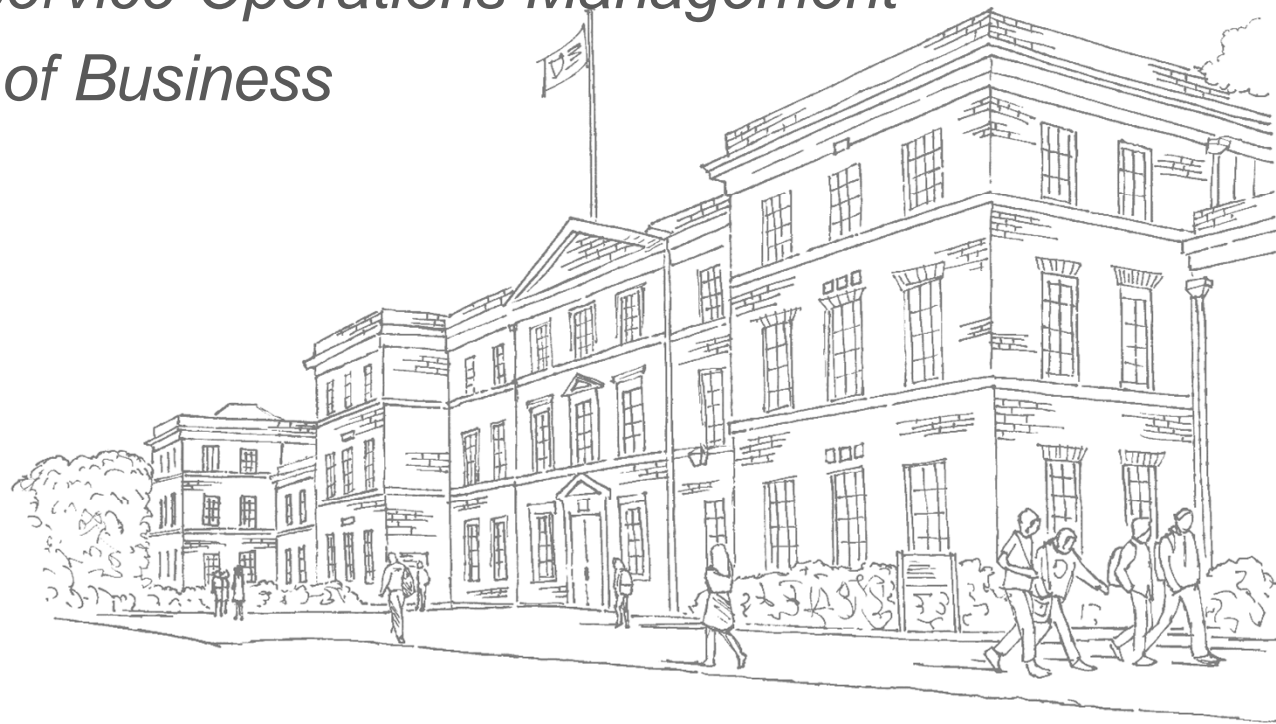# Is Lean a failed theory for public services?

Professor **Zoe Radnor**

Professor of Service Operations Management

Dean, School of Business

Lean not just for the Private Sector…

Plus Local Government, Fire and Rescue Services………

Evaluation of the Lean
Approach to Business
Management and Its Use
in the Public Sector

SCOTTISH EXECUTIVE

HM Revenue
& Customs

Evaluati...

Evaluation of the Lean Programme
in HMCS
Final Report

Review of Bus...
Process Improvem...
Methodologie...
Public Servic...

Associate Professor (Reader) in Operations Managem...
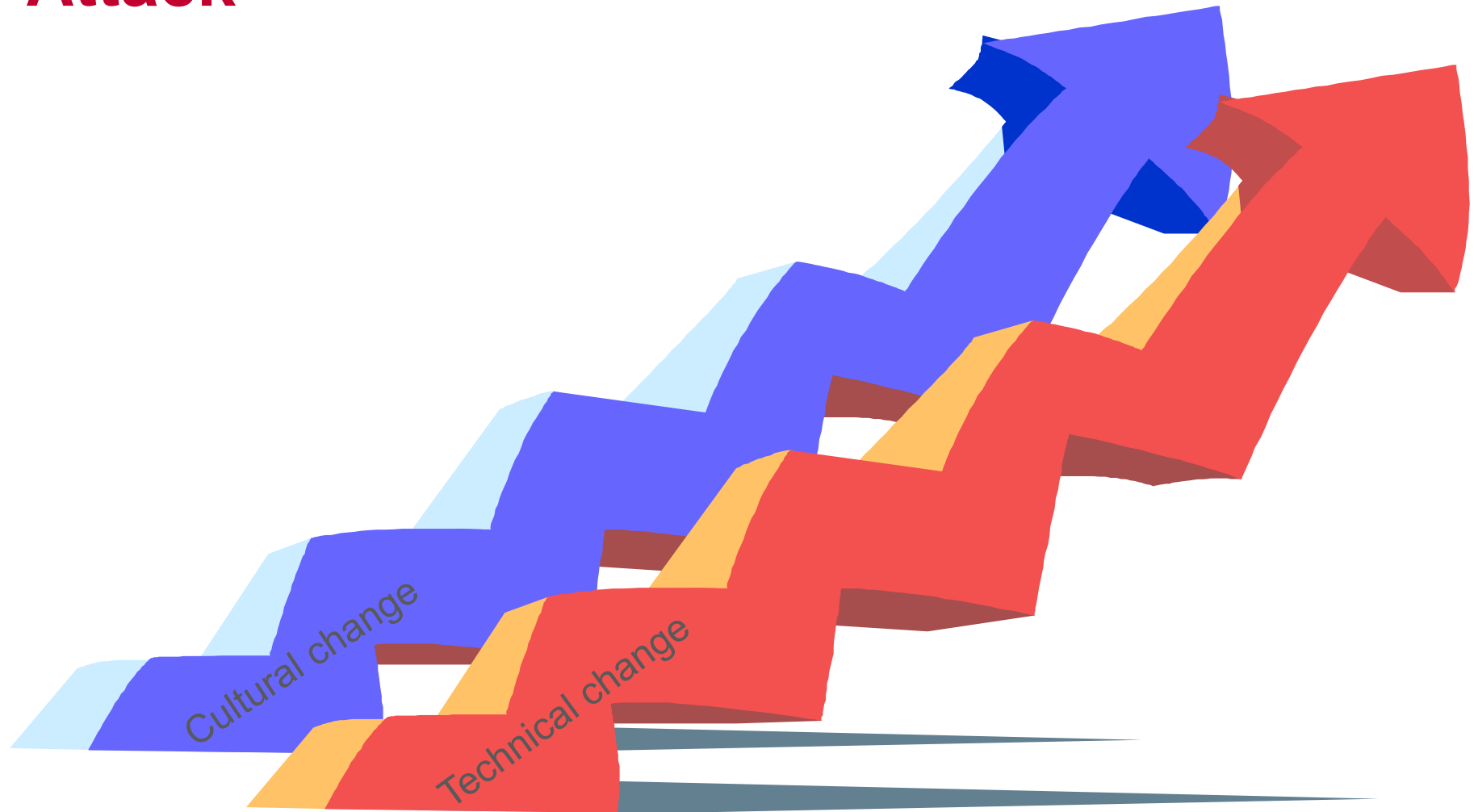Warwick Business School, University of Warw...

