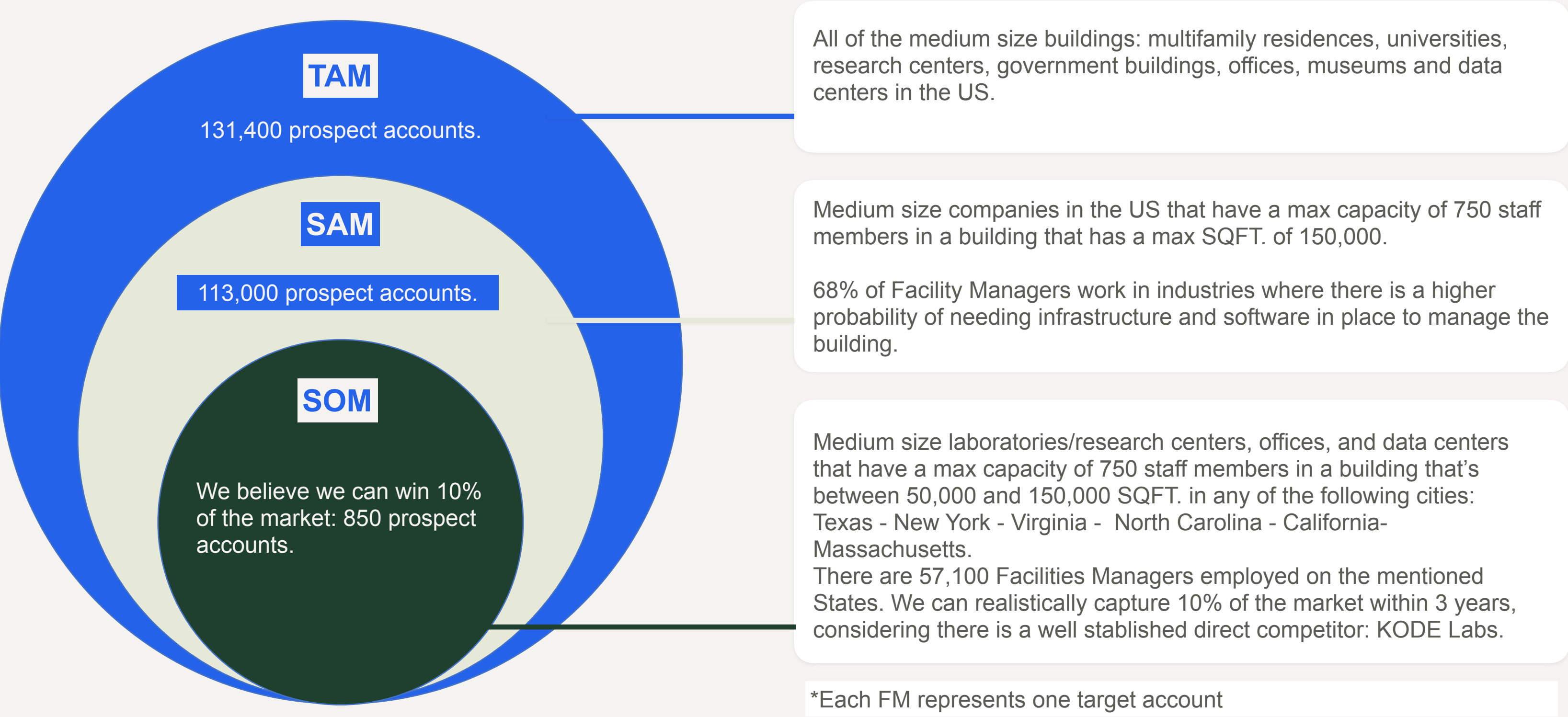
AI token sales.

Usage revenue with no tier upgrade — AI without the top-tier price.

Market: ABI Research projects 75% growth in perimeter security, fire safety and indoor sensing by 2032.

