

H9SDM : Science of Decision Making

Module Code:	H9SDM
Long Title	Science of Decision Making APPROVED
Title	Science of Decision Making
Module Level:	LEVEL 9
EQF Level:	7
EHEA Level:	Second Cycle
Credits:	5
Module Coordinator:	COLETTE DARCY
Module Author:	Isabela Da Silva
Departments:	School of Business
Specifications of the qualifications and experience required of staff	
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
#	Learning Outcome Description
LO1	Demonstrate critical knowledge and understanding of the models which underlie participants own and others' judgement and decision-making processes, including the distinction between System 1 and System 2 thinking.
LO2	Critically analyse and evaluate the psychology of decision making and its relevance to business decision making and application to real world contexts.
LO3	Demonstrate a critical awareness of decision-making models under risk and the role of heuristics and cognitive biases in individual decision making.
LO4	Critically assess group decision making dynamics.
LO5	Self-reflect on personal decision-making processes and seek to identify way of improving both personal and business decision making processes.
Dependencies	
Module Recommendations	
No recommendations listed	
Co-requisite Modules	
No Co-requisite modules listed	
Entry requirements	There are no additional entry requirements for this module. The programme entry requirements apply. No pre-requisites or co-requisites apply.

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Module Content & Assessment			
Indicative Content			
The Psychology of Decision-Making: What is a decision? How do we make decisions? Thinking processes and modes of thought (System 1 and 2) Rationality, bounded rationality and intuition Perception Memory and context Cognitive Neuroscience of Decision-Making			
Modes of decision-making under risk Expected Utility Theory (EUT) Prospect Theory Implications for effective decision-making			
Heuristics and common cognitive biases in individual decision-making Availability of heuristics and bounded awareness Representativeness heuristics Confirmation heuristics Framing, social preferences and ethics in decision-making Motivational and emotional influences on individual decision-making Intertemporal choice and decisions about the future (discounted utility model) Risk perception and risk communication			
Group Decision-Making Common traps in decision-making Overconfidence Group think Theories of the Entrepreneurial Firm Characterizing the New and Developing Firm Contemporary Theories in understanding Enterprise Management Considering how small firms can gain competitive advantage against large firms			
Improving Decision-Making Debasing techniques Choice architecture and nudges			
Assessment Breakdown			%
Coursework			60.00%
End of Module Assessment			40.00%
Assessments			
Full Time			
Coursework			
Assessment Type:	Continuous Assessment	% of total:	60
Assessment Date:	n/a	Outcome addressed:	1,2,3,4,5
Non-Marked:	No		
Assessment Description: Reflective Journal – 15% Learners are required to produce a journal which reflects on their own and others thinking processes, biases and way that they can be improved Group Report – 30% Learners are required to work in groups of no more than four to produce a 2,000 word report on the topic of 'Are groups smarter than individuals? Group Presentation – 15% Identify an issue/problem and work through the stages of the decision making process.			
End of Module Assessment			
Assessment Type:	Terminal Exam	% of total:	40
Assessment Date:	End-of-Semester	Outcome addressed:	1,2,3,4
Non-Marked:	No		
Assessment Description: Students are required to sit an end of module examination which will cover all the learning outcomes of the module. The students will be given different types of questions ranging from straight forward calculations to the interpretation of accounts.			
No Workplace Assessment			
Reassessment Requirement			
Repeat examination <i>Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.</i>			
Reassessment Description The students overall marks are a combination of both the CA and the terminal examination. An overall fail across both elements requires that the student attempt the repeat exam sitting. Should they fail this element then they must repeat the module. Where a student fails the CA element of the module, the lecturer may offer that learner the opportunity to sit a second case study however this will be capped at 40%.			

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Module Workload				
Module Target Workload Hours 0 Hours				
Workload: Full Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	Classroom and demonstrations	30	Per Semester	2.50
Directed Learning	Directed e-learning	30	Per Semester	2.50
Independent Learning	Independent learning	65	Per Semester	5.42
Total Weekly Contact Hours				5.00

Module Resources

Recommended Book Resources

Benjamin R. Newell, David A. Lagnado, David R. Shanks. (2022), Straight Choices, 3rd. Psychology Press, p.360, [ISBN: 9781032267845].

Gazzaniga MS, Ivry RB, Mangun GR, 2019. Cognitive Neuroscience: The Biology of the Mind, Fifth Edition. Chapter 12.4, Decision Making. W.W. Norton & Company.

Hodgkinson GP, Sadler-Smith E, Burke LA, et al, 2009. Intuition in organizations: Implications for strategic management. Long Range Planning.

Kahneman D, 2011. Thinking Fast and Slow: Penguin.

Kahneman D and Tversky A, 1979. Prospect theory: an analysis of decision under risk. Econometrica 47(2): 263-291.

Plous, S, 1993. The psychology of judgment and decision-making. McGrawHill.

Thaler RH and Sunstein CR, 2008. Nudge. Improving decisions about health, wealth, and happiness: Yale University Press.

This module does not have any article/paper resources

This module does not have any other resources

Discussion Note: