



Creating Lean in Sales & Service

*Lean Transformation Summit,
Orlando*

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March 5th 6th 2008



Objectives

- To introduce a practical & systematic way to apply lean principles to sales & service
- To structure some of the issues into a step-by-step method



Seeing the Opportunities & Grasping the Situation





Lean Thinking

- Lean starts with value from the perspective of the customer
- Delivers value through end to end processes (Value Streams) that no one sees
- The aim is to get all the actions that add value to flow at the pull of customer demand
- Building in quality and standardising work
- As no one sees these processes, no one manages them
- Performance delivered by a management system that at its heart is characterised by two principles
 - Respect for people and the engagement of everyone in continuous improvement

Purpose, Process, People

4



Lean Principle # 1

- Specify value from the standpoint of the customer
 - Who is/are the consumer(s)?
 - Who is/are the customer(s)?
 - What is Value?
 - Who decides what is value?

Aim to develop a commonly agreed 'value' specification



Exercise #1

- As a customer how would you express value for the following:
 - What do you want when you buy a car? (5 minutes)
 - What do you want when you take it to be serviced? (5 minutes)



Value in the Eyes of the Consumer:

Acquisition

- "The right car in the right place at the right time"
- At the right price

Maintenance

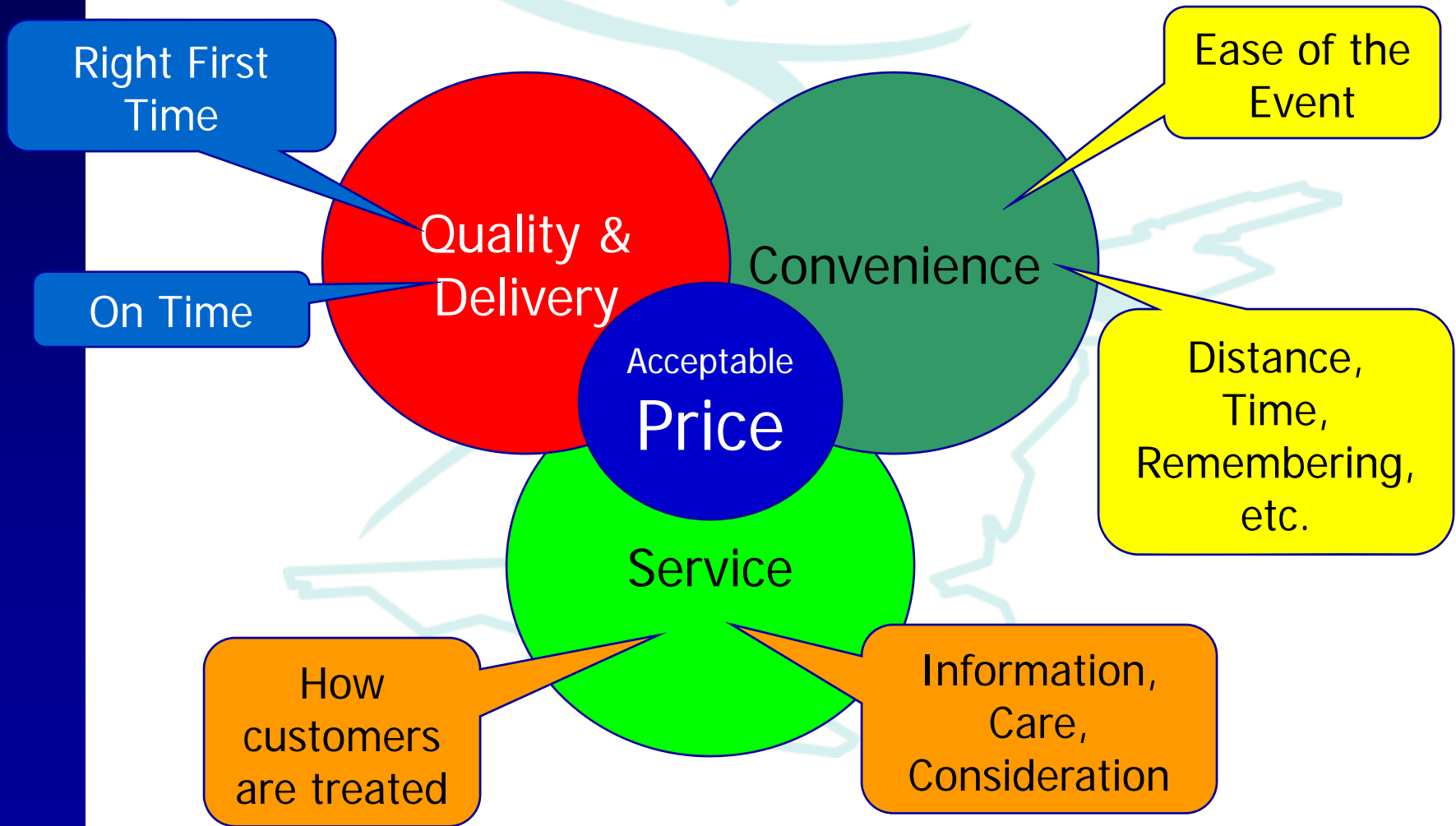
- "Fixed right first time on time"
- At the right price

Quality & Delivery

"Customer Fulfilment"



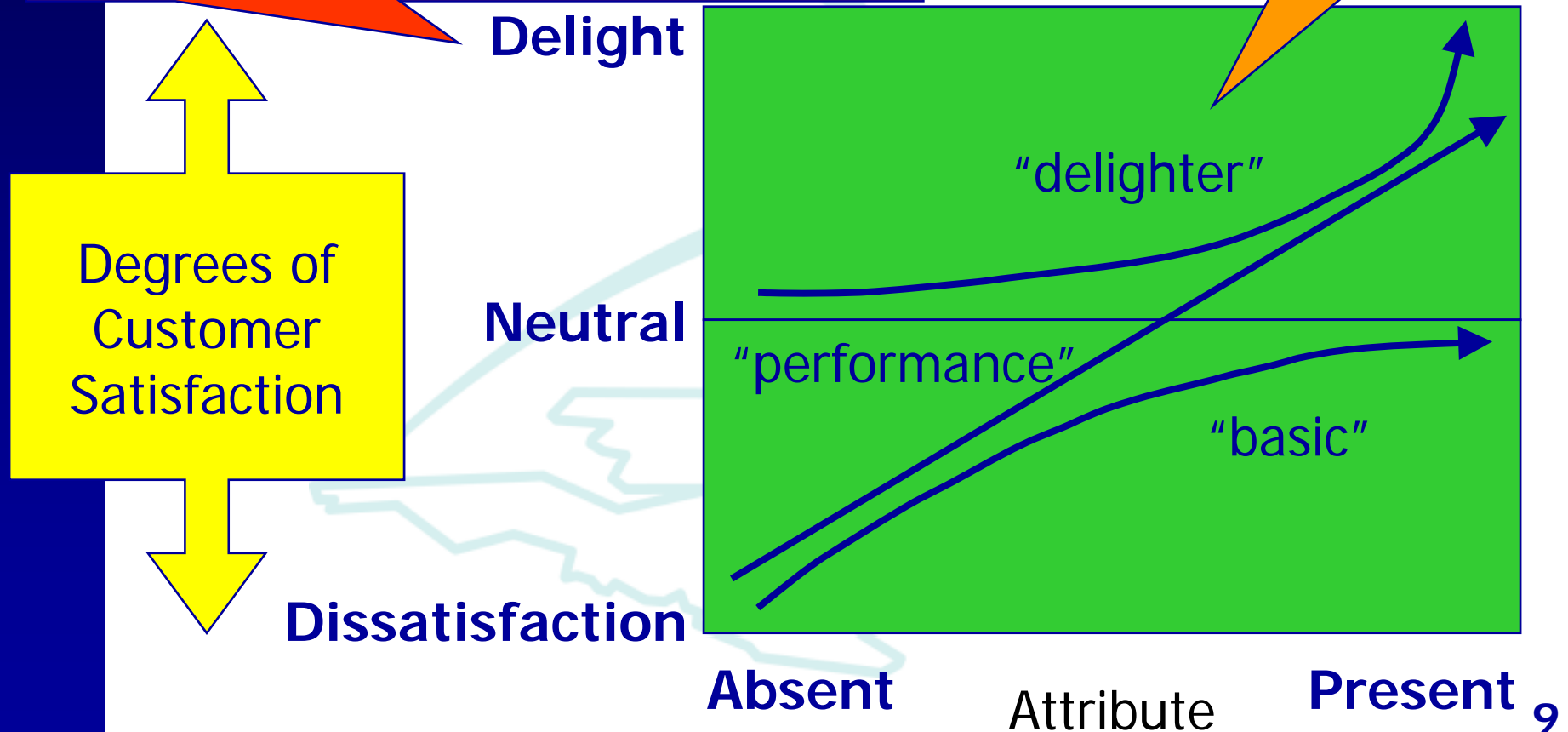
Value: Extending the Concept



The Kano Model

- ☛ Human, personal, value-adding
 - Different aspects each time
 - Not a replicable 'formula-solution'
- ☛ The basis of real relationships!

But today's 'delighter's' become tomorrow's 'basics' !!





Customer Fulfilment

New Car Sales

Right

- Car provided to the exact specification ordered, without defects
- Correctly prepared including accessory fitment
- Cleaned to the satisfaction of the salesperson & the customer

First Time

- Customer has not been persuaded to take a different specification
- No unavailability or delay after ordering
- Car needs no rework prior to or after the handover

On Time

- Handover at the time originally promised at the time of the order

After Sales

Right

- All service & repairs completed, with all the necessary parts available
- Car cleaned to the satisfaction of the customer

First Time

- Car does not need to return for rectification or rework

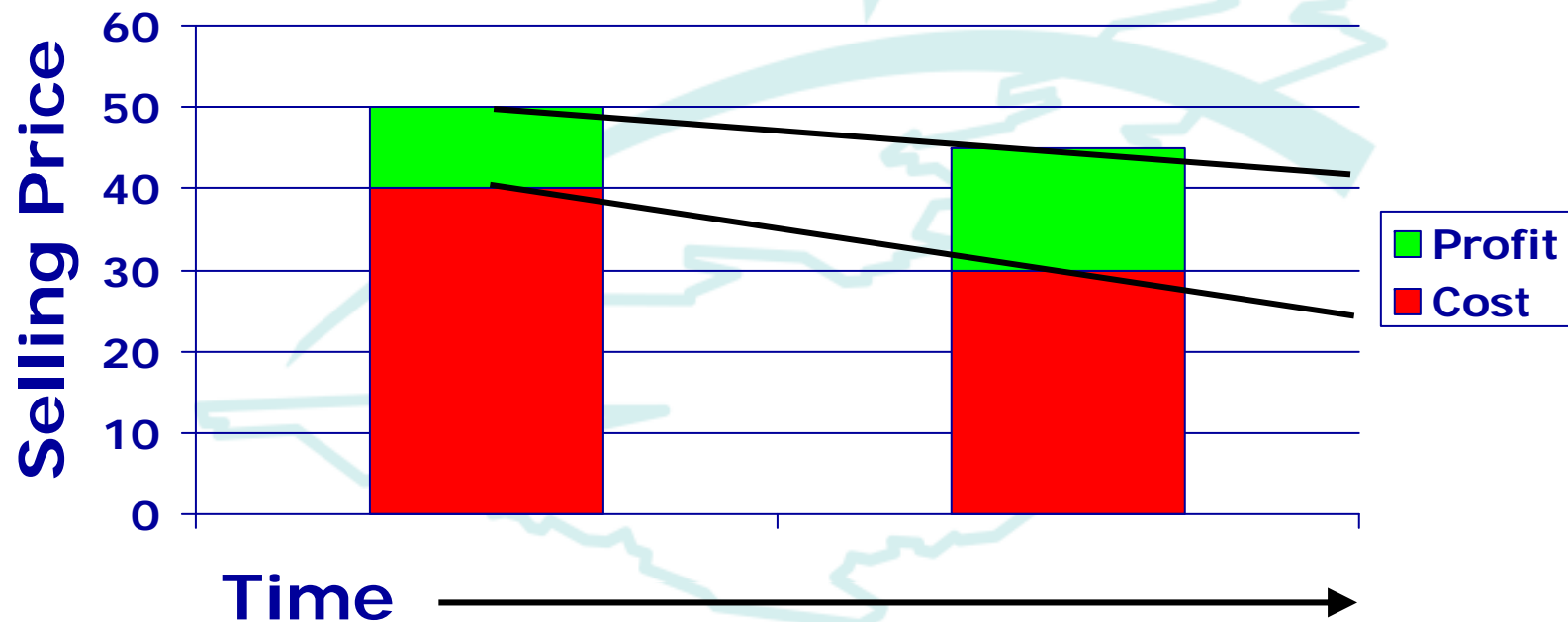
On Time

- Handback at the time originally promised



What About Cost?

