Build to Order; Making it Happen
11th February 2009

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Agenda

• The ILIPT approach
  • Current markets
  • The Triple Bottom Line
  • Future challenge
ILIPT provides a holistic Build to Order solution

Modular Product

Interoperable Networks

Modelled & Validated
Simulation of the BTO concepts showed the approach works.

Note: ILIPT conditions include 15 OEM plants in Europe; BTO & BTS suppliers based on ILIPT distances and product varieties; VOB and information transparency implemented.
A Transition Framework was developed

EU ILIPT Project

Research
Opportunity Recognition
Dissemination
Demonstration
Validation
Localised Testing
Formalisation
Enterprise adoption
Scale Change

Industry Take-up
Supported by experts

ILIPT Project
Finishes

Traditional Automotive
Mass Production

BTO Enhanced
Production Network
We understand how to implement change

**Adoption Decision**
- Antecedents to adoption
- Overcoming strategic context difficulties
- Securing commitment
- Building acceptance and routine
- Retentive capacity

**Implementation**
- Planning Strategic Change
- Nurturing a fertile organisational context
- Maintaining focus and flexibility

**Ramp-Up**
- Building acceptance and routine

**Integration Use**

**NEED PUSH**
- Inter-organisational relationships
- Modelling
- Regulation
- Need
- Crisis
- Problem

**NEED PULL**
- Exploration
- Resistance
- Denial

Source: ADOPTION OF PROMISING PRACTICE, Advanced Institute of Management (AIM) Research, February 2004
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### Days of Stock (US figures)

<table>
<thead>
<tr>
<th>OEM</th>
<th>April 2008 Days (# cars)</th>
<th>January 2009 Days (# cars)</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM</td>
<td>80 (408,300)</td>
<td>197 (1,005,439)</td>
<td>146</td>
</tr>
<tr>
<td>Honda US</td>
<td>60 (322,000)</td>
<td>100 (536,667)</td>
<td>67</td>
</tr>
<tr>
<td>Toyota</td>
<td>50 (417,500)</td>
<td>94 (784,900)</td>
<td>88</td>
</tr>
<tr>
<td>BMW</td>
<td>34 (36,000)</td>
<td>57 (60,353)</td>
<td>68</td>
</tr>
</tbody>
</table>

$10s bn’s capital employed held as stock
The response has been to shut production lines - Europe is suffering

Ford makes worst loss in its history
Carmaker loses nearly $15bn in a year, but says it doesn’t need a government handout

Toyota to shed 1,200 workers at Sunderland plant
The dismal state of Toyota announced it is going into February and March

Nissan to shed 1,200 workers at Sunderland plant
Workers at Nissan’s Sunderland car plant on Thursday paid the price for a slide in global demand when the company announced it was to cut 1,200 manufacturing jobs, dealing a sharp blow to the north-east’s economy.

The job losses, which will reduce the factory’s 3,800 manufacturing workers by almost a third, are the most sweeping cut yet by any UK carmaking site in response to the downturn.

The Society of Motor Traders and Manufacturers seized on the announcement to ratchet up pressure on ministers to shore up the beleaguered industry, saying swift action was vital to limit damage and ensure the UK retained its status as a European manufacturing hub.

Price cuts available at a Ford dealershi Sillitoe/Guardian
The Ford motor company suffered history last year, slumping $14.6bn insisted today it still hoped to surv
Many of its problems are of its own making and could be eased by adopting BTO.

- **Overcapacity**
  - estimates up to 21M production capacity in Europe
  - at the peak of 2007 all vehicle manufacture accounted for 19.7M

- **Current process are forecast or push based**
  - Sales staff become the highest paid

- **Large European stocks**
  - 18.5million car produced in 2008, but only 14million sold
  - This was at the ‘peak’ of financial markets
  - September 2008 saw a 20% reduction in sales

- **Large pension liabilities**
  - These companies must be supported

Is the provision of government money a long term solution?
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Industry Executive Perspective

- What do industry experts have to say?
- 55 executives from top automotive OEMs, suppliers and service providers
Is Build to Order a solution?

- Is BTO the most promising opportunity for the European automotive industry?

- There is already a strong belief in BTO by executives

- Yes 63%
- No 37%
How difficult is the change?

- To what extent is it possible to build BTO cars today?
- There is a belief BTO is possible, but significant change is required
Transformation is required – this is more than an ordinary change

Output performance

- Financial
  - Cash flow
  - ROCE
  - Revenues
  - Profits
  - ...
- Operational Service
  - Quality
  - Safety
  - Customer satisfaction
  - ...
- Organisational (health)
  - Alignment
  - Renewal
  - Execution
  - ...

“Transformation is a conscious and sustainable transition to a significantly higher level of business performance and organizational health, based on a fundamental shift in underlying capabilities, systems and processes”
The ILIPT transformation provides a sustainable future

- **Economic impact**
  - Removes stocks throughout supply chain
  - Free’s $bn’s of cash
  - Improves return on capital employed

- **Environmental impact (low CO2)**
  - Car and components only made to confirmed order
  - BTO suppliers near OEM so shorter logistics
  - Shorter supply chains & building only to order lowers emissions

- **Societal impact**
  - Manufacturers located close to customer
  - Employment and investment remains within EU

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The ILIPT transformation provides a sustainable future through its Economic, Environmental, and Societal impacts, contributing to the Triple Bottom Line.
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Conclusions

- There is a clear need for change
- Over capacity and pension liabilities will not ‘go away’
- Build to Order delivers the Triple Bottom Line bringing financial, environmental and societal benefits
- ILIPT provides a validated sustainable future solution for the car industry in Europe

Will you lead the change?
• A detailed account of the requirements for a 5-day car is presented the BTO book

• 28 authors from 12 different ILIPT partner organisations from across Europe

• ISBN 978-1-84800-224-1