Dr Zoe Ra...

May 2010

There is evidence of the benefits of Lean but need to be careful… as this may be due to poor service design and an over focus on efficiency.

Lean Transformation – A Two Pronged Attack

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The History of Lean…

- **Taiichi Ohno**
  Vice President of Manufacturing,
  Toyota Motor Corporation

- Toyota Production System
  - 1950s, after WW2
  - External factors; small market, culture and difficulties in equipment purchase.
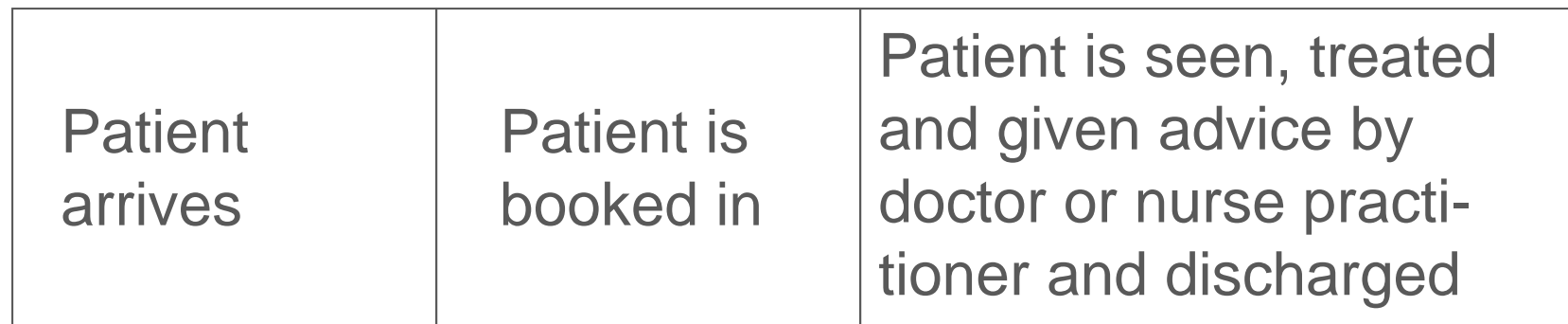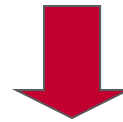 - Inspired by USA supermarkets

Lean in Public Services: Power of 3

- 3 Principles:
  - Value, Flow and Reduction of Waste

- 3 Types of tools:
  - Assessment, Monitoring and Improvement

- 3 Stages of the Lean journey:
  - Engage, establish and embed

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Understand Value

Flow: Understanding and Managing Demand Types and Patterns

| Patient arrives | WAIT | Patient is triaged | WAIT | Patient is booked in | WAIT | Patient is seen by doctor | WAIT | Treatment by nurse | WAIT | Patient is discharged by doctor |

| Patient arrives | Patient is booked in | Patient is seen, treated and given advice by doctor or nurse practitioner and discharged |

Failure Demand

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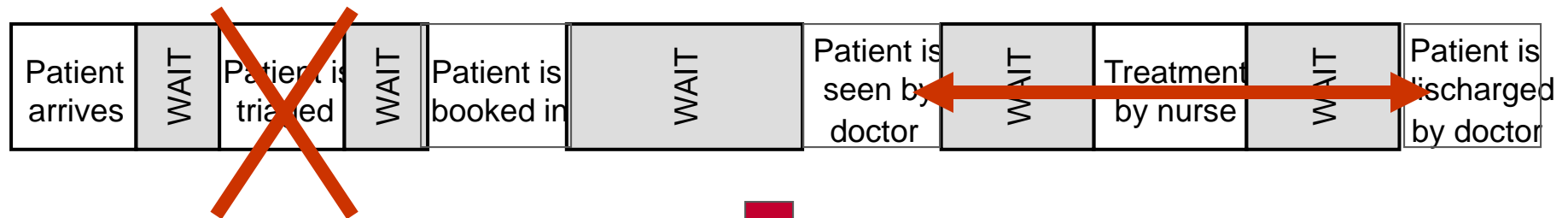
Reduction of Waste

1

Over-production - 60% of computer generated post printed in the post room was discarded

2

Waiting - Post delivered by Royal Mail did not always arrive at 7:45 am

3

Transport - Post moved 500 metres before any value-added work was performed

4

Over-processing - Sorting post in 21 categories when 4/5 were enough

5

Inventory – 15+ days of work on shelves

6

Rework - Post transferred between offices; Frequent redirection due to mis-sorting

