

IB9WD-15 Pitfalls of Customer Data Analytics

27/28

Department

Warwick Business School

Level

Taught Postgraduate Level

Module leader

Iman Ahmadi

Credit value

15

Module duration

9 weeks

Assessment

20% coursework, 80% exam

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module explores how marketing and consumer-related decisions can be shaped, and sometimes distorted, by the way evidence, behaviour, and market signals are interpreted. It introduces students to a range of paradoxes, fallacies, and analytical misunderstandings that can lead to flawed judgement, even when decisions appear to be well supported by data, research, or established assumptions.

The purpose of the module is to develop a more critical and reflective approach to marketing decision-making by encouraging students to question apparently straightforward conclusions and to engage more carefully with patterns, comparisons, and interpretations. Through a combination of conceptual grounding and applied examples, the module highlights the importance of careful judgement in areas such as consumer insight, segmentation, targeting, and market analysis.

Module aims

To develop students' understanding of how marketing and consumer-related decisions are shaped by the interpretation of evidence, market signals, and behavioural patterns.

To introduce students to key paradoxes, fallacies, and analytical misunderstandings that can affect judgement in marketing and consumer contexts.

To encourage a more critical and reflective approach to apparently straightforward data, research findings, and managerial assumptions.

To strengthen students' ability to engage with core marketing concepts, such as segmentation, targeting, consumer insight, and market analysis, through a more questioning and analytically informed lens.

To help students recognise the limitations of simplified, aggregated, or intuitive interpretations when evaluating marketing and consumer-related issues.

To support students in developing a more rigorous and thoughtful approach to decision-making in contemporary marketing practice.

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 – Introduction: Why apparently sensible marketing decisions go wrong

Overview of the module, the role of judgement in marketing and consumer decision-making, and introduction to paradoxes, fallacies, and interpretive errors.

Week 2 – Segmentation, targeting, and the problem of hidden differences

How broad market-level conclusions can conceal meaningful variation across groups; introduction to segmentation and targeting through the lens of misinterpretation and oversimplification.

Week 3 – Simpson's paradox and the danger of aggregate evidence

How overall patterns can reverse when relevant subgroups are examined; implications for marketing analysis, campaign evaluation, and strategic decision-making.

Week 4 – Consumer behaviour, context, and misleading generalisations

How consumer behaviour can be misread when context, situation, or variation across individuals is overlooked; limits of "average consumer" thinking.

Week 5 – Correlation, causation, and false confidence in marketing insight

The risks of treating association as evidence of causal influence in areas such as brand perceptions, customer loyalty, campaign performance, and consumer response.

Week 6 – Framing, presentation, and the interpretation of evidence

How the presentation of information, comparisons, and performance metrics can shape judgement and lead to different conclusions from similar evidence.

Week 7 – Metrics, dashboards, and the illusion of clarity

Critical engagement with common marketing and consumer metrics; how simplified indicators can support decision-making but also hide important assumptions and trade-offs.

Week 8 – Bias, heuristics, and managerial judgement in marketing contexts

The role of cognitive shortcuts, selective attention, and intuitive reasoning in shaping marketing

and consumer-related decisions.

Week 9 – From insight to decision: applying critical judgement in marketing practice
Bringing the module together through applied reflection on how marketers can make more careful, critical, and responsible decisions in complex environments.

Learning outcomes

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

- Demonstrate knowledge and understanding of key paradoxes, fallacies, and interpretive challenges relevant to marketing and consumer-related decision-making, and explain their implications for areas such as segmentation, targeting, consumer insight, and market analysis.
- Critically assess apparently straightforward conclusions, question underlying assumptions, and develop more reflective and analytically informed interpretations of marketing and consumer-related issues.

Indicative reading list

[Reading lists can be found in Talis](#)

Subject specific skills

Apply relevant marketing and consumer behaviour concepts to interpret evidence, evaluate managerial claims, and identify potential weaknesses in the way data, patterns, and market signals are presented or understood.

Transferable skills

Communicate ideas clearly, engage in reasoned discussion, and work with qualitative and quantitative evidence in a more careful, critical, and structured way.

Study

Study time

Type	Required
Lectures	9 sessions of 1 hour (6%)
Other activity	18 hours (12%)
Private study	49 hours (33%)
Assessment	74 hours (49%)
Total	150 hours

Private study description

Private study to include preparation for lectures/ seminars/ workshops and own reading

Other activity description

9 x 2 hours (F2F) Practical class/workshop

Costs

No further costs have been identified for this module.

Assessment

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

Assessment group D

	Weighting	Study time	Eligible for self-certification
Assessment component			
Group Presentation – 20 minutes	20%	15 hours	No
Reassessment component			
1000 words			Yes (extension)
Assessment component			
2 hour exam	80%	59 hours	No
Answerbook Pink (12 page)			

Reassessment component is the same

Feedback on assessment

via my.wbs

[Past exam papers for IB9WD](#)

Availability

There is currently no information about the courses for which this module is core or optional.