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Energy Management Platforms: great investment or a total waste of money?

There is no shortage of so-called energy management platforms. A quick web search will reveal a long list of providers claiming great energy savings, increased building efficiencies, simplified carbon reporting or tenant billing and cost allocation. In many cases, all these features are promised within the same solution.

The increasing use of cloud technology has allowed many new entrants to the 'energy platform' market. The installation of AMR for commercial properties, Part L building Regs for sub meters and the smart meter roll-out have increased awareness of the potential value in using metering data for analytics.

Cloud technology has also given the ability for faster and more complex analysis. With the increasing drive for machine learning and artificial intelligence, one could easily believe that energy management platforms are easy, comprehensive, accurate and due to the vast selection available, cheap.

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In some respects, all the above statements are true. These platforms can be very impressive, beautiful graphs, comprehensive report designs, animated dashboards with moving dials and flashing kpi indication. At the push of a button automated reports, submissions to benchmarking or certification body, automatic invoices sent directly to your customers, it all sounds so easy and so straight forward.

Unfortunately, the reality of the perfect platform being simple and error free is a myth. Plain and simple – if you don't get the fundamentals right, these platforms can be a total waste of money.

How can this happen?

- Some systems are oversold and far less capable in reality than advertised;
- In many cases, systems are designed with little or no consideration of the real world of data collection or the ability to ingest data from different sources;
- The client is 'wowed' into selecting a system based on its visual appeal rather than its ability to deliver the requirements;
- The other key reason that energy platforms do not deliver what they promise is down to the data they receive.

The typical business model for most platform providers is to have a clean break between the software platform and the metering data provided to it. Whilst this makes sense from a business perspective, it is not so helpful from a customer perspective. Platform providers can offer great things, but completely washing their hands of the real-world technical issues associated with collecting good quality data, can leave the customer with a big problem.

How many energy platform users have experienced any of the following scenarios?

- 'The energy project I wanted to track was missing data at the critical moment'.
- 'My meter failed so I did not get the data'.
- 'I changed supplier and my gas data stopped'.
- 'The metering system stopped last year so we missed several months of data'.
- 'I have new metering, but it is incompatible with my platform'.

It is blindingly obvious that any energy management platform will only be as good as the data it receives. So why do so many organisations consider the energy platform in isolation to the metering and data collection? Considering both elements together does not need to hinder your choice of platform. If your hardware provider will not support a 3rd party platform, then I suggest you switch providers. There is little justification these days for proprietary hardware locking customers to a single platform.

It is absolutely essential that the quality of your metering/ data collection solution is robust, accurate and complete. It is equally important that there is some provision to check and manage the metering data – this is a task that is often neglected by energy managers due to other workload pressures. The lack of meter management inevitably results in allowing bad or no energy data into your software. It is negligent to assume metering systems will work forever. Failure to detect and rectify problems quickly will simply mean your metering data degrading over time rendering your energy management platform useless.

