



THE CHALLENGE OF LEAN CONSUMPTION

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Who am I?

- Co-author with Jim Womack of **The Machine that Changed the World, Lean Thinking** and the new
- **Lean Consumption** article and **Lean Solutions** book
- Chairman of the non-profit **Lean Enterprise Academy** in the UK - part of the **Lean Global Network**
- Researchers and publishers of the knowledge needed to build a lean business system
- Thought leaders in pushing forward the frontiers of lean thinking in our **Lean Summits** and
- Mentors to organisations seeking to implement lean in every type of activity

Toyota's Lean Strategy



“Brilliant process management is our strategy.

We get brilliant results from average people managing brilliant processes.

We observe that our competitors often get average (or worse) results from brilliant people managing broken processes.”

Lean Thinking is Process Thinking



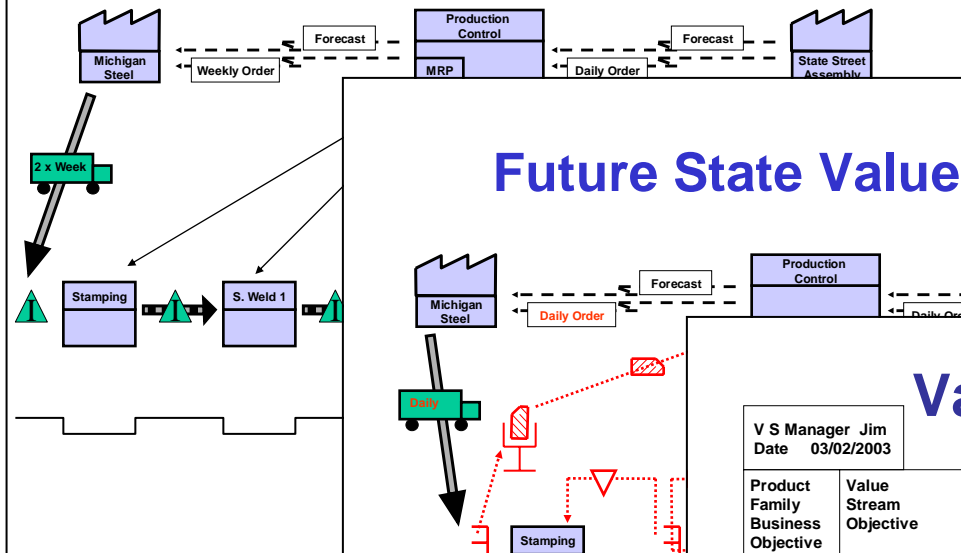
Lean Principles

- Specify **value** from the standpoint of the consumer - (not from your assets and organisation)
- Identify the **value stream** through the steps required to create each product - from concept to launch and order to delivery - and remove the wasted steps
- Make the process of value creation **flow** smoothly and quickly to the customer
- But only in line with the **pull** of the consumer
- While pursuing **perfection** by constantly improving the product and the value stream

