QQI
Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Independent Panel Report
on a Programme Review

Provider	Dublin Business School
Programme(s) Reviewed	Diploma in Big Data for Business
Date of Panel Event	27/04/2022 (conducted online)

Independent Panel Members

Name	Role	Affiliation
Dr. Therese Moylan	Chair	**Head of Department of Entrepreneurship,** Institute of Art, Design and Technology (IADT)
Dr. Christopher McLaughlin	Subject Matter Expert	**Course Director: BSc (Hons) in Business Analytics and BSc (Hons) in Business Information Systems** Ulster University Business School
Dr. Nigel McKelvey	Subject Matter Expert	**Head of Department of Early Education and Social Studies; Lecturer in Computing** Atlantic Technological University (formerly Letterkenny IT)
Craig Smoothey	Industry Representative	**Senior Big Data Engineer** The Stars Group
Anastasia Potyagalova	Learner Representative	**PhD Student** Dublin City University
Sam Whelan	Secretary	**Programme Development Executive and Learning Technologist** Griffith College

All members of the independent panel declared their independence of Dublin Business School and that they have no conflict of interest.

Part 1.   Introduction

The scope of the review encompassed the Diploma in Big Data for Business (60 ECTS credits) delivered by Dublin Business School. The programme is at level 7 on the National Framework of Qualifications (NFQ). The programme is delivered on a part-time basis, across three semesters within a calendar year (12 months). This review is presented to Quality and Qualifications Ireland (QQI) as part of the College's proposal for the re-validation of the programme for a further five-year period, commencing in September 2022.

Part 2.   Evaluation Process

2.1   Documents Supplied to the Panel

	Document Type	Document Name
1.	Agenda and Terms of Reference	Agenda and Terms of Reference
2.	Key Documents	• Programme Review Report • Proposed Programme Document • Module and Assessment Document • Programme Team CVs • Programme Handbook • Teaching and Learning Programme Strategy • DBS Cover Letter Declaration • DBS Self Evaluation Report
3.	Support Documents	• Programme Leader Reports • Learner Feedback Documents • External Examiner Reports • Exam Papers • Enrolment, Progression and Graduation Data and Analysis • Certificate of Validation • Class Rep meeting minutes
4.	Governance Information	• QQI Criteria and Handbook • PEL Refund Arrangements • DBS Deed of Guarantee
5.	Legacy Documents	• IER Diploma in Big Data 2017 • DBS Diploma in Big Data Revised Document 2017

2.2   Provider's Representatives Met

	Person	Role / Job Title
1.	Andrew Conlan-Trant	DBS President
2.	Tony Murphy	Academic Dean
3.	David Williams	Academic Director
4.	Emma Balfe	Head of Teaching Delivery and Content Production
5.	Shane Mooney	Head of Student Experience
6.	Lori Johnston	Registrar
7.	Grant Goodwin	Assistant Registrar
8.	Gracie Mooney	Academic Programmes Manager, DBS note-taker
9.	Anita Dwyer	Faculty Manager
10.	Sarah Sharkey	Student Engagement Officer
11.	Marina Nunes	Head of Reader Services (Library)
12.	Darragh Breathnach	Head of Academic Operations

13.	Seamus Coogan	Head of Content Development and Relationships Manager
14.	Tanya Balfe	Admissions Manager
Lecturing Team		
15.	Charles Nwankire	
16.	Jennifer Byrne	
17.	Kunwar Madan	
18.	Mehran Rafiee	
19.	Shazia Afzal	
Student and Graduate representatives		
20.	Alva Kenny	Current Student
21.	Stephen Browne	Graduate (Diploma in Big Data for Business)

2.3   Description of evaluation process

The programme review process for the Diploma in Big Data for Business began in September 2021 with the Terms of Reference agreed with QQI in December 2021. The review process involved all members of the programme team in the Computing discipline with support from DBS' quality assurance team and academic and executive boards. This team encompasses the following members:

- Academic Director (Computing)
- Lecturing Team
- Registrar
- Academic Dean
- Data Analytics and Reporting Manager
- Head of Academic Experience Information and Resource Centre
- Head of Teaching Delivery and Content Production
- Head of Academic Operations
- Programme Coordinator
- Assistant Registrar
- Student Engagement Officer
- Head of Student Experience

As part of the review process, the programme team conducts internal reviews of its programmes annually. The panel noted in the programme review documentation that an analysis of the following had taken place as part of the process:

1. Data on learner characteristics and performance including but not limited to: gender; nationality; applications and enrolment; attrition, transfer, progression and completion; and graduate destinations.
2. Programme delivery and Teaching and Learning Strategies in respect of: physical facilities and resources; timetabling of contact hours; learner workload; attendance; teacher to learner ratios; teaching, learning and assessment strategies; and learning outcomes.
3. Stakeholder feedback in respect of each cohort of learners, lecturers and external examiners as part of DBS' quality assurance (QA) processes.
4. Effectiveness of QA systems and processes.

The programme team also carried out consultations with external industry stakeholders in Ireland and the United Kingdom, including but not limited to:

- Spark HQ
- NDRC
- JP Morgan Chase
- ZYTE
- RenttheRunway
- Techfindr

Furthermore, DBS consulted with:

- Professional Bodies:
  - Irish Computer Society
  - AI Ireland
  - Cyber Ireland
  - Technology Ireland
- Competitor programmes from other providers.

As previously mentioned, the programme team was also assisted by the Quality Assurance team and academic and executive board members in the compilation and presentation of information relating to college-wide governance issues. Throughout the review process, the QA team coordinated the college's engagement with QQI by agreeing the definitive Terms of Reference for the Diploma in Big Data for Business.

