Data and Analytics

Module description
Data and information are critical to the success of organisations. Organisations that manage information effectively can improve efficiency, be more responsive to market opportunities, achieve competitive advantage and operate more sustainably. As organisations seek to develop innovations and grow in a sustainable way, they are looking for better information to guide decisions. This module will explore the role of information and analytics in supporting the development of innovative, sustainable growth strategies and the practical techniques managers can use to design effective information flows.

This module aims to:
- Equip participants with the knowledge, understanding and skills to assess how emerging technologies affect business and society
- Make students understand key terms and concepts in data and information management and their application to a typical business situation
- Critically analyse complex, structured and unstructured data and information to promote actionable insights.

Learning outcomes
On completion of this module, students will be able to:
- evaluate and critically analyse how emerging technologies will affect business and society and the opportunities and risks that are associated with it
- understand key terms and concepts in data and information management and be able to relate these to a typical business situation
- critically evaluate current approaches used for collection, management, communication and analysis of commercial, operational and sustainability data, and how this data is used to support decision-making
- apply techniques to the analysis of a specific business challenge and use these to identify required information flows
- develop and use data visualisation techniques to share original content and insight with a general management audience
- demonstrate familiarity with analytical tools available for the analysis of numerical and textual data and use these to find, derive and evaluate information
- demonstrate familiarity with current developments and thinking in the information management industry, specifically around ‘big’ data management, analytics, cloud and visualisation techniques

Syllabus
- Emerging technologies – what they are, and how they impact business and society
- Data and information management in an organisational setting
- Data-driven decision making processes
- Design thinking techniques and their application
- Data analysis and visualisation techniques; numerical and textual data
- Current developments in information and data management

Learning and teaching methods
This module will be delivered by learning materials provided on the learning platform supplemented by readings. Tutor support will be available to students via phone, email, and a fortnightly seminar session.

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<thead>
<tr>
<th>Description of unit of assessment</th>
<th>Length/Duration</th>
<th>Submission date</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>End of module project</td>
<td>2,500 to 3,000 words</td>
<td>End of Unit 6</td>
<td>70%</td>
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<tr>
<td>Discussion forums x2</td>
<td>Up to 10 posts in each forum</td>
<td>End of Units 2 and 4</td>
<td>20%</td>
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<tr>
<td>Individual reflective journal</td>
<td>3 entries</td>
<td>End of Units 2, 4 and 6</td>
<td>10%</td>
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