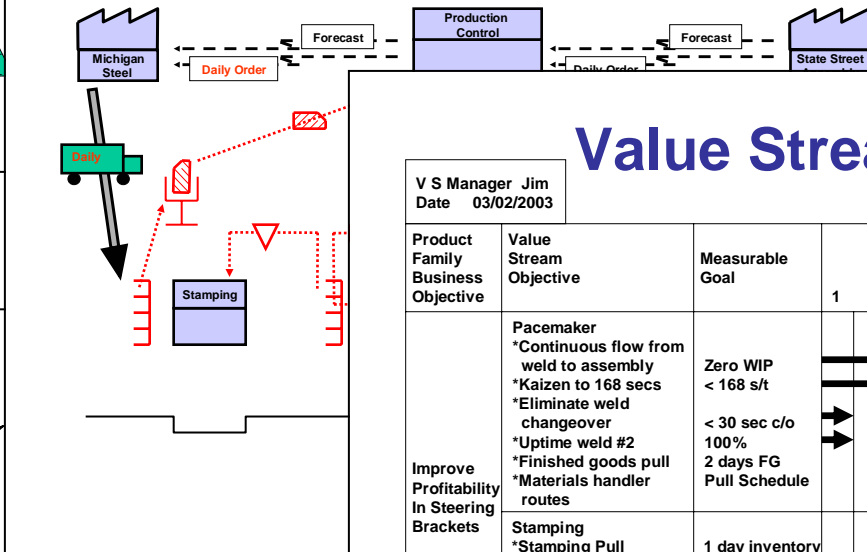
Implementing Lean



Current State Value Stream



Future State Value Stream



Check progress and stabilise

Value Stream Plan

V S Manager Jim Date 03/02/2003		Product Family Steering Brackets											
Product Family Business Objective	Value Stream Objective	Measurable Goal	Monthly Schedule									Person in Charge	
			1	2	3	4	5	6	7	8	9		
Improve Profitability In Steering Brackets	Pacemaker *Continuous flow from weld to assembly *Kaizen to 168 secs *Eliminate weld changeover *Uptime weld #2 *Finished goods pull *Materials handler routes	Zero WIP < 168 s/t < 30 sec c/o 100% 2 days FG Pull Schedule	→	→									John Dave Sam Mike Sue James
	Stamping *Stamping Pull *Stamping changeover	1 day inventory + pull schedule batch size 300/160 pieces c/o < 10 min				→	→						Fred Tim
	Supplier *Pull coils with daily delivery	daily delivery < 1.5 days of coils at press								→			Graham

Ask the key questions



Consumption

- Improvements in production and logistics have given consumers a growing **range** of higher **quality** products at lower **prices** through many different sales **channels**
- So why is consumption still so **frustrating**? Why does the new computer fail to work with the rest of our kit? Why do we have to waste so much time in hub airports and general hospitals? Why do we fail to find exactly what we are looking for on a trip to the supermarket?
- Why is it so difficult to connect consumption and provision? Why do we think and act differently as consumers to how we do in our lives as providers?

The Consumption Process



- The answer begins by seeing consumption not as an isolated transaction between strangers
- But by seeing consumption as a **process** of steps to solve a consumer's **problem** – involving researching, selecting, obtaining, integrating, maintaining, upgrading, disposing and replacing many items over time – interacting with several providers of goods and services in a parallel provision process
- Add this up and you realise that **managing** the household consumption processes is complicated and takes a lot of “unpaid” time and mind share

The Consumer's Dilemma



We all have more and more choices to make and
more and more products to manage

but less **time** and **energy** to do so

This situation creates a major opportunity for
providers

and a major **win-win** opportunity for collaboration



Principles of Lean Consumption

1. Solve the consumers **problem** completely
2. Don't waste the consumer's (or the provider's) **time**
3. Provide exactly **what** the consumer wants
4. Deliver it **where** it's wanted
5. Supply it **when** it's wanted
6. Continually **aggregate solutions** to reduce the consumer's time and hassle



