Module Outline
ECF on Fintech
Module 3 "Fintech Practicum"

Benchmarked HKQF Level:	5
No. of Credits:	20
Total Notional Learning Hours:	200
a) Class contact hours:	*15 hours (3-hour per session x 5)*
b) Self-study hours:	*182 hours*
c) Assessment hours:	*3 hours*
Pre-requisite:	NA

Module Objective

The module aims to introduce the basic concepts, methods, and approaches of data analytics in Fintech with various quantitative analysis techniques in developing analytical data models to support decision-making; to introduce the latest trend of technologies adoption, customers centric and testing methodologies in design and development of Fintech products in banking related services; to provide learners the fundamentals on Fintech project management and reporting, and equips students with knowledge and skills needed for the management of the processes, risks and compliance issues on the Fintech transformation project in Hong Kong.

Module Intended Outcomes (MIOs) & Units of Competencies (UoCs)

Upon completion of the Module 3, candidates should be able to:

MIOs	Intended Outcomes / Competence	*Unit of Competencies (UoCs)
MIO-1	Conduct business analytics, milestone monitoring, and stakeholder communication for Fintech projects.	109583L5 107442L5 109389L5 109581L5
MIO-2	Apply the essential principles and industry standards of Fintech product design and development cycle fundamentals, including methodology selection and criteria evaluation.	

**Note: For the details of the UoCs, please refer to the Specification of Competency Standards (SCS) of Retail Banking and Corporate & Commercial Banking which were developed by HKCAAVQ.*

Assessment Activity

Examination duration:	3 hours
Examination format:	Session A: Multiple Choice Questions (MCQ) with 50 questions Session B: 2 out of 3 Short Questions
Pass mark:	60% (Combined Mark for both sections)

Syllabus

Chapter 1: Business Analysis for Fintech Projects	
1.1	**Problem framing: Using accounting and finance data to frame questions**
1.2	**Master the data: An introduction to accounting and finance data**
1.3	**Master of data: preparing the data for analysis**
1.4	**Perform the analysis (QDAR) – Descriptive analytics**
1.5	**Perform the analysis (QDAR) – Diagnostic analytics**
1.6	**Perform the analysis (QDAR) – Predictive analytics**
1.7	**Perform the analysis (QDAR) – Prescriptive analytics**
1.8	**Communicate the results: Data visualisation and report**
Chapter 2: Fintech Product Design and Development	
2.1	**Fintech development in banking industry**
2.1.1	- The Bali Fintech Agenda of World Bank / IMF, and FintTech development in banks
2.2	**New technologies adopted in Fintech applications**
2.2.1	- Basics of the advanced technologies (technology sensing / biometrics, AI / ML, big data, NLP, Blockchain)
2.2.2	- Applications of the advanced technologies in banking products
2.2.3	- Lab: Basics of Blockchain technology and how payments are transacted on Blockchain (Eth.build sandbox)
2.3	**Fintech product design**
2.3.1	- Digital services in banking
2.3.2	- Design essentials of Fintech products
2.3.3	- Introduction of systems architecture
2.3.4	- Lab: UX design of an application mock-up (pencil project)
2.4	**Fintech product development**
2.4.1	- Product development tools
2.4.2	- Development & user research strategies
2.4.3	- Testing methodologies and strategy

Chapter 3: Fintech Project Management and Reporting	
3.1	**Fundamentals of Fintech project management**
3.1.1	- Overview
3.1.2	- Linkage with product management
3.1.3	- System for value delivery
3.1.4	- Fintech project management principles
3.1.5	- Fintech project performance domains
3.1.6	- Fintech project development approaches
3.2	**Stakeholder management**
3.2.1	- Stakeholder management framework
3.2.2	- Stakeholder engagement steps
3.2.3	- Stakeholder communication
3.2.4	- Stakeholder satisfaction measurement
3.2.5	- Key stakeholder – customers
3.2.6	- Key stakeholder – regulators
3.2.7	- Key stakeholder – Fintech project team
3.3	**Cross-functional coordination**
3.3.1	- Planning
3.3.2	- Project Work
3.3.3	- Delivery
3.3.4	- Measurement and reporting
3.4	**Agile methodologies**
3.4.1	- Agile Manifesto and 12 principles
3.4.2	- Agile methodologies overview
3.4.3	- Lean
3.4.4	- Kanban
3.4.5	- Scrum
3.4.6	- eXtreme programming (XP)
3.4.7	- Other agile methodologies
3.5	**Contemporary cases and issues on Fintech project management**
3.5.1	- Selection of approaches / models
3.5.2	- Selection of Approaches – The APP case
3.5.3	- Managing uncertainties and risks