The panel received the suite of documentation from DBS on the 14th April 2022. A review meeting was conducted virtually using Zoom on 27th April, during which the panel met with representatives of Dublin Business School, including the programme team, senior management, learners and graduates. The panel had prepared questions to discuss with the DBS programme team and a summary of these findings, including commendations, conditions and recommendations are set out in this document.

Part 3.   Panel Findings on Provider Programme Review Report
The following is the panel's commentary and recommendations on the provider's programme review report. It follows the section structure of the report in headings and in sequence. References to specific parts of the provider report will use the relevant report reference e.g. 2.2.4 Programme Management

3.1   Context and Terms of Reference for the Programme Review

3.1.1   Commentary
The objectives and approach to programme review are clearly outlined, with a need to conform to QQI policies published since the last validation. Details of proposed programme changes and the rationale for same was provided. Four special consideration[s] were also identified by Dublin Business School, in consultation with QQI, and included in the terms of reference. The final enrolment date for which the programme is validated is August 2022.

The panel was satisfied with the level of detail and the professionalism of the documentation and discussions that took place in the review.

3.1.2   Recommendations
Not applicable in this case.

The panel commends both the thorough review process undertaken by the programme team and the implementation of their stakeholder feedback to enhance the revised programme.

3.2 Dublin Business School Information and Programme Context

3.2.1 Commentary

DBS was established in 1975 and over the following 40-plus years has increased its range of programmes and specialisms. Currently, programmes span a broad range of disciplines including accounting, business, film and creative media, finance, humanities and social sciences, law, marketing, and the computer sciences. Typically, DBS has over 8,000 active students every year, over half of which are part-time evening students and the remainder full-time, day students. This number will have been impacted by the COVID-19 situation in 2020 but is expected to return to previous levels post-COVID.

The strategic aims and objectives of the DBS are clearly set out in the Programme Review Report with particular emphasis on the following strategies:

- **Teaching and Learning Strategy**
  Their 2019 Strategy for Learning Assessment and Teaching Enhancement (SLATE) is a three-year plan driving DBS:

  1. To be known as a learning-centred higher education institution (HEI)
  2. To greater integrate educators, learners and industry experts in the learning experience
  3. To increase the flexibility of the learning environment.

- **Research Strategy (in process)**
  DBS are reviewing their current Research, Innovation and Enterprise strategy with a view to focusing on:

  1. Student Experience
  2. Realising Potential
  3. Relationships
  4. Infrastructure

- **Related Services Strategy**
  As part of the overarching DBS operating strategy there are related services strategies including those for infrastructure, IT, library, Student Services etc.

The *Diploma in Big Data for Business* programme is part of the computing discipline in DBS. Several programmes at the undergraduate and postgraduate levels in the area of computing are delivered by this discipline area in DBS. The diploma is part of a suite of Data related programmes delivered by DBS.

This is an innovative programme with an integrated delivery from end-to-end covering a wide range of Big Data topics. The programme aims to develop learners' knowledge of the theory and practice of Big Data necessary for them to secure employment in the areas of information systems, big data and databases in a broad range of commercial, industrial and public sector environments. Graduates will have an in-depth knowledge of the practical and theoretical aspects of big data. The programme enables and supports learners in developing critical analytical skills and in applying theoretical concepts to the practice of big data.

The programme incorporates Personal & Professional Development (PPD) within modules to enhance the student's employability, which will enable them to integrate seamlessly into an organisation by addressing skills such as leadership, self-management and teamwork that are essential in the area of big data.

A summary of commendations, condition and recommendations relating to the programme can be found in the revalidation report.

3.2.2. Recommendations
Not applicable in this case.

The panel commends the programme team for identifying the need and successfully delivering a Big Data programme at Level 7.

3.3 Baseline qualitative and quantitative information - Programme Data Overview

3.3.1 Commentary
The panel found that the baseline qualitative and quantitative information was thoroughly captured, in line with the whole review process, and commends this. The programme evidences strong application and enrolment numbers thanks in large to its successful funding through Springboard+.

The panel acknowledged the sector-wide gender imbalance in computing disciplines and it is clear that DBS are actively encouraging more female participation through engagement with female leaders in the ICT industry, increasing the number of female lecturers and working with marketing to encourage more female learners to the programme.

In terms of attrition, transfer, progression and completion data, the panel are satisfied that the DBS mechanisms in place to interrogate these levels are robust and accurate.

The panel also acknowledged the relatively high performance rates of learners on the programme and the learner supports in place, which are driving successful graduate outcomes in terms of employment and progression to further education (85% to 100%).

3.3.2 Recommendations
Not applicable in this case.

The panel commends the learning analytics mechanisms in place through the Student Engagement and Support Unit (SESU), and recognises the range of learner supports available to bridge any knowledge gaps.

3.4 Programme Delivery and Teaching & Learning Strategies

3.4.1 Commentary
In reviewing the documentation supplied, it was evident that a thorough review of the delivery and teaching and learning strategies had been undertaken. The impact and legacy of COVID-19 has led to a dedicated focus on multimodal teaching methods. The teaching staff have been trained appropriately to deliver online, providing learners with recordings of all lectures to aid flexibility and provide them with more opportunities to reflect on their learning.

As alluded to in s. 3.3.2, the panel commended the team for their use of learning analytics – through the Student Engagement and Success Unit (SESU) – to track and monitor learner attendance and engagement on the programme and that appropriate mechanisms were in place to intervene where necessary.