Solve my Problem

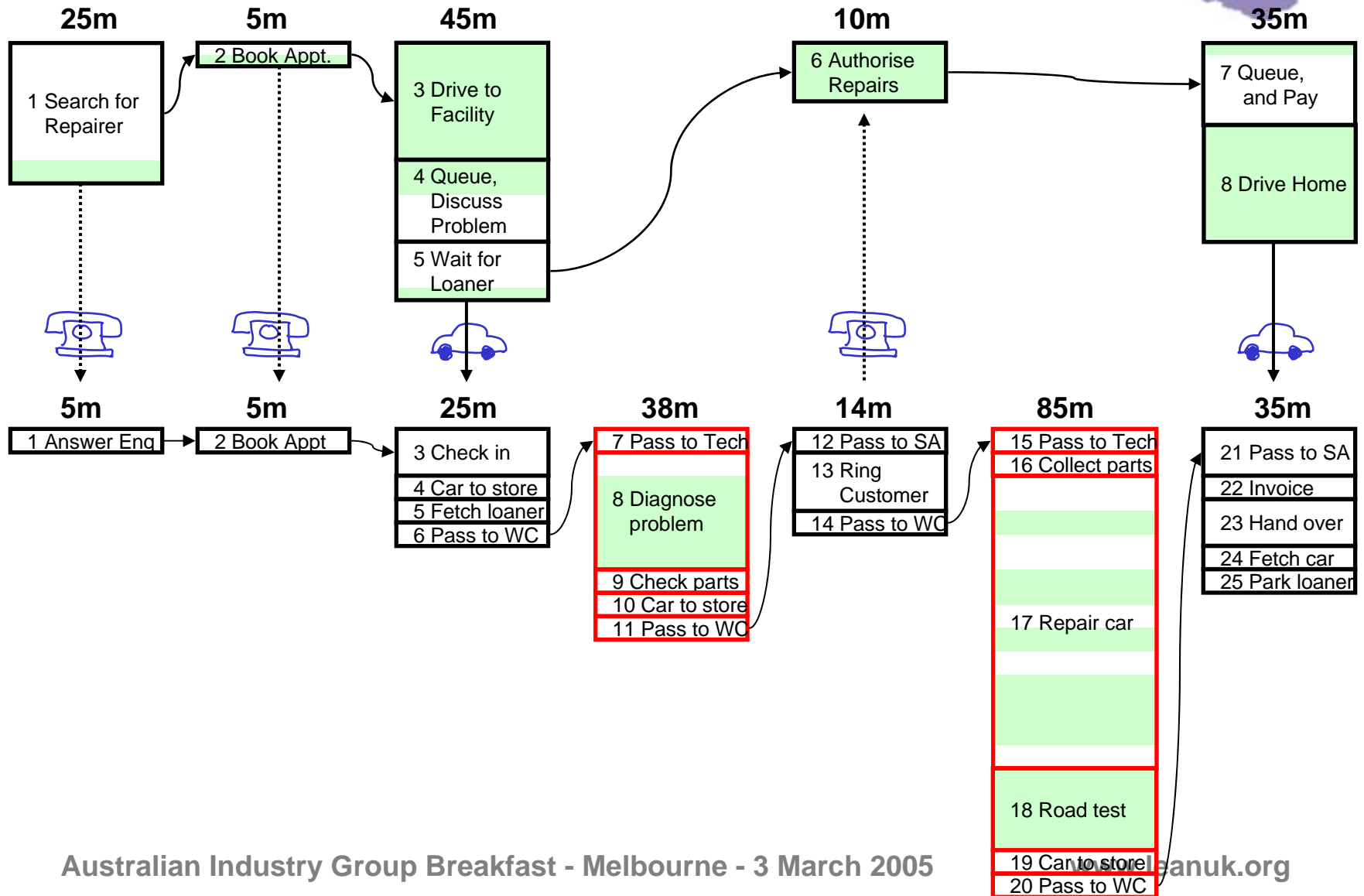
- It is not the object we are buying but the **use** we get from the object or service – in relation to its context
- Has it solved my problem completely? What was I trying to do exactly? What else did I have to do to solve the problem completely? Was that a hassle?
- Fujitsu Services reversed the logic of outsourced customer service and technical support – getting experienced staff to ask about customer purpose, offer a fix, redesign to eliminate the root cause and discover additional value for future products
- We need a dialogue to discover **purpose** and **hassle**

