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Title	Performance metrics for optimum operational systems performance
Abstract	<p>Operational systems performance metrics are widespread in engineering and manufacturing industries but little is known about the long-term, sustainable, benefits to company performance improvements. Measures often proliferate in an era when process change, including lean manufacturing, is fashionable. But which measures give short-term benefits and which give long-lasting improvement to business performance, taking into account the effort and cost of low-level drivers ?</p> <p>Even when used as a lever for change, say as part of a DMAIC approach (Define, Measure, Analyse, Improve, Control), measures – and the culture of measurement as a key part of continuous improvement – are often short-lived, especially in the small batch/high variety or design & manufacture to order business.</p> <p>Is there an optimal methodology, backed-up by culture change techniques, that can ensure both measurable and enduring effectiveness of operational systems?</p> <p>Babcock Marine – Warships Business – is about to introduce a much more heavily regulated operational improvement campaign, spanning 8-10 years, and supported by a mandatory measurement system. Regular reporting via a balanced scorecard / dashboard-based system will force the collection of data, it's analysis and improvement initiatives. Many of these will be short-lived and/or immature while a realisation of what is really important might not dawn until much time and learning has elapsed.</p> <p>Is there a process that could be adopted to maximise effective analysis and improvement in shorter timescales (or at least with more frequent</p>

	<p>iteration) for operational systems?</p> <p>Babcock Marine's annual Business Plan announces annual objectives – many of them operational system improvement-based. Effort goes into trying to ensure that these goals are visible to all and subsequent reporting via a dashboard attempts to draw up lower-level performance to prove high-level advances.</p> <p>How important is achieving line-of-sight linkage between these 'Board-level' aims and any initiatives and measures initiated at shop-floor level and what is the best way of testing the effectiveness of effort expended at a low level ?</p>
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