7

Motion - In post room the operator moved from desk to scales to measure a single item of post

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The 8ᵗʰ Waste ... Untapped human potential

- Not listening

- Not asking

- Not empowering

- Not doing anything with generated ideas

Use of Tools and Techniques within Lean in Public Services

- Assessment:
  - To assess the processes at organisational level e.g. value stream mapping, process mapping

- Monitoring:
  - To measure and monitor the impact of the processes and their improvement e.g. control charts, visual management, benchmarking, work place audits
  - Measures in terms of quality, time, costs, satisfaction levels

- Improvement:
  - Tools implemented and used to support and improve processes e.g. RIEs, 5S, structured problem solving

Assessment: Reviewing the work

From

Current State

to

Future State
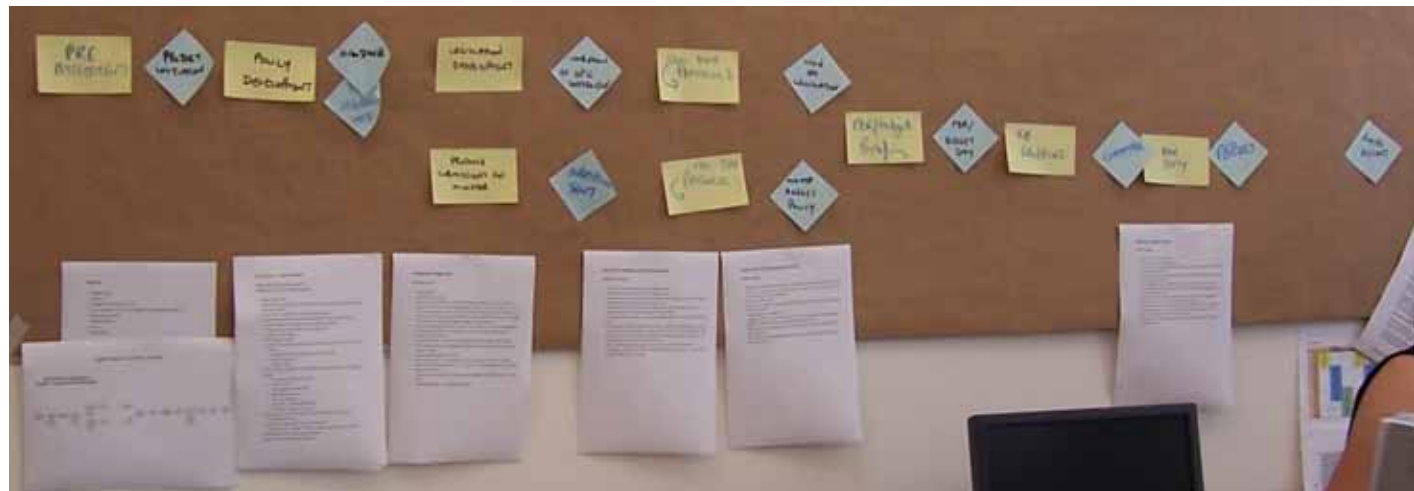
Monitoring: Visual Management

Team Board

Team Communications Hub

Resource Planning

Improvement: The Five-Step Kaizen Movement

SEIRI
Sort

SEITON
Set in order

SEISO
Sweep and Shine

SHITSUKE
Standardise

SEIKETSU
Sustain

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Improvement: Structured and systematic use of problem-solving

Day-to-day problem solving: 3Cs document

These are some of the Problem Solving tools that are available, but there are many more

- 3 C's Document
- Brainstorming
- Kipling
- SMART
- Open Questions
- 5 Why's
- Timing Plan

- Fishbone Diagram
- Web Chart
- Like & Must
- Check Sheet
- Action Plan
- Pareto Analysis
- Interviewing

This is the basic method of Problem Solving used by teams to address day-to-day issues affecting performance. The process has 3 steps:

Concern:
  Define the Problem clearly – doing this is essential, as it will help to ensure that you don't try to put the whole world right in one go.

Cause
  Think carefully – try to get to the *"ROOT CAUSE"* of the problems, rather than just dealing with the symptoms.

Countermeasures
  Try to fix the problem once and for all, but if that's not possible, then do everything you can to mitigate the impact on the customer.

More challenging problems: Structured Approach

1 – Problem
WHAT DO WE WANT TO IMPROVE AND WHERE DO WE WANT TO BE?

2 - Causes
WHAT'S STOPPING US FROM ACHIEVING OUR DESIRED STATE?

3 - Options
WHAT CHOICES DO WE HAVE ?

6 - Results
HOW GOOD WAS THE SOLUTION ?

5 - Implementation
WHAT IS OUR ACTION PLAN ?

4 - Solutions
WHICH IS THE BEST WAY TO SOLVE OUR PROBLEM ?
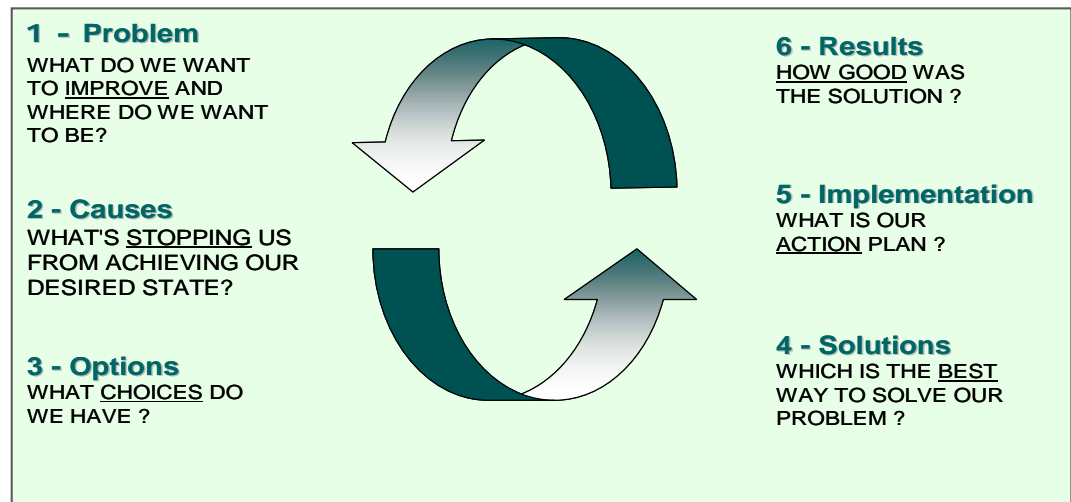
Challenges of Lean in Public Services