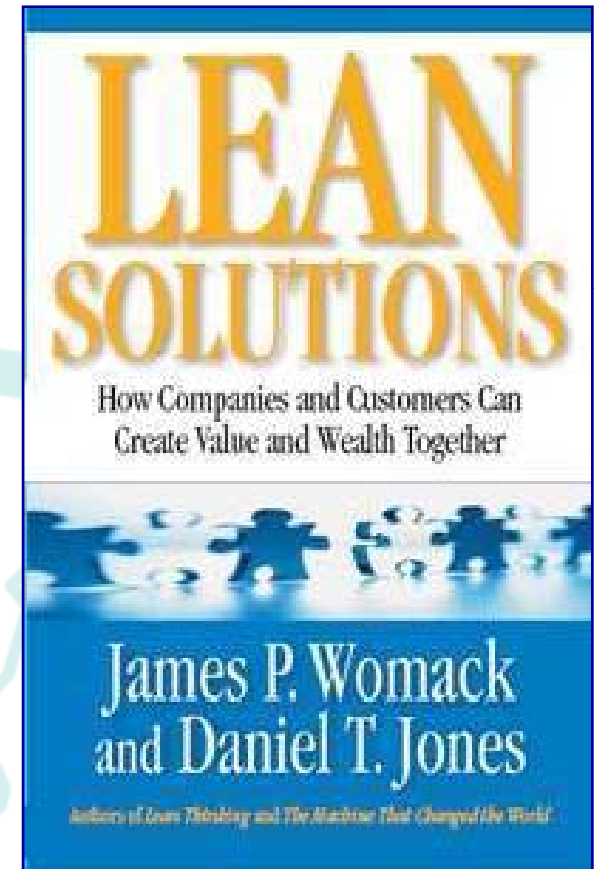
- From “Selling Price = Cost + Profit”
- To “Selling Price (fixed) – Cost = Profit”
- Establish a “Target Cost”





Principles of Lean Consumption

- Solve the consumers *problem* completely
- Don't waste the consumer's (or the provider's) *time*
- Provide exactly *what* the customer wants
- Deliver it *where* it is wanted
- Supply it *when* it is wanted
- Continually *aggregate solutions* to reduce the consumers time and hassle

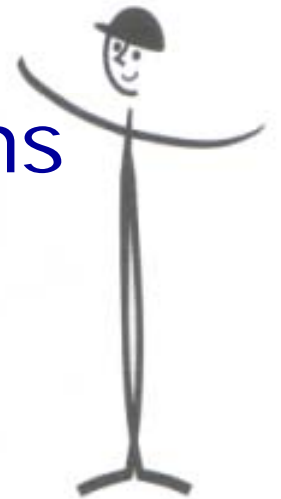




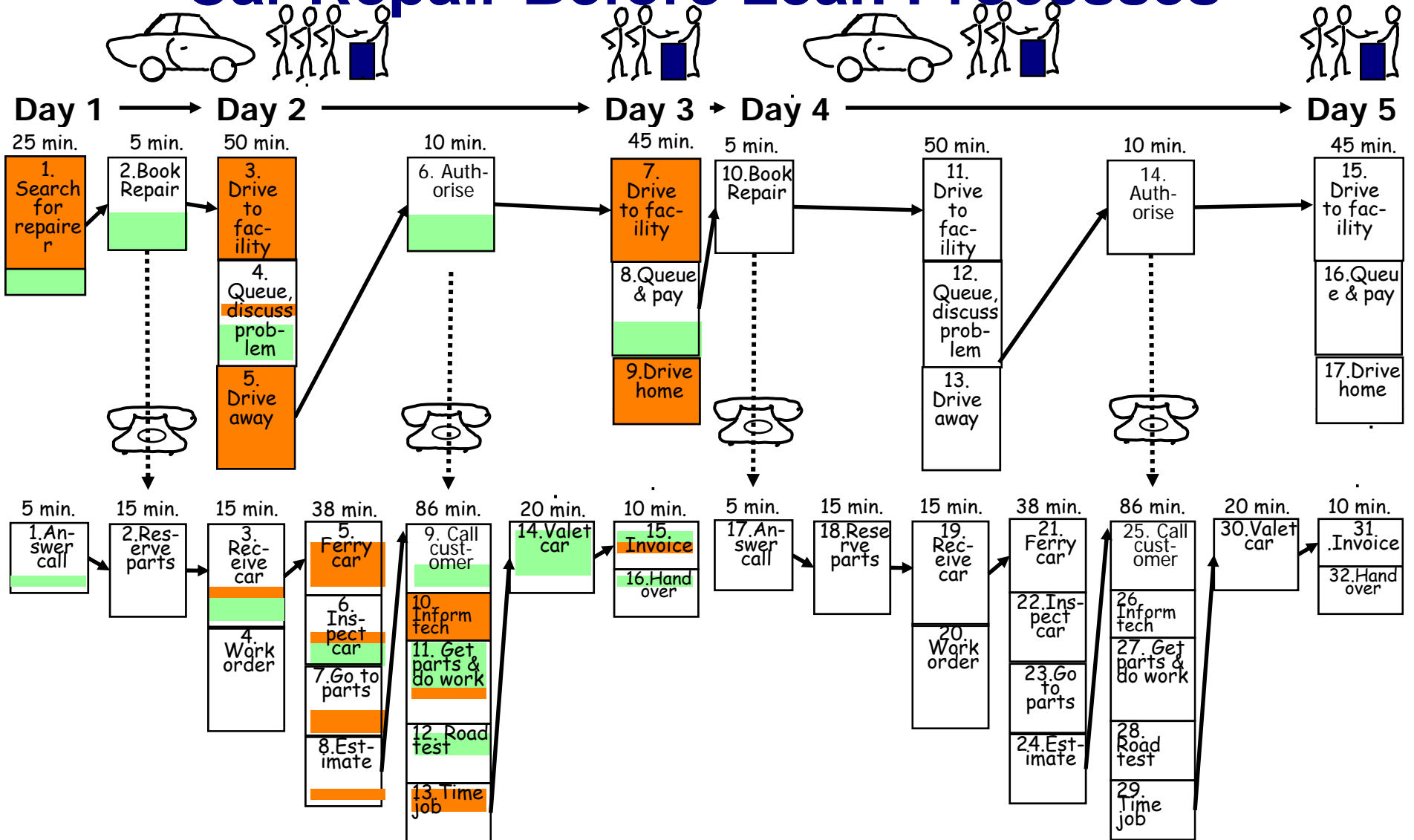
Introduction to Seeing Consumption as a Process

- Problems are hard to see & solutions are hard to imagine without a way for consumers & providers to see the current situation
- When doing lean transformations the first thing we do is.....

.....**take a walk**



Car Repair Before Lean Processes

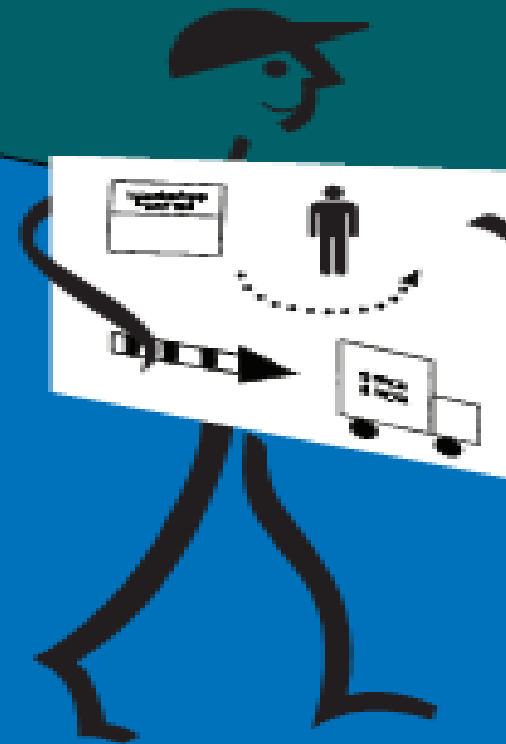
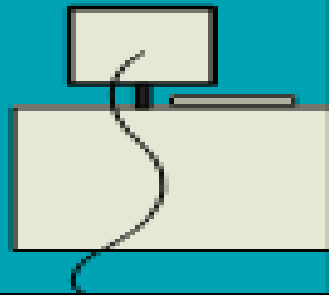


Box Score

- Value Creating time:
- Necessary Non Value Creating Time
- Waste
- Total time:

	Consumer		Provider	
Value Creating time:	17 min	7%	73 min.	19.3%
Necessary Non Value Creating Time	142 min	58%	31 min.	8.2%
Waste	86 min	35%	274 min.	72.5%
Total time:	245 min.		378 min.	