Don't Waste my Time

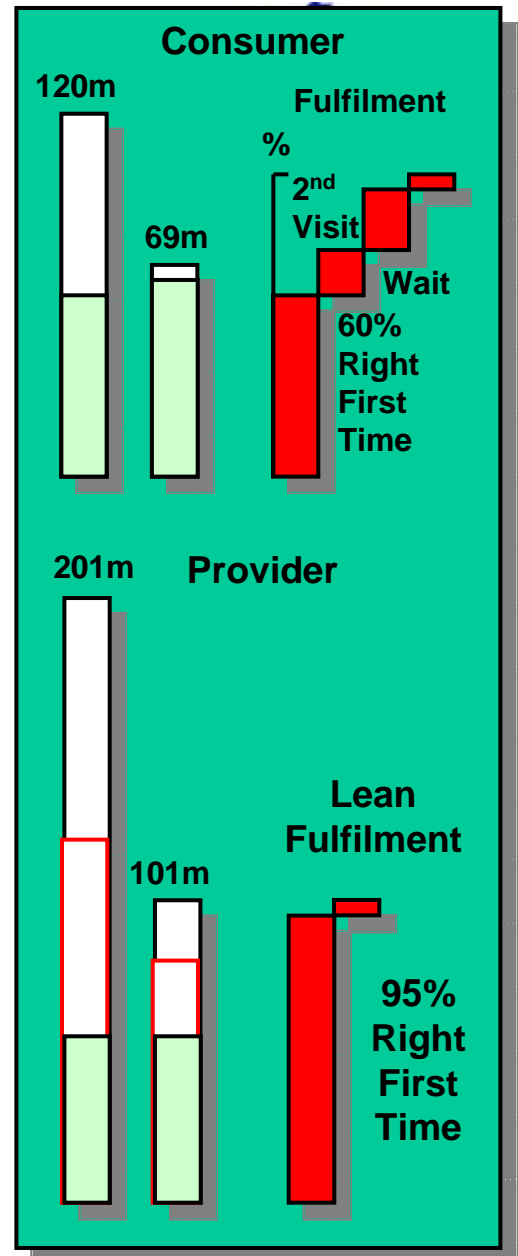
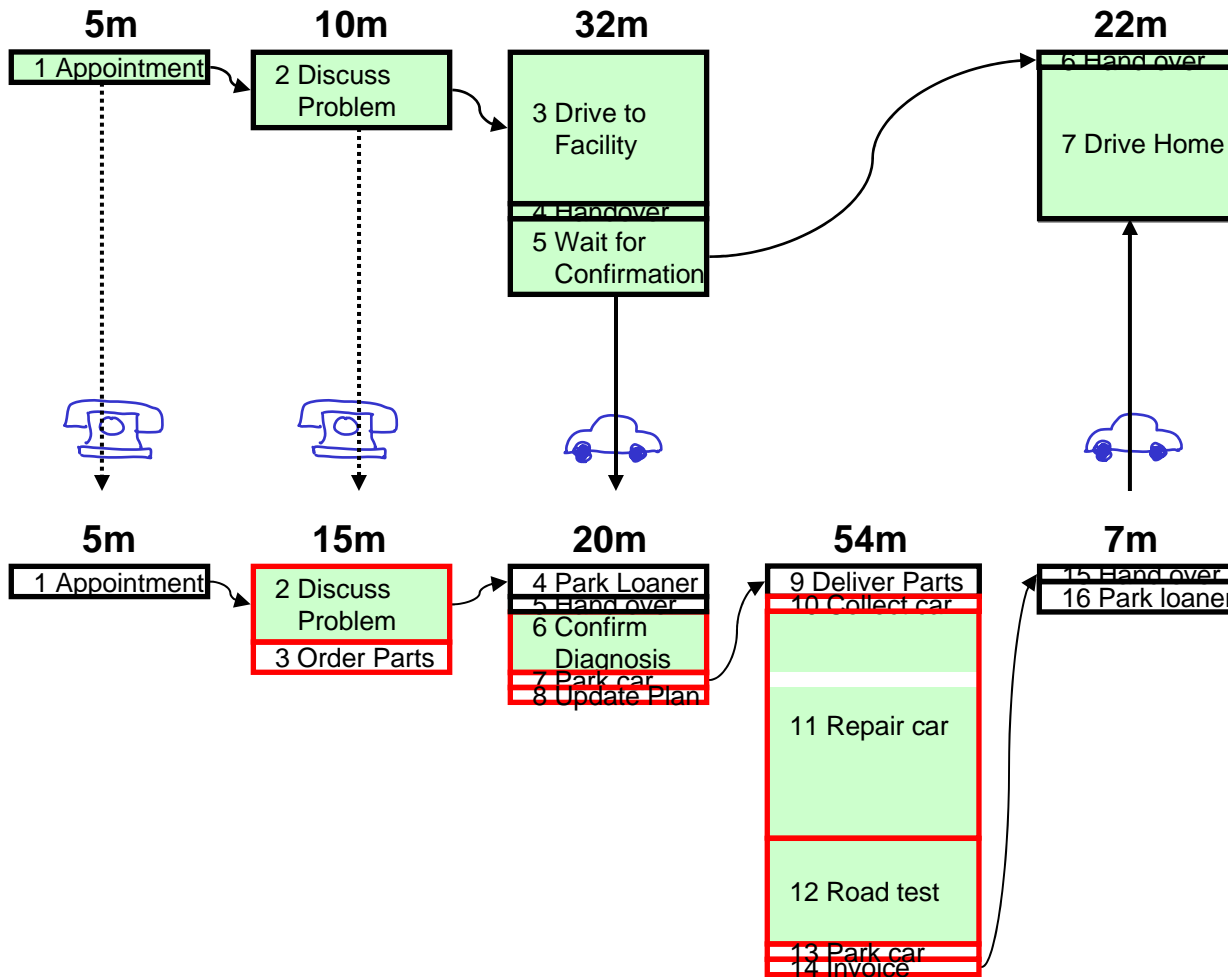


