

The 3 key success factors for continuous improvement programmes: LEAD, SHARE, LIVE!

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Are you searching for new ways to improve your operations? Or are you struggling to succeed with your current continuous improvement efforts? I suggest the development of a company-specific Production System (XPS), with a particular attention to *leading* it, *sharing* it, and *living* it.

The fashion cycles of continuous improvement programmes

Manufacturing companies have at all times strived to improve their operations with the aim to continuously create more value from the resources at hand. During the past decades most manufacturers have gone through phases of JIT, TQM, TPM, WCM, 6σ, C2C, QRM, and other much less known TLAs (three-letter acronyms). The business life is – just like the society at large – marked by the requirement of modishness. Managers have a legitimate need to pursue the "next big thing". The fashion industry of production improvement methods is well-known in literature [1, 2], and has earned the living of many consultants.

No matter how natural and inescapable this phenomenon is – it is of course both ineffective and a waste of time and resources. In practice the different TLAs target the same objective: Continuously, relentlessly, and incrementally improve the company's operations in terms of safety, quality, cost, delivery, flexibility, environment, and people performance. They all share a basis in more than 100 years of knowledge development in industrial management [3]. Shared design parameters are customer focus, flow orientation, quality at the source, and reduction of all types of waste. They are all good, and they are all smart. It just so happens that they are not very different – at least not at the level that they usually get implemented in companies. The cost of jumping on the next new TLA bandwagon and thereby tossing the old but similar concepts over board, often far exceeds the gains.

XPS – the definitive TLA?

Of course, many companies have seen through this fallacy a long time ago and try hard to avoid it by building systems that are much more durable, holistic and maintained. Just like Toyota has held on to their hugely successful Toyota Production Systems (TPS), companies have increasingly realised that they need a similar but *company-specific* system in place. As a consequence they develop their own company-specific Production System (XPS) [3].

Look for example to Hydro with its Aluminium Metal Production System (AMPS), Elkem with its Elkem Business System (EBS), Boeing with its Boeing Production System (BPS), Volvo with its Volvo Production

System (VPS), John Deere with its John Deere Quality and Production System (JDQPS), Electrolux with its Electrolux Manufacturing System (EMS), and so on and so on. The three latter are illustrated below. Such XPSs differs from other TLAs; firstly by being organised as never-ending continuous improvement *programs* (different from projects), secondly by being uniquely adapted to the company's needs and design (different from off-the-shelf consultancy systems), and thirdly by being a shared system throughout the company it gives a shared vision and language for the continuous improvement. I therefore propose that XPSs has the *potential* to become the company's last TLA [4]; an infinite improvement programme deeply ingrained in the organisational culture.



The idea itself is good. Many companies might end up succeeding with improvement work where they earlier failed. This can lead to great cost savings and increased value creation – a necessity for survival in today's ever-increasing competitive market. Having an XPS might soon become an indirect order-qualifier, and companies that are able to implement XPSs at a faster pace than others might as well earn a competitive advantage [5]. The downside, of course, is that succeeding with an XPS does not come without challenges.

I see three fundamental success criteria for all XPS implementation: You must LEAD it, SHARE it, and LIVE it. It is of essential importance to address these three correctly and in the right sequence.

Lead it: The XPS must be backed by a persistent top-down management commitment

There are probably more companies that fail with their continuous improvement initiatives than succeed. A main reason is the trend-shopping that follows from a lack of persistent long-term objectives. Managers shop new concepts even if there is no news in the new. And even if they are not slaves of fashion - they might fall victim to newly hired senior managers with personal interest in establishing territory by enforcing a "new" road to operational excellence. Unfortunately, the expected return horizon is often no longer than the annual budget period. A corporate improvement programme must be strategically anchored at the top-floor as a long-term objective, and the support must be inherited when the top-management is replaced. Without a persistent *top-management commitment* an XPS can never really succeed.

There is nothing wrong with initiatives starting at the shop-floor. In fact, fostering such initiatives is one of the key outputs of a successful XPS deployment. But for the programme as a whole, the ownership

must start at the top. Continuous improvement is all about bringing about change – solving small and large problems; if the management layer above you is not dedicated to the programme, you'll soon meet an alienated attitude telling you to "bring your problems elsewhere". It is therefore of essential importance to first "implement" management commitment in your XPS efforts. Management commitment motivates engagement and discipline. Management matters.

Share it: The XPS must be shared across organisational functions and units

An XPS must enjoy a holistic and unifying focus in the company; the programme must be *shared*. A production system must be based in the value creating activities (for manufacturers that is in production), but at the same time shared with all functional areas of the company. All must not share all the tools and methodologies that follow, but all must share the *logic and vision* of how to operate according to the XPS. This would build *factory fitness* [6].

For manufacturing companies that operate in mature industries, the production is the most important arena. This means that sales, HR, R&D, managers, engineering, and the technical and administrative support functions, must *serve* the production. This, however, is a rare understanding in industry, where all functional areas tend to believe in their superiority. For an XPS to really succeed however, the logic must be shared across functions. Say for example, that a design solution results in inefficient assembly of a product, and that an XPS tool uncovers this as a root cause for recurring quality problems. Without the shared XPS, the engineering department could simply reject it as a production problem. In a similar vein, a "litmus test" for an organisations XPS maturity would be to test the sales department's ability and willingness to really discuss and solve a production problem. If the system is not shared across the horizontal functions of a company, it will not live long and prosper.

To successfully share an XPS requires sufficient investments of time and resources in teaching the XPS logic to all employees. External courses and education within industrial engineering, lean production, and Six Sigma etc. all helps in this regard. There is no easy way to XPS implementation – it takes time. Toyota used 30 years to develop its TPS, and its frontrunners were often frustrated with its slow progress [7]. Allow for discussions and criticism to the programme because such are necessary ingredients in all employees' learning process. If all employees share the XPS logics and vision, it is only a sign of strength if someone argues that Value Stream Mapping, for example, does not fit for the engineering department. Sharing means joint learning.

Live it: The XPS must become embedded in daily operations

Finally, the system must be alive. Employees must *live* it. Corporate improvement programmes such as XPSs often come in nice-looking models, posters, brochures and presentations. A pitfall which far too often occurs is that the XPS does not move far beyond its appearance; the XPS remains talk and not action. Managers take on rhetoric of successful implementation because it seems visual to the eye, while the XPS in practice is only *window-dressing* [8]. An XPS should be endlessly more than a 5S cleaning project. An opposite danger is that the XPS is uncritically implemented in all its rigidity by force. The result then is overly standardised solutions not optimised for the local situation. Such *cloning* only results in local frustration and full blossom of the not-invented-here-syndrome.

To avoid both situations – window-dressing or cloning – the trick is to understand that it is really not what you see or read that you want to implement, it is how you think. Living the *logic* behind the XPS is the ultimate aim. The logic is ten-times as important as the content of the system. If well diffused, it makes all employees able to take the right decisions without the need to check the manual. A successful XPS gives identity and a shared improvement language to all employees. As the XPS becomes an integrated part of "how we operate here" – embedded in the organisational culture and a shared mindset of how the company creates value for customers, owners, employees, and the society at large – it eventually has all it takes to yield success.

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