

Module 3

6.3.1. Business Policy with Data Analytics

Module title	Business Policy with Data Analytics
Module NFQ level (only if an NFQ level can be demonstrated)	9
Module number/reference	PGDAF03
Parent programme(s)	Post Graduate Diploma in Accounting and Financial Services
Stage of parent programme	
Semester (semester1/semester2 if applicable)	Semester 1
Module credit units	ECTS
Module credit number of units	10
List the teaching and learning modes	Lectures, Tutorials, Guided blended learning, Self and Peer-directed learning.
Entry requirements (statement of knowledge, skill and competence)	This is an <i>ab initio</i> module, though students will have met the minimum entry requirements and RPL criteria for the parent programme.
Pre-requisite module titles	N/A
Co-requisite module titles	N/A
Is this a capstone module? (Yes or No)	No
Specification of the qualifications (academic, pedagogical and professional/occupational) and experience required of staff (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)	The lecturer for this module is required to have a level 9 qualification in Business or a cognate discipline, relevant industry experience, as well as a track record of teaching in a higher education institution.
Maximum number of learners per centre (or instance of the module)	40.
Duration of the module	One Academic Semester, 12 Weeks Teaching.
Average (over the duration of the module) of the contact hours per week	6
Module-specific physical resources and support required per centre (or instance of the module)	One classroom with capacity of 40 and a number of smaller classrooms for tutorials.

Analysis of required learning effort										
Effort while in contact with staff										
Classroom and demonstrations		Mentoring and small-group tutoring		Other (specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
48	1:40	24	1:20				178			250
Allocation of marks (within the module)										
				Continuous assessment		Supervised project	Proctored practical examination	Proctored written examination	Total	
Percentage contribution				100 %					100%	

6.3.2 Module aims and objectives

The aim of this module is to develop the learners' ability to evaluate and select policies appropriate to business organisations. This will involve an analysis of the impacts of the external operating environment and the need to plan organisational policies to ensure effective business performance. Policy is concerned with the *long term direction* of an organisation. A critical appraisal of strategic policy implementation issues including the use and application of Data Analytics and their use as a strategic policy tool in the organisation.

OBJECTIVES

To successfully complete this module the learner must be able to:

- A. Analyse how the business environment is considered in strategy formulation. Explain how strategic priorities vary by level, corporate, business and operational. Describe the characteristics of strategic policy decisions
- B. Understand the process of strategic planning and how these can lead to competitive strategies of organisations and creating competitive advantage
- C. Examine approaches to strategy evaluation and selection including environment based motives, capability based motives and expectation based motives in addition to using the SAF framework.

- D. Analyse how strategy implementation is realized, from organising for success, through to the organisations overall strategy and the relationship between IT and people, information, finance and technology

6.3.3 Minimum intended module learning outcomes

On the successful completion of this module, students should be able to:

- MIMLO 3.1** Define and discuss the role of strategic planning in business and enumerate a variety of key theoretical approaches to business strategy with particular emphasis on financial services.
- MIMLO 3.2** Demonstrate a critical understanding of strategy formulation, its ethical dimensions, and the impact of both external environmental factors and internal conditions.
- MIMLO 3.3** Critically analyse specific case studies and propose informed solutions for the strategic development of financial services organisations.
- MIMLO 3.4** Critically appraise strategic implementation issues and identify and evaluate some of their associated problems and challenges.
- MIMLO 3.5** Discuss the theoretical foundation of data analytics that determine decision making processes in management or business environments. Apply a range of descriptive analytic techniques to convert data into actionable insight using a range of statistical techniques.
- MIMLO 3.6** Investigate a range of predictive analytic techniques to discover new knowledge for forecasting future events. Demonstrate prescriptive analytic methods for finding the best course of action

6.3.4 Module content, organisation and structure

Indicative Syllabus:

Strategy Formulation

- *Strategic contexts and terminology*: role of strategy, missions, visions, strategic intent, objectives, goals, core competencies, strategic architecture, strategic control

- *Stakeholder analysis*: stakeholder significance grid, stakeholder mapping
- *Environment auditing*: Political, Economic, Socio-cultural, Technological, Environmental and Legal analysis (PESTEL), Porter's 5 force analysis, the threat of new entrants, the power of buyers, the power of suppliers, the threat of substitutes, competitive rivalry and collaboration
- *Strategic positioning*: the Ansoff matrix, growth, stability, profitability, efficiency, market leadership, survival, mergers and acquisitions, expansion into the global market place
- *The organisational audit*: benchmarking, TOWS analysis, product positions, value-chain analysis, demographic influences, scenario planning, synergy culture and values

Strategic Planning

- *Strategic thinking*: future direction of the competition, needs of customers, gaining and maintaining competitive advantage, Ansoff's growth-vector matrix, portfolio analysis
- *Planning systems*: informal planning, top-down planning, bottom-up planning, behavioural approaches
- *Strategic planning issues*: impact on managers, targets, when to plan, who should be involved, role of planning
- *Strategic planning techniques*: BCG growth-share matrix, directional policy matrices.

