# IB247-15 Improving Process Performance

## 21/22

**Department**
>   Warwick Business School

**Level**
>   Undergraduate Level 2

**Module leader**
>   Giovanni Radaelli

**Credit value**
>   15

**Module duration**
>   10 weeks

**Assessment**
>   100% exam

**Study locations**
>   University of Warwick main campus, Coventry Primary
>   Distance or Online Delivery

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## Description

### Introductory description

N/A.

[Module web page](#)

### Module aims

- To provide start-of-art definitions and models to describe the main components of an process.
- To provide start-of-art models, concepts and tools to define and measure the performances of a process.
- To provide start-of-art models, concepts and tools to prioritize areas of improvements in a process.
- To provide start-of-art languages and techniques of process mapping to describe the flow of activities in a process.
- To provide start-of-art models, concepts and tools to analyse and diagnose the shortcomings of a process.

- To provide start-of-art models, concepts and tools to design process improvement solutions.
- To describe and analyse alternative methodologies of (and approaches to) process improvement, e.g. oriented to radical innovation or to incremental changes.
- To show and support the application of the models, concepts, tools and languages in practice, e.g. through games, experiments and case studies.
- To enable interactive discussions about the use and limitations of the models, concepts, tools and languages in multiple contexts of application, e.g. through comment sections, discussion forums.
- To facilitate collaborative discussions and applications of the models, concepts, tools and languages among students, e.g. through group work and discussion forums.

## Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Week 1: Definition of process, performance and types of improvement (Online Lecture).
Week 1: Development of Key Performance Indicators (Seminar).
Week 2: Prioritization of Performance Factors (Online Lecture and Seminar).
Week 3: Process Mapping (Online Lecture and Seminar).
Week 4: Process Analysis and Process Diagnosis (Online Lecture and Seminar).
Week 5: Review of First Half.
Week 6: Total Quality Management (Online Lecture and Seminar).
Week 7: Business Process Re-Engineering (Online Lecture and Seminar).
Week 8: Lean (Online Lecture and Seminar).
Week 9: Six Sigma (Online Lecture and Seminar).
Week 10: Benchmarking (Online Lecture and Seminar).

## Learning outcomes

By the end of the module, students should be able to:

- Define key concepts of process improvement, such as performance, benchmarking, just-in-time.
- Gain an ability to apply and critically evaluate a number of process improvement tools and techniques for analysing and improving operations.

## Indicative reading list

Core text:

- Slack, N., Brandon-Jones, A., Johnson, R. (2016) Operations Management (eight edition), London, UK: Pearson.
  Additional reading:
- Deming, W.E. (2001). Out of the crisis. MIT Press
- Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2013). Fundamentals of business process management . Heidelberg: Springer.

- Garvin, D.A. (1986). "Competing on the Eight Dimensions of Quality". Harvard Business Review, November 1987 Issue.
- Hill, A. & T. Hill (2012) Operations Management (3rd ed.) Basingstoke: Palgrave Macmillan.
- Liker, J. (2004), The Toyota Way: 14 management principles from the world's greatest manufacturer, McGraw-Hill Professional.
- Slack, N. (1994). "The Importance-Performance Matrix as a Determinant of Improvement Priority". International Journal of Operations & Production Management 14(5), 59-75.
- Womack, J.P., Jones, D.T. and Roos, D. (2007), The machine that changed the world, Simon and Schuster.

## Subject specific skills

Understand the use and limitations of key models, tools and languages of process improvement, e.g. the importance-performance matrix.
Apply the models, concepts, tools and languages of process improvement in real- life case scenarios.
Compare and contrast the different models, tools and languages, to understand which are more appropriate in different circumstances.
Select an appropriate approach of process improvement (or combination of), based on their advantages, limitations and costs of models, tools and concepts.

## Transferable skills

Work in groups to prepare and present case studies.
Develop analytic skills through case study analysis.
Conduct independent research using primary and secondary data.
Demonstrate oral and written communication skills.