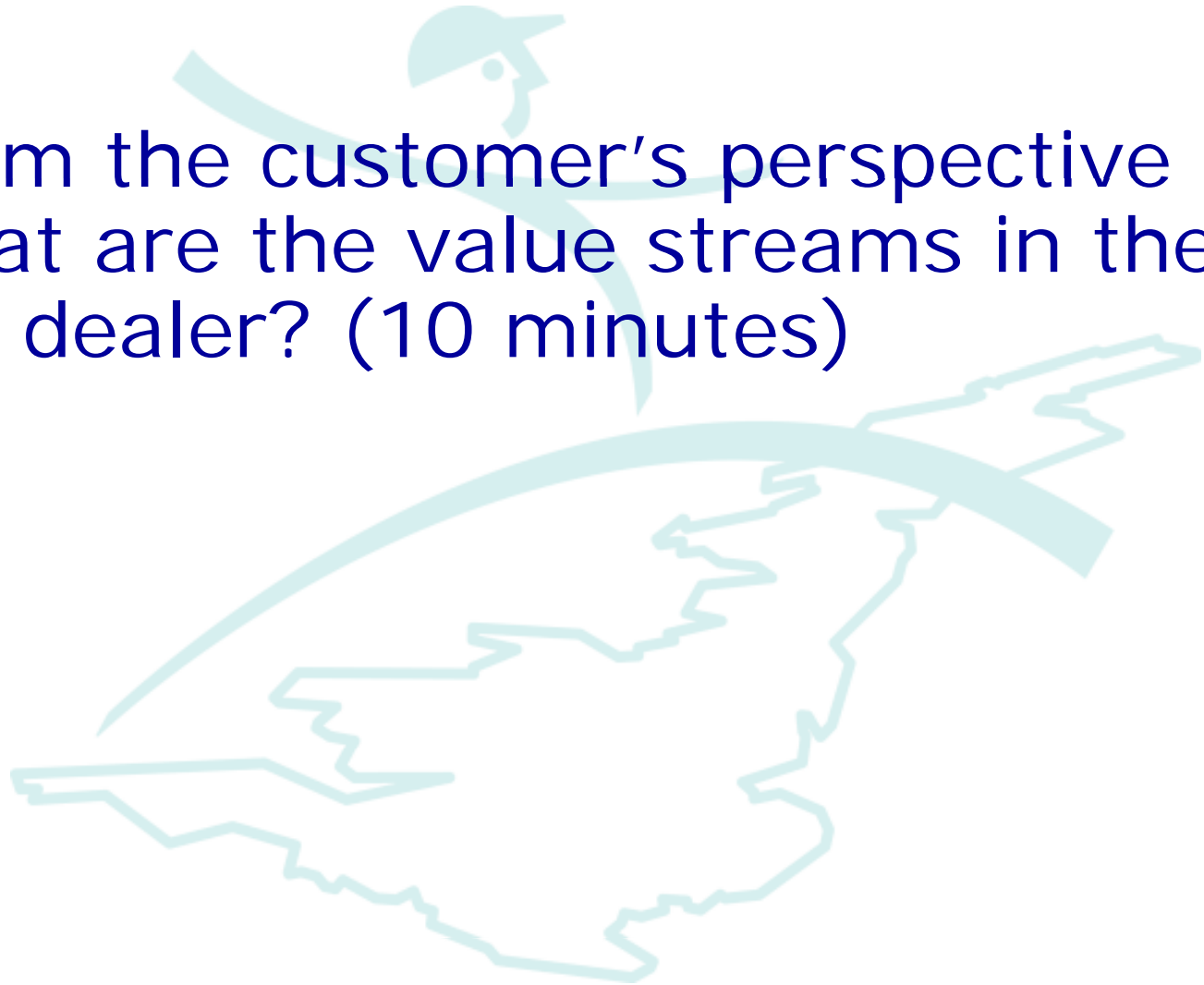
Assessing the Current State





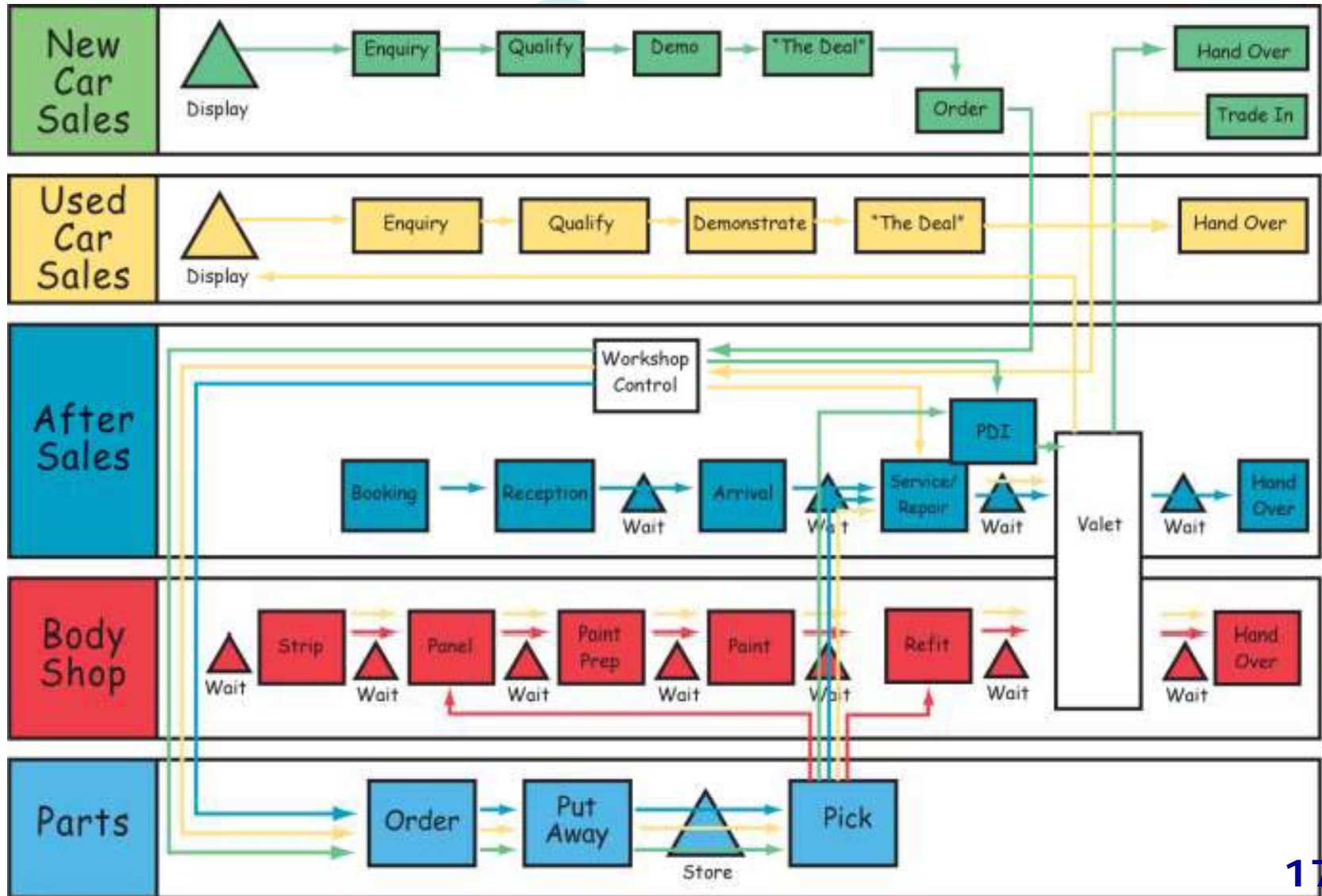
Exercise #2

- From the customer's perspective what are the value streams in the car dealer? (10 minutes)



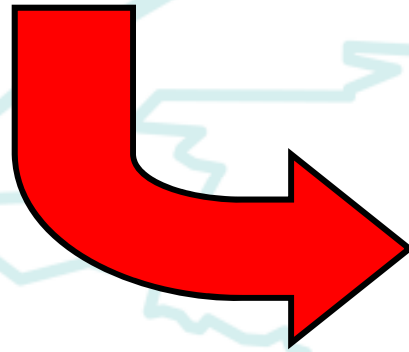
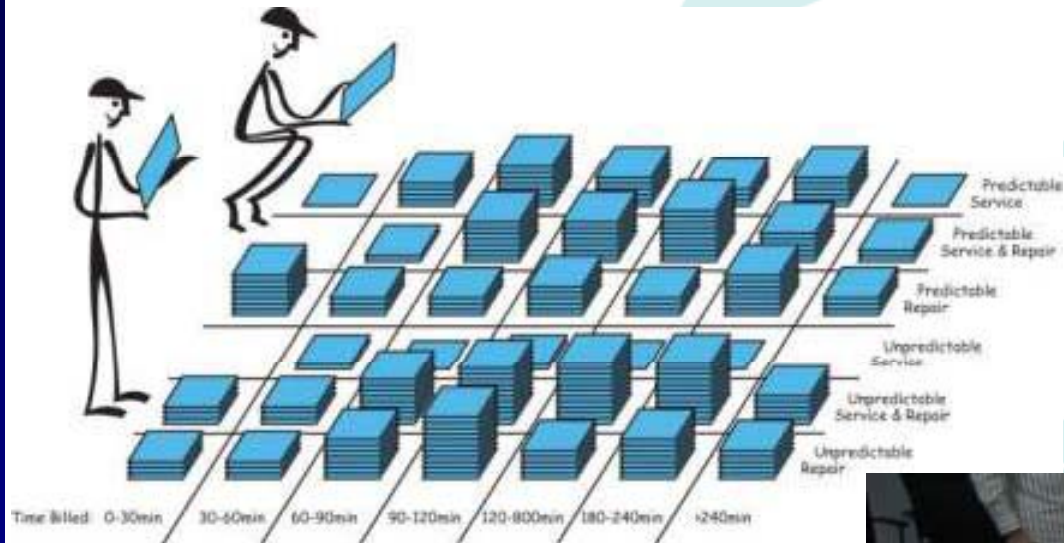


What are the Value Streams?



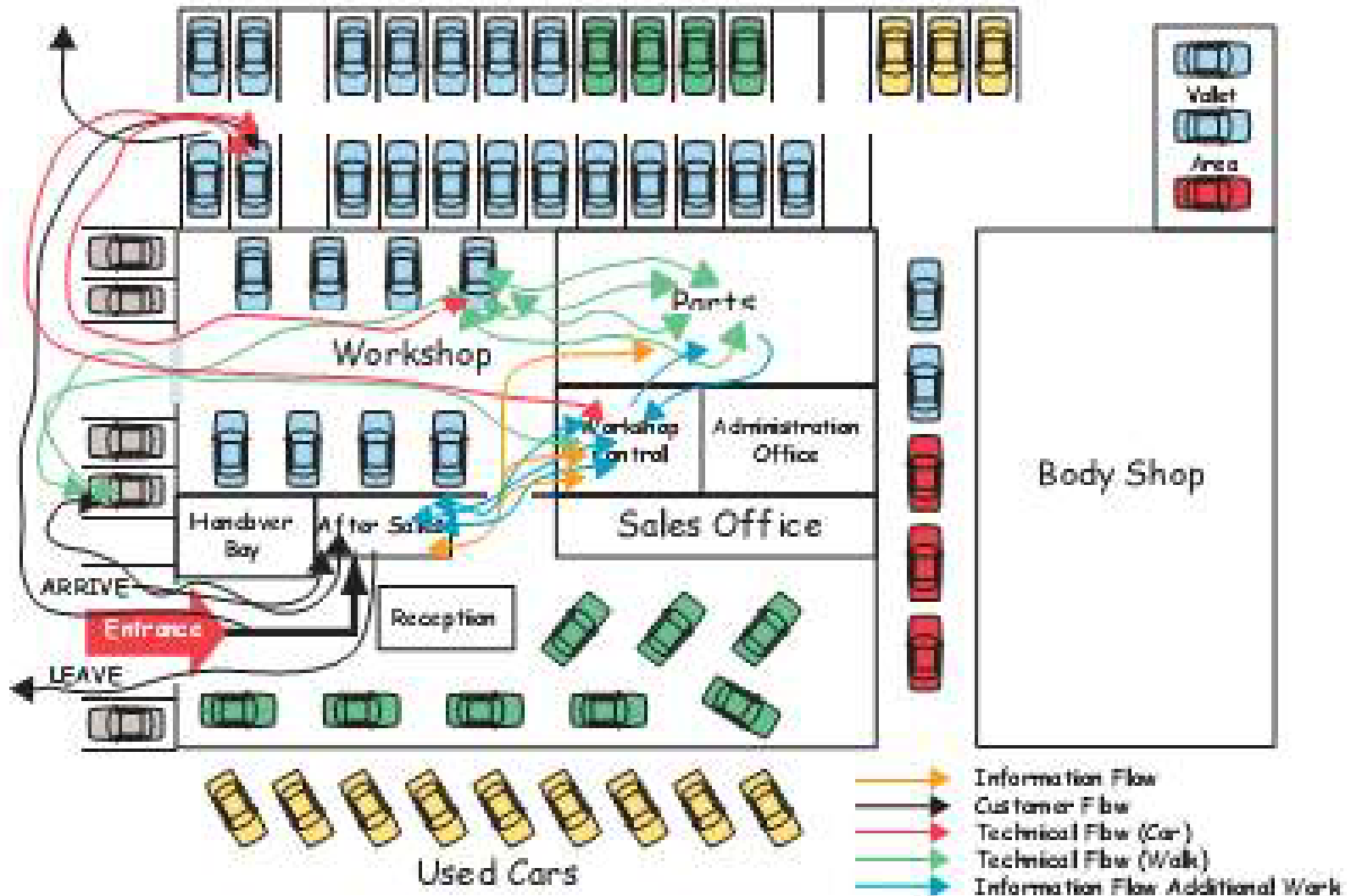


What is the Demand?

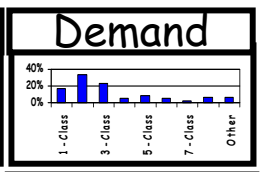
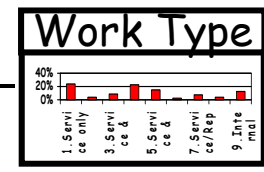




What are the Flows?



