

Victorian Smart Meters

A rollout that installed the meters but never secured the value the data was meant to create

The programme measured success by meters installed. **EPM would have measured value realised from the data**, and shown that a meter creates nothing until its information reaches the people, systems and decisions that can act on it.

01 What Happened, and the Deeper Failure Beneath It

WHAT THE AUDITOR-GENERAL FOUND

In 2006 Victoria mandated smart electricity meters for households and small businesses. The *Realising the Benefits of Smart Meters* audit found consumers were expected to have paid an estimated **AUD 2.239 billion** by end-2015, while benefits realisation ran behind schedule and most anticipated benefits had not yet been realised.

WHAT THE AUDIT CONCLUDED

The programme design prevented the state from directly controlling many costs and benefits; around 80% of original benefits were forecast to be realised, with consumers potentially facing a higher net cost than estimated. The original design had not adequately considered the resulting costs and benefits, and transparency, consumer education and benefit maximisation all needed to improve.

THE DEEPER ECONOMIC-PROCESS FAILURE

The programme was framed as "**roll out advanced meters**". The real economic process was: *convert household electricity-consumption information into lower system costs, better network decisions and value for consumers*.

Installation is only an **action**; a meter is only a **system**. Neither creates the anticipated value unless the data reaches decisions that change customer behaviour, network operations, outage management, pricing and demand management.

The programme could complete installation efficiently while the economic value remained unrealised.

02 Decompose — Where the Value Actually Had to Flow

Information

- half-hourly consumption data
- network-condition data
- outage signals
- pricing & tariff signals
- demand-response data
- who can access the data
- timeliness & usability

Actions

- install meters
- transmit & store data
- change customer behaviour
- optimise network operations
- manage outages
- set & apply pricing
- run demand management

Systems

- advanced meters
- data & communications network
- retailer systems
- distributor systems
- network-operations systems
- billing & pricing systems

People

- consumers
- retailers
- distributors
- network operators
- the state (paying party)
- regulators
- future service providers

What this exposes: the meter and its installation were the easy, controllable part. Every anticipated benefit depended on a later step, often owned by a different party, that the programme did not control. Value lived downstream of the data, not in the hardware.

03 Attribute — Where the Economic Value Actually Sat

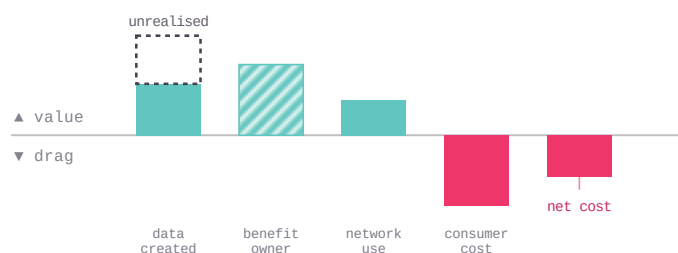
PROCESS COMPONENT	ECONOMIC VALUE EPM WOULD ATTRIBUTE
Consumption data	High information value, but only conditional: worth depends on who can access it, how usable it is, and which decisions it improves.
Downstream decisions	Where the benefit is actually captured: behaviour change, network optimisation, pricing, demand management.
Consumer understanding & action	High realisation value: efficiency gains only count if consumers understand and act, and the savings reach them.
Data access & interoperability	High option value: open, usable data lets future services use the information asset.
Meter hardware & installation	Necessary enabling cost, but value-neutral on its own: installation is not realisation.
Benefit ownership alignment	Critical risk factor: if the party paying is not the party who must act, benefits stall.
Why this matters: scored this way, "meters installed" is revealed as an enabling action, not a value outcome. EPM forces the question of who owns each downstream action, and what happens economically if it never occurs.	

From value profile to *the decisions it would have changed*

04 Diagnose — The Patterns EPM Would Have Surfaced

THE ECONOMIC VALUE PROFILE OF THE METERING PROCESS

ILLUSTRATIVE · RELATIVE VALUE, NOT DOLLAR FIGURES



Scored across the value lenses, the process shows a large asset created but only partly realised. The profile is a **ledger, not an install count**: the tall dashed cap is benefit the programme produced the infrastructure for but never captured, because the downstream actions sat with other parties.

UNREALISED VALUE

Data infrastructure built, but the **economic benefit depended on downstream actions** the programme did not control.

MISALIGNED BENEFICIARIES

The parties **paying, collecting data, changing operations and receiving benefit** were not aligned.

VALUE-DEFINITION GAP

Success defined as **installation** rather than realised consumer and network outcomes.

COST CONCENTRATION

Consumers carried the cost while facing a potentially higher net position than estimated.

OPTION FORECLOSURE

Weak data access or interoperability would **limit future services** using the information asset.

BENEFIT-REALISATION LAG

Physical rollout ran ahead while **most anticipated benefits** went unrealised.

05 Redesign — The Decisions That Visibility Would Have Enabled

RESEQUENCE

Design the consumer, tariff, network and information-use processes before or alongside mass deployment, not after.

AMPLIFY

Increase access to, and usability of, consumption information so consumers and operators can actually act on it.

SUBSTITUTE

Replace installation-based success measures with realised consumer and network outcomes.

PROTECT OPTION VALUE

Design data access and interoperability so future services can use the information asset.

06 What's In It For the Executive

IF YOU'RE THE CEO

"We were reporting rollout percentage complete. EPM asks the harder question: complete to produce what? The meters were never the value; what anyone did with the data was."

IF YOU'RE THE CFO

"The business case assumed benefits followed automatically from installation. EPM would have shown that every benefit sat behind an action owned by someone else, and priced the risk that those actions never happen."

THE CREDIBLE ALTERNATIVE OUTCOME

Not a guarantee of full benefit realisation. Rather, a **staged transformation in which deployment scale was linked to demonstrated information use and consumer benefit**, instead of treating physical installation as equivalent to value realisation. Benefit ownership would be assigned explicitly, and data access designed so the information asset kept its option value for future services.