H9INN1: Innovation I

Module Code:	H9INN1
Long Title	Innovation I APPROVED
Title	Innovation I
Module Level:	LEVEL 9
EQF Level:	7
EHEA Level:	Second Cycle
Credits:	5
Module Coordinator:	Victor Del Rosal
Module Author:	Victor Del Rosal
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	

Learning Outcomes

On successful completion of this module the learner will be able to:

#	Learning Outcome Description
LO1	Assess the attractiveness of business opportunities using commonly accepted innovation methodologies such as the lean canvas and the business model canvas.
LO2	Appraise sources of significant competitive advantage including proprietary knowledge and algorithms to create innovative solutions with a focus on the value added to customer segments.
LO3	Design and validate the conceptual business model that addresses a relevant gap in the market, using commonly accepted approaches such as the lean canvas and the business model canvas.

Dependencies

Module Recommendations

67498	H9INN1	Innovation I

Co-requisite Modules

No Co-requisite modules listed

Entry requirements	

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Module Content & Assessment

Indicative Content
Defining Innovation. Innovator mindset and skillset; introduction to Innovation methodologies Empathy. User-centric design. 4 C's and 21st Century skills. Contrast and comparison of the lean canvas and the business model canvas. ISO 56002 Innovation Management System
The Lean canvas and Emerging technologies and Types of Innovation Lean canvas (9 sections). Emerging technologies. Social and economic change and opportunities
Customer Segmentation Ethnographic research. User-centric analysis . Customer persona. Customer/user journey. Price sensitivity analysis. Ethical Considerations of Customer Segmentation
Problem definition Root cause analysis. Customer/problem fit. Urgency of pain points. Industry and trend analysis
Creative Idea Generation Idea generation tool. Problem/emerging technology matrix. VC investment trends and priorities. Industry forecast analysis
Unique Value Proposition Features vs. benefits comparison. Benefit vs. technology matrix
Early adopters value mapping Early adopter value matrix. Priority customer/user map. Early adopter vs. early majority feature and benefit analysis
Solution Feature design. Feature prioritisation . Emerging technology landscape. Solution benchmarking
Business Model Business Model Archetypes. Assessing financial viability and attractiveness. Competitor benchmarking
Minimum Viable Product Types of MVPs. Key validation goals . MVP hypothesis design
Unfair Advantage and Organisational innovation readiness Sources of competitive advantage. Intellectual Property. Organising for innovation
Final Presentations Dragon Dens type format

Assessment Breakdown	%
Coursework	100.00%

Assessments

Full Time

Coursework

Assessment Type:	Formative Assessment	**% of total:**	Non-Marked
Assessment Date:	n/a	**Outcome addressed:**	1,2,3
Non-Marked:	Yes		

Assessment Description:
Formative assessment will be provided on the in-class individual or group activities. Feedback will be provided in written or oral format, or on-line through Moodle. In addition, in class discussions will be undertaken as part of the practical approach to learning.

Assessment Type:	Formative Assessment	**% of total:**	Non-Marked
Assessment Date:	Week 4	**Outcome addressed:**	1,2,3
Non-Marked:	Yes		

Assessment Description:
Problem Definition and Customer Segmentation exercise. Goal: identify an attractive customer segment-problem combination to address. Following the lean canvas and market segmentation methodologies this submission will concentrate on identifying a highly focused (hyper-focused) customer segment and a highly urgent problem to solve for.

Assessment Type:	Assignment	**% of total:**	40
Assessment Date:	Week 6	**Outcome addressed:**	1
Non-Marked:	No		

Assessment Description:
This is an initial proposal that must address the first 3 sections of the lean canvas (customer segment, problem definition and solution architecture) as well as other key elements of the business model.

Assessment Type:	Project	**% of total:**	60
Assessment Date:	Week 12	**Outcome addressed:**	1,2,3
Non-Marked:	No		

Assessment Description:
Minimum Viable Product (MVP) document and presentation. This presentation is an expanded and annotated version of the final (Dragons' Den) slide deck presentation. It must address the first 5 sections of the lean canvas as well as other key elements of the business model. Key criteria for marking include urgency of customer needs, technical feasibility. Financial viability is not assessed at this stage. The project document is marked with the corresponding sections of the innovation marking rubric. Appropriate referencing must be followed.

No End of Module Assessment

No Workplace Assessment

Reassessment Requirement

Repeat examination
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.

Reassessment Description
If a pass grade is not achieved, learners must undertake a continuous assessment that assesses all learning outcomes. The repeat submission will be a 100% assignment or project. This may be the submission of the Minimum Viable Product (MVP) slide deck. This is an expanded and annotated version of the slide deck presentation, addressing the first 5 sections of the lean canvas. A live pitch will not be necessary, only a report submission will be required.

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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 & Demonstrations (hours)	24	Every Week	24.00
Tutorial	Other hours (Practical/Tutorial)	24	Every Week	24.00
Independent Learning	Independent learning (hours)	77	Every Week	77.00
			Total Weekly Contact Hours	48.00

Module Resources

Recommended Book Resources

Ash Maurya. (2012), Running Lean, "O'Reilly Media, Inc.", p.207, [ISBN: 1449305172].

Victor Del Rosal. (2015), Disruption, CreateSpace, p.184, [ISBN: 1514173948].

Peter Thiel,Blake Masters. (2015), Zero to One, Virgin Books, p.210, [ISBN: 0753555204].

Michael Lewrick,Patrick Link,Larry Leifer. (2018), The Design Thinking Playbook, John Wiley & Sons, p.352, [ISBN: 9781119467472].

Supplementary Book Resources

Adam M. Grant,Sheryl Sandberg. (2016), Originals, Viking, p.322, [ISBN: 0525429565].

Andrew Romans. (2013), THE ENTREPRENEURIAL BIBLE TO VENTURE CAPITAL: Inside Secrets from the Leaders in the Startup Game, McGraw Hill Professional, p.256, [ISBN: 0071830359].

Clayton M. Christensen. (2016), The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail, [ISBN: 1633691780].

This module does not have any article/paper resources

Other Resources

[Website], ISO. (2019), Shape a new future with innovation management standards, https://www.iso.org/news/ref2414.html

[Website], World Economic Forum: Outlook on the Global Agenda, https://www.weforum.org/agenda/global/

[Website], McKinsey Global Institute Technology and Innovation Research, https://www.mckinsey.com/mgi/our-researc h/technology-and-innovation

[Website], Gartner Hype Cycle 2019, https://www.gartner.com/smarterwithgartn er/gartner-top-10-strategic-technology-t rends-for-2019/

[Website], Gartner's Top 10 Strategic Technology Trends, http://www.gartner.com/technology/resear ch/top-10-technology-trends/

[Website], MIT Tech Innovation Resources, https://innovation.mit.edu/resources/?wh o=graduate&what=acceleratorincubator -graduate,courses-graduate,hackathonidea tion-sessions-graduate,student-club-grad uate

Discussion Note:	