The panel found that teacher-learner ratios are satisfactory and that the programme team's programme, module and assessment revisions are welcome and considered, and reflect stakeholder feedback. With that in mind, the panel made recommendations to help with the implementation of the revised assessment strategy (s. 3.4.2).

3.4.2 Recommendations
The panel made recommendations in relation to the programme learning outcomes, learner grading (group and individual) and possible integration of assessment. Please see the Revalidation Report for detail in relation to these.

Part 4.   Evaluation of the programme by stakeholders

4.1   Evaluation by current learners and graduates of the programme

4.1.1   Commentary
The panel is satisfied that feedback from learners and graduates was taken into account in the review of the programme through learner surveys and through ongoing discussions and surveys with learners.

4.1.2   Recommendations
Not applicable in this case.

The panel commends the implementation of stakeholder feedback to enhance the Diploma in Big Data for Business going forward.

4.2   Evaluation of the programme by Staff

4.2.1   Commentary
The review process evidenced a strong, collaborative engagement by staff and the programme team over an extended period of time. All aspects of the programme have been thoroughly reviewed and this was clearly documented.

4.2.2   Recommendations
Not applicable in this case.

The panel commends the "obvious staff engagement" throughout the review process, which was further highlighted on the day of the programme review meeting.

4.3   Evaluation of the programme by external stakeholders

4.3.1   Commentary
The programme report clearly evidences thorough engagement with external stakeholders. The consultations with industry and alumni have influenced the proposed development of the objectives, learning outcomes, structure and content of the Diploma in Big Data for Business.

4.3.2   Recommendations
Not applicable in this case. As alluded to in s. 4.1.2, the panel commends the implementation of stakeholder feedback to enhance the Diploma in Big Data for Business going forward.

Part 5.   Programme Quality Assurance

5.1   Complaints, appeals and commendations

5.1.1   Commentary
The panel is satisfied that there are clear mechanisms in place to address complaints and appeals.

5.1.2   Recommendations
Not applicable in this case.

5.2   Quality Assurance Systems and Processes

5.2.1   Commentary
Dublin Business School has robust quality assurance systems in place and it was clear from the documentation provided that these are updated and reviewed.

5.2.2   Recommendations
Not applicable in this case.

5.3   Additional Quality Assurance Systems and Processes required (e.g. online delivery / assessment)

5.3.1   Commentary
No further supplementary QA procedures are required for this programme.

5.3.2   Recommendations
Not applicable in this case.

Part 6.   Summary Analysis of the programme

6.1   Commentary

Overall, the panel is satisfied that the programme review has been conducted thoroughly and in consultation with all relevant stakeholder groups. Feedback from learners, staff, external examiners, industry and alumni, as well as the review of key reports, have clearly influenced the review and proposed revisions for the programme.

The panel commends the overall review process, the obvious staff engagement and enthusiasm, the implementation of stakeholder feedback and use of learning analytics to inform the data and enhancement of the revised programme. Furthermore, the panel commends the programme team for both identifying the level 7 niche within the Big Data discipline and then delivering a successful programme over the last five years.

6.2   Conditions and Recommendations

In general, the panel is satisfied that the Diploma in Big Data for Business is well designed and fit-for-purpose. However, the panel felt that there is an inconsistency in the programme documentation between the programme title and programme detail. The use of Big Data needs to be reflected right through the programme and learning outcomes. Further details on recommendations, commendations and condition are outlined in the Revalidation Report.

Part 7.   Revision of the programme

In this section the panel will respond to any proposals made by the provider in respect of changes to the programme arising from the review. The revised programme's readiness for validation will be reported on in more detail in the Independent Evaluation Report for Validation.

7.1   Commentary:

A key feature from the programme review the programme review for the Diploma in Big Data for Business is the applied, hands-on focus of the programme. The panel is satisfied with the proposed revisions highlighted in the review. It is clear that some of the old modules were somewhat detached from the programme and that the new modules reflect the fresh emphasis on transversal skills in the programme. The proposed changes to the teaching and learning strategy and module structure further emphasise the enhanced merit of the programme.

The special considerations identified in the terms of reference were also discussed, and the panel has no concerns in their regard.

7.2   Recommendations:

The panel made a number of recommendations based on the programme review report for Dublin Business School to consider as further changes to enhance the programme. These are summarised in Part 11 below, and set out in the Revalidation Report.

Part 8.   Overall Findings

8.1   Commentary on review process

Overall, the panel is satisfied that the review undertaken was comprehensive and thorough, with extensive consultation with staff, industry, learners, graduates and external examiners. Dublin Business School provided documentation with respect to programme review process and the programme under review.

Part 9.   Recommendations on review process

The panel is satisfied that the revisions to the programme have been carefully considered and derived from feedback from the various stakeholders.

Part 10.   Commentary on programme revisions

The panel evaluated the Diploma in Big Data for Business and are satisfied with the revisions. For a full articulation of the panel's commendations, condition and recommendations, please the Revalidation Report.

Part 11. Commendations and recommendations on programme revisions:

The panel is satisfied that the programmatic review was undertaken in a meaningful way and makes the following commendations based on the programme review report:

1. The panel commends the rigour and depth of engagement with the review process conveyed by the programme team.
2. The panel commends the implementation of stakeholder feedback to enhance the revised Diploma in Big Data for Business programme.
3. The panel commends the programme team for identifying the need and successfully delivering a Big Data programme at Level 7.
4. The panel commends the obvious staff engagement and enthusiasm demonstrated throughout the programme review process.

The panel also revalidated the programme and in summary the panel had:

•   5 Commendations
•   1 Condition of Re-validation
•   8 Recommendations for Re-validation.