1. A focus and over reliance on lean workshops

2. A tool based approach to lean implementation

3. Impact of public sector culture and structures

4. Lack of focus on the customer (service user) and understanding of service process

Lean is delivering efficiency but need to embed it within a service model to delivery effectiveness

Radnor, Z.J and Osborne, S.P. (forthcoming),'Is Lean a failed theory for Public Service?', Public Management Review

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Focus on Workshops and RIEs

CULTURE CHANGE

Lean

Improvement
Opportunity

Greater, sustained results achieved

Lost and repeated results due to no sustainability

Improvement levelled off and eventually stopped due to lack of realizing "true" lean opportunity

Short term gains made ↓

Kaizen Blitz

Rapid Improvement Events

Awareness, education, organization structure created to support lean

Time
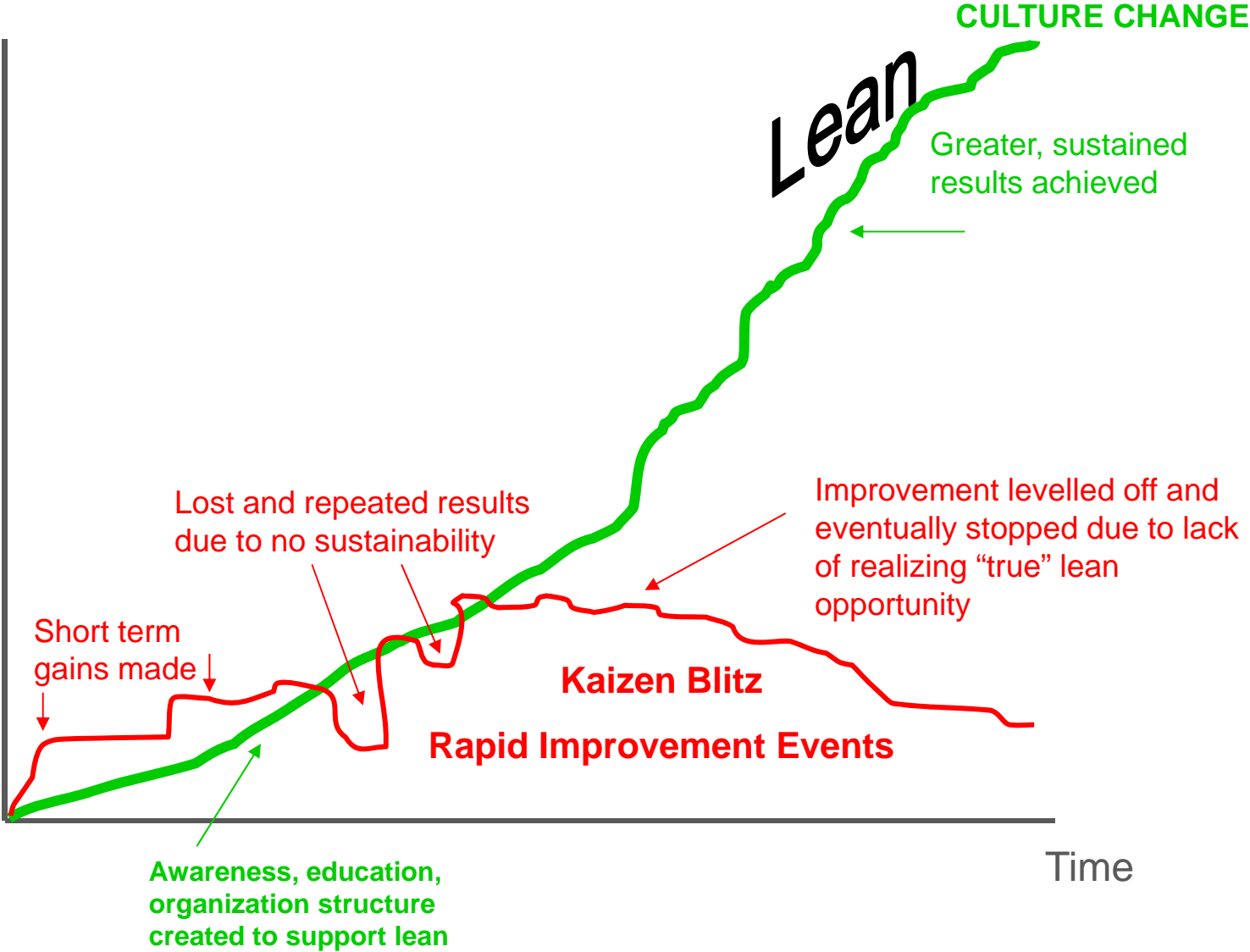
Source: Chris Craycraft, Whirlpool

Our Lean Tools Guarantee Success!

