Don’t Transform Manufacturing: Reconfigure it.

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“I would like all of us to put our customers at the center of everything we do. That sounds obvious but it doesn’t always happen. We must listen ... then respond in a fast coordinated way”

— Guillaume Faury, CEO Airbus
93% of manufacturers claim manufacturing operations are an integral component of their digital supply chain strategies.

71% of manufacturing digitization efforts are separate but parallel to digital supply chain initiatives.
REVOLUTION

RECONFIGURE

TRANSFORMATION
Smart Manufacturing is a cultural shift and a reconfiguration of existing organizational mindsets.
4 Ways To Reconfigure Manufacturing Operations

1. Disrupt How Outcomes Are Approached
2. Go Beyond Smart Factories
3. Shift From Project To Program
4. Prepare For The Big Unlearn
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Secondary effects will be more disruptive than the initial change.
Disrupt How You Approach The Outcome

Customer Experience

Cost
Quality
Service Levels

Time
Reliability
Transparency
Data Needs To Be A Conversation Starter. Not A Conversation Ender.
Today’s Dialogue Is Narrow

Pace of Discovery, Learning and Execution of Change

Automated

Breadth of Data Access + Analytical Techniques, and Organizational Capability

Knowledge

Reconfigure

Understanding

Transform

Visibility

Improve

Manual, Ad Hoc, Start, Stutter, Stop

Source: “Artificial Intelligence Will Make Manufacturing Smarter—But a Learning Curve Comes First”, Gartner, 2018
What’s Achievable

Precisely Timed Decisions

Digitized Production System

Improvement Without Emotion

Source: “Evolve Your Manufacturing Intelligence Strategy to Keep Pace With New Analytics Requirements” Gartner, 2018
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Dreams of Zero Touch, Zero Lead Time
Where Does Manufacturing Fit?

Digital Business Strategy

Digital Business Optimization

- Improved Productivity & Existing Revenue
- Better Customer Experience

Digital Business Transformation

- Net-New Revenue Product and Services
- New Business Models

*Client POV: Digital Transformation
Synchronize With The Supply Chain Operating Model

- Planning Horizons
- Product Life Cycles
- Cost Optimization
- Supply Network Design
- Smart Factories

Ecosystem
Digitization Plans For The Next Two Years

Q: Please tell us what the state of each manufacturing process/activity will be 2 years from now?

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Production Planning (n=135)</td>
<td>19%</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>Materials Logistics (n=131)</td>
<td>18%</td>
<td>40%</td>
<td>41%</td>
</tr>
<tr>
<td>Quality (n=157)</td>
<td>18%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Reporting/KPI Management (n=121)</td>
<td>13%</td>
<td>46%</td>
<td>40%</td>
</tr>
<tr>
<td>Changeovers (n=147)</td>
<td>14%</td>
<td>54%</td>
<td>33%</td>
</tr>
<tr>
<td>Asset Care/Maintenance (n=150)</td>
<td>25%</td>
<td>45%</td>
<td>30%</td>
</tr>
<tr>
<td>Lean &amp; CI (n=142)</td>
<td>22%</td>
<td>49%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Base sizes vary by process/activity
Converge and Influence Other Functions

Planning
(Short and Long Term)

Sourcing and Procurement

Customer Service

Logistics and Delivery

Manufacturing Operations

Source: “Survey Analysis: Lights Out Manufacturing is More Than Factory Automation” (G00329420)
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What Happens When Digital Defines Your Strategy
Digital Hype Pressures The Manufacturing Improvement Portfolio

Balancing Innovation with Core Competency

What should we prepare for?

Where should we focus today?

What should be completed?

Source: "Hype Cycle for Manufacturing Operations Strategy, 2018", Gartner 2018
A Balanced Roadmap is Needed

Source: "Toolkit: Self-Assess Your Manufacturing Operations Maturity" (G00349158)

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We Are Asking The Wrong Talent Question

Session Q&A
Please ask a question by opening this session through the "Agenda" on the APP

Avoiding the Skills Gap: Planning for the Short and Long Term to Secure your Future

How can companies make themselves more “sexy” for young talents?

What do you think about “hire for mentality, train for skills”?

Is there a connection with a life quality choice in the job (home office, etc.) from new generation, difficult to get in manufacturing?

On the road map to industry 4 Rev is the skills gap identified on technical skills or on soft skills&behaviors as resistance on change?

What are your recommendations for 'healthy' job rotation to develop skills in an organization?

How have you partnered with HR to either redefine job descriptions or hire people?

In any organisation, who is best placed to identify a succession plan. External or internal?
## A Digitally-capable Workforce Requires More Than Fixing Recruitment

Q: When digitizing the manufacturing operations, what were/are/will your company's top constraints with respect to skills and talent?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>56%</td>
<td>Existing employees struggle to embed digital into their day-to-day work</td>
</tr>
<tr>
<td>52%</td>
<td>Lack of skilled workers inside the company to support digitization plans</td>
</tr>
<tr>
<td>50%</td>
<td>No formal career path/skills development for existing employees</td>
</tr>
<tr>
<td>50%</td>
<td>Lack of mentorship programs between new and current employees</td>
</tr>
<tr>
<td>41%</td>
<td>No formal knowledge management process</td>
</tr>
<tr>
<td>40%</td>
<td>Inability to recruit and hire from the outside</td>
</tr>
</tbody>
</table>

Base: All Respondents, n = 205, Percentage of Respondents Sum of Top 3 Rank Shown
Percentages may not add to Sum due to rounding
Cultivate Digital Dexterity

New Competencies

New Organization Models

Nurture Natural Interaction

Source: How to Overcome Three Obstacles to Accelerate Innovation in Manufacturing Operations With Bimodal Gartner, 2017
“Failure is so important. We speak about success all the time. It is the ability to resist failure or use failure that often leads to greater success. I’ve met people who don’t want to try for fear of failing.”

— J.K. Rowling
“50% of the time we didn’t know what we were doing”
Smart Manufacturing is a cultural shift and a reconfiguration of existing organizational mindsets.
In Order To Succeed

- Distinguish “problem solving” from “opportunity creation”. This is a mindset shift.
- Your existing capacity is your greenfield opportunity. Invest in—and maximize—the core.
- Focus on the next level of performance and capability for the customer—not just automating factories. Synchronize activities with other supply chain functions.
- Dedicate attention to people and process, not just technology. Without process change you’ll just spend money.
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