The Independent Report on Revalidation contains the detail of the condition, the commendations and the recommendations made in relation to the Diploma in Big Data for Business.
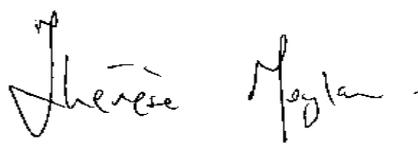
Signed: _____ _Thérèse Moylan_ _____
           Panel Chairperson:

Date: _____2//6/2022_____

Independent Evaluation Report on an Application for Revalidation of a Programme of Education and Training

Part 1.   Provider details

Provider name	Dublin Business School
Date of site visit	27/04/2022 (conducted online)
Date of report	16/05/2022

Section A.   Overall recommendations

Principal programme	Title	Diploma in Big Data for Business
	Award	Special Purpose Award
	Credit	60 ECTS (Level 7)
	Recommendation *Satisfactory OR Satisfactory subject to proposed conditions OR Not Satisfactory*	Satisfactory subject to one proposed condition and eight proposed recommendations outlined in this report.

Part 2.   Expert Panel

Name	Role	Affiliation
Dr. Therese Moylan	Chair	**Head of Department of Entrepreneurship,** Institute of Art, Design and Technology (IADT)
Dr. Christopher McLaughlin	Subject Matter Expert	**Course Director: BSc (Hons) in Business Analytics and BSc (Hons) in Business Information Systems** Ulster University Business School
Dr. Nigel McKelvey	Subject Matter Expert	**Head of Department of Early Education and Social Studies; Lecturer in Computing** Atlantic Technological University (formerly Letterkenny IT)
Craig Smoothey	Industry Representative	**Senior Big Data Engineer** The Stars Group
Anastasia Potyagalova	Learner Representative	**PhD Student** Dublin City University
Sam Whelan	Secretary	**Programme Development Executive and Learning Technologist** Griffith College

Part 3.   Principal Programme

Names of centre(s) where the programme(s) is to be provided	Maximum number of learners *(per centre)*	Minimum number of learners
Dublin Business School, Aungier Street	150	5

Proposed Enrolment	
Date of first intake	September 2022
Maximum number of annual intakes	3
Maximum total number of learners per intake	50
Intake Schedule	September, January, March/April
Programme duration *(months from start to completion)*	12 months
Panel Commentary on proposed enrolment: The panel are satisfied with the proposed enrolment arrangements.	
Target learner groups	
This programme targets mature learners who meet the minimum entry requirements for the programme and the Springboard requirements for funding. Primarily this programme's target group is those wishing to upskill in this area or who have been away from the workplace for some time and wish to refresh their skills in order to seek employment.	
Approved countries for provision	Ireland
Delivery mode: Full-time/Part-time	Part-time
The teaching and learning modalities	
1. Classroom / Face to Face 2. Online (Synchronous) 3. Other - Asynchronous	

Brief synopsis of the programme (e.g. who it is for, what is it for, what is involved for learners, what is it leads to.)

This *Diploma in Big Data for Business* has been designed to meet the growing need for graduates with data science skills in the light of increasing applications of new and existing technologies and techniques such as statistical analysis, business information and data visualisation across many industries throughout the global economy.

Given the rapid growth in internet data usage, the shift to cloud computing, and the rate at which Irish businesses integrate data and analytics into their daily operations, Big Data is an identifiable discipline with a breadth and depth of content that encompasses many of the subfields (e.g. information systems, business intelligence, data visualisation all contribute to forming the modern big data ecosystem). Semester one lays the groundwork for the programme and encompasses modules that focus on providing a solid and comprehensive understanding of the relevant concepts, a proficiency in the use of project management skills to plan to gather, analyse, process and visualise data, and maths and statistics for big data.

Learners develop advanced applied skills in essential areas such as statistical tools and techniques on complex data sets, while also offering theoretical knowledge of business application. Semester two builds on this by covering advanced modules in which the knowledge, understanding and skills acquired in the first semester can be employed. Semester two modules offer advanced and applied skills in topics such as Information systems, databases and data visualisation.

In semester three, the learners apply a variety of skills in practical modules of Databases and Business Intelligence and Analysis. In addition, the programme aims to incorporate advanced transversal skills in each module for the professional development of learners to enhance their employability options. This will enable the learner to integrate seamlessly into an organisation by addressing skills such as problem-solving, teamwork, time management and academic writing that are essential for a graduate.

It is a 1-year programme with six 10 ECTS taught modules.

Summary of specifications for teaching staff	WTE
Lecturers who hold a minimum of a Level 8 Honours degree in IT in the following or a related area: • Mathematics • Statistics • Computing • Computer Science • Software Development • Management Information Systems • Artificial Intelligence • Data Science • Data Analytics • Business Analytics	5 full-time lecturers and 2 part-time lecturers. This programme can be delivered through current faculty.
Administration and Support staff	0.64 WTE
Academic Director	0.1 WTE
Subject Matter Experts	0.1 WTE

Learning Activity	Ratio of learners to teaching staff
Lecture classroom-based sessions	50:1
Workshops	25:1
Practical lab sessions	35:1
Online class (broadcast live)	50:1
Online tutorial (interactive)	25:1
Asynchronous	
Panel Commentary on programme outline and staffing: The panel are satisfied with the programme outline and staffing.	

Programmes being replaced (applicable to applications for revalidation)		
Code	**Title**	**Last enrolment date**
N/A	N/A	N/A

Part 4.　　Other noteworthy features of the application

Having reviewed the documentation, the panel recommends that the programme team pitches the Diploma in Big Data for Business as an introductory programme in Big Data to ensure learners' expectations are set appropriately. Please refer to Criterion 9 with reference to Teaching and Learning Strategy.