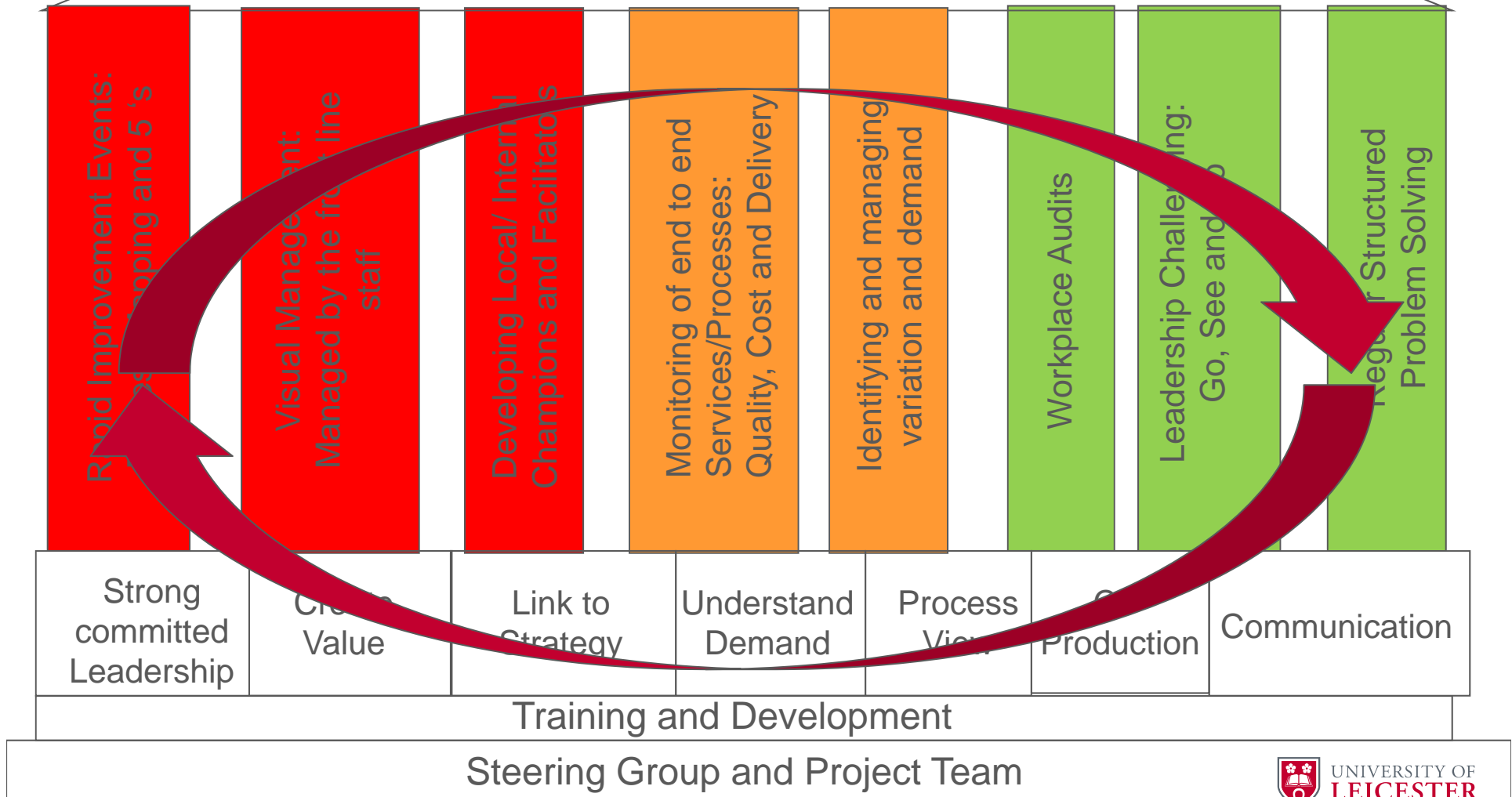…but really, we all know it takes more than tools to make real change happen!

ust Six Weeks!

Instant Six Pack!

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Whole system view

Embedded continuous improvement behaviours
Stable robust efficient and effective processes

Rapid Improvement Events: Mapping and 5 's

Visual Management: Managed by the front line staff

Developing Local/ Internal Champions and Facilitators

Monitoring of end to end Services/Processes: Quality, Cost and Delivery

Identifying and managing variation and demand

Workplace Audits

Leadership Challenging: Go, See and Do

Regular Structured Problem Solving

Strong committed Leadership	Create Value	Link to Strategy	Understand Demand	Process View	Production	Communication

Training and Development

Steering Group and Project Team

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Strong Committed Leadership

Driven by Department Heads or Lean enthusiasts.

"To become a Lean school, the top management needs to be on board and drive it. This is not an add-on. It's about getting the entire operation of the school adopt Lean philosophy and practice on a continuous basis." Dean of English Business School

"I'd like to think that it [lean] is now the lens through which we run the hospital. I can't think of a day when I'm not dealing with issues, when I'm not thinking about it in lean terms; whether that's the challenges we've got of hitting the A&E target or money we need to save or mortality rate" Chief Executive of a English Hospital

Go and See, Go and Do, Lead by example, Leading in a Lean Environment

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Create Value

"Sometimes we forget there is a customer at the other end. I think Lean has highlighted that. Sometimes we are in danger of forgetting that the paper we are dealing with, actually represents the customer."

