

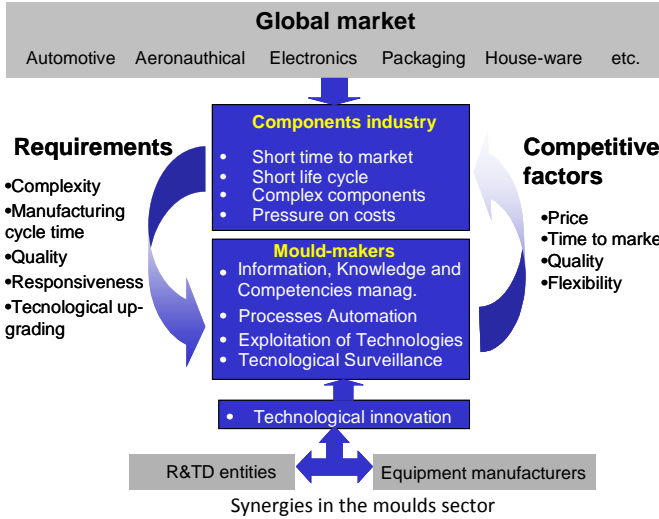


# THE NEED FOR AGILE MANUFACTURING IMPLEMENTATION IN MOULD MAKING BUSINESS

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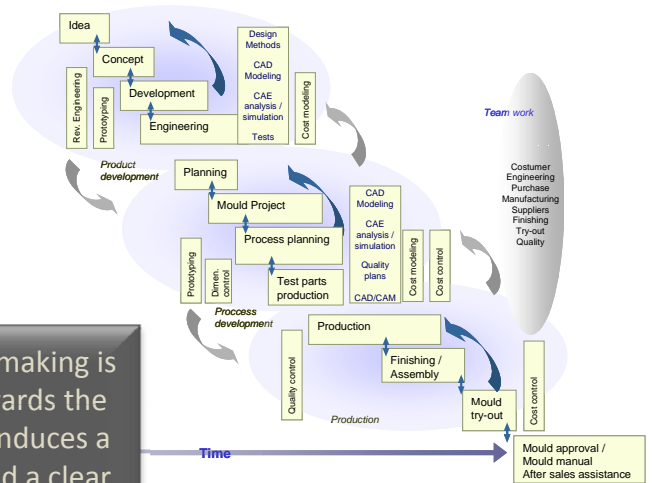
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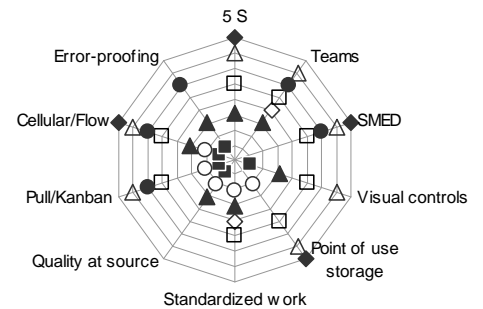
Level	Strategic	Management	Operational
<b>Concepts and tools</b>	• Lean thinking	<ul style="list-style-type: none"> <li>• Value Stream Mapping</li> <li>• People empowerment</li> <li>• Kaizen (Continuous Improvement)</li> <li>• TPM (Total Productive Maintenance)</li> </ul>	<ul style="list-style-type: none"> <li>• Concurrent engineering</li> <li>• Internet-based manufacturing</li> <li>• Best-practices of planning</li> <li>• Automation</li> </ul>
<b>Type of Change</b>	Cultural Change	Management Change	Procedures Change

Scheme of the LM Model proposed to moulds industry

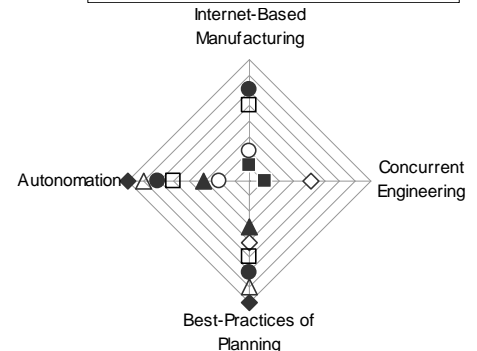


Mould project and manufacturing in a SE Framework.

Several industrial sectors, in which value chains mould making is involved, are actually subjected to a huge demand towards the reduction of their product innovation cycles. This fact induces a strong pressure on mould manufacturing lead times and a clear need to accommodate a growing number of product modifications during mould manufacturing cycle without deteriorate mould final cost and final due date. Implementing management strategies able to cope with a one-of-a-kind production type, with a changeable specifications set where delivery date is a critical issue, assuring a continuously improved performance, is the only way to guarantee business excellence and market leadership. In this paper the management strategies and the methodologies to be used on the pathway to fully implement lean manufacturing will be discussed, taking into account mould making companies classical constraints.



■ Over-Production	○ Inventory Waste
▲ Defective Products	◇ Over-Processing
□ Waiting Waste	● People Waste
△ Motion Waste	◆ Transportation Waste



	SE.	Internet based manuf.	Best Practi. Plann.	Autonomation
5 S		✓	✓	✓
Teams	✓		✓	
SMED			✓	✓
Visual controls		✓		✓
Point of use storage		✓	✓	
Standard. work	✓		✓	✓
Qual. at source	✓		✓	✓
Pull/Kanban	✓	✓	✓	
Cellular/Flow	✓		✓	
Error-proofing		✓	✓	✓

Relations between the methodologies proposed by traditional models and the ones purposed to moulds industry.

Correlations between the waste classes and the methodologies at (a) Traditional LM Model; and (b) Mould making LM Model.