Part 1A Evaluation of the Case for an Extension of the Approved Scope of Provision (where applicable). Having examined appropriate QA / Governance procedures, comment on the case for extending the applicant's Approved Scope of Provision to enable provision of this programme. (Especially relevant for move to online delivery / assessment)

Not applicable.

Part 5.   Evaluation against the validation criteria

Criterion 1.   **The provider is eligible to apply for validation of the programme**

a) The provider meets the prerequisites (section 44(7) of the 2012 Act) to apply for validation of the programme.

b) The application for validation is signed by the provider's chief executive (or equivalent) who confirms that the information provided is truthful and that all the applicable criteria have been addressed.

c) The provider has declared that their programme complies with applicable statutory, regulatory and professional body requirements.[1]

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel is satisfied that Dublin Business School is eligible to apply for validation of the programme. The documentation provided to the panel evidenced that all prerequisites have been met, that the information provided was confirmed to be truthful by the DBS Registrar and that the programme fully complies with QQI standards.

---

[1] This criterion is to ensure the programme can actually be provided and will not be halted on account of breach of the law. The declaration is sought to ensure this is not overlooked but QQI is not responsible for verifying this declaration of enforcing such requirements.

Criterion 2. **The programme objectives and outcomes are clear and consistent with the QQI awards sought**

a) The programme aims and objectives are expressed plainly.
b) A QQI award is specified for those who complete the programme.
   (i) Where applicable, a QQI award is specified for each embedded programme.
c) There is a satisfactory rationale for the choice of QQI award(s).
d) The award title(s) is consistent with unit 3.1 of QQI's *Policy and Criteria for Making Awards.*
e) The award title(s) is otherwise legitimate for example it must comply with applicable statutory, regulatory and professional body requirements.
f) The programme title and any embedded programme titles are
   (i) Consistent with the title of the QQI award sought.
   (ii) Clear, accurate, succinct and fit for the purpose of informing prospective learners and other stakeholders.
g) For each programme and embedded programme
   (i) The **minimum intended programme learning outcomes** and any other educational or training objectives of the programme are explicitly specified.[2]
   (ii) The minimum intended programme learning outcomes to qualify for the QQI award sought are **consistent with** the relevant QQI awards standards.
h) Where applicable, the **minimum intended module learning outcomes** are explicitly specified for each of the programme's modules.
i) Any QQI minor awards sought for those who complete the modules are specified, where applicable.

For each minor award specified, the minimum intended module learning outcomes to qualify for the award are consistent with relevant QQI minor awards standards.[3]

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Partially	The panel is partially satisfied that the programme objectives and outcomes are clear and consistent. The programme title and choice of QQI award are well rationalised and legitimate. The programme objectives are expressed plainly in s. 2.1 of the programme document. Though the programme team expressed the interdisciplinarity and applied nature of the programme in great detail during our discussions, the panel felt that the programme documentation did not explicitly emphasise the Big Data focus in the programme learning outcomes, module content or assessment strategy. Employability is another core focus of the revised programme through the development of key transversal skills. Though it is clear from discussions with the team that learners will have ample opportunities to develop these skills, the panel recommends that the transversal skills must be explicitly embedded in the programme (as a minimum standard) rather than in the external, non-credit bearing workshops provided. The panel also recommends that MIPLO 4 is redrafted to remove the reference to attitudes as it is deemed difficult to measure as an outcome.

---

[2] Other programme objectives, for example, may be to meet the educational or training requirements of a statutory, regulatory or professional body.
[3] Not all modules will warrant minor awards. Minor awards feature strongly in the QQI common awards system however further education and training awards may be made outside this system.

Panel special condition of validation with reference to programme objectives and outcomes:

- **Condition 1:** Explicitly articulate and thread 'Big Data' throughout programme documentation, learning outcomes, module content and assessment strategy.

Panel recommendations with reference to programme objectives and outcomes:
- **Recommendation 1:** Explicitly embed the transversal skills as minimum intended module learning outcomes throughout the programme.
- **Recommendation 2:** Rewrite MIPLO 4 to remove the reference to *attitudes* as this is too difficult to measure as an outcome.

Criterion 3. **The programme concept, implementation strategy, and its interpretation of QQI awards standards are well informed and soundly based (considering social, cultural, educational, professional and employment objectives)**

a) The development of the programme and the intended programme learning outcomes has sought out and taken into account the views of stakeholders such as learners, graduates, teachers, lecturers, education and training institutions, employers, statutory bodies, regulatory bodies, the international scientific and academic communities, professional bodies and equivalent associations, trades unions, and social and community representatives.[4]

b) The interpretation of awards standards has been adequately informed and researched; considering the programme aims and objectives and minimum intended programme (and, where applicable, modular) learning outcomes.
   (i) There is a satisfactory rationale for providing the programme.
   (ii) The proposed programme compares favourably with existing related (comparable) programmes in Ireland and beyond. Comparators should be as close as it is possible to find.
   (iii) There is support for the introduction of the programme (such as from employers, or professional, regulatory or statutory bodies).
   (iv) There is evidence[5] of learner demand for the programme.
   (v) There is evidence of employment opportunities for graduates where relevant[6].
   (vi) The programme meets genuine education and training needs.[7]

c) There are mechanisms to keep the programme updated in consultation with internal and external stakeholders.

d) Employers and practitioners in the cases of vocational and professional awards have been systematically involved in the programme design where the programme is vocationally or professionally oriented.

e) The programme satisfies any validation-related criteria attaching to the applicable awards standards and QQI awards specifications.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel recommends that QQI can be satisfied that the programme meets this criterion. Indeed, the programme team (and documentation provided) conveyed an inclusive, participative dialogue with a number of industry stakeholders, including: the ICT Advisory Board, learners, lecturing staff, alumni and external examiners. It is clear that the programme modifications are as a result of a thorough consultation process with all stakeholders. Indeed, the panel commended the programme team for this depth of engagement. The programme evidences strong employment opportunities, support and learner demand, the latter especially true due to it being a Springboard-funded offering.