"We think we understand what customers want but we really don't know. We haven't asked them. We think they want a faster service. We have improved the turnaround of resulting and post etc., so we assume they are more satisfied, but we don't really know for sure"

Emotional Mapping, Enacting or Creating rather than defining value

Link to Strategy

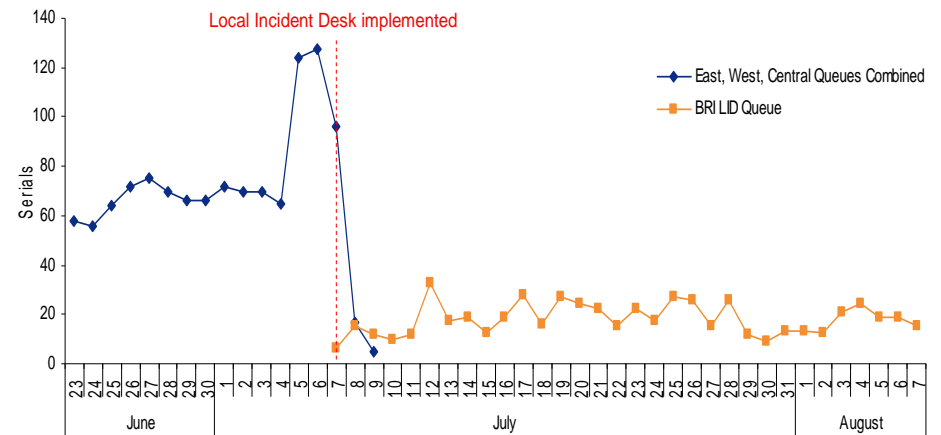Islands of Optimisation at Department, Business Unit or Ward level
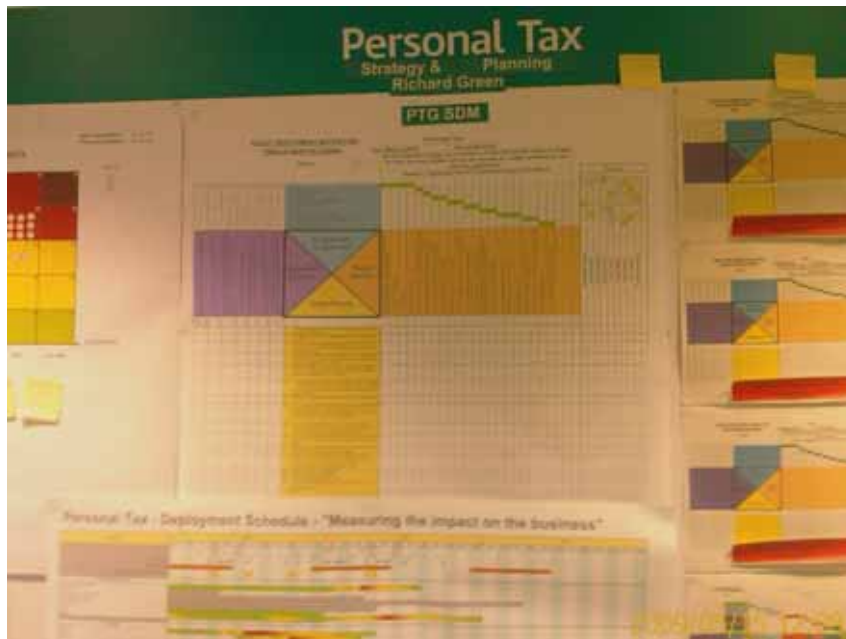
Policy Deployment, Balanced Scorecard, Benefits Realisation

Understand Demand

Capacity not Demand Led, variable seen as the work not the staff

"We are better able to plan resources to meet workload. Work is

Runners, repeaters and Strangers; Capacity Planning for the Short and Medium Term; Systems Thinking

Process View

Task focused driven by performance measures and making the job easier


"The understanding of process here has changed, especially for those who attended the Lean event. They were able to see how the work linked together across the court. But the other staff need to attend more Lean events to get a better understanding"

End to end customer journey mapping, measures focused on outcomes, link to policy

Co-Production

Lack of challenge to the established line of visibility and interaction between the service user and service provider
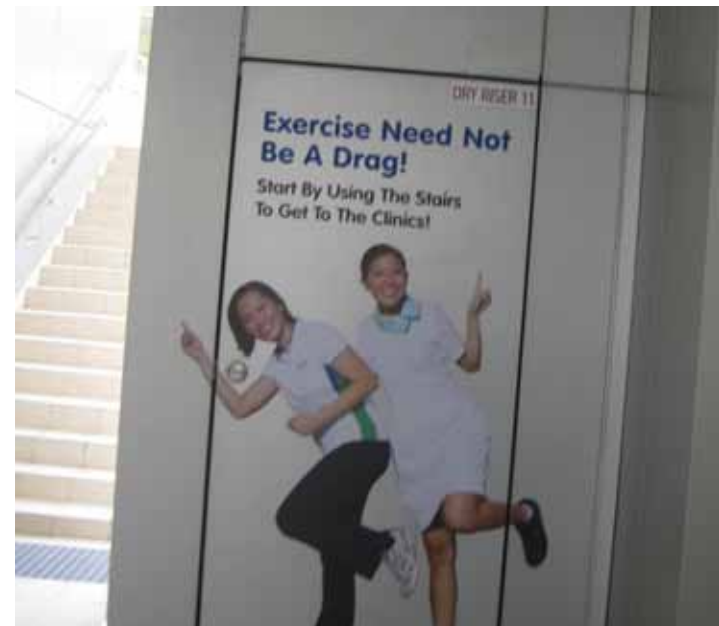
Service Blueprint: Changing the line of visibility between front and back office, letting the customer absorb variation and variety