- The assumption is “my time is free” – so I can do more!
- In reality the consumer and the providers time is wasted by a poorly designed and disconnected consumption and provision processes
- Mapping both processes and their interactions reveals this **wasted time and cost** and identifies opportunities for **win-win collaboration** to cut time and cost for both
- By creating a dialogue with consumers to pre-diagnose the problem, planning and preparing, separating job types and creating standardised lean processes

Car Repair Before Lean



Lean Car Repair





What I want

- Fulfilment levels are poor in most systems
 - 98.5% availability drops to 92% on the shelf and **55%** for a basket of 40 items in the grocery store
 - **80%** availability for the shoe with 150 day order window leads to 40% being remaindered
 - **52%** of consumers get the cars they wanted on time and **64%** of service jobs are completed RFTOT
- Better IT, RFID and stocks are not the answer – but rapid, reflexive, replenishment loops back upstream
- And compressing the length of the supply chain

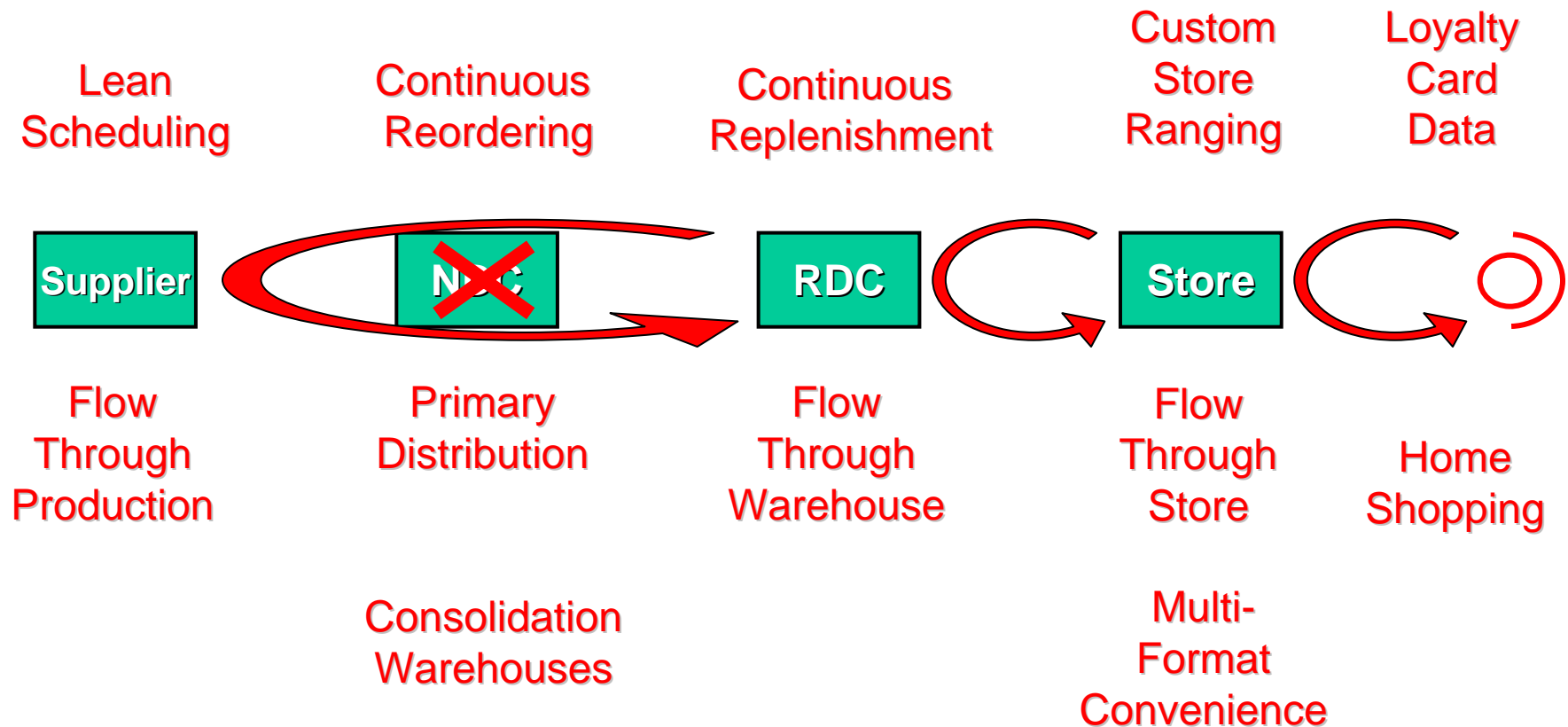
Toyota's Supply Chains



- Toyota spent 30 years developing lean in house and spreading it up and down its supply chain
- The most impressive is their aftermarket parts system – supplying 400,000 SKUs to dealers
- It operates as a series of tight replenishment loops – dealers call off parts from Distribution Centres every day – these shipments trigger daily orders to be picked up from suppliers the next day – 60% of whom can also make every part that is required in a day every day
- The result is the highest availability, lowest stock levels and the smoothest order signals



Lean in Grocery so Far





Where I want it

- We all use many formats depending on our circumstances – and time pressure places a growing premium on convenience – which signals the end of the “big box” dominant mass retailing format
