



## Information Pack

# Unit 524-Applying Lean Production and Improvement Methodologies to Operational Problems in Service Delivery

**SAMPLE**

## INTRODUCTION

Lean thinking is about accelerating the velocity of any process by doing only the things that add customer value and eliminating other activities that don't (waste)

Lean production is an approach to management that focuses on cutting out waste, whilst ensuring quality. This approach can be applied to all aspects of a business – from design, through production to distribution. Lean production aims to cut costs by making the business more efficient and responsive to market needs.

Lean production may be founded in manufacturing, but it can actually be applied much more broadly.

Lean is easy to explain, but very hard to do. Only five to seven percent of organisations who try to implement Lean do it successfully.

The reason is that most companies look at Lean as an operational process, not a strategic one. They only give some of their attention to the transformation, or delegate it to someone who can't make any headway. And, the effort fizzles out.

### Learning Outcomes

#### **Be able to undertake a service delivery improvement project using lean production and improvement methodologies**

The first part of this task is to develop a correct and appropriate plan to improve a workplace project using lean production and improvement methodologies.

You are then required to implement an appropriate improvement to service delivery using the plan, ensuring that efficient and effective controls and monitoring techniques have been, or are being, used to ensure the continuing implementation of the improvement project

#### **Be able to develop a report on the outcomes of the service improvement project**

The second part of the task requires you to evaluate the success of the improvement project in order to provide a conclusion or recommendations that explain how it is controlled to produce long term sustainability of the improvement.

You are then required to develop an accurate and appropriate report on the improvement project that communicates the outcomes of the improvement project.

## GUIDANCE

This document is prepared to break the unit material down into bite size chunks. You will see the learning outcomes above treated in their own sections. Therein you will encounter the following structures;

### Purpose

Explains *why* you need to study the current section of material. Quite often learners are put off by material which does not initially seem to be relevant to a topic or profession. Once you understand the importance of new learning or theory you will embrace the concepts more readily.

### Theory

Conveys new material to you in a straightforward fashion. To support the treatments in this section you are strongly advised to follow the given hyperlinks, which may be useful documents or applications on the web.

### Example

The examples/worked examples are presented in a knowledge building order. Make sure you follow them all through. If you are feeling confident then you might like to treat an example as a question, in which case cover it up and have a go yourself. Many of the examples given resemble assignment questions which will come your way, so follow them through diligently.

### Question

Questions should not be avoided if you are determined to learn. Please do take the time to tackle each of the given questions, in the order in which they are presented. The order is important, as further knowledge and confidence is built upon previous knowledge and confidence. As an Online Learner it is important that the answers to questions are immediately available to you. Contact your Unit Tutor if you need help.

### Challenge

You can really cement your new knowledge by undertaking the challenges. A challenge could be to download software and perform an exercise. An alternative challenge might involve a practical activity or other form of research.

### Video

Videos on the web can be very useful supplements to your distance learning efforts. Wherever an online video(s) will help you then it will be hyperlinked at the appropriate point.

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**SAMPLE**

## Defining Lean Production

Lean manufacturing, or lean production, is a production method derived from Toyota's 1930 operating model "The Toyota Way" (Toyota Production System, TPS). The term "Lean" was coined in 1988 by John Krafcik, and defined in 1996 by James Womack and Daniel Jones to consist of five key principles; 'Precisely specify value by specific product, identify the value stream for each product, make value flow without interruptions, let customer pull value from the producer, and pursue perfection.'

In 1990 James Womack and Daniel Jones went on a world tour to promote their book: "The Machine That changed the world ". During their tour, they gave seminars on the efficient way of production realised by the Toyota Company. James Womack and Daniel Jones named this way of working: Lean Production. The theory behind this has been later described by Womack and Jones in their book: Lean Thinking. In practice, these Lean Thinking methodologies and tools are often captured in different terminologies such as Lean Management, Lean Manufacturing and Lean Enterprise.

Lean Management is a methodology to ensure value adding activities run smooth and quickly through the process. Process speed or the efficient flow of a process is the essence of Lean Management. Anything which impedes this speed is called Muda. Muda is the Japanese word for waste and describes all non-value adding activities within a process.

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*Lean Management is the method which creates an efficient process flow by eliminating non-value adding activities (Muda).*

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### Challenge

Think about a process in your current workplace that could be changed to save time and effort? Draw a flow chart with the old process and the new process identifying why the new process would be more efficient.

## Key Principles and Waste

Womack and Jones define Lean as

"...a way to do more and more with less and less - less human effort, less equipment, less time, and less space - while coming closer and closer to providing customers exactly what they want"

and then translate this into five key principles:

1. Value – Identify the value desired by the customer. "Form a team for each product to stick with that product during its entire production cycle", "Enter into a dialogue with the customer"
2. The Value Stream - Identify the value stream for each product providing that value and challenge all of the wasted steps (generally nine out of ten) currently necessary to provide it