

# Lean Principles

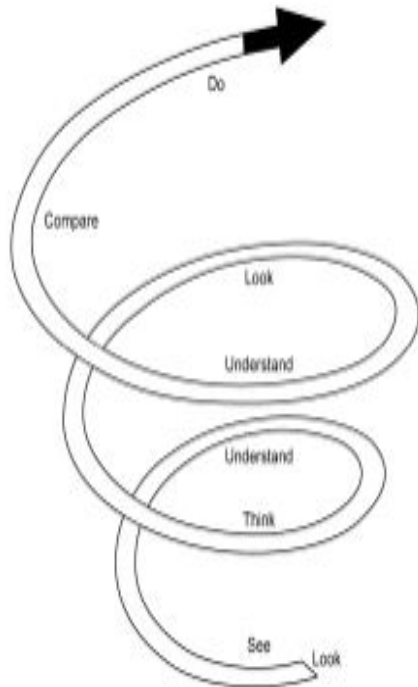
Future in Pharmaceuticals  
Driven by Sustainability

# Who am I?

- ***Enterprise Ireland, Competitiveness Department***
  - *Lean, Green, Benchmarking*
- ***EU Japan Centre for Industrial Co-Operation***
- ***European Benchmarking Network***
- ***Advisor Internationally on Benchmarking and Best Practice***
- ***Trinity College Dublin, Business School***
- ***Author***

### Level 3

<i>Process Benchmarking</i>	<i>The Five S's</i>	<i>Total Productive Maintenance</i>	<i>Overall Equipment Efficiency</i>	<i>Six Sigma</i>
<i>Business Excellence</i>	<i>Value Analysis &amp; Management</i>	<i>Lean Production</i>	<i>Target Cost Management</i>	



### Level 2

<i>Facilitated Assessment Benchmarking</i>	<i>Physical &amp; Process Flow in the Office</i>	<i>Physical &amp; Process Development</i>	<i>Production Control Systems</i>
<i>Saving Time in the Workplace</i>	<i>Maintenance</i>	<i>Practical Quality Tools</i>	<i>Team Building &amp; Culture</i>
<i>Sales and Growing them</i>	<i>Financial Management</i>	<i>Supply Chain &amp; Logistics</i>	<i>Innovation &amp; Design</i>
<i>Business Strategy</i>	<i>Implementation</i>		

### Level 1

<i>Self Assessment Benchmarking</i>	<i>Physical Flow</i>	<i>Process Flow</i>	<i>Set Up Time Reduction</i>
<i>Check Sheets</i>	<i>Run Chart</i>	<i>People &amp; Teams</i>	<i>Basic Maintenance</i>

# What do we mean by Lean?

- Lean is shorthand for Best Practice within a sector
- Helps People identify and deliver improvements in their businesses
- Provides a framework for competitiveness improvement by building the capability and competences of people
- Driving and integrated into company strategy

***QUICKER***

***BETTER***

***CHEAPER.....TOGETHER***

# What is Lean?

- Based on the Toyota Production System
- “Understood” by American consultants
- Focused on Effectiveness and Efficiency
- Doing the right things well!
- A War on Waste!!!
- What is the alternative?

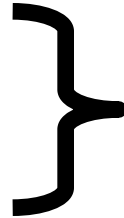
# Some Lean Principles....

- Time
- Money
- Effort

***Must want to compete.....***

# Rules

1. Fairness
2. Firmness
3. Consistency



Dealing with People

4. Look
5. See
6. Understand
7. Think
8. Do



Dealing with Processes



# Five Fundamental Lean tools.....

- Process Mapping
- Physical Flow mapping
- Check Sheets – What is going wrong?
- Run Charts – Is it getting better or worse?
- Teams – People working together to improve their business

# Key Lean Questions.....

- What are you doing?
- How are you doing it?
- Why are you doing it?
- Who is going to improve it?
- When?