Reminder to Drop Off
 Lead Time = 9 Days
 Process Time = 15 Mins



Manufacturer Parts Warehouse

Order times: VOR by 11.00
Stock by 15:00

Stack Daily
VOR daily

Parts

⊙2

Reserve C/T = 15 Mins
A/W C/T = 15 Mins
Part Avail=92%

Service Reception

⊙ 2SA, 1 Books

Booking 5 Mins
Drop Off 10 Mins

Inform Parts

Book in C/T= 5 Mins
Drop C/T= 10Mins
Cost&Inform=10Min
Invoice = 5 Mins
CF = 88%

Demand

Cars 1-10 years old
Job Ord.=420/mnth
Lead Time= 7 Days
Loan Car = 14 Days
Collect&Del=9 Days
Cust Fulfil = 59%

Service Reminder
Appointment
Arrival

A/W

Workshop Control

⊙1

Give Job C/T= 5 Mins
A/W C/T= 3 Mins
A/W Inf C/T=1Min
Time Job C/T=10Mi

Handover Car

⊙2

C/T = 10 Mins
CF = 96%

Time up Job
Invoice

Additional Work (A/W) Sheet

Car Park

8

Get Car = 5 Mins

10 Mins Min
600 Mins Max
60 Mins Typical

Inspect Car

⊙7

C/T = 15 Mins
A/W = 35%
Dist.= 30m

5 Mins Min
300 Mins Max
35 Mins Typical

Carry Out Work

⊙7

C/T = 50 Mins
CF = 96%
Dist.= 120m
Bays = 12

5 Mins Min
120 Mins Max
40 Mins Typical

Road Test

⊙2

C/T = 15 Mins
CF = 98%
Dist.= 120m

5 Mins Min
120 Mins Max
30 Mins Typical

Valet

⊙1

C/T = 20 Mins
CF = 98%
Dist.= 120m

Car Park

27

10 Mins Min
600 Mins Max
60 Mins Typical

60 Mins 5 Mins

15 Mins

35 Mins

50 Mins

40 Mins

15 Mins

30 Mins

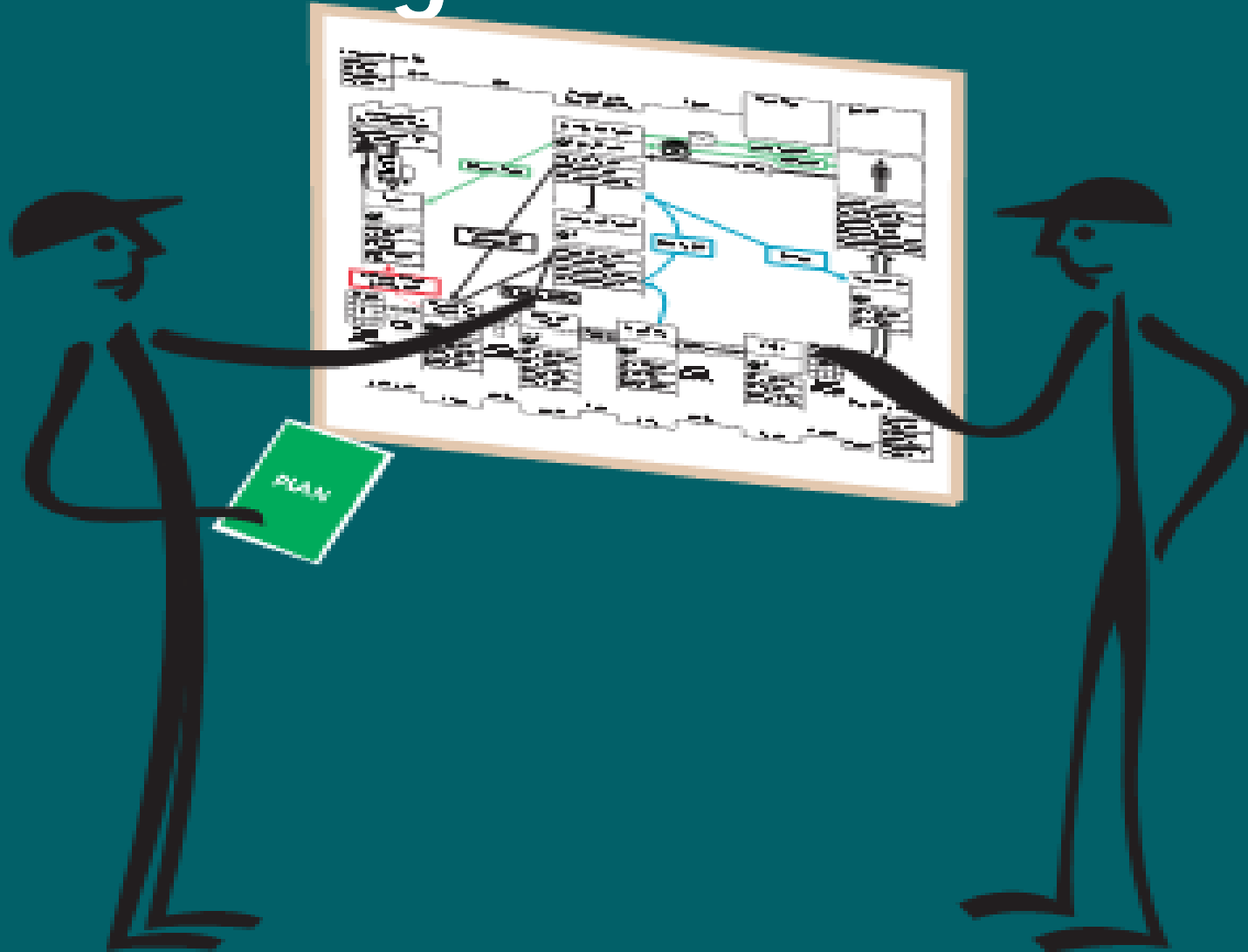
20 Mins

60 Mins

10 Mins

Drop Off to Pick Up
 Lead Time = 230 Mins
 Process Time = 100 Mins

Creating a Future State





Future State Questions

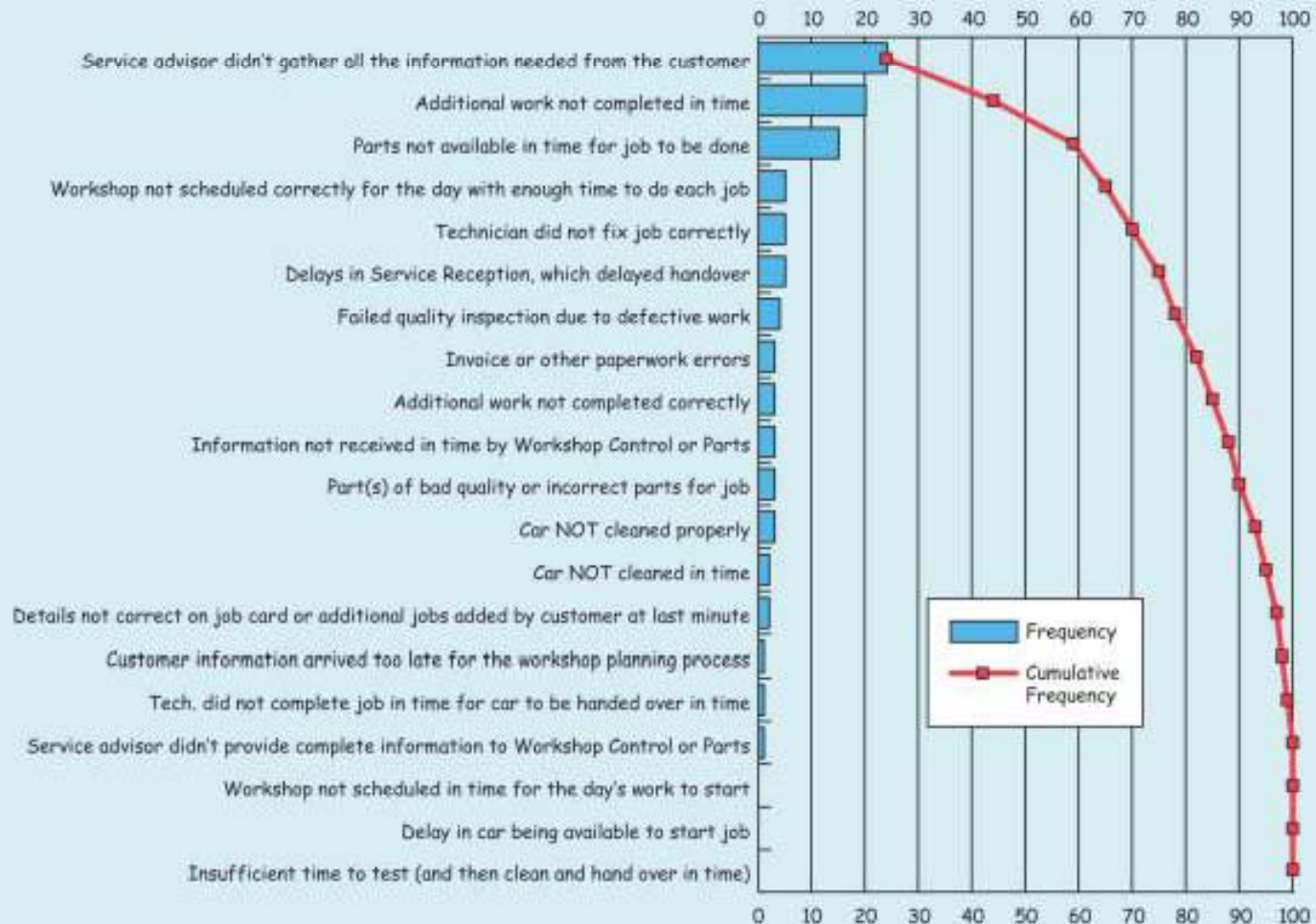
- Understand the performance of your value streams in terms of “Right First Time, On Time”
- What are the causes of failure to fulfil?
- What is the demand?
- Where can we flow the work?
- Where can you pull?
- What point can we gather information on what to do?
- Where do we schedule the workshop?
- What timeframe do we use to plan?
- How do we make sure work loads are levelled?
- What are the supporting improvements we need to ensure we reach a Future State?





Reasons for Lack of Fulfilment (Q & D)

Reasons for lack of Fulfilment



Reminder to Drop Off

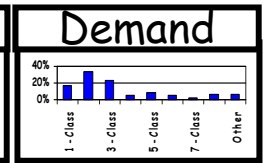
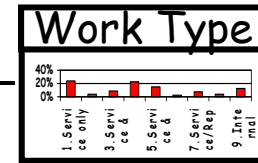
Lead Time = 9 Days
Process Time = 15 Mins

1 Day

1 Day

Booking 5 Mins
Drop Off 10 Mins

7 Days



Manufacturer Parts Warehouse

Order times: VOR by 11.00
Stock by 15:00

Stock Daily
VOR daily

Parts

Right parts not available

Reserve C/T = 15 Mins
A/W C/T = 15 Mins

Wait for Parts

Part Avail=92%

Additional Work (A/W) Sheet

Car Hard to Find
No Parking Spaces

Inspect Car

C/T = 15 Mins
A/W = 35%
Dist. = 30m

60 Mins 5 Mins

15 Mins

5 Mins Min
300 Mins Max
35 Mins Typical

Search for Tools

CF = 96%
Dist. = 120m
Bays = 12

35 Mins

50 Mins

Mins Min
120 Mins Max
40 Mins Typical

Wait for Tester

CF = 98%
Dist. = 120m

40 Mins

Road Test

C/T = 15 Mins
CF = 98%
Dist. = 120m

15 Mins

5 Mins Min
120 Mins Max
30 Mins Typical

Wait for Valet

CF = 98%
Dist. = 120m

30 Mins

Valet

C/T = 20 Mins
CF = 98%
Dist. = 120m

20 Mins

Car Park

19

10 Mins Min
600 Mins Max
60 Mins Typical

60 Mins

Drop Off to Pick Up

Throughput Time = 340 Mins
Wait Time = 230 Mins
Process Time = 110 Mins

Service Reception

2SA, 1 Books

Arrive in C/T = 5 Mins

Drop C/T = 10 Mins

Cost & Inform = 10 Mins

Invoice = 5 Mins

CF = 88%

Workshop Control

Give Job C/T = 5 Mins

A/W C/T = 3 Mins

A/W Inf C/T = 1 Min

Time Job C/T = 10 Mins

Delay for Authorisation

Service Reminder
Appointment

Available Loan Cars?

