Asset Reengineering:

AMC's Strategy for Sustainable Asset Management in the Utility Space

One impact of the 2008-2009 global financial crisis has been to put in question an excessive reliance on numbers as the sole or even best means of measuring enterprise asset performance, especially when that enterprise asset belongs to a utility on which we all in some way depend. Unless the numbers relate to real world service needs and real world expectations, whether those of customers or of stakeholders, they can be as misleading as bank balance sheets before the crash. AMC believes the future of asset management systems in general, but especially for utilities, will depend on their ability to parse the numbers into a rich set of performance criteria that inform a narrative that customers and stakeholders can understand.

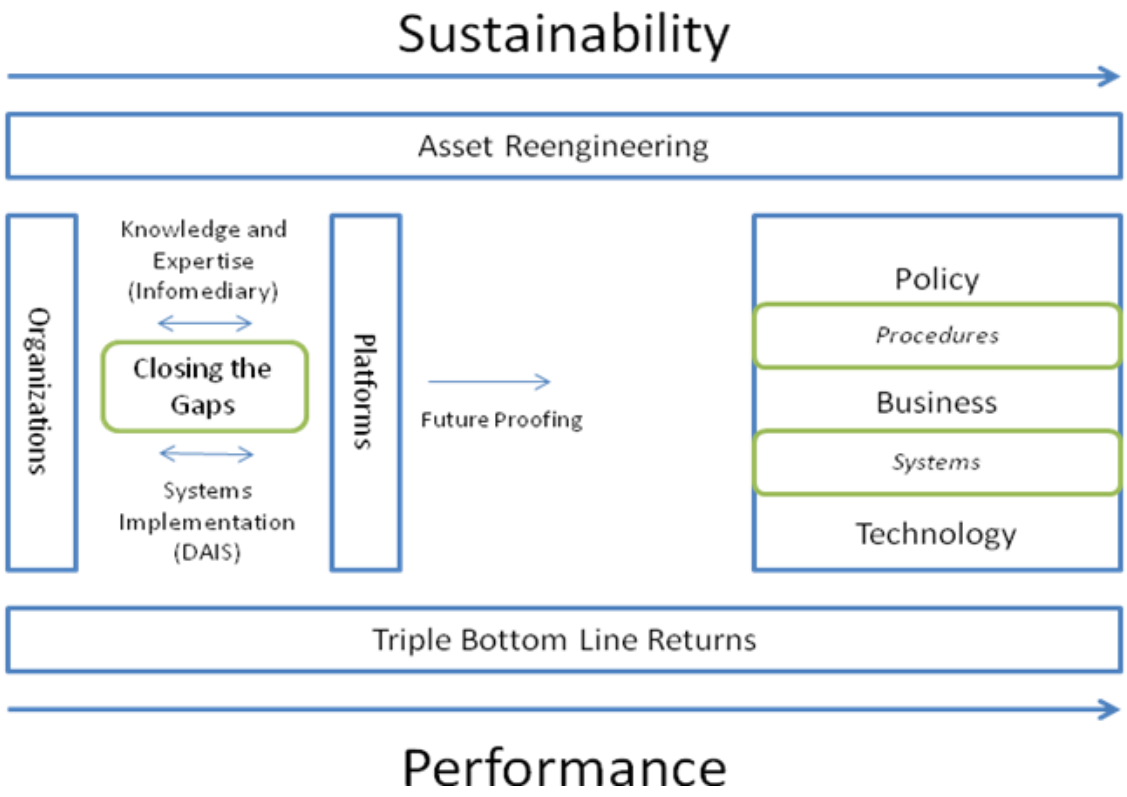
The silver lining in the current situation is the opportunity it offers to rethink the relationship between utilities and their customers and repair the basis of trust and confidence between them. In AMC's view the basis of the restored relationship is a new understanding and appreciation of the role of the core assets of the utility, an outcome achieved through a process of asset reengineering.

If this process is conducted well, the outcome will be sustainability at all levels, starting with the nature and function of the asset base on which the utility conducts its work. If customers and stakeholders are better informed about the extent to which their choices and behaviors can influence the life-cycle cost of the asset, and hence its cost to them, the relationship between customer and utility can be much enhanced, to the benefit of both parties. The goal is to align expectations on both sides.