***Capture the FACTS!***

***Make things better.....***

# *NOT just on the Production Floor!*



# Lean - Action based on FACTS

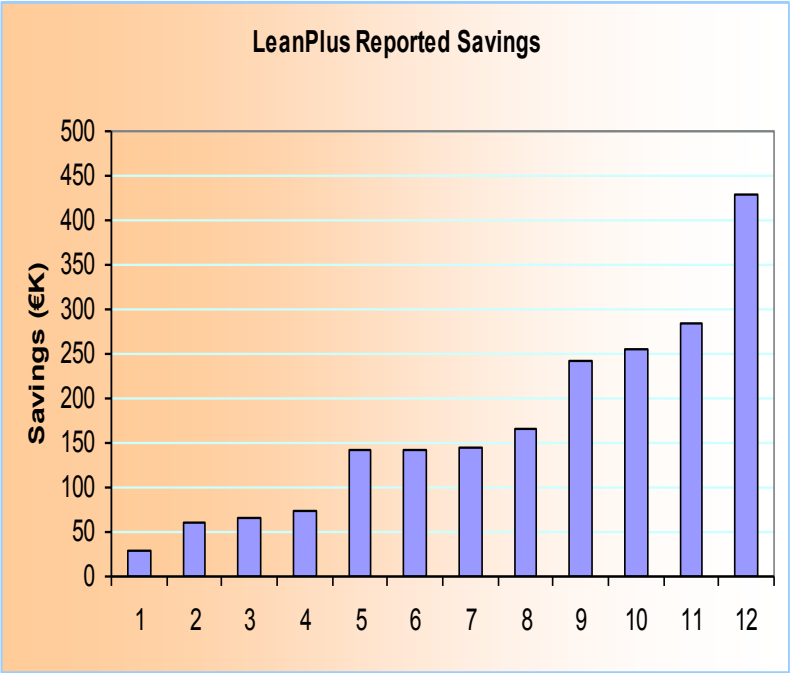
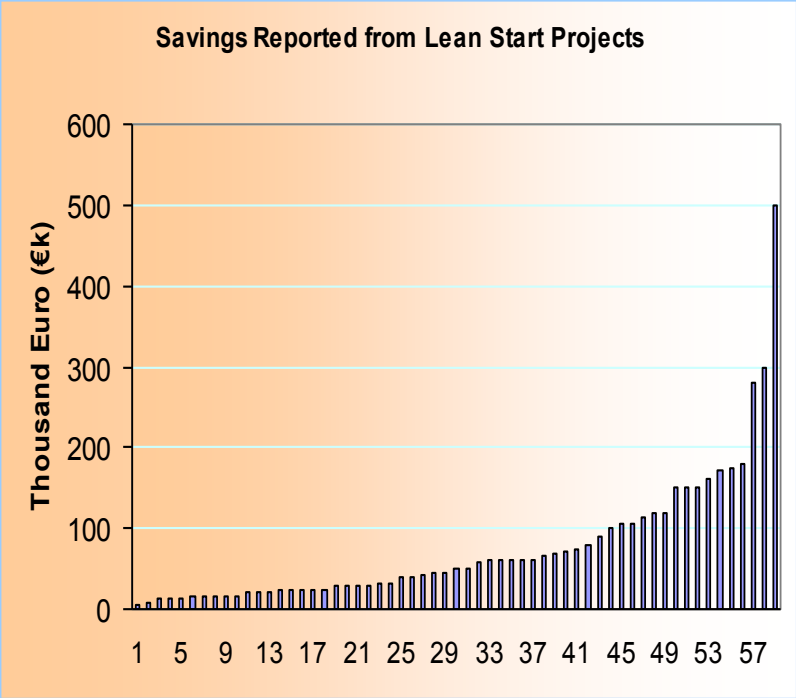
- Benchmarking = Diagnosis
- Lean - Best Practice = Medicine
- Green = Driving Sustainability