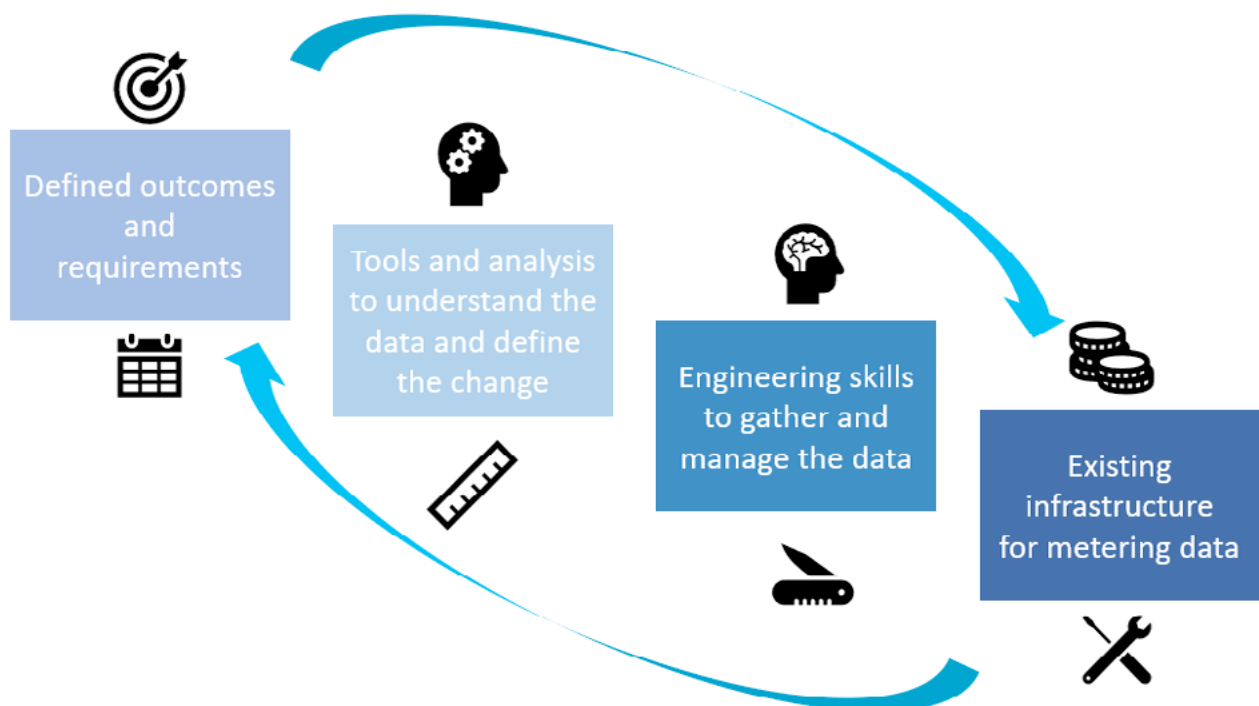## How can you choose the right platform?

The most critical thing is to understand your requirements in advance. What is the platform actually required to do? Forget the fancy graphics if all you need is a tabular league table. Don't get sucked into clever analysis if you don't need it. Be thorough with your requirements, be thorough with your evaluation of how the platform will deliver expectations.

Equally, the platform is unlikely to deliver results if the infrastructure feeding it is poor, incomplete or unmanaged. These functions should not be considered in isolation.

I strongly recommend that the full cycle of metering data is considered before making a final decision about platforms and analytics. Having the right metering system infrastructure partner in place is one of the

> **THE OTHER KEY REASON THAT ENERGY PLATFORMS DO NOT DELIVER WHAT THEY PROMISE IS DOWN TO THE DATA THEY RECEIVE.**

Defined outcomes and requirements

Tools and analysis to understand the data and define the change

Engineering skills to gather and manage the data

Existing infrastructure for metering data

key components for metering and data in any energy management strategy.

In summary, energy management platforms can and will deliver great results. They should play a key role in any organisation's energy management strategy. However, energy management platforms do not standalone and must be considered with other system components. An energy management platform will be rendered totally worthless if the data it receives is not trusted or of sufficient quality. I therefore recommend a few key points to be considered when selecting an energy management platform:

1. Are my requirements clear and does the platform meet these requirements:
    a. Don't just believe that a feature called 'Tariffs' will meet your needs – test the features if necessary.
    b. Are my requirements detailed enough, just adding a heading to your list, for example, 'tenant billing', is not a requirement. How do you want to bill tenants, what data? What reports and outputs?

Have detailed requirements and ensure that they can be delivered.

2. Will my platform provider work with different data sources? Don't just accept a generic answer 'yes', check which data sources are actually being offered and whether they are suitable for your data.

Ensure that there is proven integration with different data sources.

3. Understand the data needed to feed the platform.
    a. Where does the data come from?
        i. Existing system
        ii. BMS
        iii. A combination of systems
    b. Wherever possible, insist on non-proprietary equipment (don't get locked into a solution – hardware or software).
    c. Will my providers work together, will they integrate seamlessly? Avoid vendors blaming each other, choose vendors with a track record of cooperation.

Author's profile:
Tim Hooper is a UK energy industry expert in metering, energy management software systems, energy data analytics and data services. Tim has experience in both large and small businesses having held senior positions in a number of businesses including; Centrica, Capgemini, Npower and EnergyICT. Tim is a strong advocate of using data to deliver tangible benefits and outcomes.