- Scale economies do not derive principally from production economies or store size but buying power
- The key to serving multiple channels is a common fulfilment system and a “water spider” replenishment system for all formats – including local stores and home shopping
- Which requires much more accurate fulfilment



When I want it

- Is everything purchased on impulse? Is there any incentive to plan ahead?
- The consequence is that production must be infinitely flexible, every event must be planned and we have to dispose of unwanted stock
- Reversing this logic – How can we **plan ahead** with most consumers while offering price incentives to **smooth the demand** for production slots? This stability creates the possibility of responding to the “got-to-have-it-now” consumers at much lower cost?
- This realistically takes us beyond “build to order”



Aggregate Solutions

- Why are consumers **increasing** the number of suppliers – often one off strangers – to acquire the elements of the solution to their problems?
- While lean producers are **decreasing** the number of suppliers, each with a deeper knowledge to solve bigger problems on a continuing basis?
- Why can't someone provide **continuing solutions** to integrate the elements to solve my bigger problems? Such as communications, mobility, shelter, healthcare, financial management and routine shopping



A New Era

We are moving beyond the era of **Mass Consumption** in which one format fits all at ever higher scale – bigger boxes – as ever increasing variety is substituted for true consumer desire

To a world of **Lean Consumption** in which consumption and provision become a shared process that is clearly visible to everyone and in which problems are jointly defined and resolved with minimum time and cost



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