<https://www.abiresearch.com/press/commercial-building-security-sensor-shipments-to-reach-352-million-by-2032-as-ai-and-retrofit-demand-accelerate-market-growth>

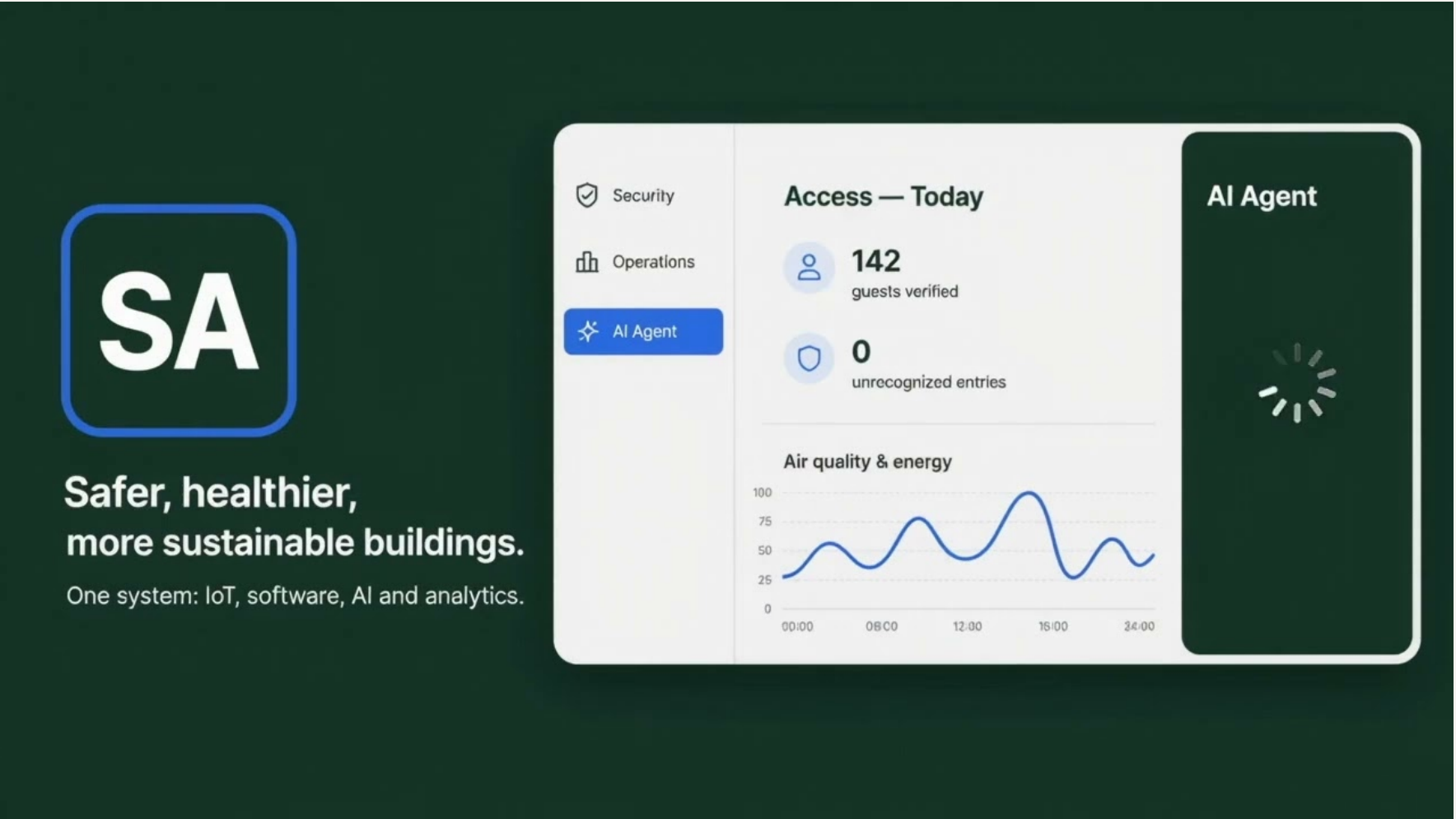
MARKET SIZING. bottom up approach.



Because of the information available to us, we are going to look at Facilities Managers, since companies that employ Facility Managers are a good fit for Smart Access. We are also going to look at specific states where there is a higher number of the type of facilities that will benefit from using Smart Access. <https://www.bls.gov/oes/2023/may/oes113013.htm>

MVP DEFINITION AND USER STORIES.

MVP: EXPLAINER VIDEO



USER STORIES

As a Director of Operations, I want a real-time dashboard of energy consumption by site and asset, so that I can quickly identify inefficiencies and take corrective action.

