Unit 523

Information Pack

Preparing to Apply Lean Production and Improvement Methodologies to Operational Problems in Service Delivery

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 to service delivery. 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. In this information pack we will review tools used to analyse current and future practice for improvement planning.

A service improvement project is a plan to change in practice identified in collaboration with service users, colleagues and key stakeholders. Essentially it puts service users at the centre of improvement activity. A well written proposal for change will no doubt be accepted in order to continually improve.

Learning Outcomes

Understand how to use lean production and improvement methods to measure and analyse service problems

The first part of this task is to evaluate, in order to provide a conclusion or recommendations, a representative range of lean production and improvement methods appropriate for measuring and analysing service delivery problems.

You are then required to describe and assess the features and effectiveness of lean production and improvement methods currently employed within the organisation in order to compare and contrast the relative merits of the methods.

Understand how to develop a service improvement project using lean production and improvement methodologies

The second part of the task requires you to describe the principal features of an aspect of service delivery requiring improvement in such a way that the need for improvement is made clear, and then to develop a correct and appropriate project proposal that uses lean production and improvement methods to bring about service improvement.

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.

Contents

INTRODUCTION 2
GUIDANCE 3
What is a Service Improvement Project? 6
What is a Service Improvement Plan? 6
Process Improvement Techniques 6
Defining Lean Production 6
Key Principles and Waste 7
The 7 Types of Waste 7
Lean Services 9
Lean in the Service Industry 9
Improvement Methodologies 10
JIT 10
5'S 10
KANBAN 11
Understanding Six Sigma 12
DMAIC 12
Kaizen 15
Organisational Infrastructure Pyramid 15
The Role of Managers and Management 16
Organisational Performance 16
Supporting Strategic Development 17
Goals, Aims and Strategy Goals 18
The Definition and Meaning of Strategy 18
The Role of Strategy 18
Levels of Strategy 20
Core Areas of Strategic Management 23
Context, Content and Process 24
Key differences between Lean and Six Sigma 26
Green Lean Sigma 27
Basics of Improvement Methodology 28
Service Improvement Proposal 35

How to write a Project Proposal? 35
Basic Elements of the Implementation Process 36
Why are monitoring and controls important? 38
What are the main elements of strategic control system? 39
How can strategic controls be improved? 39
Effectively Implement and Monitor a Project. 40

What is a Service Improvement Project?

The main aim of a service improvement project is to change an organisation as identified by analysis and action. This improvement could have been identified by key stakeholders or service users. It is essential to put the service users needs at the centre of improvement activities. There are a range of tools, processes and measures that can be used to inform proposed change and we will discuss this throughout this information pack. A service delivery plan will usually be developed in conjunction with or once a project proposal has been accepted.

What is a Service Improvement Plan?

It is essential to plan for change, a clear plan will not only outline to the team what you hope to achieve and a step by step guide on how to get there. It will allow key stakeholders to buy into the change that is about to happen. The service improvement plan is a plan and road map for improving service levels e.g. if service levels are not being met, need to be improved or changed. It is based on service level review, and customer service level management process improvement suggestions.

Process Improvement Techniques

Reflection is the first step towards streamlining your work processes. Identifying what is slowing down procedure and processes can be done by using a number of improvement methodologies. They can help to identify inefficiencies, bottlenecks, identify wasted time and resources. Below we will give you a brief overview of improvement techniques which can be used in collaboration and included in your proposal for change.

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.

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.

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

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. E.g. sending a letter

Type letter → log into CRM → find customer details → print letter → put letter in envelope → write address on envelope → buy stamp → post letter

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 the wasted steps currently necessary to provide it
3. Flow - Make the product flow continuously through the remaining value-added steps
4. Pull - Introduce pull between all steps where continuous flow is possible
5. Perfection - Manage toward perfection so that the number of steps and the amount of time and information needed to serve the customer continually falls.

Lean is founded on the concept of continuous and incremental improvements on product and process while eliminating redundant activities. "The value of adding activities are simply only those things the customer is willing to pay for, everything else is waste, and should be eliminated, simplified, reduced, or integrated".

The 7 Types of Waste

There are 7 types of non-value adding activities recognised in the Lean Management theory:

1. Transportation
2. Stock
3. Motion
4. Waiting