A/W

Delay for Authorisation

Time up Job

Invoice

Incorrect Billing

Queues of Customers

Cars 1-10 years old
Job Ord. = 420/mnth
Lead Time = 7 Days
Loan Car = 14 Days
Collect & Del = 9 Days
Cust Fulfil = 59%

Handover Car

C/T = 10 Mins
CF = 96%

Drop Off to Pick Up

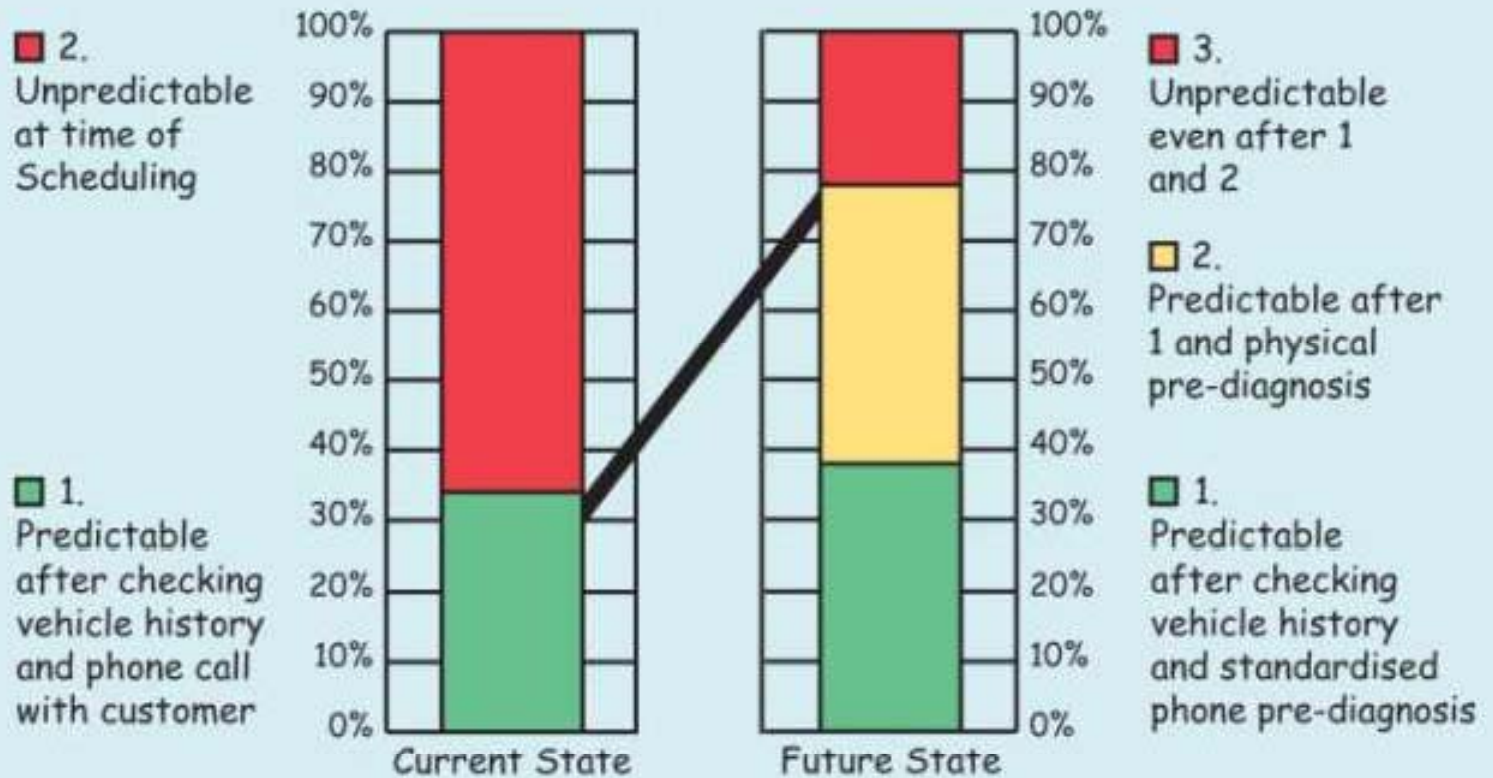


Predictable & Unpredictable Work





Greater Predictability by Pre-Diagnosing



Reminder to Drop Off

Lead Time = 5 Days
Process Time = 15 Mins

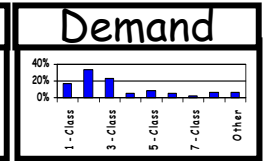
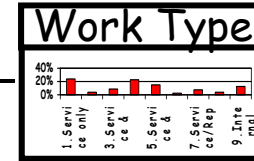
1 Day

1 Day

Future State # 1: 3 Months

Booking 5 Mins
Drop Off 10 Mins

3 Days



Manufacturer Parts Warehouse

Order times: VOR by 11.00
Stock by 15:00

Stock Control

Inform Parts

Parts
⊙2

Level Appointments

Appointment Slots

Reserve C/T = 15 Mins
A/W C/T = 5 Mins
Part Avail=98%

Reduce A/W

Additional (A/W) Sheet

Standard Check

Standard Work

FIFO

Car Park
1

10 Mins Min
10 Mins Max
10 Mins Typical

Health Check Car
⊙2

C/T = 10 Mins
A/W = 35%
Dist. = 10m

5 Mins Min
300 Mins Max
35 Mins Typical

Carry Out Work
⊙7

C/T = 50 Mins
CF = 96%
Dist. = 40m
Bays = 12

FIFO

C/T = 15 Mins
CF = 98%
Dist. = 120m

FIFO

5 Mins Min
20 Mins Max
20 Mins Typical

Valet
⊙1

C/T = 20 Mins
CF = 98%
Dist. = 120m

Car Park
27

10 Mins Min
600 Mins Max
60 Mins Typical

10 Mins 5 Mins

10 Mins

35 Mins

50 Mins

0 Mins

15 Mins

20 Mins

20 Mins

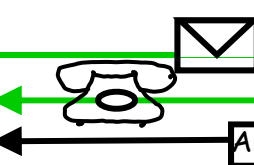
60 Mins

10 Mins

Drop Off to Pick Up
Lead Time = 130 Mins
Process Time = 105 Mins

Service Reception
⊙ 2SA, 1 Books
Book in C/T = 5 Mins
Drop C/T = 10 Mins
Cost & Inform = 10 Mins
Invoice = 5 Mins
CF = 88%

Workshop Control
⊙1
Give Job C/T = 5 Mins
A/W C/T = 3 Mins
A/W Inf C/T = 1 Min
Time Job C/T = 10 Mins



Service Reminder
Appointment

Arrival

Fulfilment

Time up Job

Invoice

Person icon

Cars 1-10 years old
Job Ord. = 420/mnth
Lead Time = 3 Days
Loan Car = 14 Days
Collect & Del = 9 Days
Cust Fulfil = 70%

Handover Car
⊙2
C/T = 10 Mins
CF = 96%

Reminder to Drop Off

Lead Time = 5 Days
Process Time = 15 Mins

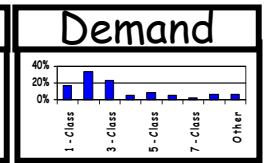
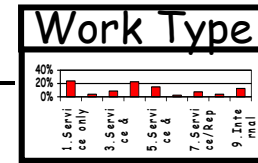
1 Day

1 Day

Future State # 2: 6 Months

Booking 5 Mins
Drop Off 10 Mins

3 Days



Manufacturer Parts Warehouse

Order times: VOR by 11.00
Stock by 15:00

Stock Daily
VOR daily

Parts

⊙2

Reserve C/T = 15 Mins
A/W C/T = 5 Mins
Part Avail=98%

Parts Distribution

Inform Parts

Pre-Pick Parts

30 Min Appointment Slots

Standard Work

Service Reception
⊙ 2SA, 1 Books

Book in C/T = 5 Mins
Drop C/T = 10 Mins
Invoice = 5 Mins
CF = 100%



Service Reminder & Booking

Arrival

Pro-active Reminder

Further demand segment

Menu Price

High Fulfilment

Invoice

Time up Job

Parallel with work



Cars 1-5 years old
JobOrd.=300/mnth
Lead Time= 3 Days
Loan Car = N/A
Collect&Del= N/A
Cust Fulfil = 95%

Handover Car
⊙2
C/T = 1 Mins
CF = 100%

Car Park
1

10 Mins Min
10 Mins Max
10 Mins Typical



Get Car = 5 Mins

Reduce Space

Standard Service
⊙2

C/T = 20 Mins
A/W = 2%
Dist.= 10m

Road Test
⊙7

C/T = 15 Mins
CF = 100%
Dist.= 120m

Valet
⊙1

C/T = 10 Mins
CF = 100%
Dist.= 120m

Car Park
1

00 Mins Min
10 Mins Max
10 Mins Typical

10 Mins 5 Mins

20 Mins

0 Mins

10 Mins

0 Mins

10 Mins

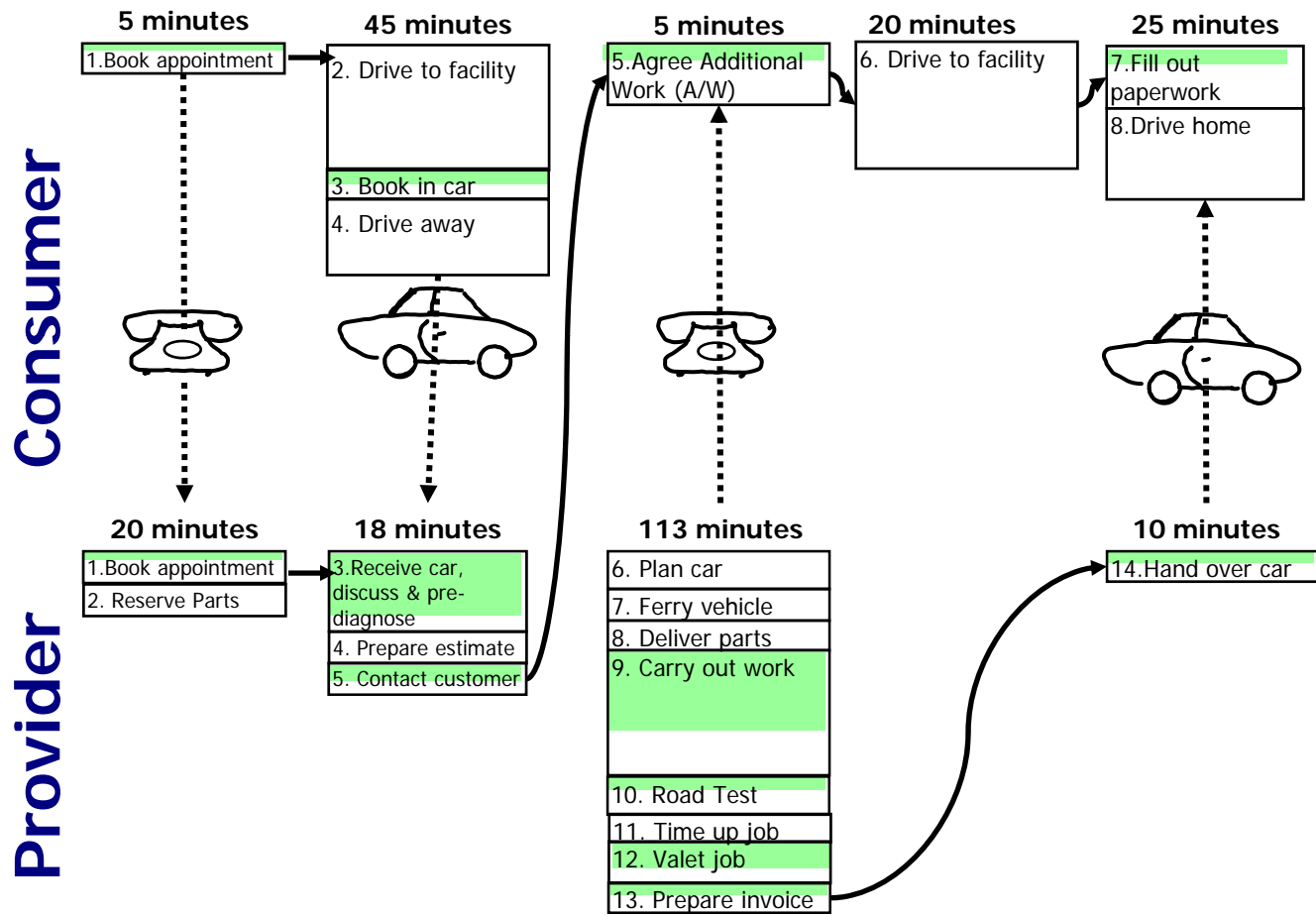
1 Mins

Drop Off to Pick Up

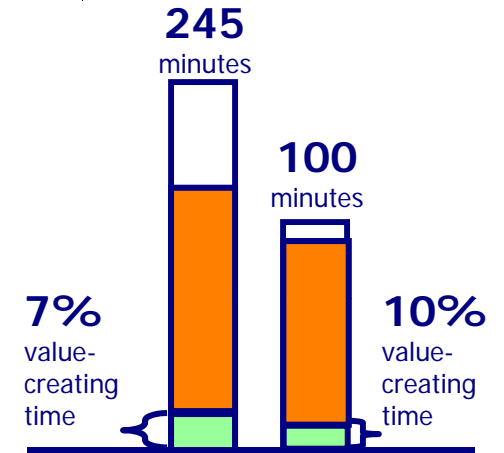
Lead Time = 56 Mins
Process Time = 40 Mins