Communication

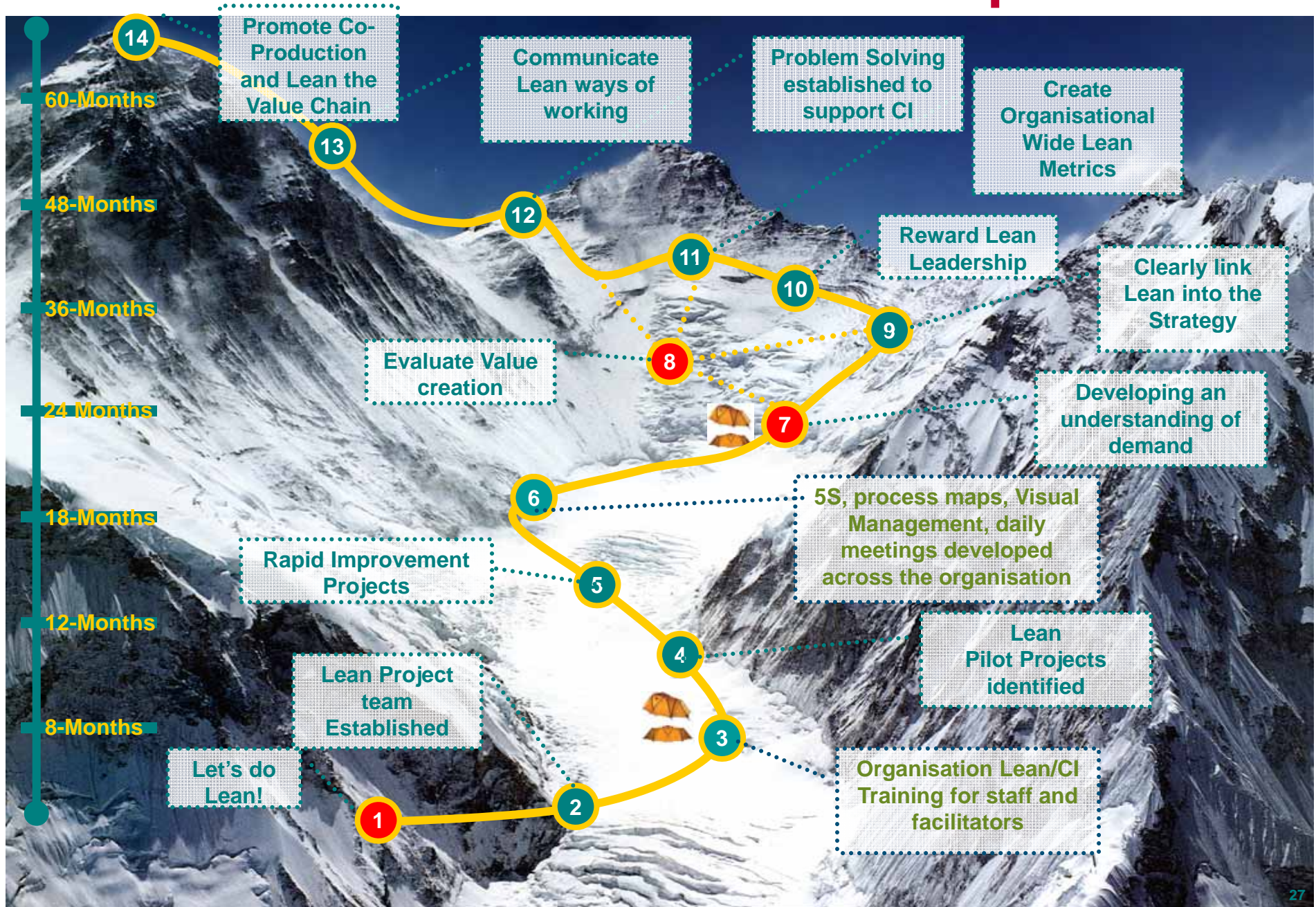Powerful use of visual management for internal management but lack of change regarding external communication
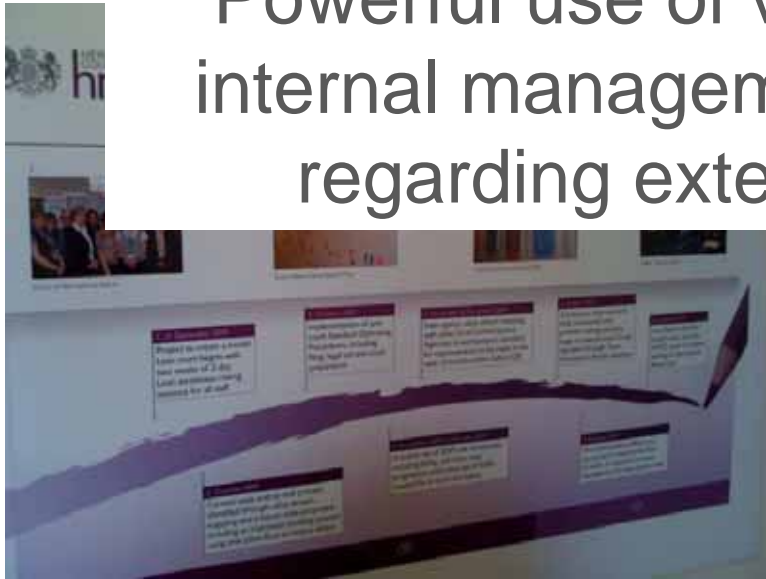
"The majority of staff like TIBs because they know what's going on. Managers have all the information about the skills that their teams have, but it's only by making them visible that staff realise they need further training"

'Marketing': Communicating changes and impact of processes and practices

Lean in the Public Sector Is An Expedition

- 14 — Promote Co-Production and Lean the Value Chain
- 13
- 12 — Communicate Lean ways of working
- Problem Solving established to support CI
- Create Organisational Wide Lean Metrics
- 11
- 10 — Reward Lean Leadership
- 9 — Clearly link Lean into the Strategy
- 8 — Evaluate Value creation
- 7 — Developing an understanding of demand
- 6 — 5S, process maps, Visual Management, daily meetings developed across the organisation
- 5 — Rapid Improvement Projects
- 4 — Lean Pilot Projects identified
- 3 — Organisation Lean/CI Training for staff and facilitators
- 2 — Lean Project team Established
- 1 — Let's do Lean!

Timeline:
- 60-Months
- 48-Months
- 36-Months
- 24 Months
- 18-Months
- 12-Months
- 8-Months

Lean in Public Services

To develop a Public Service Dominant Logic

Need to consider Lean not as a quick fix but as a implementation philosophy.

> "A series of RIEs does not Lean make!"

There is a need to develop a mindset within the organisation of process and customer view

> "Public Service not Public Sector ethos"

Move thinking from task/ policy to value/ process.

> Opportunity to redefine the end to end process

Need to develop an awareness of variation, demand and capacity relationships.

