

# The seven most expensive words in business are...

...we have always done it this way...

**R**isk Management as a strategy is applied to a very wide range of projects and industrial operations; these vary from financial funds to hospitals, from industrial maintenance to terrorism.

For each subject, the emphasis is different. The questions and concerns are different and thus, of necessity, the answers will be different. What binds all together under the one banner is the underlying technique.

## For every application:

- The problems must first be identified and then evaluated;
- A solution or countermeasure must be devised and tested;
- The effects should then be evaluated against the original problem;
- The results, and any new problems identified, are then fed back to the beginning of the process so that the solutions can be refined.

If this sounds familiar, it is because the technique has, for a long time, been hailed as sound good practice. The name 'Risk Management' with the recent emphasis is new.

If the technique is so good and has been around for so long, then the important questions are:  
Why the technique is not more widely applied?

Why do we get so many breakdown/failures of the systems?

Insight Monitoring Services Ltd was established in 1989, first as a partnership, now a Limited Company. Our remit, then as now, was to provide access to high level machine monitoring techniques complemented by expert analysis with practical recommendations. This service was

primarily aimed at smaller companies, not large enough to warrant the investment in equipment and training.

From the perspective of a simple engineer, the advantages of utilising the new technology were obvious and irresistible. The concept was a winner – or was it?

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## 'The management ethos must include a willingness to embrace change and to invest both time and energy to develop the culture in all levels of the organisation.'

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A steep learning curve soon demonstrated that, in reality, optimising the efficiency of systems or equipment represents a significant challenge. Success can be likened to the stable platform of a three legged stool that will stand firm, even on uneven ground. The supporting legs represented by 'Technology', 'Process' and 'Company ethos' must all be sound. Take away or significantly weaken any of these and the structure will become unstable and topple – success lost in failure.

### Technology

The technologies, the instruments to apply them and the expertise are, and have been for some time, readily available; indeed, with the continued progress in computer technology and miniaturisation, the choice is growing rapidly.

### Process

The processes for data collection and knowledge management are well established and are being updated and enhanced on a regular basis. The help required to customise the processes to individual applications is available.

### Company ethos

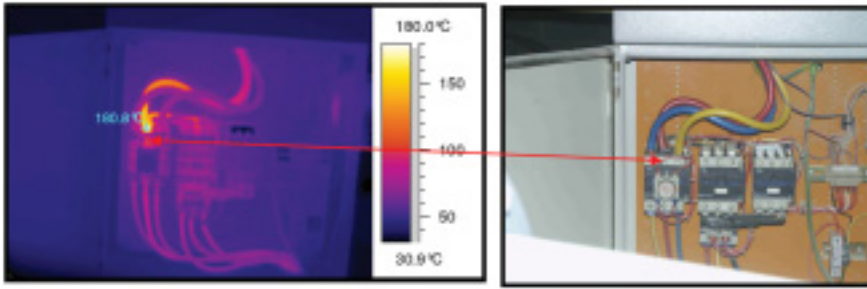
Unlike technology and processes, the management ethos that supports and encourages cannot be bought off the shelf, but must be built and developed from within the organisation.

The required change in the management style is where the main problems and true challenges lie. The management ethos must include a willingness to embrace change and to invest both time and energy to develop the culture in all levels of the organisation. The whole team should own the systems.

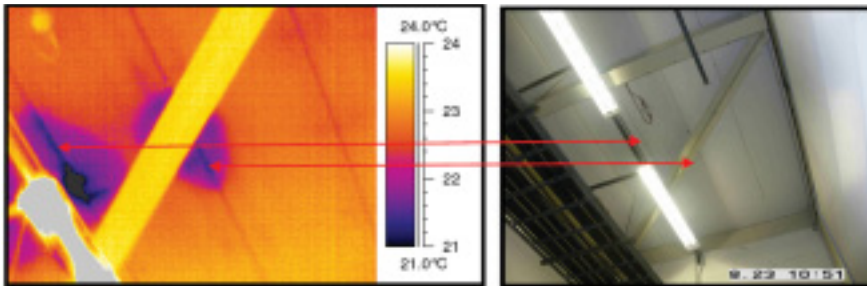
Undoubtedly, it is much easier to sit back and continue in the old ways but the economic and social environment has changed over the last 20 years and continues to change. There is no longer a place in modern organisations for the traditional 'us and them' approach where managers insist on control but then disclaim the responsibility for poor results.

For those organisations willing to grasp the nettle, then the rewards and savings have been and are considerable, as is well documented in numerous studies. Primarily driven by financial considerations, competition and the drive for efficiency has been the main incentive. By corollary, competitive industry is in the forefront of management innovation; non competitive organisations bring up the rear.

Hence the need for a new initiative with a new headline 'Risk Management' to grab the attention. The basic technique may, for a long time, have been hailed as sound good practice but it has been developed considerably and deserves a new, attention grabbing,



**Thermal Imaging technology: The above image and picture demonstrate the ease with which a poor electrical connection can be detected and the problem quantified. These images were collected at a distance with no need to work inside the panel**



**The above image and picture were collected from ground level to identify the source and track of water leaking through the roof. No need for roof work or scaffold for the inspection**

headline. As results and experience continue to accumulate, they demonstrate irrefutably and more forcibly the advantages of participation. Alas, the results of non participation are equally obvious.

The above generalised overview is fine but is not specific enough to give direction to an organisation wishing to apply the sound principles of 'risk management' within their own environment. A practical way forward is required.

The expertise and experience built up and held within Insight Monitoring Services Ltd is predominantly in engineering and Asset Management, machines, controls, power supplies and buildings, including internal services. The core business of Insight Monitoring Services Ltd is the provision of Vibration and Thermographic Data collection and analysis services.

The following examples, discussions and observations draw on that experience.

**Thermal Imaging technology** (illustrated above) has a very wide application and is relatively easy to understand and implement; it also often results in immediate payback.

This makes it an ideal technology to start with.

Before any decision is made regarding change, establish the nature and extent of the problem or threat and the expected impact, should the problem continue or the threat materialise. Planning a change to a risk-based asset management strategy starts by understanding where you are today. Is what you 'want' what you 'need'? If so, then certain ground rules should be considered with particular attention to how the change fits into the current management or work ethos or environment:

- The first and most basic assertion is that any recommended changes or improvements are not a replacement for a well trained workforce, good working practice, good quality equipment, good parts lists, good measurement and data collection to feed into the system. They are there to optimise utilisation of the above and identify any deficiencies and potential improvements;
- The second assertion is that these technologies and processes will not

do the job for you. They are tools that, when used properly, will enable trained personnel to do the job more effectively, more reliably and more quickly;

- Asset Management initiatives should be driven by business goals regarding the purchase, use and care of equipment assets. They should never be 'flavour of the month' decisions;
- The maintenance strategy should be determined according to operational requirements. It should start with purchase and consider 'whole life cost'. Cheapest purchase price is often the most expensive in the long term.

The most common reason for the failure of management change initiative is the failure to get a full understanding of the problems. A full understanding is required to facilitate the preparation of a detailed, structured improvement plan with well defined, achievable milestones against which progress can be measured. There must also be performance indicators to ensure that targets, once achieved, are maintained, not neglected in favour of progress towards the next target milestone.

A successful initiative will be dynamic, assimilating the most efficient and effective use of technology and the best systems into a cohesive whole unique to each application.



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