As a Facility Manager, I want the software to take pre-approved energy reduction actions, so that the building efficiency doesn't suffer.

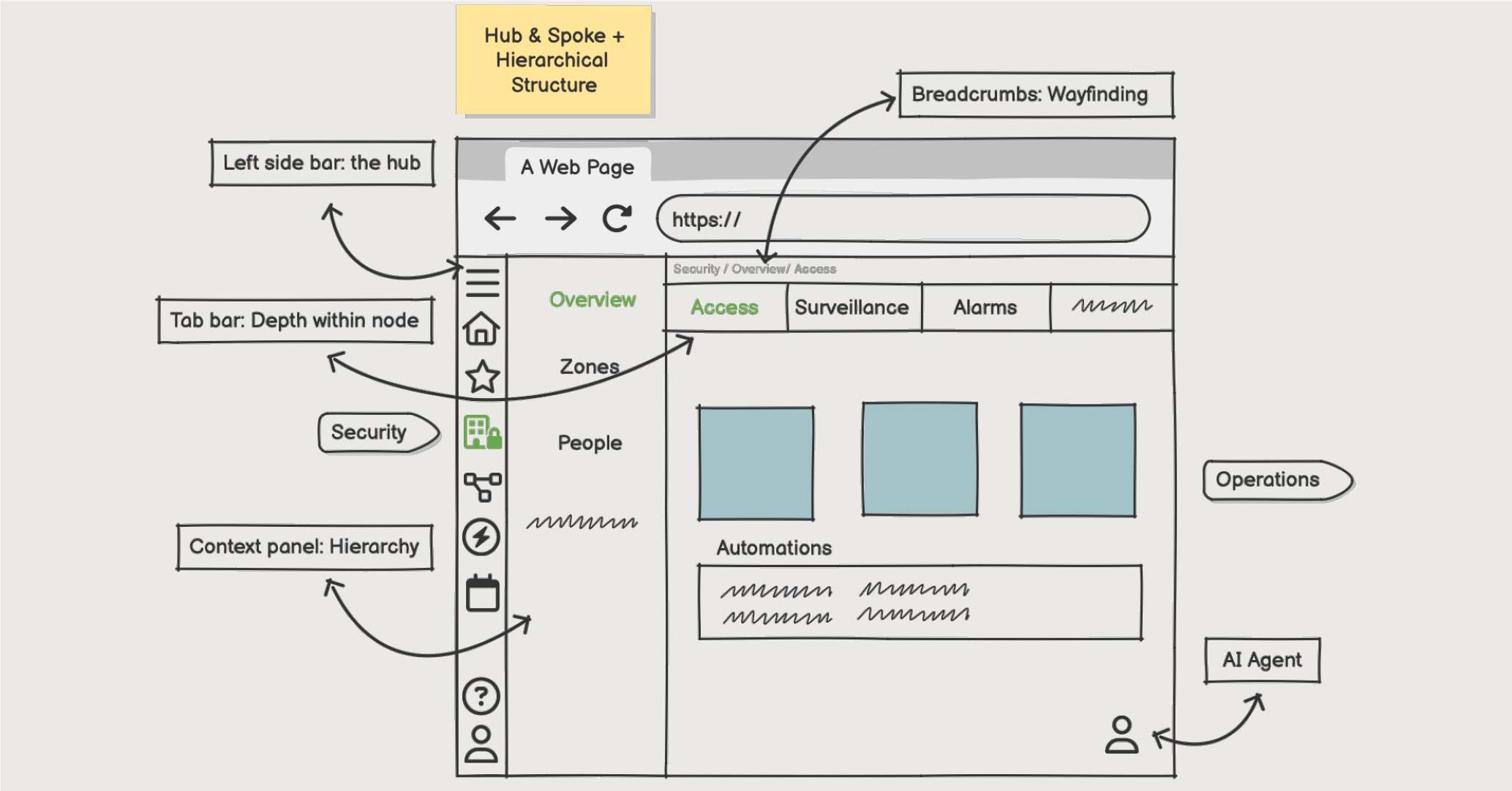
As a Facility Manager, I want an energy consumption dashboard that displays automated energy reduction actions taken by the system, so that I can review outcomes and adjust thresholds/actions as needed.