---

[4] Awards standards however detailed rely on various communities for their interpretation. This consultation is necessary if the programme is to enable learners to achieve the standard in its fullest sense.

[5] This might be predictive or indirect.

[6] It is essential to involve employers in the programme development and review process when the programme is vocationally or professionally oriented.

[7] There is clear evidence that the programme meets the **target learners'** education and training needs and that there is a clear demand for the programme.

		The interdisciplinarity of the programme, with its dual focus on developing technical knowledge as well as business acumen, aligns most appropriately with the General Awards Standards too.
		*Recommendations relating to programme and module learning outcomes are detailed in Criterion 2 above.

Panel commendation with reference to programme concept, implementation and awards standards:

- **Commendation 1:** The panel commends the implementation of stakeholder feedback to enhance the Diploma in Big Data for Business going forward.

Criterion 4.   **The programme's access, transfer and progression arrangements are satisfactory**

a) The information about the programme as well as its procedures for access, transfer and progression are consistent with the procedures described in QQI's policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training. Each of its programme-specific criteria is individually and explicitly satisfied[8].
b) Programme information for learners is provided in plain language. This details what the programme expects of learners and what learners can expect of the programme and that there are procedures to ensure its availability in a range of accessible formats.
c) If the programme leads to a higher education and training award and its duration is designed for native English speakers, then the level of proficiency in English language must be greater or equal to B2+ in the Common European Framework of Reference for Languages (CEFRL[9]) in order to enable learners to reach the required standard for the QQI award.
d) The programme specifies the learning (knowledge, skill and competence) that **target learners** are expected to have achieved before they are enrolled in the programme and any other assumptions about enrolled learners (programme participants).
e) The programme includes suitable procedures and criteria for the **recognition of prior learning** for the purposes of access and, where appropriate, for advanced entry to the programme and for exemptions.
f) The programme title (the title used to refer to the programme):-
    (i) Reflects the core *intended programme learning outcomes*, and is consistent with the standards and purposes of the QQI awards to which it leads, the award title(s) and their class(es).
    (ii) Is learner focused and meaningful to the learners;
    (iii) Has long-lasting significance.
g) The programme title is otherwise legitimate; for example, it must comply with applicable statutory, regulatory and professional body requirements.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel considered that the programme's access, transfer and progression arrangements are satisfactory. Procedures for access, transfer and progression are consistent with QQI's policy and criteria in this area. Information available to learners is clear. A Programme Handbook is available, which details clearly what the programme expects of learners and what learners can expect of the programme. The programme team communicated the recognition of prior learning process in great detail, alluding to a structured approach to prerequisites and mapping of experience to learning outcomes. Learners are given also given a wealth of supports on the programme to alleviate feelings like imposter syndrome and to build confidence. The Student Engagement and Support Unit (SESU) are especially active in this regard.

---

[8] Each of the detailed criteria set out in the Policy and criteria for access, transfer and progression in relation to learners for providers of further and higher education and training must be addressed in the provider's evaluation report. The detailed criteria are (QQI, restated 2015) arranged under the headings
- Progression and transfer routes
- Entry arrangements
- Information provision

[9] http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf (accessed 26/09/2015)

		Though Criterion 4 is satisfactory, the panel recommends a thorough proofreading of the documentation to ensure consistency and to alleviate any confusion in terms of entry requirements (s. 3.2 refers to Level 8 suitability for example), programme schedules and timetables.

Panel recommendations with reference to access, transfer and progression arrangements:

- **Recommendation 3:** Proofread documentation to ensure consistency throughout, especially in relation to entry requirements, programme schedules and timetables.

Criterion 5. **The programme's written curriculum is well structured and fit-for-purpose**

a) The programme is suitably structured and coherently oriented towards the achievement by learners of its intended programme learning outcomes. The programme (including any stages and modules) is integrated in all its dimensions.

b) In so far as it is feasible the programme provides choice to enrolled learners so that they may align their learning opportunities towards their individual educational and training needs.

c) Each module and stage is suitably structured and coherently oriented towards the achievement by learners of the intended *programme* learning outcomes.

d) The objectives and purposes of each of the programme's elements are clear to learners and to the provider's staff.

e) The programme is structured and scheduled realistically based on sound educational and training principles[10].

f) The curriculum is comprehensively and systematically documented.

g) The credit allocated to the programme is consistent with the difference between the entry standard and minimum intended programme learning outcomes.

h) The credit allocated to each module is consistent with the difference between the module entry standard and minimum intended module learning outcomes.

i) Elements such as practice placement and work-based phases are provided with the same rigour and attentiveness as other elements.

j) The programme duration (expressed in terms of time from initial enrolment to completion) and its fulltime equivalent contact time (expressed in hours) are consistent with the difference between the minimum entry standard and award standard and with the credit allocation.[11]

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel has evaluated the programme and recommends that QQI can be satisfied that the programme meets this criterion. This 60-credit, NFQ level 7 programme is suitably structured to facilitate learners achieving the MIPLOs. The curriculum is clear and the overall structure is suitable and fit for purpose. The programme schedule is comparable with other Springboard programme offerings (2 by 3-hour evenings per week). At 20 ECTS per semester, the programme duration and equivalent contact time is consistent and fair for target learners. Though all modules are mandatory, the assessments are designed so that learners can focus their learning towards their individual needs. This is especially evident in the group work assignments in modules 2, 4 and 6. To wholly ensure the programme is fit for purpose, the panel recommends several amendments to module-specific resources and content.