Strategy Evaluation and Selection

- *Market entry strategies*: organic growth, growth by merger or acquisition, strategic alliances, licensing, franchising
- *Substantive growth strategies*: horizontal and vertical integration, related and unrelated diversification
- *Limited growth strategies*: do nothing, market penetration, market development, product development, innovation
- *Disinvestment strategies*: retrenchment, turnaround strategies, divestment, liquidation
- *Strategy selection*: considering the alternatives, appropriateness, feasibility, desirability

Strategy Implementation

- *The realisation of strategic plans to operational reality*: communication – selling the concepts, project teams, identification of team and individual roles, responsibilities and targets, programme of activities, benchmark targets at differing levels of the organisation
- *Resource allocation*: finance, human resources, materials, time
- *Review and evaluation*: an evaluation of the benchmarked outcomes in a given time period of corporate, operational and individual targets.

Data Analytics

- data analytic terminologies, types of data analytics, data exploration and visualisation, understanding data with descriptive, predictive and prescriptive analytics.
- Population, sample, categorical data, nominal data, ordinal data, continuous data, discrete data etc.
- Types of data analytics: Descriptive data analytics, predictive data analytics and prescriptive data analytics. Exploratory data analysis (EDA): Variable identification, univariate and bivariate analysis, missing values treatment, etc. Data visualisation: Graphs, charts, plots.

- Measures of central tendency, measure of position and measures of dispersion. Probability distribution: Cumulate distribution, discrete distribution, continuous distribution. Sampling and estimation: Random sampling, systematic sampling, point estimate.
- Investigate a range of predictive analytic techniques to discover new knowledge for forecasting future events Regression analytics: Linear regression, multiple linear regression and logistic regression. Forecasting techniques: Qualitative, average approach, naïve approach, time series methods, causal relationship.
- Demonstrate prescriptive analytic methods for finding the best course of action for a situation Optimisation: Classical optimisation, linear programming techniques, nonlinear programming techniques, dynamic programming. Decision analysis: Models, justifiable decisions and defensible decisions.

6.3.5 Reading lists and other information resources

Title	Author	Publisher	Year
Essential:			
Exploring Strategy, Text and Cases	Angwin, D., Johnson,G., Scholes, K., and Whittington, R.	Prentice Hall	2019
Strategic Management & Business Policy: Globalisation, Innovation and Sustainability, 15 th Ed.	Wheelan,Thomas,L.,Hunger, David,J.,Hoffma,Alan,N.,Bamford,Charles,E.	Pearson	2018
Strategic Business Leader		BPP Learning Media	2021 and Annually
Business Policy: Managing Strategic Processes. 8 TH Ed.	Bower, Joseph L., Hugo E.R. Uytterhoeven, and Richard E. Walton.	Homewood, IL: Irwin, 1995.	2009
Business Analytics. 2 nd Ed.	Evans, J.	Pearson	2016
Data Analytics: Models and Algorithms for Intelligent Data Analysis. 2nd Ed..	Runkler, T.	Vieweg+Teubner Verlag - eBook	2016

REFERENCE:

Journals:

Journal of Strategic Management
 Journal of Strategic Change Management
 International Journal of Strategic Management
 Strategic Management Society - Publications
 Journal of General Management
 International Journal of Data Analytics
 Journal of Data Analysis
 International Journal of Business & Data Analytics
 Journal of Big Data

Case Studies:

Harvard Business Review Case Studies
European Case Clearing House CODIS
Darden Case Collection
FT McCarthy

Websites:

<http://sloanreview.mit.edu> (Sloan Management)
<http://harvardbusinessonline.hbsp.harvard.edu>
www.mckinseyquarterly.com
www.strategy-business.com
www.lfd.uci.edu University of California, Irvine "Binaries for Python Extension Packages"
www.cran.r-project.org The R Project for Statistical Computing
www.knime.org Konstanz Information Miner "KNIME"
www.mindtools.com

Professional Magazines

Financial Management (CIMA)
Student Accountant (ACCA)
Accounting and Business ACCA
Accountancy Plus (CPA)
Accountancy Ireland (ICAI)
Analytics Journal
Analytics Insight Magazine