3.5.4	- Fintech project failure – The “ABC” case

Recommended Readings

Essential Readings:

1. HKIB Course Notes of ECF-Fintech Module 3 Fintech Practicum. (2022).
2. Project Management Institute. (2021). A guide to the project management body of knowledge (PMBOK® Guide) and the standard for project management (7th ed.). Project Management Institute.

Supplementary Readings

1. Bañuls, V. A., López, C., Turoff, M., & Tejedor, F. (2017). Predicting the impact of multiple risks on project performance: A scenario-based approach. Project Management Journal, 48(5), 95–114.
2. Basten, D., Stavrou, G., & Pankratz, O. (2016). Closing the stakeholder expectation gap: Managing customer expectations toward the process of developing information systems. Project Management Journal, 47(5), 70–88.
3. Copola Azenha, F., Aparecida Reis, D., & Leme Fleury, A. (2021). The role and characteristics of hybrid approaches to project management in the development of technology-based products and services. Project Management Journal, 52, 90–110.
4. Hobbs, B. & Petit, Y. (2017). Agile methods on large projects in large organizations. Project Management Journal, 48(3), 3–19.
5. Hong Kong Monetary Authority (2017, November 28). Fintech supervisory chatroom.
6. Hong Kong Monetary Authority (2021, July 29). Supervisory policy manual. CG-5 Guideline on a sound remuneration system
7. Hong Kong Monetary Authority. (2016, September 6). Fintech supervisory sandbox (FSS).
8. Huo, X., Zhang, L., & Guo, H. (2016). Antecedents of relationship conflict in cross-functional project teams. Project Management Journal, 47(5), 52–69.
9. Jinasena, D. N., Spanaki, K., Papadopoulos, T., & Balta, M. E. (2020). Success and failure retrospectives of fintech projects: A case study approach. Information Systems Frontiers, 1-16.
10. OECD. (2020, 26 February). Digital Disruption in financial markets. https://www.oecd.org/daf/competition/digital-disruption-in-financial-markets.htm
11. Recker, J., Holton, R., Hummel, M., & Rosenkranz, C. (2017). How agile practices impact customer responsiveness and development success: A field study. Project Management Journal, 48(2), 99–121.
12. Richardson, Teeter & Terrell, McGraw-Hill (2019). Data Analytics for Accounting. McGraw Hill.
13. Richardson, Teeter & Terrell, McGraw-Hill (2020). Introduction to Data Analytics for Accounting. McGraw Hill.
14. Tereso, A., Ribeiro, P., Fernandes, G., Loureiro, I., & Ferreira, M. (2019). Project management practices in private organizations. Project Management Journal, 50, 6–22.

15. World Bank (2020, April). Digital Financial Services. https://pubdocs.worldbank.org/en/230281588169110691/Digital-Financial-Services.pdf
16. World Bank (October 11, 2018). The Bali Fintech Agenda: A blueprint for successfully harnessing Fintech's opportunities. https://www.worldbank.org/en/news/press-release/2018/10/11/bali-fintech-agenda-a-blueprint-for-successfully-harnessing-fintechs-opportunities
17. Yousif Abdullatif Albastaki, Anjum Razzaque, Adel M. Sarea (2020), Innovative Strategies for Implementing FinTech in Banking. IGI Global.

Further Readings

1. Gemino, A., Reich, B. H., & Serrador, P. M. (2021). Agile, Traditional, and Hybrid Approaches to Project Success: Is Hybrid a Poor Second Choice? Project Management Journal, 52, 161–175.
2. Global Financial Innovation Network (2019). GFiN – one year on: The global financial innovation network reflects on its first year.
3. Global Financial Innovation Network (2020). GFiN – cross-border testing lessons learned: The global financial innovation network reflects on the cross-border testing pilot.
4. Liu, J. Y.-C. & Yuliani, A. R. (2016). Differences between clients' and vendors' perceptions of IT outsourcing risks: project partnering as the mitigation approach. Project Management Journal, 47(1), 45–58.