Module Details

Module Title	Data Visualisation for Business Leaders (DL)
Module Code	OIM7051-A
Academic Year	2024/5
Credits	10
School	School of Management
FHEQ Level	FHEQ Level 7

Contact Hours

Type	Hours
Directed Study	70
Online Lecture (Synchronous)	14
Practical Classes or Workshops	14

Availability

Occurrence	Location / Period
DLA	University of Bradford / Non Standard Year

Module Aims

The module?s primary objective is to empower students with effective data visualization techniques, enabling them to make strategic decisions in diverse business contexts. By transforming intricate data into compelling visual representations, students learn to communicate insights persuasively. Moreover, the module emphasizes leadership capabilities in an increasingly data-driven world, recognizing the pivotal role of data-driven decision-making in today?s business landscape.

Outline Syllabus

Foundations of Data Visualization
* Introduction to data visualization and its importance in decision-making.
* Descriptive statistics for understanding data distributions.

Planning Effective Visualizations
* Strategies for designing impactful visualizations.
* Identifying target audiences and framing data inquiries.

Data Storytelling Principles
* Types of data narratives and how to structure them.
* Crafting compelling stories using visual elements.

Choosing the Right Charts
* Exploration of various chart types (bar charts, line charts, scatter plots, etc.).
* Guidelines for selecting appropriate charts based on data context.

Responsible Storytelling
* Ethical considerations in data visualization.
* Ensuring accuracy, transparency, and fairness.

Insights through Visual Storytelling
* Extracting meaningful insights from data graphics.
* Enhancing decision-making through visual narratives.

Dashboard Design and Accessibility
* Creating user-friendly dashboards for business leaders.
* Ensuring accessibility for diverse audiences.

Interactive Visualizations
* Building dynamic and engaging visualizations.
* Leveraging interactivity for deeper exploration.

Exploring Tools and Technologies
* Hands-on experience with tools like Tableau and D3.
* Understanding their capabilities and limitations.

Learning Outcomes	
Outcome Number	Description
O1	To build useful visualisations for different types of data sets and application scenarios
O2	To develop the ability to effectively communicate complex business data through visual representations, gaining proficiency in translating numerical information into clear and compelling visual messages.
O3	To evaluate and assess the ethical implications of visual storytelling in data presentation.
O4	To enhance the ability to interpret and communicate key findings and trends derived from data visualisations to diverse stakeholders within the business context.

Learning, Teaching and Assessment Strategy

Learning will be directed, supported, and reinforced through a combination of lectures, seminars, groupwork activities, presentations, online activities, as well as through personal research and directed and self-directed study. These activities will all be further supported through face-to-face engagement and through the virtual learning environment.

Directed study will specifically make use of the recommended reading, cases studies and videos, with interaction being maintained though on-line discussion boards and formative activities.

Delivery for the Executive will be using flipped classroom to embed the learning and show its relevance in the workplace.

To gain a firm understanding of the subject area and the key issues (as outlined in the syllabus) students will be required to access and engage with a variety of online resources (selected readings and video resources) a designated set text and a module study book that sets out guided reading, self-assessment exercises, case studies and links to additional resources. This relates to module learning outcomes 1 and 2.

The flipped classroom approach will allow students to reflect on their learning further applying key academic and practitioner based frameworks thereby gaining a critical understanding of the themes from the module. This relates to module learning outcomes 3-4.

Students have the opportunity to complete a formative assignment plan of their summative assessments, which will allow them to prepare for their final assessments. After completing a draft outline (up to 500 words) students receive collective feedback on their plans/outlines.

The group written assignment and group presentation assesses learning outcomes 1-3 and is designed to test students understanding of the subject and explores a number of areas within the module by applying their learning to real case contexts. The presentation specifically concerns their own professional settings, thus helps achieve learning outcome 4.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Coursework - Written	Group written report (3000 words)	70%
Summative	Presentation	Group presentation (Pre-recorded 7 minutes)	30%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.