BN3318 – OPERATIONS STRATEGY, SYSTEMS AND IMPLEMENTATION

Module Number: BN3318

Module Title: Operations Strategy, Systems and Implementation

Number of Aston Credits: 20

Total Number of ECTS Credits: 10
(European Credit Transfer)

Staff Member Responsible for the Module:

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Operations & Information Management Group

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Availability: Please see office hours on door or group administrator, John Morley, ABS266, Extension 3236

Other Staff Contributing to the Module: None

Pre-Requisite(s) for the Module: None

Module Learning Outcomes:

Operations is what a company 'does'. It is how it delivers its 'product' to customers. It is the core of a company's business (whatever that is). Manufacturing companies make products, stockholders purchase, store and distribute materials, whilst retailers procure, stock and supply the public with goods. This definition of operations can be applied to almost any organisation and typically over 70% of a company's assets (and people) are the responsibility of the operations function.

Operations strategy is concerned with matching the characteristics of the operations function with the requirements of the market in order to fulfil the needs of the business. A proper appreciation of this requires an understanding of the methods used to develop an operations strategy and the approaches that operations managers often use to represent an operations strategy such as lean and agile operations. It also requires a knowledge of the techniques and principles involved in the implementation of an operations strategy. Implementation requires knowledge of both structural decisions - regarding areas such as layout design and service design - and also infrastructural decisions such as supply chain management policies.

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Upon successful completion of this module students will be able to:

- Describe & discuss a suitable methodology for the development of an operations strategy
- Describe & discuss the key characteristics of the popular approaches to operations strategy, including 'lean' and 'agile'.
- Assess the suitability of operations systems & techniques for a particular operations strategy
- Plan the implementation of an operations strategy
- Critically evaluate the various approaches and methodologies used in the development and implementation of operations strategies.

Module Content:

The module uses the Hill methodology is used to establish an understanding of the fundamental concepts involved in developing an operations strategy. The 'lean', 'agile' and other operations approaches are used as a means of discussing the way in which they provide a substitution for following a formal operations strategy plan.

The major topics covered include:

- Operations strategy & the business requirements
- Strategy development methodologies
- 'Substitutes' for operations strategy including BPR, ERP, TQM, Agile and QRM.
- Structural decisions for operations strategy implementation including process types, layout design, facility design, process technology, product and service design and job and work design.
- Infrastructural decisions for operations strategy implementation including inventory management, capacity management and supply chain management.

International Dimensions:

The concepts that form the core of the module are international in derivation and application, for example Lean manufacture has its roots in the Japanese

approach to operations whilst the more recent developments in Agile manufacturing were founded in the USA.

Corporate Connections:

The lecturer will draw on his experience as a consultant over 20 years for manufacturing and service organisations and from European case study material.

Links with Research:

Research is ongoing in support of the set text authored by the module leader. Current research includes simulation studies of an operations logistics system and a Police Force Control Room.

Learning and Teaching Rationale and Methods:

2 hour lectures over 20 weeks including discussion of case study material.

Contact and Directed Learning	
Lectures	40 hours
Examination	2 hours
Indirect Learning	
Coursework Preparation	40 hours
Exam revision	38 hours
Preparatory reading to support case studies	40 hours
Background reading to support lectures	40 hours
Total	**200 hours**

Ethical Approval:

This module does not require any primary research and no ethical approval will be necessary.

Assessment and Feedback Rationale and Methods:

The assessment is via a coursework assignment (50%) and a two-hour open book examination (50%).

Formative feedback will be provided by the web site that accompanies the set text. Students are encouraged to utilise lecturer office hours to obtain more detailed feedback and advice.