---

[10] This applies recursively to each and every element of the programme from enrolment through to completion.

In the case of a modular programme, the pool of modules and learning pathway constraints (such as any prerequisite and co-requisite modules) is explicit and appropriate to the intended programme learning outcomes.

[11] If the duration is variable, for example, when advanced entry is available, this should be explained and justified

Panel commendations with reference to curriculum:

- **Commendation 2:** The panel commends the programme team for identifying and delivering a Big Data programme at Level 7.

Panel recommendations with reference to curriculum:

- **Recommendation 4:** Review and update reading lists to include more contemporary material.
- **Recommendation 5:** Thread data-related ethics and governance principles throughout the curriculum.

Criterion 6.   **There are sufficient qualified and capable programme staff available to implement the programme as planned**

a) The specification of the programme's staffing requirements (staff required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme and its defined purpose. The specifications include professional and educational qualifications, licences-to-practise where applicable, experience and the staff/learner ratio requirements. See also criterion 12 c).

b) The programme has an identified complement of staff[12] (or potential staff) who are available, qualified and capable to provide the specified programme in the context of their existing commitments.

c) The programme's complement of staff (or potential staff) (those who support learning including any employer-based personnel) are demonstrated to be competent to enable learners to achieve the intended programme learning outcomes and to assess learners' achievements as required.

d) There are arrangements for the performance of the programme's staff to be managed to ensure continuing capability to fulfil their roles and there are staff development[13] opportunities[14].

e) There are arrangements for programme staff performance to be reviewed and there are mechanisms for encouraging development and for addressing underperformance.

f) Where the programme is to be provided by staff not already in post there are arrangements to ensure that the programme will not enrol learners unless a complement of staff meeting the specifications is in post.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel met with the programme team who have delivered the programme over the past 5 years. The documentation provided indicates that there are sufficient qualified and capable staff available to implement the programme as planned. The qualifications and experience required, as specified in the programme document, is evidenced in the CVs of the programme team. Their expertise, knowledge and experience was also evident in the rich discussion held between the programme team and panel. DBS also ensures all staff have the appropriate training resources (on demand) to deliver multimodal teaching consistently. Workshops include: scriptwriting and drafting learning outcomes. The panel recommends that QQI can be satisfied that the programme meets this criterion.

---

[12] Staff here means natural persons required as part of the programme and accountable (directly or indirectly) to the programme's provider, it may for example, include contracted trainers and workplace supervisors.

[13] Development here is for the purpose of ensuring staff remain up-to-date on the discipline itself, on teaching methods or on other relevant skills or knowledge, to the extent that this is necessary to ensure an adequate standard of teaching.

[14] Professional or vocational education and training requires that teaching staff's professional/vocation knowledge is up to date. Being qualified in a discipline does not necessarily mean that a person is currently competent in that discipline. Therefore, performance management and development of professional and vocational staff needs to focus on professional/vocational competence as well as pedagogical competence. Professional development may include placement in industry, for example. In regulated professions it would be expected that there are a suitable number of registered practitioners involved.

Criterion 7.   **There are sufficient physical resources to implement the programme as planned**

a) The specification of the programme's physical resource requirements (physical resources required as part of the programme and intrinsic to it) is precise, and rigorous and consistent with the programme, its defined purpose and its resource/learner-ratio requirements. See also criterion 12 d).

b) The programme has an identified complement of supported physical resources (or potential supported physical resources) that are available in the context of existing commitments on these e.g. availability of:

(i) suitable premises and accommodation for the learning and human needs (comfort, safety, health, wellbeing) of learners (this applies to all of the programme's learning environments including the workplace learning environment)

(ii) suitable information technology and resources (including educational technology and any virtual learning environments provided)

(iii) printed and electronic material (including software) for teaching, learning and assessment

(iv) suitable specialist equipment (e.g. kitchen, laboratory, workshop, studio) – if applicable

(v) technical support

(vi) administrative support

(vii) company placements/internships – if applicable

c) If versions of the programme are provided in parallel at more than one location each independently meets the location-sensitive validation criteria for each location (for example staffing, resources and the learning environment).

d) There is a five-year plan for the programme. It should address

(i) Planned intake (first five years) and

(ii) The total costs and income over the five years based on the planned intake.

e) The programme includes controls to ensure entitlement to use the property (including intellectual property, premises, materials and equipment) required.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	There are sufficient physical resources to implement the programme as planned. The programme is delivered on campus in Dublin Business School, Aungier Street and online. Learners are supported by a range of administrative teams and services, including: • Student Engagement and Success Unit (SESU) who run academic workshops, tea and talks drop-in sessions in collaboration with DBS' award-winning library team. • Learner Supports • Exams Office • Students' Union • Student Experience Team – encompassing careers, student services and international student services. careers' office and counselling service. The programme team uses the Moodle virtual learning environment, which serves as a central blended delivery resource for learners. The Computer Services department provides IT support for on- and off-campus learners. Furthermore, all in-class and online learning activities are recorded for flexibility and to provide reflective learning opportunities.

| | | The panel is satisfied that information provided in the five-year plan for the programme is appropriate. Finally, the panel recommends that QQI can be satisfied that the programme meets this criterion. |

Criterion 8.   **The learning environment is consistent with the needs of the programme's learners**

a)	The programme's physical, social, cultural and intellectual environment (recognising that the environment may, for example, be partly virtual or involve the workplace) including resources and support systems are consistent with the intended programme learning outcomes.	
b)	Learners can interact with, and are supported by, others in the programme's learning environments including peer learners, teachers, and where applicable supervisors, practitioners and mentors.	
c)	The programme includes arrangements to ensure that the parts of the programme that occur in the workplace are subject to the same rigours as any other part of the programme while having regard to the different nature of the workplace.	