Car Repair After Lean Processes

Future State 1

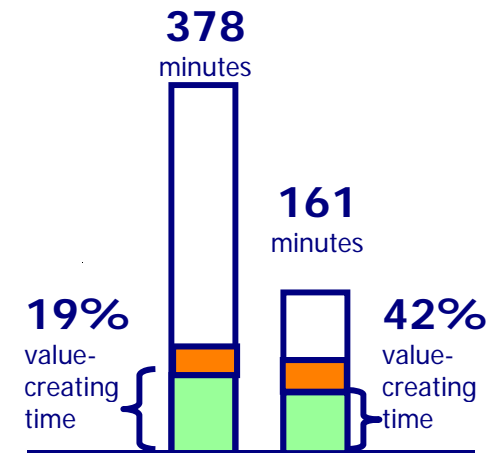


Time Saved



Consumer

Provider

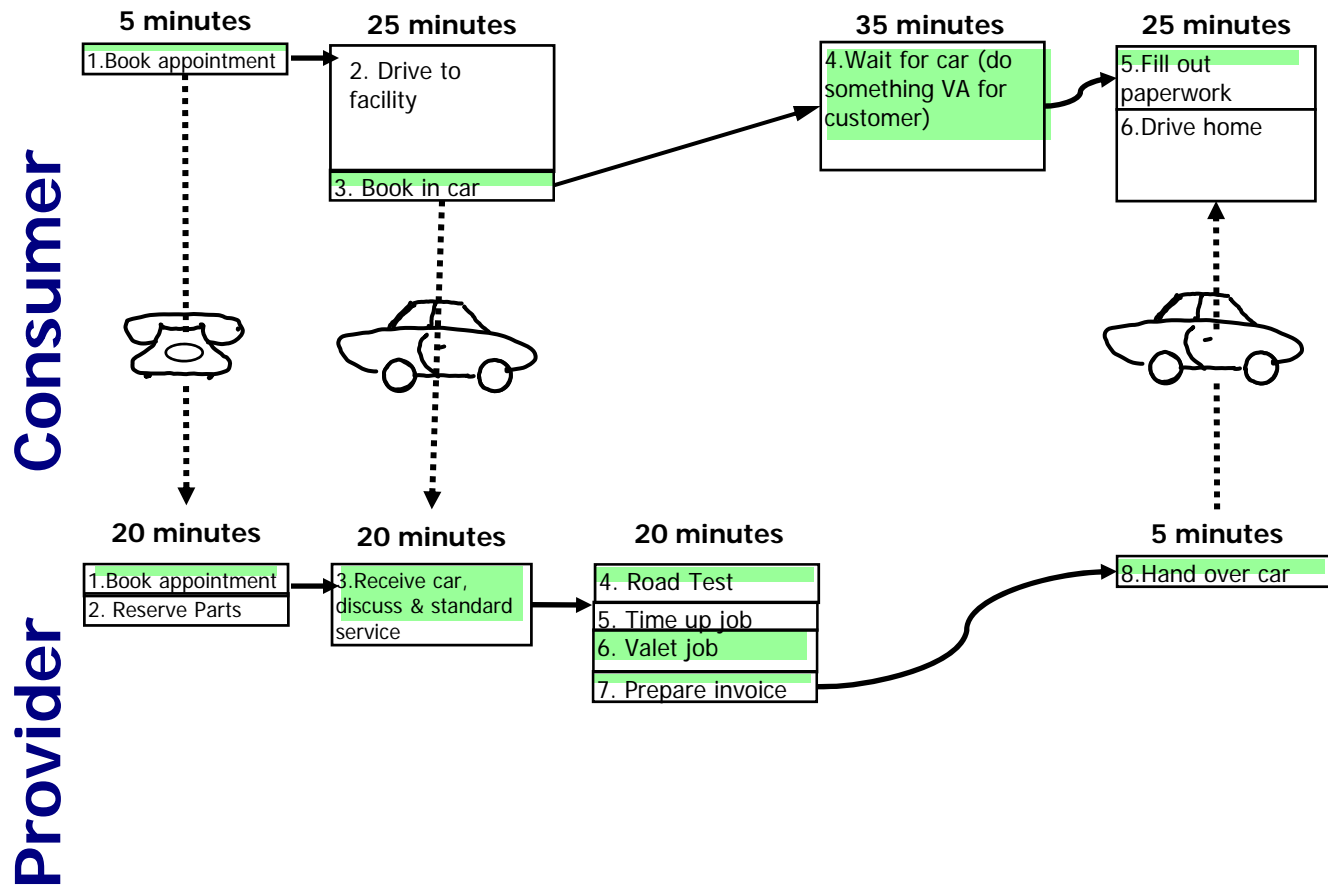


■ Value Creating time:
■ Necessary Non Value Creating Time
□ Waste
Total Time

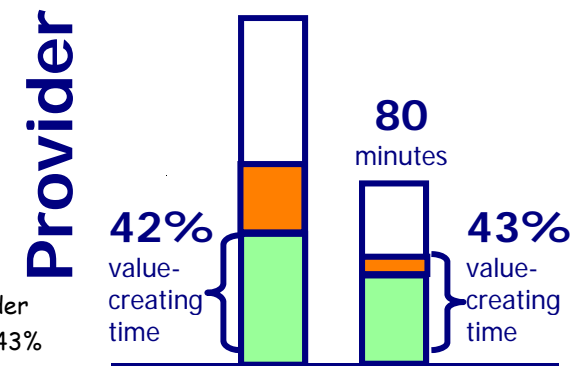
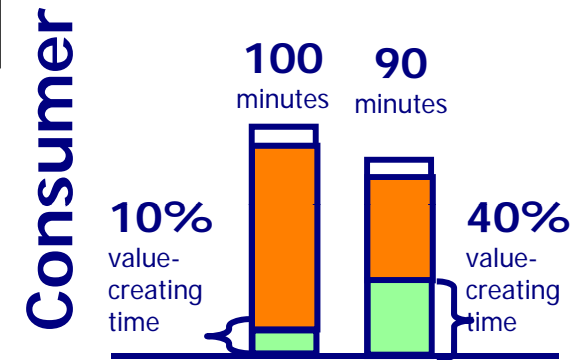
	Current State		Future State	
	Consumer	Provider	Consumer	Provider
Value Creating time:	17 min	73 min	10 min	68 min
Necessary Non Value Creating Time	142 min	31 min	84 min	25 min
Waste	86 min	274 min	6 min	68 min
Total Time	245 min	378 min	100 min	161 min
	7%	19%	10%	42%
	58%	8%	84%	16%
	35%	72%	6%	42%

