IB964-15 Customer Analytics

26/27

Department
Warwick Business School
Level
Taught Postgraduate Level
Module leader
Roland Kassemeier
Credit value
15
Module duration
9 weeks
Assessment
100% coursework
Study location
University of Warwick main campus, Coventry

Description

Introductory description

Businesses today have unprecedented access to information about their customers. However, many businesses fail to use this information to generate meaningful insights about the behaviour of their customers. The consequence is that these businesses fail to exploit opportunities for value creation, and improving their financial performance.

Module aims

This module is inspired by the idea that 'It's not the size of the data, it's how you use it'.

Hence, the principal aim of this module is to challenge students' thinking about the appropriate and inappropriate use of customer data for strategic decision-making including ethical issues involved in handling and using data.

Using real-world cases as context for data analyses, we will discuss good and bad practices for how to derive meaningful insights from data. Examples include comparing data for different groups of customers, finding clusters of customers, and how to analyse relationships between different types of customer data.

Students will not only improve their theoretical understanding of empirical methods, but will also learn how to apply these methods in the widely-used software R.

Once these insights have been generated, it is also important to know how to use graphical representations of these insights for story-telling in business presentations. Accordingly, this module will also place great emphasis on good practices in the context of presentations with data.

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.

This topic is a dynamic and expanding field and the syllabus will reflect that dynamism. Typically (but not exclusively) it would cover the following:

Part 1: Customer Analytics and Business Performance
1.1 What is Customer Analytics?
1.2 How can Customer Analytics help to improve business performance?

Part 2: Customer Analytics Methods and how to apply them
2.1 Introduction to the Software R
2.2 Fundamentals of Customer Data Analysis:
a) Describing Data
b) Studying Relationships between different types of customer information
2.3 Advanced Marketing Applications:
a) How to segment customers,
b) choice modelling;
c) structural models;
d) artificial intelligence and machine learning;

Part 3: Sharing your insights with others
3.1 Using graphs for storytelling

Learning outcomes

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

- Demonstrate a comprehensive understanding of the central and essential premises of customer analytics, and critically evaluate its role, usefulness and applicability in a business context.
- Demonstrate a comprehensive understanding of the different customer analytics tools such as customer segmentation, choice modelling,the identification of relationships between different types of customer information, and machine learning techniques.
- Demonstrate developed analytical skills through the evaluation of cases.
- Conduct effective research and synthesise logical arguments
- Critically evaluate data collection practices in businesses from a customer analytics perspective
- Demonstrate a comprehensive understanding of the importance of customer analytics for value creation in business-customer relationships

Indicative reading list

Reading lists can be found in Talis

Research element

Students learn how to conduct quantitative analyses in research projects

Interdisciplinary

Statistical knowledge and skills can be applied to other contexts

International

Application of international contexts

Subject specific skills

Apply and implement a broad range of marketing analytics methods in the software R
Deploy graphics to communicate customer analytics insights effectively to third parties
Evaluate the appropriateness of different customer analytics techniques in specific contexts and the value of market research insights generated by third parties

Transferable skills

Written communication skills
Verbal communication skills.
Problem solving skills (both theoretically, and when it comes to the programming implementation of a selected method).
Work within a team to analyse issues and propose solutions.

Study

Study time

Type	Required
Lectures	9 sessions of 1 hour (6%)
Online learning (scheduled sessions)	(0%)
Other activity	21 hours (14%)
Private study	48 hours (32%)
Assessment	72 hours (48%)
Total	150 hours

Private study description

Self study is pre-reading for lectures and workshops

Other activity description

9 x 2 hrs F2F workshops
3 hrs presentations

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 A5

	Weighting	Study time	Eligible for self-certification
Assessment component			
Group Presentation	20%	15 hours	No
Reassessment component			
Individual assignment			Yes (extension)
Assessment component			
Individual Assignment	80%	57 hours	Yes (extension)
Reassessment component is the same			

Feedback on assessment

Assignments are graded (%) using standard University Postgraduate Marking Criteria and written feedback is provided.

Availability

Courses

This module is Optional for:

- Year 1 of TIBS-N1F5 Postgraduate Taught Business and Finance
- Year 1 of TIBS-N1F2 Postgraduate Taught Business with Consulting
- Year 1 of TIBS-N1F3 Postgraduate Taught Business with Marketing
- Year 1 of TIBS-N1QG Postgraduate Taught Business with Operations Management
- Year 1 of TIBS-N1F4 Postgraduate Taught International Business (MINT)
- TIBS-N2N3 Postgraduate Taught Management
    - Year 1 of N2N3 Management
    - Year 1 of N2N4 Management (Elite Sports Management)