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# Study

## Study time

| Type | Required |
| --- | --- |
| Lectures | 10 sessions of 1 hour (13%) |
| Seminars | 9 sessions of 1 hour (12%) |
| Online learning (scheduled sessions) | 10 sessions of 1 hour (13%) |
| Private study | 48 hours (62%) |
| Total | 77 hours |

### Private study description

Private Study.

# Costs

No further costs have been identified for this module.

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# Assessment

You do not need to pass all assessment components to pass the module.

### Assessment group B

|  | Weighting | Study time |
|---|---|---|
| Online Examination<br>Exam | 100% | 73 hours |

### Feedback on assessment

Feedback via My.WBS

[Past exam papers for IB247](#)

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# Availability

# Courses

This module is Core optional for:

- Year 2 of UPXA-F3N2 Undergraduate Physics with Business Studies

This module is Optional for:

- UIBA-MN34 Law and Business Four Year (Qualifying Degree)
    - Year 3 of MN34 Law and Business Studies Four Year (Qualifying Degree)
    - Year 4 of MN34 Law and Business Studies Four Year (Qualifying Degree)
- UECA-3 Undergraduate Economics 3 Year Variants
    - Year 3 of L100 Economics
    - Year 3 of L100 Economics
    - Year 3 of L100 Economics
    - Year 3 of L116 Economics and Industrial Organization
    - Year 3 of L116 Economics and Industrial Organization
    - Year 3 of L116 Economics and Industrial Organization
    - Year 3 of L116 Economics and Industrial Organization
- UECA-4 Undergraduate Economics 4 Year Variants

- ◦ Year 4 of L103 Economics with Study Abroad
- ◦ Year 4 of LM1H Economics, Politics & International Studies with Study Abroad
- ◦ Year 4 of LM1H Economics, Politics & International Studies with Study Abroad
- UECA-LM1D Undergraduate Economics, Politics and International Studies
  - ◦ Year 3 of LM1D Economics, Politics and International Studies
  - ◦ Year 3 of LM1D Economics, Politics and International Studies
- Year 2 of UIPA-L8N1 Undergraduate Global Sustainable Development and Business
- Year 3 of UIBA-MN31 Undergraduate Law and Business Studies
- UIBA-MN32 Undergraduate Law and Business Studies
  - ◦ Year 3 of MN32 Law and Business Studies (Four-Year)
  - ◦ Year 4 of MN32 Law and Business Studies (Four-Year)
- UIBA-MN37 Undergraduate Law and Business Studies (Qualifying Degree) with Intercalated Year
  - ◦ Year 2 of MN37 Law and Business Studies (Qualifying Degree) with Intercalated Year
  - ◦ Year 5 of MN37 Law and Business Studies (Qualifying Degree) with Intercalated Year
- UIBA-MN35 Undergraduate Law and Business Studies with Intercalated Year (3+1)
  - ◦ Year 3 of MN35 Law and Business Studies with Intercalated Year (3+1)
  - ◦ Year 4 of MN35 Law and Business Studies with Intercalated Year (3+1)
- UIBA-MN36 Undergraduate Law and Business Studies with Intercalated Year (4+1)
  - ◦ Year 2 of MN36 Law and Business Studies with Intercalated Year (4+1)
  - ◦ Year 5 of MN36 Law and Business Studies with Intercalated Year (4+1)
- Year 3 of UMAA-GL11 Undergraduate Mathematics and Economics

This module is Unusual option for:

- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - ◦ Year 3 of V7ML Philosophy, Politics and Economics (Tripartite)
  - ◦ Year 3 of V7ML Philosophy, Politics and Economics (Tripartite)
  - ◦ Year 3 of V7ML Philosophy, Politics and Economics (Tripartite)

This module is Option list G for:

- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - ◦ Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)
  - ◦ Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)
  - ◦ Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)