



The Evolution of Lean

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Straws in the Wind?

- **Denmark – “Can’t find staff – how do we do more with the staff we have?”**
- **GE – “The future is not Six Sigma but Lean”**
- **Louis Vuitton – “Using lean methods to make its handbags and keep its sales outlets stocked”**
- **Tesco - grows in Korea while WallMart withdraws**
- **Airbus – “It will take 10 years to catch up with Boeing”**
- **Toyota – “Increased sales by 20% last month in the US – GM and Ford sales fell by 3%”**
- **Toyota R&D Director – 3rd generation Hybrid engine will be half the size, half the weight and half the cost of the 2nd – it will be a big surprise”**



Toyota's Lean Strategy

“Brilliant process management is our strategy.

We get brilliant results from average people managing brilliant processes.

We observe that our competitors often get average (or worse) results from brilliant people managing broken processes.”

Lean Thinking is Process Thinking



What I See

- **Printing equipment maker – customising, making and installing equipment faster**
- **Machining and sub-assembly manufacturer – new equipment, focused factories and ERP**
- **Food manufacturer moving from monthly batches to every product every day**
- **Pharma manufacturer with a two year supply chain to make and distribute pills**
- **Auto parts maker – suffering from chaotic orders – but also designing right sized equipment**
- **Toyota designing new production systems for Lexus, the Asian vehicle and the hybrid engine**



Conclusions

- **Different situations require different starting points**
- **But the core lean principles are the same**
- **Levelling the information flow is as important as streamlining and synchronising the physical flow**
- **One hour of value creation should not take more than one day to complete**
- **It is possible to synchronise production with demand**
- **The right focus is the end-to-end value stream back from the customer or user**
- **Without process design or value stream leadership very little progress will be made**



Principles of Lean System Design

- Distinguish between real and created demand
- Level (not amplify) orders with a buffer stock
- Trigger the system at one “pacemaker” point
- Release (and ship) orders little and often
- Create basic stability (capability and availability)
- Combine steps to flow and link others with pull
- Develop the capability to make every product every cycle (day or week)
- Spread across the end-to-end value stream
- Work to simplify the design, tooling and systems
- Locate value creation as close as possible



The Tasks of Management

- **Create stable foundations – across the Gemba – levelled orders and stability – problem solving here is about maintaining standard work and recovering quickly from interruptions**
- **There are numerous opportunities for middle management to participate in value stream redesign and lead process improvement activities across an ever wider scope**
- **Top management is responsible for synchronising all the value streams and all the support processes of the organisation and for setting the direction**



Bringing it all Together

- **Strategic thinking** – is about defining where the business must go
- **Process (or value stream) thinking** – is about how it will deliver on these goals
- **Financial or functional thinking** – is about the resources and skills needed to enable these processes to flow
- The core value streams collectively articulate the voice of the product to the support functions
- This changes the discussion about plans and budgets – the first stage of policy deployment



To learn more

- **Read Lean Thinking and Lean Solutions**
- **Enjoy The Gold Mine**
- **Take action guided by the Lean Action Workbooks**
- **Contact the Lean Global Network for advice, networking etc – through the Lean Enterprise Academy**
- **Sign up for our monthly eletters at www.leanuk.org and www.lean.org**



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