

CASE STUDY · IT PARK / BMS + TENANT BILLING

When the Building Runs Itself, the Facility Manager Finally Gets to Do His Job

Technopark had field controllers and I/O modules already installed across its campus — the hardware was doing its job. What was missing was a software layer that could bring it all together, show it clearly, and let the team actually manage the building instead of just react to it. EnSmart delivered exactly that in three weeks.

Client: Technopark, Trivandrum · Location: Trivandrum, Kerala · Platform: EnSmart BMS + Tenant Billing · Year: 2024

At a Glance

74	37	16	3	1
AHUs Integrated	CSUs Mapped	DFAs on Dashboard	Weeks Deployment	BMS + Billing Platform

The Challenge

Rahul is the BMS Operator at Technopark, Trivandrum. Every morning he walks in knowing that thousands of people are about to fill those floors expecting cool air, stable systems, and a comfortable working environment.

The field controllers and I/O modules installed across the campus were doing their job at the hardware level — AHU-74 was running, CSU-37 was running, DFA-16 was running. But the software that was supposed to show Rahul all of this in one place, alert him when something drifted, and help him make decisions? It was not delivering. Data gaps. No live graphics. No way to see the campus without walking it floor by floor.

- **No usable software visibility**

The installed controllers and I/O modules were functional, but the supervisory software was not giving usable visibility into what was happening on each floor.

- **No live graphical view**

Rahul had no live graphical view of AHU status across zones — checking the system meant physically walking the building.

- **No scheduling in place**

AHUs ran on manual overrides or fixed timers, consuming energy through the night even when floors were empty.

- **Tenant billing based on estimates**

Each tenant's energy billing was based on estimates and averages, not actual metered consumption — tenants questioned the numbers and the facility team had no clean answer.

- **BMS and billing were separate tools**

BMS monitoring and tenant billing lived in separate tools with no connection between them.

"The hardware was there. The visibility wasn't. Rahul knew every AHU on that campus was running — he just couldn't see any of them from his desk. Three weeks later, he could see all 74 from one screen."

A Campus Already Built — Just Missing the Right Brain

- **No rip-and-replace.**

The existing field controllers and I/O modules stayed exactly where they were. EnSmart integrated with what was already installed — giving the building a new operating system without touching the hardware underneath.

- **BMS and Tenant Billing as one.**

EnSmart's platform brought building management and tenant billing into a single system. Tenant billing sits inside the platform — not a separate tool, not a separate login. One platform, complete picture.

- **Custom graphics built for Technopark.**

Not a generic template. EnSmart built graphical screens that match how Technopark is actually laid out — zone by zone, floor by floor, the way Rahul thinks about the campus every morning.

- **Scheduling that works without being reminded.**

AHUs now follow programmed schedules tied to occupancy hours, shift timings, weekends, and holidays. They come on when tenants arrive. They switch off when the last person leaves.

- **Three weeks from kickoff to live.**

Integration, custom graphics, Tenant Billing Software, scheduling, tenant billing setup, and handover — all completed in three weeks.

Three Weeks. One Campus. Fully Live.

Week	What Happened
Week 1	Site audit and I/O mapping. EnSmart engineers review the installed controllers and map all existing field points — all AHUs, CSUs, and DFAs — into the EnSmart platform using open protocols.
Week 2	Custom graphics built for Technopark's floor plans. BMS software goes live. Tenant Billing Software configured with energy metering and billing logic assigned and tested zone by zone.
Week 3	AHU schedules programmed and verified. Full handover and training session with Rahul and the facility team. System running independently by end of week.

What Changed for Rahul — and for Everyone Above Him

- **One screen, full campus.**

All 74 AHUs, 37 CSUs, and 16 DFAs visible in a live graphical dashboard. Rahul sees the status of every zone from his desk. If something drifts, he knows before a tenant calls.

- **Schedules running on their own.**

AHUs follow business-hours programs. No more manual overrides. No more energy wasted cooling an empty floor at midnight.

- **Tenant billing that tenants trust.**

Each tenant's energy consumption is metered and reported directly from the Tenant Billing Software. The numbers are real, auditable, and no longer a source of disputes.

- **Zero new hardware spend.**

The field controllers and I/O modules that were already installed are still the ones doing the work. EnSmart brought the intelligence layer on top — no hardware budget required.

- **Rahul's morning is different now.**

He opens one dashboard. He sees the campus. He knows what is running, what is scheduled, and where to look if something needs attention. He does not walk five floors to find out.

Results and Value Delivered

Area	Before EnSmart	After EnSmart
BMS Visibility	No live graphical view — walk the floor to check	74 AHUs, 37 CSUs, 16 DFAs on one live dashboard
AHU Scheduling	Manual overrides and fixed timers — energy wasted 24/7	Occupancy-based schedules — on when needed, off when empty
Tenant Billing	Estimates and averages — disputed every month	Metered, auditable consumption per tenant — no disputes
Hardware	Existing controllers underutilised, no supervisory layer	Same hardware, new intelligence layer on top
Platform	BMS and billing in separate tools, separate logins	One platform — BMS + Tenant Billing fully integrated
Deployment	Ongoing delays, visibility gaps	Fully live in three weeks from kickoff

Questions the Technopark Team Asked Before the Project Started

Q: Do we have to replace any of the existing controllers or field devices?

A: No. Everything installed on site stayed in place. EnSmart integrates with existing hardware using open protocols — BACnet, Modbus, and others. The only thing that changed was the software layer above.

Q: How does EnSmart's BMS connect to controllers from other vendors?

A: EnSmart uses open industry protocols to read data from any compatible field controller or I/O module. As long as the device speaks a standard protocol, EnSmart can map it, monitor it, and display it.

Q: Is tenant billing really part of the platform, or is it a separate system?

A: It is part of the platform. At Technopark, BMS monitoring and tenant billing are in the same system — there is no separate billing application. Consumption is measured, calculated, and reported from one place.

Q: What happens if the original vendor software has issues again?

A: EnSmart operates entirely independently of the original vendor software. The field devices still function on their own. EnSmart simply provides a better supervisory layer — so a vendor software issue no longer takes down your visibility or your operations.

Q: Is three weeks a realistic timeline for a campus this large?

A: It was for Technopark — 74 AHUs, 37 CSUs, 16 DFAs, custom graphics, and Tenant Billing Software, all live in three weeks. It moves quickly because the hardware is already there. EnSmart builds the intelligence layer on top, not the infrastructure from scratch.

EnSmart does not ask you to start over. If you have field controllers and I/O modules already installed — from any vendor — we integrate with them. We bring the BMS software and the tenant billing together into one platform that your BMS Operator can actually use every morning. Rahul manages Technopark from one screen now. If your BMS Operator is still walking floors to check what should be visible from a dashboard, let's talk.

Ready to bring your building together on one platform?

EnSmart integrates existing field controllers, delivers custom BMS graphics, and includes Tenant Billing Software — all in one platform.

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