Will the European Industry ever build a 3 Day Car?

Introduction

- Why is building-to-order attractive - to customers and to the industry?
- Where is the European industry at present - how does it schedule, build and deliver?
- How far is it, both practically and theoretically, from a full build-to-order system?
- Summary of the 3 Day Car research carried out to date
Why build to order?

- Cost of finished stock sitting at OEM and dealer
- Too many customers given incentives to take a car specification alternative to the one desired
- Loss of customers due to wrong spec and/or failure to quote accurate delivery time
- Current system keeps product mix low (Europe)
- Changes to distribution will equalise prices between regions and consumers - so OEMs need another way to maximise price

Why build to order? - OEM benefits

- Radically reduce level of finished cars
- Minimise model obsolescence - both with annual spec. changes and with model changeover
- Changes relationship with supply base - transparency and instant information ends complaints about inaccurate forecasts, scheduling unreliability
- Marketing advantages maximise pricing.....
Why build to order? - marketing benefits

• Customer gets exact specification, views car as custom made, encouraged to up specification
• Totally reliable delivery times
• Changes problematic relationship with dealers - no push and less price negotiation?
• With price equalisation inevitable in Europe, allows OEM to re-segment market

The industry at present

• Research to date shows a multitude of different forecasting, scheduling and delivery systems
• Most a complex mix of old practices, various IT systems, only semi-successful initiatives etc.
• Little attempt to understand the link between scheduling and transaction price in the market
• Some lead times too long for customers to wait
• Some systems cannot build a car to order at all!
The industry at present (II)

- Order lead times vary between segments

![Order lead time comparison chart]

The industry at present (III)

- Sales sourcing (1997 - volume orders may not be customer allocated)

![Sales sourcing bar chart]
The industry at present (IV)

- To understand more about this inflexibility, 3 Day Car researchers have ‘big picture mapped’ all the sponsor OEMs - travelling to suppliers, assembly plants, head offices, national sales organisations, dealers
- Research reveals an incredibly complex set of arrangements with little or no link to market
- Complaints and failings at every level!

IMVP, 6-7 October 1999
Moving to build-to-order

- We are trying to understand the objectives, motivations and role of each part of the extended organisation
- We’ve identified some of the factors - both constraints and incentives - that support the current system
- Research is focusing on these factors - with detailed value stream mapping and specific issue-based work

The basic auto supply chain

Diagram showing the basic auto supply chain with information flow and physical flow through different stages such as purchase, production control, prog’ing, NSC, and dealer.
Constraints on lead time reduction in the supply chain

Summary of research to date

- Big picture mapping of all sponsor OEMs
- Detailed value stream mapping of constraints - focusing on product variety funnel and supply chain responsiveness
- Specific issue-based research and papers on:
  - paint plant
  - alternative design and assembly (spaceframe)
  - marketing and customer wants
  - IT