As a Director of operations, before I start my day, I want to make sure there is no pressing issue, so that I can confidently enter any meeting or meet with a stakeholder.

As a Director of Security, I want to know when any unauthorized person entered an off-limits area, so that I can alert the team.

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WIREFRAMES AND PROTOTYPE.



STRATEGY

Unify building operations with AI.

SCOPE

Overview, security, operations, and sustainability.

STRUCTURE

Hub & spoke plus hierarchical navigation.

SKELETON

Icon rail, breadcrumbs, and context panel.

SURFACE

"Simplest is better" — stay consistent.

ROADMAP WITH AGILE APPROACH.

QUARTER 1

SMOOTH TRANSITION

Agent built and loaded with onboarding content.

- Access with one click
- Bulk tenant upload
- IoT set up for security

Goal: Smooth rollout to gain customer's trust.

QUARTER 2

EASY ONBOARDING

The agent runs client onboarding end to end.

- Token system & in-app buying
- Populate Onboarding Agent with instructional content to support user onboarding.

Goal: Increase product adoption

QUARTER 3

OPERATIONAL EFFICIENCY

The agent troubleshoots and guides the user

- HVAC temperature adjust
- IoT smart lighting controls
- Custom energy dashboards

Goal: Make the product part of users' daily workflow. Improve retention.

QUARTER 4

FREEING USERS FROM REPETITIVE WORK.

Automation: The agent suggests fixes and schedules maintenance

- Custom client-set automations
- Automatic weekly dashboards

Goal: Make the product part of users' weekly workflow. Improve retention.

POSITIONING AND MESSAGING.

POSITIONING STATEMENT

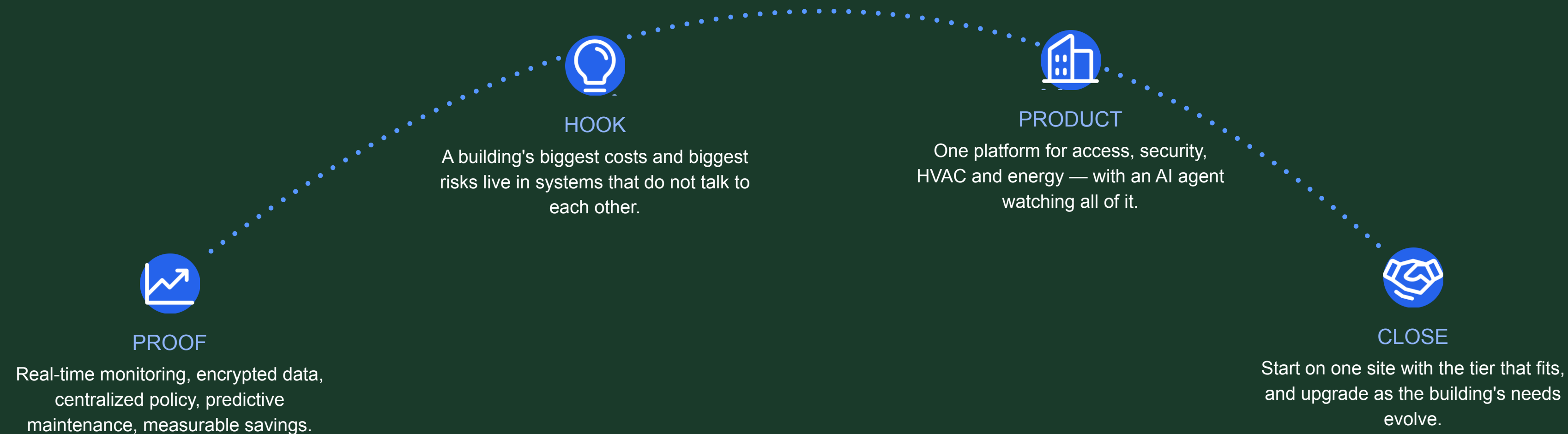
For building operations managers who want to automate their building with a single piece of software, Smart Access is a web service that manages security, HVAC and energy sustainably while lowering operating costs.

Unlike KODE Labs, we do real-time monitoring, data encryption and centralised security policy management.

