

Track MCPC Manufacturing / Logistics & Product Design

Something to read while waiting on the session to begin...

Making Mass Customization work...

...redesigning your functional processes to enable efficient mass customization

- ▶ key points at a glance
- ► self-evaluation of existing processes

...the way your shareholders & customers like it.

A contribution by : Christian Klock MOVEAHEAD® Consulting & Executive Training CONSULTING & EXECUTIVE TRAINING

schieving operational excellence

Dear conference participant,

As we know, making mass customization *truly* work is not a simple task. In most cases it requires a redesign and a realignment of nearly all existing functional processes to match mass customization needs.

To recall, mass customization means providing individually customized goods at mass production volume and efficiency, but why embarking on this journey?

Well, due to the increase in transparency of product offers combined with convenient information & ordering processes via the internet, customers more and more prefer products that exactly match their needs. If someone can get these products made...

- the way they want it,
- when they want it,
- in an as convenient way as possible and
- at a price they are willing to pay, they will go for it.

If you can't do it, they will buy from someone that can.

Up to a certain extent, companies, without changing its processes dramatically, are able to provide customized goods in "acceptable" lead times (current market average). Even the cost / profit side looks ok based on information from the accounting system.

Often this is not true and companies loose money on customized products. The reason is that the cost-accounting system often uses a "flaw" product/cost mixed-calculation in which standard and customized products get mixed together. In this case costs are not distributed correctly or are simply disregarded (e.g. overhead cost). Things get even worse if the portion of individually customized goods sold is increasing (what is usually happening).

You can do the math yourself by manually performing a value stream cost-accounting for selected products. You will be surprised!

In addition you should use the *zero-base approach*. Here, current total cost of attempting to offer variety is compared with the cost of a "fresh starter" who perfectly applies lean manufacturing and mass customization principles (design of all products and the complete production system from scratch). This not only will reveal the huge potential cost saving but it also highlights the threat that might come from a "fresh" new competitor.

As it is difficult to know what competition is doing there is not much choice but to be a "first mover" and to embark on the mass customization journey to maintain or increase competitive advantage (market share & profits). But no worries, all we are taking about is achieving *operational excellence*.

This is what every company should drive for anyway due to market needs:

o producing only what is ordered -> make the customized product

o in high quality -> without warranty claims

o quickly -> within *minimized lead time*

o at low total cost -> with minimum effort

Operational excellence in producing goods, in response to a particular customer desire, can only be achieved if all processes throughout the organization are set-up and aligned to match these market-driven needs.

As operational excellence is mainly driven by the design of the existing production system and the product design, existing *build-to-order* manufacturing capabilities as well as product development excellence are key for success. Mass customization therefore not only drives the adoption of Just-in-Time / lean manufacturing philosophy within the industry but it also forces to move from a reactive to a *proactive operating mode* within the R&D department.

This requires to do three things hand in hand as they are heavily interlinked:

- Product / R&D process redesign towards LeanProductDesign
- o Redesign of existing production/operating system
- Redesign of sourcing, distribution and IT processes

To achieve *LeanProductDesign*, designers and production system designers have to acknowledge that about 60% of the total product cost is determined by the product architecture during concept phase (which is before the design phase!). Key to low total cost is the application of modularity concepts that make variety and complexity manageable within a product line. *Modularity* than also aligns product and operations strategy which is the starting point for designing the production/operating system with its sub-systems.

Before starting the mass customization journey one should evaluate the existing processes and products regarding their capabilities to support mass customization. A copy of our self-evaluation manual is available upon request. Please send an e-mail to info@moveahead.com

We, MOVEAHEAD[®], a consulting firm based out of Munich (Germany), have gained unique knowledge in redesigning and implementing "lean" / flexible processes that can handle the mass customization challenge. We also assist our clients in re-defining R&D guidelines, necessary to ensure a proper LeanProductDesign.

If you would like to get in touch with us please do so using our contact details on the backside of this flyer.

Yours sincerely, Christian Klock

About us:

MOVEAHEAD[®] is a unique consulting firm based out of Munich, Germany. We support companies in designing and implementing lean production systems to match necessary market requirements.

These activities are supported by executive training sessions. Ideally this builds up the right knowledge and experience that is needed to design, implement and maintain the necessary changes within the existing production system (built-to-order/Just-in-Time), performance management systems (target costing and monitoring) and product development processes (guidelines for lean product design to enable mass customization).

About the author:

Christian Klock, managing director of MOVEAHEAD®, is a former McKinsey consultant that has more than seven years of industry and consulting expertise. Mr. Klock spent more than two years as production manager and in-house consultant at BTR-automotive in the USA, transforming the US-based manufacturing facilities towards lean manufacturing. Thereafter he joined Porsche Consulting to serve as a lean manufacturing consultant. During this time he had the great opportunity to learn from the source of lean manufacturing thinking, the well know Japanese consultants of Shingijutsu, a spin off from the Toyota's supplier training center. The past four years Mr. Klock served as a practice consultant / manufacturing specialist for McKinsey's global manufacturing practice helping clients around the world to achieve operational excellence.

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