Car Repair After Lean Processes

Future State 2

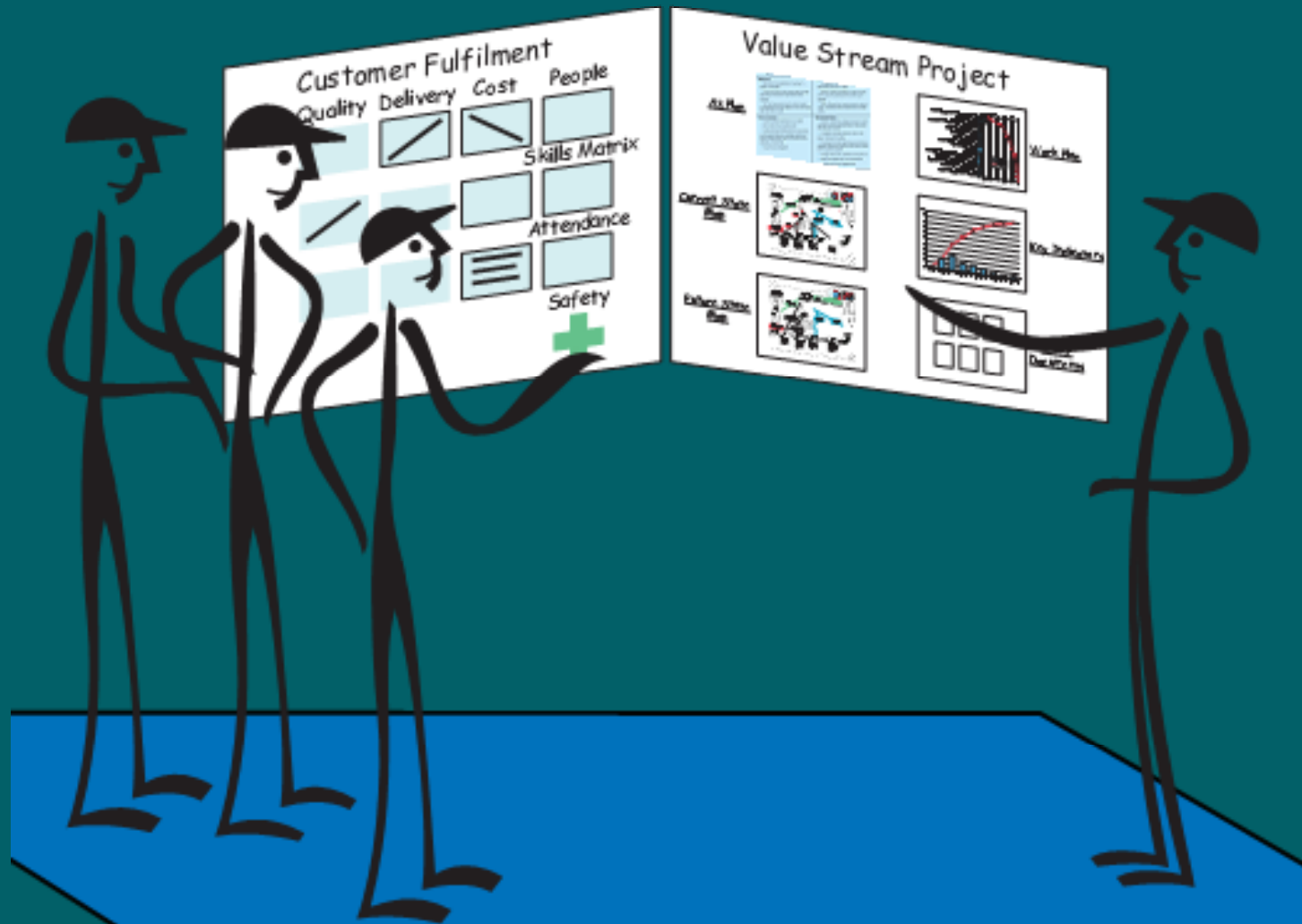


Time Saved FS1 to FS2

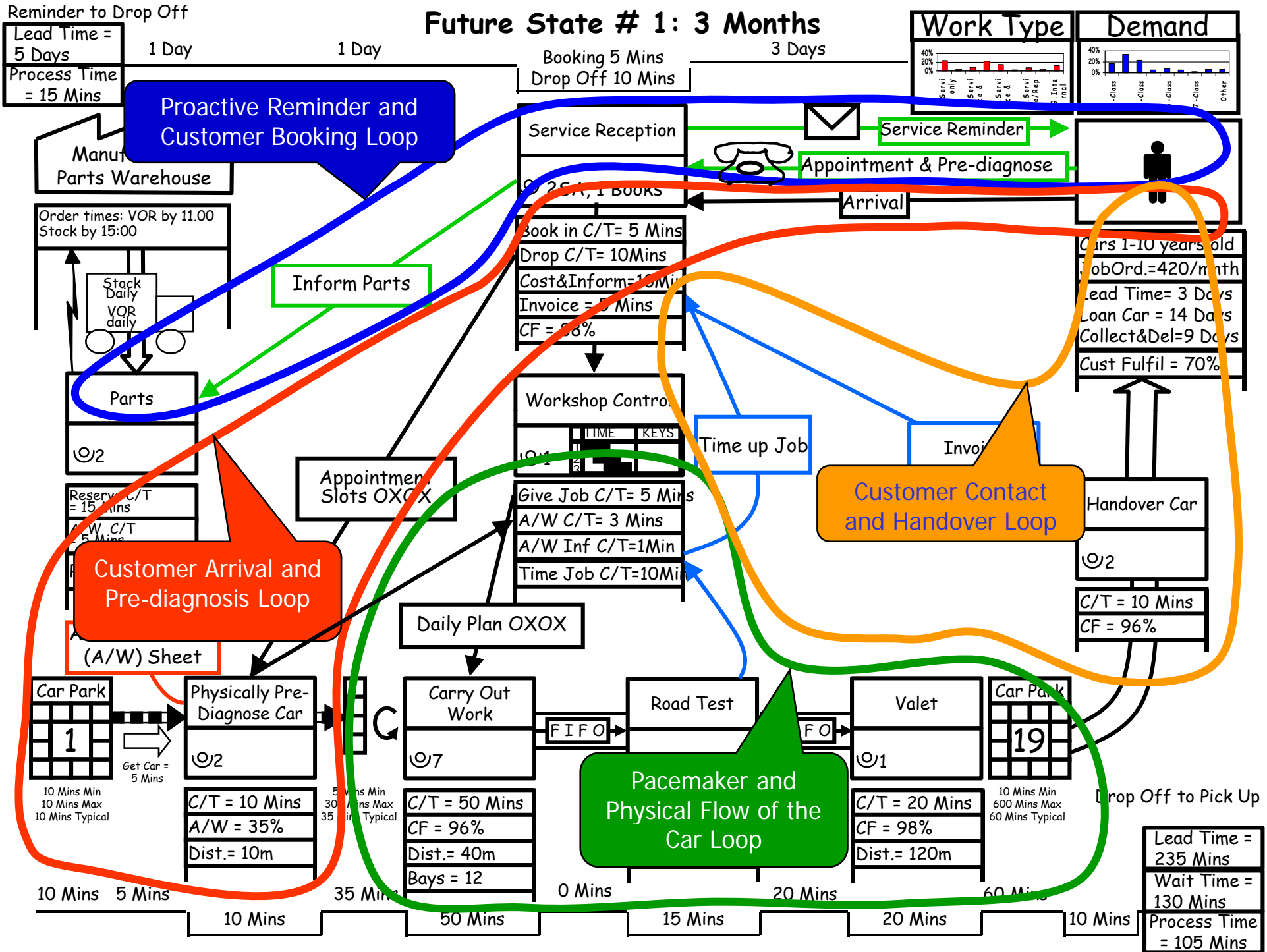


	Future State 1				Future State 2			
	Consumer		Provider		Consumer		Provider	
■ Value Creating time:	10 min	10%	68 min	42%	36 min	40%	34 min	43%
■ Necessary Non Value Creating Time	84 min	84%	25 min	16%	49 min	54%	8 min	10%
□ Waste	6 min	6%	68 min	42%	5 min	6%	39 min	49%
Total Time	100 min		161 min		90 min		80 min	

Planning & Managing the Change



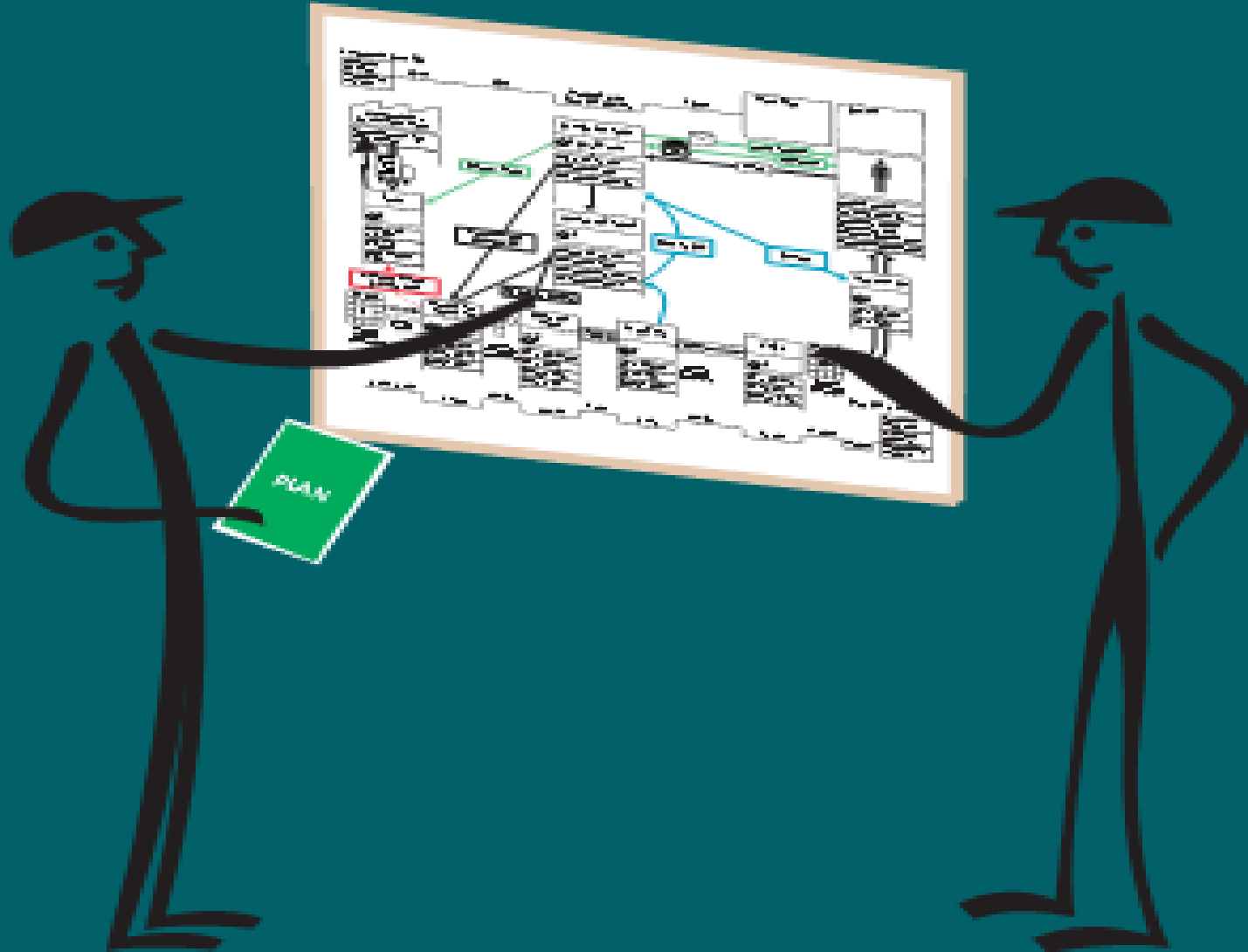
Future State # 1: 3 Months



Date:	02/02		Value Stream Plan: After Sales (90 Days)											Signatures										
Site Manager	Dave Johnson													Site Manager	Sales	After Sales	Parts							
Value Stream Manager	Harry Bamford													D. Johnson	T. Plant	H. Bamford	A. Harvey							
Site Level Objective	Value Stream Loop	No	Value Stream Goals ("Deliverable")	Target ("Metric")	Weekly Schedule												Person Responsible	Related Individuals/Departments	Review Schedule (Monthly) With weekly progress					
					1	2	3	4	5	6	7	8	9	10	11	12			Reviewer DJ 30 Days	Reviewer DJ 60 Days	Reviewer DJ 90 Days			
"right first time, on time, at the right price." Quality = 94% Delivery on Time = 97% CF Combined = 92% Productivity = 135% Lead Time = 4 days (no loan car or collection & delivery)	1 Proactive reminder & Customer Booking	1.1	Develop a proactive booking process	100% of cust. Level, Retention		●	▲		◆							◇	T. Plant	SA, Adm	●					
		1.2	Establish telephone pre-diagnosis	Data 100% C/A at booking	●		▲		◆								◇	T. Plant	Tch, Wco	●				
		1.3	Create visual capacity management process	Plan v Act = 5% variation	●		▲		◆								◇	H. Whittle	Tch, Wco, SA	●				
		1.4	Book customers to arrival slots	Slot booking implemented				○	◇	●	▲						◇	T. Plant	Tch, Wco	▲				
	2 Customer Arrival & Pre-Diagnosis	2.1	Develop std pre-diagnosis process	C/T=10 min 95% work known	●		▲		◆								◇	H. Whittle	Parts	●				
		2.2	Eliminate tech waiting for authority	18 to 0 mins	●		▲		◆								◇	H. Whittle	Parts, Wco, Tch	●				
	3 Pacemaker Physical flow of car	3.1	Develop standardised work for "carry out work" so cars flow	30 min cycles CF Quality = 100%				●	◆								◇	H. Bamford	Adm Parts SA Tch Wco	●				
		3.2	Develop standardised work & rapid f'back for "road test"	CF Quality = 100%							○						◇	H. Whittle	Sales, Parts SA, Val					
		3.3	Develop standardised work for "valet"	CF Quality = 100%												○	▲	◇	M. Rushton	Tch Wco				
		3.4	Establish FIFO rules between "road test" and "valet"	Min = 0 cars Max = 3 cars													○	▲	◇	J.Butterworth	Tch, Wco			
		3.5	Develop pull between "physical P/b" & "carry out work"	Min = 0 cars Max = 3 cars													○	▲	◇	J.Butterworth	Wco, Tch, SA, Parts			
		3.6	Pre-pick parts, develop pull & deliver to technicians	10 minutes to 0 minutes	●				◆									◇	A. Harvey	Parts, Tch, Wco	●			
	4 Customer Contact & Handover	4.1	Establish flow of work for invoicing after "Road Test"	Invoices 100% C/A & available												○	▲	◇	T. Plant	Wco, Tch, SA, Parts, Fi				
		4.2	Establish handover slots to eliminate waiting	C/T = 10 Mins Slot levelling												○	▲	◇	T. Plant	SA				
		4.3	Establish a handover area so cust find cars	Eliminate waiting for customers												○	▲	◇	J. Butterworth	SA, Fi				