MESSAGING

- ✓ **Operations manager: monitor in real time, and grant or revoke access with one click, from anywhere.**
- ✓ **Director of operations, two buildings: manage both from one account and let the AI learn from each to lower costs.**
- ✓ **Building owner: automate your building with one software — the best partner you could have.**

PRODUCT PITCH OVERVIEW.



GO-TO-MARKET PLAN.

CHANNELS

Direct sales through the platform, the IoT affiliate partner network, and an onboarding team.

PRICING

Three tiers side by side, tokens sold separately — AI never forces a tier upgrade.

DEMAND

Certification bodies, IFMA and FMP associations, and the tech newsletters Melissa reads.

READINESS

Legal and security review first; then a two-stage plan — launch, then sustained presence.

PRICING TIERS.

TIER 1

SECURITY EXPERT

Connected technology, information systems, IoT and AI tools that streamline building access and security.

Limited AI tokens · buy more anytime

Choose plan

TIER 2

BUILDING OPERATIONS MASTER

Unified operations: preventative and predictive maintenance that lowers operating costs, plus energy and water savings and optimized use of space.

Limited AI tokens · buy more anytime

Choose plan

TIER 3

GRANDMASTER IN OPERATIONS

Security and operations together, with AI agents that raise security red flags, automate services and predict equipment maintenance.

Unlimited AI tokens

Choose plan

PARTNERSHIP STRATEGY.

THE GAP

Mid-size clients need IoT hardware procurement and installation — capability outside our core software offering.

Left unaddressed it stalls deals, or pushes clients to competitors with broader service offerings.

ALLY, NOT MAKE OR BUY

Partner: an established IoT systems integrator with certified technicians and regional service coverage.

Structure: a non-exclusive referral and co-delivery agreement, with joint service standards and revenue share.

For us, a complete end-to-end solution without new headcount; for them, a stream of pre-qualified leads.

GROWTH PLAN AND HACKING TACTICS.

- ✓ Hypothesis: partnering with LEED and WELL certification bodies puts us in front of clients already managing with other tools.
- ✓ The hack: one-click green-building reports — generated manually at first, from data the platform already collects.
- ✓ Metrics: how many clients request a report, and how they rate the service.
- ✓ Iterate: if it lands, a button under the sustainability tab replaces the email request.

ML OPPORTUNITY.

INPUTS

Sensor telemetry Maintenance history Exterior weather Occupancy and schedules

MODEL PER BUILDING

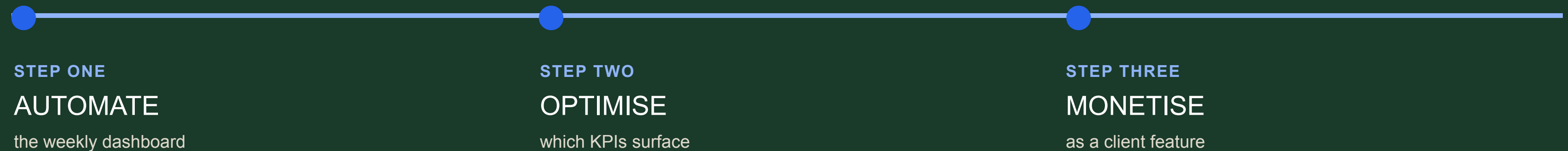
One seasonal cycle of data before it is trusted.

OUTPUTS

Failure-risk alert — time to failure, per unit Optimization — comfort against energy cost

Confirmed maintenance outcomes are the feedback loop, and drifting error rates trigger a retraining review.
The data moat: a building's history gets more accurate the longer it runs — and cannot move to a competitor.

EMBEDDED PRODUCT STRATEGY.



- Optimizing returns one to two hours a week and lets each manager keep their own view, it gives them small but valuable customization.
- Friction to watch: engineering team might get pulled back to the core product.

FINAL SUMMARY.

- ✓ **Smart Access wins where the giants overwhelm: mid-size buildings, one platform, a partner who answers the phone.**
- ✓ **Protect the north star — every mid-cycle request needs a written case tied to it before it enters scope.**
- ✓ **Instrument buildings early: the data collected now is what makes the AI, and the moat, possible later.**
- ✓ **Grow through certification partners and the IoT integrator alliance before adding headcount.**