# Enterprise Ireland Lean Business Offer

## 540 projects supported to date

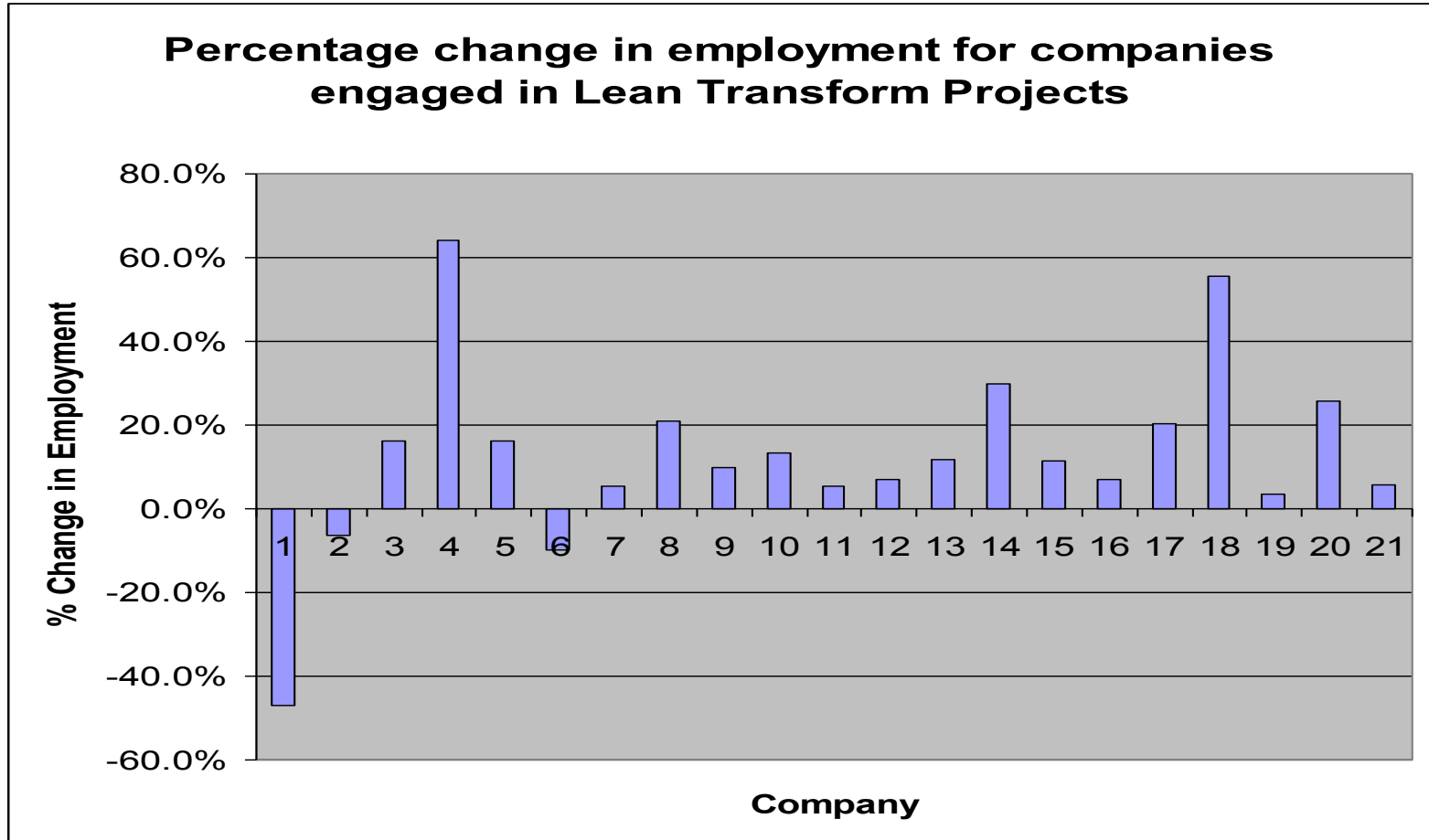
	Eligible cost elements	Client costs	EI grant
<b>Lean-Start</b>	<b><i>'Lean' consultancy fees at €900 per day</i></b>	<b>€6300</b>	<b>€5000</b>
<b>Lean-Plus</b>	<b><i>'Lean' (&amp; specialist) training fees</i></b>  <b><i>Cost of company 'lean project champion'. subject to EI assessment.</i></b>	<b><i>Up to €70 k</i></b>	<b><i>Up to 50%</i></b>
<b>Lean Transform</b>	<b><i>Training fees</i></b>  <b><i>training costs</i></b>  <b><i>company staff costs and other costs as may be approved by EI</i></b>	<b><i>Typically over €100 k</i></b>	<b><i>As set by EI. &lt; 50%</i></b>

# Lean Works - Project Impacts



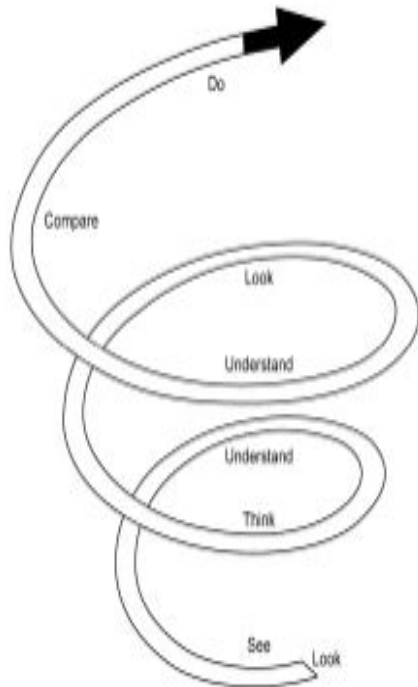
***Transform Projects reporting very significant results...***

# EI Lean Project Impacts



## Level 3

<i>Process Benchmarking</i>	<i>The Five S's</i>	<i>Total Productive Maintenance</i>	<i>Overall Equipment Efficiency</i>	<i>Six Sigma</i>
<i>Business Excellence</i>	<i>Value Analysis &amp; Management</i>	<i>Lean Production</i>	<i>Target Cost Management</i>	



## Level 2

<i>Facilitated Assessment Benchmarking</i>	<i>Physical &amp; Process Flow in the Office</i>	<i>Physical &amp; Process Development</i>	<i>Production Control Systems</i>
<i>Saving Time in the Workplace</i>	<i>Maintenance</i>	<i>Practical Quality Tools</i>	<i>Team Building &amp; Culture</i>
<i>Sales and Growing them</i>	<i>Financial Management</i>	<i>Supply Chain &amp; Logistics</i>	<i>Innovation &amp; Design</i>
<i>Business Strategy</i>	<i>Implementation</i>		

## Level 1

<i>Self Assessment Benchmarking</i>	<i>Physical Flow</i>	<i>Process Flow</i>	<i>Set Up Time Reduction</i>
<i>Check Sheets</i>	<i>Run Chart</i>	<i>People &amp; Teams</i>	<i>Basic Maintenance</i>



Just because you can't do it doesn't mean it can't be done...



<http://www.enterprise-ireland.com/en/>

<http://www.envirocentre.ie/index.html>

Becoming Lean

Becoming a Lean Service Company

First Steps to Green Competitiveness Guidebook