(BACK TO) THE FUTURE OF ASSET MANAGEMENT—2013

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In 2004 I published an article entitled "The Future of Asset Management". While much of what I wrote then is still true, the world has moved on. It's time to look at our industry again, with a new lens, and examine the major trends:

- Globalism
- Risk as a business driver
- Conformance as a business driver to control risk
- The meaning of asset management in 2013
- The role of asset managers
- The demise of outsourcing
- Global standards
- Initiative overload
- Managing corporate culture to drive performance

Globalism

Brazil, Russia, India and China have emerged as major markets and producers of resources and value-added products. Vale of Brazil is the world's second largest mining company after BHP Billiton of Australia. TATA is an Indian global business producing cars, trucks, chemicals, communications, and much more. The world's largest chemical company is SABIC from Saudi Arabia. The USA is likely to be the world's largest energy producer by 2017. BP, founded in 1909 and the third largest oil company in the world, flirted with going out of business based on two major industrial accidents. Europe now uses more coal for power generation than the US. Jobs are moving back to the USA because, in some cases, it can be the low-cost producer. The largest producer of CO2 in the world is a South African company.

I didn't see these trends very clearly a decade ago. The implications are many, but surely include these:

- The workforce is global. Specialised skills are moving around the world like never before
- Knowledge is global. Being from the West is no guarantee of dominance of operations, and in fact may be a detriment

I recently met a friend who helped start the Society of Maintenance and Reliability Professionals in 1991. He was then a maintenance manager at an aluminum rolling mill, and became the plant manager. His company is now owned by an Indian company. In the past month he and I both had meetings with the same man—his boss's boss -- in an obscure building in Mumbai: a big change in just 20 years.

Risk as a Business Driver

At one time or another we have worked for most of the major oil companies including British Petroleum, Shell, Chevron, Conoco-Phillips, British Gas and Saudi Aramco. Since Deepwater Horizon, their board of directors' first concern is "not becoming a BP". To be assured, above all, that they are safe. Who wants to risk the whole company? That distinction belongs to Wall Street!

Conformance Culture to Mitigate Risk

The practical result of environmental assurance is a never-ending series of audits around every possible process. The amount of time and energy spent checking boxes is greater every year; the consequences of a failure are now well known—and few companies would have the resources to live through what BP has experienced. Certainly there is a positive result of this focus; but the emphasis can be mind-numbing, making the work less interesting and challenging.

Asset Management in 2013

In 2004, the term asset management was largely a substitution for the discredited word Maintenance. In the 80's and early 90's, maintenance was often synonymous with Centralised Maintenance, considered too unresponsive and too expensive. The result in industrial plants tended in two directions. The first was self-managed work teams reporting to production, getting rid of central maintenance. Lee Solomon, founder of Solomon Associates who benchmark most of the world's refineries, once told me: "There is a high, negative correlation between the implementation of self-managed work teams and performance". The discipline that existed in the "bloated" maintenance departments was eliminated in a failed attempt to become more cost effective. Many plants hit their zenith in planned maintenance in the 80's, and have still not recovered that discipline.

The second tendency was to outsource maintenance, which has led to mixed results.

SAMI has redefined asset management since 2004 to cover the full lifecycle of assets in the plant: capital development, operations, maintenance, supply chain and organisational development all come under the umbrella of asset management. We understand that every phase of the operation contributes to the effectiveness of the operation, and to fix one without the other leads to a unsustainable temporary solutions.

As an example, we worked at an electric cooperative where they reported 52 KPI's. We asked what they did with them. They said, "We measure them every week", and yet their emergency work ratio was 35%. A system had been installed in maintenance, but the operations staff didn't participate. This is an example of a great success story in fixing the wrong problem.

We developed the SAMI Pyramid to describe sustainable asset management. We find these pyramids all around the world. They provide a total picture of asset management in one compact physical model, which addresses production, maintenance, supply chain, capital management and the organizational model.

The Role of Asset Managers

If asset management has become an entrenched phrase in industry, so has the need for asset managers. Maintenance and Reliability professionals are being rebranded "asset managers" around the globe. The duties of the asset manager vs. the maintenance manager are not delineated, but the intension is to take systemic responsibility for the asset, its condition, its operation and its risk. This is a substantial change from the task orientation of the

Figure 1

maintenance manager. This may be the single most important change we can support as professional societies and consultants—the role needs to be defined, skills defined and developed, and interfaces understood. It is a fundamental change from the functional silos that still dominate business.

Outsourcing

Most companies now understand that asset condition and operation are sources of existential risk. asset integrity, asset strategies, asset care and asset risk are all part of the same situation. Many companies have outsourced the Logistics (planning, materials) and Intelligence (reliability, analysis) function of maintenance, as well as the Execution. They have lost control of the means to assure safety, and in fact have lost control of the cost as well.

In social welfare oriented societies outsourcing will continue, because the cost of owning employees is simply too egregious. Where employment flexibility exists, we see the Logistics and Intelligence functions brought in-house, and in many cases the execution as well, for core production equipment maintenance.

Global Standards

PAS-55 and ISO5500 are the emerging standards to determine if a company has minimum standards for asset management. They are executed as a form of audit, less concerned with the effectiveness than the presence of the paperwork and practice. These are a positive step forward, but not oriented towards performance. Still, if this standard were a global practice, it would have a similar effect to ISO 9000; greater awareness of gaps in AM.

Initiative Overload

Our clients would like to improve. They launch initiative after initiative. They end up spinning their wheels—too many things to try to pay attention to. Things get started, make little progress, new things take their place, and they declare victory. Everyone knows they are pretending to be successful, whether it's 6 sigma, reliability, SAP, standard operating procedures, or whatever the need might be.

There are too many things to do, too little focus, no longer term plan, and no clear idea of how all the pieces fit together. Good corporate citizens do what they need to do to keep their jobs, but there is no satisfaction in pretending success.

Our response is to develop a strategic plan for asset management, in which there is a clear set of operating practices as an outcome, and a single implementation plan to achieve the result.

Managing Culture to Drive Performance

Is it possible to have asset management, low risk, high performance and results, and a satisfying job at the same time? Most of our clients wake up each morning wanting to make a difference—do a better job, get things done, not have fights with other silos. But as managers and leaders we haven't enabled them to be successful. And so the parade of emergent work, failures, safety lapses, and frustration continue.

The opposite of the reactive culture is the Performance Culture™. How do we get everyone working towards a few goals that don't ever change? SAMI focuses on measuring results and KPI's like other consulting firms. We bring world class practices and processes. That isn't unique. What's unique is that we measure behaviors. Work behaviors, safety behaviors, managing behaviors, leadership behaviors. We have a database of over 500 behaviors, and we can measure when someone has achieved a state of sustainability in a new process. Measuring behaviors actually accelerates the rate of embedment of new systems and processes, because people know exactly what they are responsible for individually and as a team.

To measure the Performance Culture™ we have identified four critical domains:

- Performance
- People
- Purpose and
- Predictability

Each domain has three elements that define it. This is illustrated in Figure 1.

By addressing all the elements of the Performance Culture as a whole, we find significant and sustained financial, functional, and safety benefits.

Physical asset management is surely part of the necessary culture: it will never manifest unless the entire organisation is aligned to achieve the results.

Summary

The business factors affecting asset management have changed in the past decade. Understanding of the barriers to good asset management, the potential for business success, and the potential satisfaction available to the workforce remain the biggest challenge.