At AMC we believe sustainable asset performance stems from a successful alignment of three points of view about that asset's nature and function:

1. the asset has to meet a policy objective such as providing heat and light to homes or collecting and treating waste
2. the business that owns and manages the asset on behalf of customers and stakeholders must understand its mission and fulfil its obligations, including to external investors or statutory reporting bodies and agencies
3. the technology base, including IT systems, on which the business depends must be capable of executing the business functions, and be responsive to advances in technology inasfar as they bring opportunities for increased efficiency or higher value-add services.

When these points of view are not aligned the result can be catastrophic system failure resulting in very high-cost asset remediation. When they are aligned, sustainability is the outcome and much lower overall life-cycle cost for the asset.



Intimacy

Modern citizens depend on reliable utility assets at every point in their daily lives, whether at work, at home, or out in the community. Understanding that dependency is a key part of the utility's responsibility; this means the relationship with the customer is much more intimate than in practice most utilities recognize. In fact, utility customers will often judge the utility's performance by the extent to which it understands that intimacy, a perspective often ignored by the utility itself. Designers and manufactures of consumer goods, such as laptops or PDAs know the significance of intimacy very well. Their services take place in, and largely define, the customer's personal and virtual space, delivered via assets the customer highly appreciates.

Utilities are in just as intimate relationships with their customers, but do not always behave as if this were the case.

Asset Reengineering for Triple Bottom Line Returns

In implementing asset management systems, such as PeopleSoft, AMC pays particular attention to the reasons why those assets are in place in the first place. Performance indicators roll up into the three Triple Bottom Line criteria according to which overall value provided to the community can be assessed - Financial, Social and Environmental. If, for example, a sewer system's performance is to be judged by all three criteria, and with equal weight, the customer is able to expect not just a financial relationship with the utility, in the form of a bill, but also a social relationship in the form of an enhanced neighborhood and increased real estate values, and an environmental benefit whether in the form of waste management or overall conservation and recycling of resources.

These more comprehensive measures of performance directly impact asset management strategies, including classification, depreciation cycles, life-cycle cost analysis, and future planning.

Future Proofing

Taken together, AMC calls this approach "future proofing" the asset. Future proofing is not just about prolonging an asset's effective life: it implies an ongoing audit of the nature and function of the asset as measured against the Triple Bottom Line as being the best means of keeping pace with customer expectations, and even unmet needs. Future proofing sets outs a plan for sustained investment that guarantees the high performance level of the asset, even as expectations of what asset performance actually means change.

In any community, services provided by utilities such as power, transportation, water, and wastewater, are critical to the community's capacity to function but also to its sense of wellbeing. The customer will understand the case for sustained investment in a given utility asset if the consequence is a reliable, highly reciprocal relationship between the performance of the asset and its contribution to community well-being.

To keep pace with the customer, the nature and purpose of these assets has to be regularly and systematically reviewed by the business leadership and, when needed, also redefined. Such a process of redefinition is now in hand as asset management systems, and sophisticated process control technologies used to optimize the efficiency of those assets, are now being rolled out. The consequence is a significant change in the relative relationship in business financing between capital and recurrent expenditures. In a nineteenth century-model sewer system, the business case was based on public health benefits that could be delivered over long periods of time. The outcome was to construct large resilient assets, such as combined sewers and expect them to last one hundred years or more. In a modern metropolitan environment, the emphasis is on going green - reducing life-cycle costs, input reductions (such as reagents), resource conservation and recycling of recoverable waste. We still need sewers, which mean we still need to invest in sewer assets, but what these assets are, the way they are configured, the way they operate, the way we judge their performance, are all changing.

The AMC response to this challenge is asset reengineering, focused on triple bottom line return. The focal point of change is at the community and city level, because that is where the utility customer interacts with the utilities and its assets.

Asset reengineering begins and ends with an understanding the sustainable utility is built on relationships, and that there is more to customer relationships then sending out bills.

If you would like to discuss this White Paper or explore ways AMC can help your utility, please contact Mike Castronovo, President AMC.