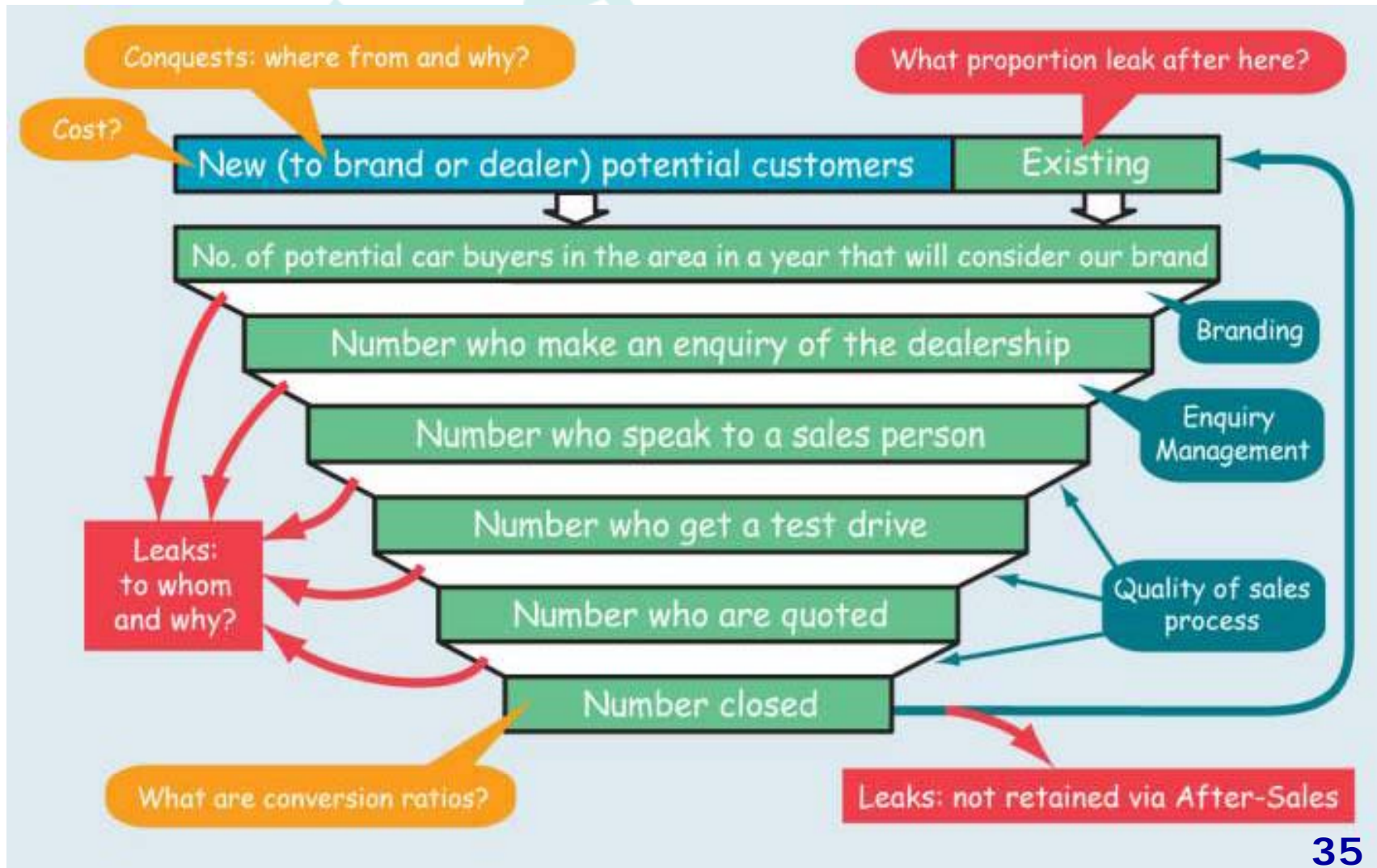
- Proposed Start
- Actual Start
- ◇ Review (Major Milestones)
- On Target
- △ Proposed Completion
- ▲ Actual Completion
- ◆ Review (Major Milestones) Complete
- ▲ Behind Target
- X Trouble

The Sales Value Stream





Sales Funnel (New & Used)

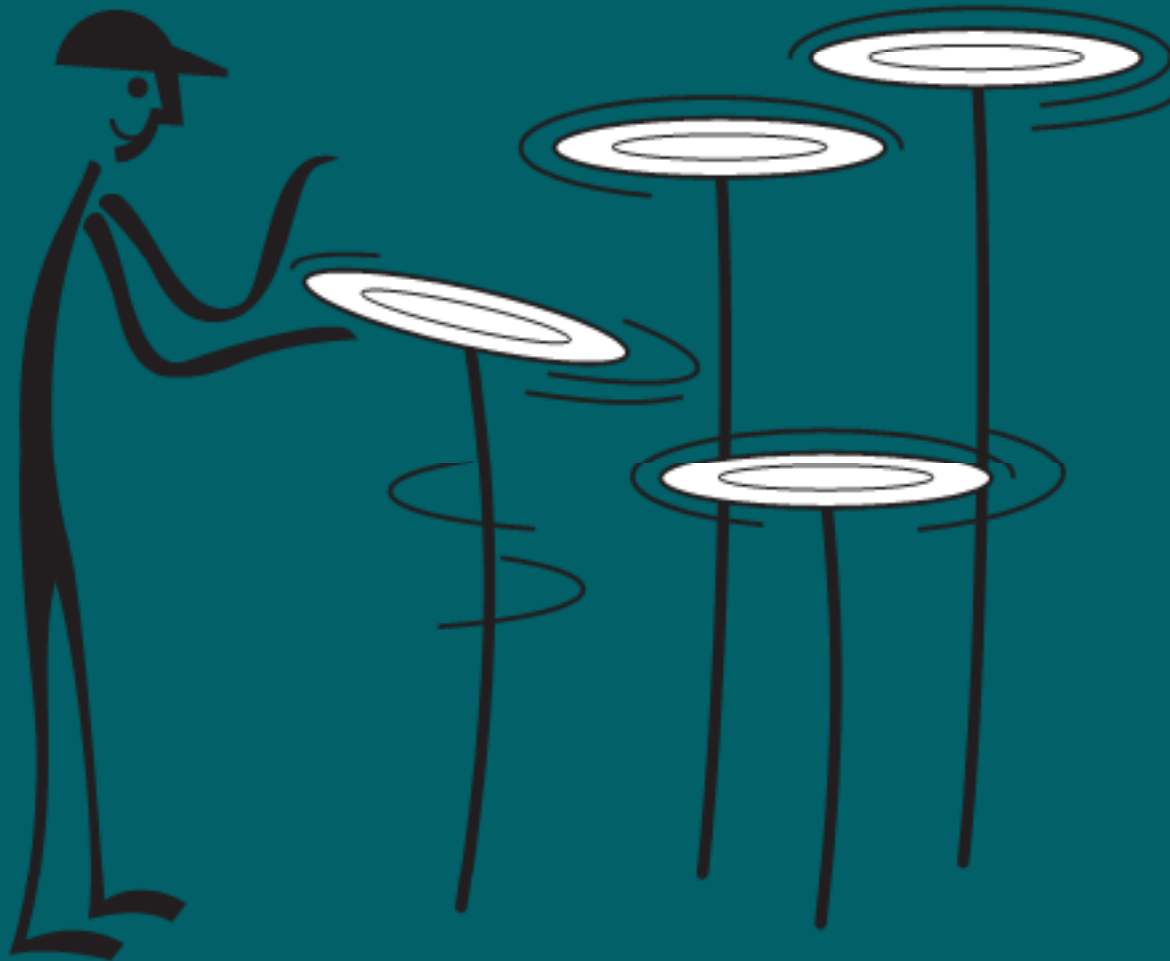




Workshop # 3

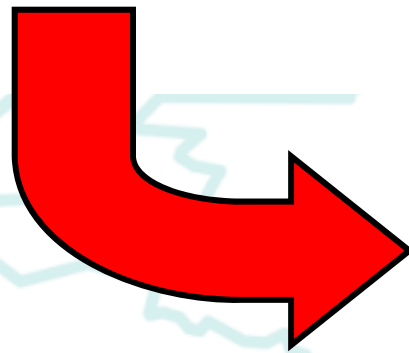
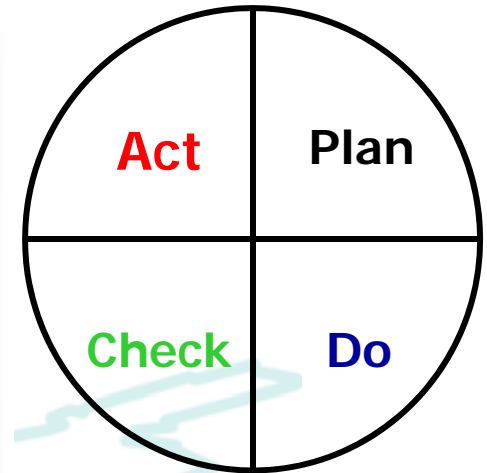
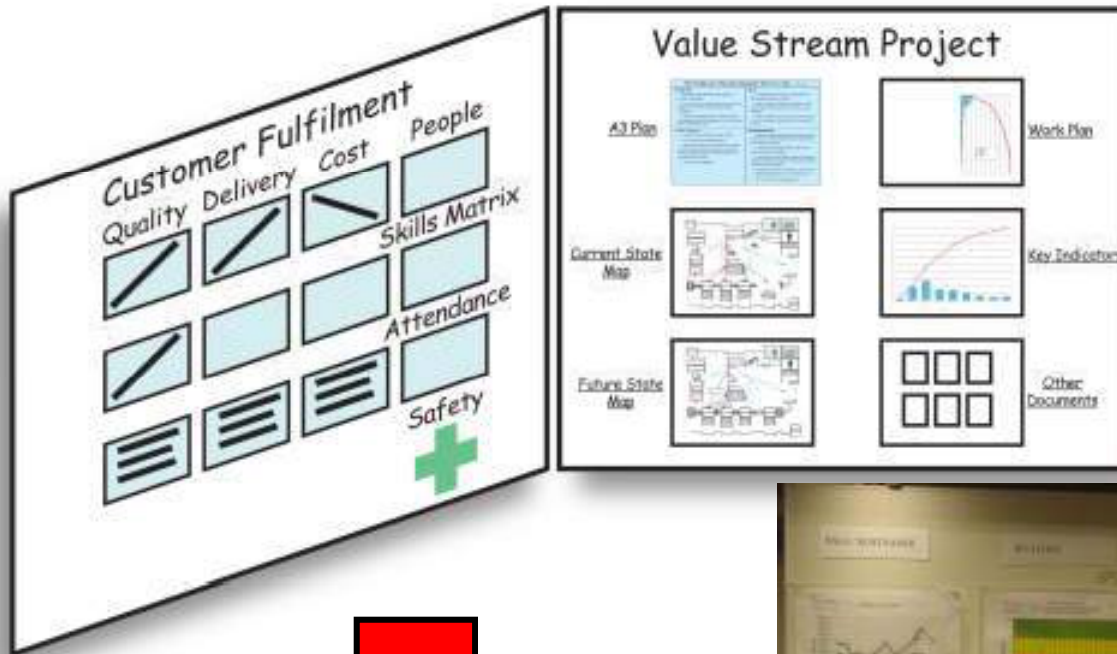
- What are the major areas of flow in the sales process?
- How would you eliminate waste, unevenness & overburden? (15 minutes)

Sustaining the Gains



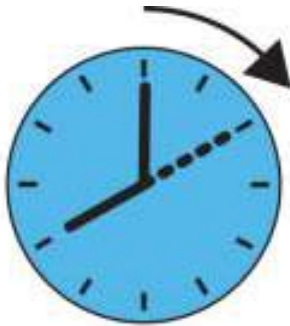


Glass Wall Management

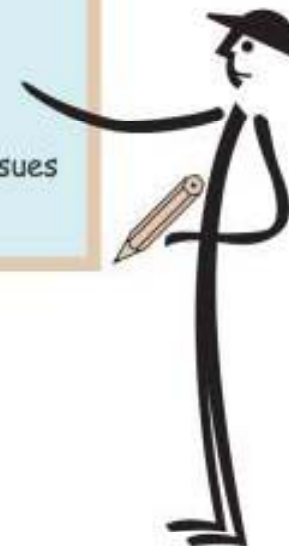




Daily Meeting Management



1. Resource Planning
2. Communications for the day
3. Health and Safety
4. Customer Fulfilment performance
5. Reasons for Failure to Fulfil
6. Concern, Cause and Countermeasure of issues





Summary

- What are the main processes in your organisation?
- How well does each process perform, in delivering value for your customers and profitability for your organisation?
- What is the demand for each process?
- What are the vital few types of work that account for most of the throughput?
- How can you create stability by turning unpredictable work into predictable work?
- How can you flow this predictable work through your organisation, without delays, errors, rework and fire-fighting?
- What does management have to do to create this flow and then sustain it over time?



Creating Lean in Sales & Service

*Lean Transformation Summit,
Orlando*

David Brunt
March 5th 6th 2008