> "See the variable as the work not the demand/ customer"

Create and focus on improving stable processes

> Standardise the process not the outputs and outcomes

Need to ensure that there is strong and committed leadership and there is a link to strategy.

> Not just about cost cutting and efficiency but about effectiveness

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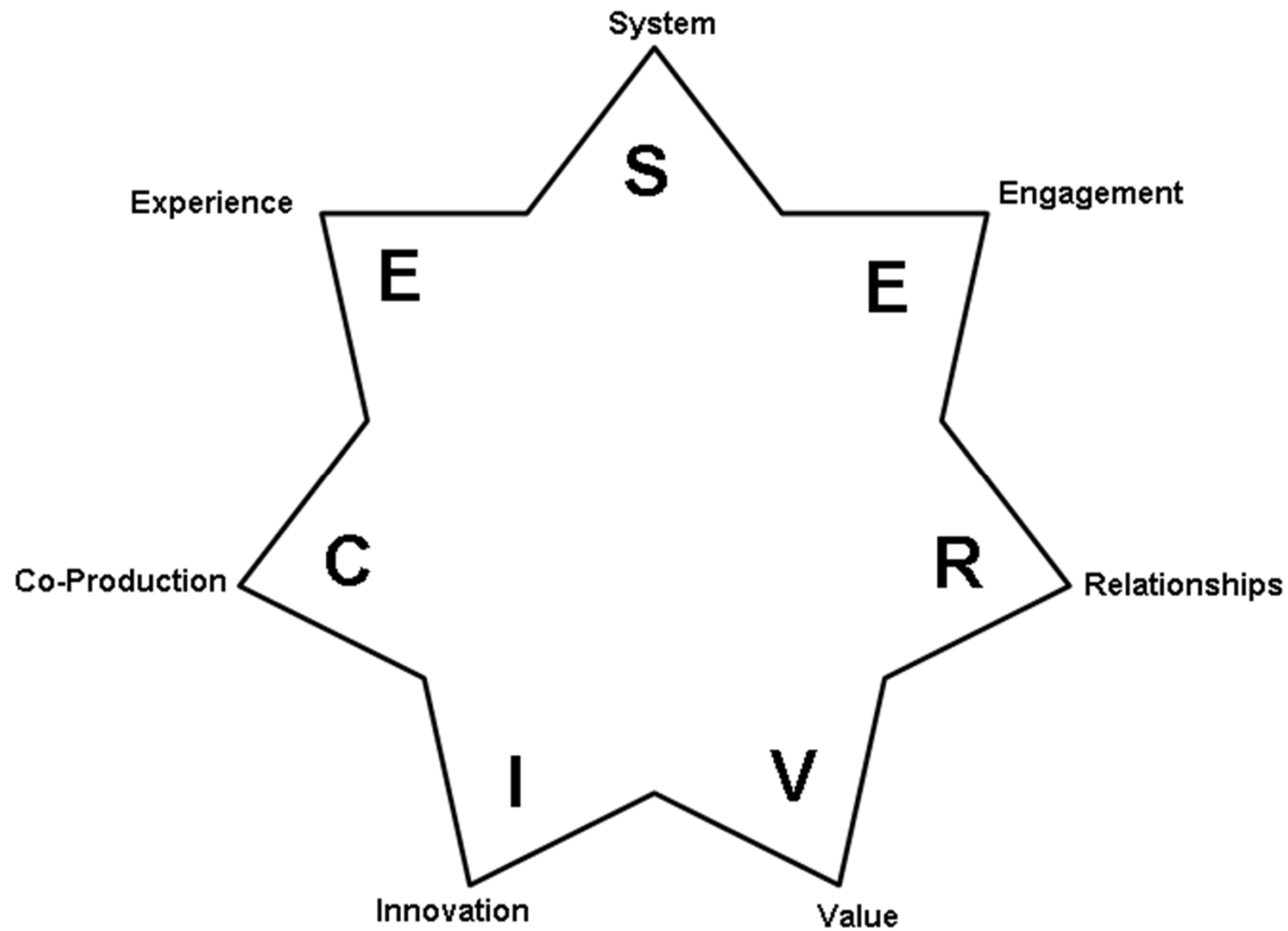
Public Services are… Services

- Much of the public management and public

    services built on product and manufacturing logic.

- The majority of 'public goods' are in fact not 'public products' but rather 'public services'.

- Need to draw from service management logic to 'unpack', understand, manage and operationalise public services.

- Move from a public sector to public service ethos

- Public services need to embrace a (public) service dominant logic

- Service dominant logic argues placing the user at the heart of the service

Osborne, S., Z. J. Radnor and G. Nasi (2013). "A new theory for public service management?
Towards a service-dominant approach." _American Review of Public Administration_

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What is makes a Service a Service?

Three core characteristics of services which differentiate them from manufacturing goods :

1. Whilst a product is invariably concrete a service is intangible
   - Services can not be stored.
   - Public service delivery is *relational.*
   - **Intangibility**

2. There is a different production logic for manufactured products and for services.
   - For manufacturing production and consumption occur separately. With services production and consumption occur simultaneously.
   - Experience created at the 'moment of truth' – centrality of the service user.
   - **Inseparability**

3. The role of the end-user is qualitatively different for manufactured products and services
   - In manufacturing they are 'simply' purchasers and consumers. For services, the user is also a co-producer of the service.
   - Services offer a promise not an actuality
   - **Co-production**

Osborne, S., Z. J. Radnor and G. Nasi (2013). "A new theory for public service management? Towards a service-dominant approach." American Review of Public Administration

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The Service Model

- **S** - *public service* system *as the unit of ar*
- **E** – embed *in genuine sustainability*
- **R** – *work at* relationships *as a key resources*
- **V** – *focus on creating external* value
- **I** – Innovation *is essential for effectiveness*
- **C** – co-production *is the core of public services*
- **E** – *use knowledge to drive service* experience