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The programme's physical, social, cultural and intellectual environment including resources and support systems are consistent with the intended programme learning outcomes and the needs of the learner. An induction programme for new learners is in place and information is provided to learners in the Programme Handbook. In DBS, there has been considerable investment in the physical, ICT and learner support environments to further enhance the college experience. All designed learning spaces create a positive atmosphere to help engagement and foster a sense of academic community. Learners are in regular communication with, and are supported by, academic staff. Despite the impact of COVID-19, these supports received further positive endorsement from the student representatives who met with the panel also. The panel recommends that QQI can be satisfied that the programme meets this criterion.

Criterion 9. **There are sound teaching and learning strategies**

a) The teaching strategies support achievement of the intended programme/module learning outcomes.
b) The programme provides authentic learning opportunities to enable learners to achieve the intended programme learning outcomes.
c) The programme enables enrolled learners to attain (if reasonably diligent) the minimum intended programme learning outcomes reliably and efficiently (in terms of overall learner effort and a reasonably balanced workload).
d) Learning is monitored/supervised.
e) Individualised guidance, support and timely formative feedback is regularly provided to enrolled learners as they progress within the programme.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel is satisfied with the programme's proposed teaching and learning (T&L) strategy. It is clear that DBS has extensive experience and expertise in delivering this programme and this is further endorsed by stakeholder feedback included with the proposal
		The programme team has designed the T&L strategy to benchmark skills early in the programme to ensure the variety of learner types and backgrounds can adapt to the programme challenges. For example, non-credit bearing workshops are provided in numeracy, academic writing and research to help learners reach the standard required.
		With the programme's renewed focus on transversal skills, the programme team have enhanced the T&L strategy to focus on continuous assessment (100%), the development of applied skills and group work. The blended multimodal approach allows for the most appropriate mode of delivery to be applied across the syllabus.
		In implementing the proposed changes in the programme, the panel has one recommendations based on the evidence presented in the documentation provided and from the engagement with the programme team and learner representatives. Related conditions and recommendations are outlined in Criterion 2.

Panel recommendation with reference to teaching and learning strategy:

- **Recommendation 6:** Set realistic expectations for learners in terms of the Big Data focus in the programme to ensure they are aware it is developed as an introduction to Big Data, focusing on the fundamental concepts and their application in a business setting (particularly a small to medium enterprise setting).

Criterion 10. **There are sound assessment strategies**

<table>
<tr><td colspan="3">
a) All assessment is undertaken consistently with *Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards*[15]
b) The programme's assessment procedures interface effectively with the provider's QQI approved quality assurance procedures.
c) The programme includes specific procedures that are fair and consistent for the assessment of enrolled learners to ensure the minimum intended programme/module learning outcomes are acquired by all who successfully complete the programme.[16]
d) The programme includes formative assessment to support learning.
e) There is a satisfactory written **programme assessment strategy** for the programme as a whole and there are satisfactory module assessment strategies for any of its constituent modules.[17]
f) Sample assessment instruments, tasks, marking schemes and related evidence have been provided for each award-stage assessment and indicate that the assessment is likely to be valid and reliable.
g) There are sound procedures for the moderation of summative assessment results.
h) The provider only puts forward an enrolled learner for certification for a particular award for which a programme has been validated if they have been specifically assessed against the standard for that award.[18]
</td></tr>
<tr><td></td><td>**Satisfactory? (yes, no, partially)**</td><td>**Comment**</td></tr>
<tr><td>**Principal Programme**</td><td>Yes</td><td>The panel is satisfied that the programme assessment strategy is sound but has included two recommendations for further enhancement.

The documentation provided details of the proposed programme assessment strategy. Sample assessments and exam papers were also provided. The panel considered that the sample assessments provided are valid but recommend exploring the possibility of cross-modular integration and more emphasis on the application of data-related skills building.

Feedback from the panel's meeting with the graduate and learners representatives indicated challenges regarding individual learner workload in group work and a lack of clarity around group work logistics. With that in mind, two recommendations are included below.</td></tr>
</table>

Panel recommendations with reference to assessment strategies:

- **Recommendation 7:** Draft group and individual grading rubrics for group assessment tasks to ensure learners are fully informed on assessment criteria and include protocols around group work disharmony (or equivalent) for transparency.
- **Recommendation 8:** Consider integration of assessment across modules and include more emphasis on the application of data-related skills in assessment, where possible.

---

[15] See the section on transitional arrangements.

[16] This assumes the minimum intended programme/module learning outcomes are consistent with the applicable awards standards.

[17] The programme assessment strategy is addressed in the Assessment Guidelines, Conventions and Protocols for Programmes Leading to QQI Awards. See the section on transitional arrangements.

[18] If the award is a QQI CAS compound award it is not necessarily sufficient that the learner has achieved all the components specified in the certification requirements unless at least one of those components is a capstone component (i.e. designed to test the compound learning outcomes).

Criterion 11.   **Learners enrolled on the programme are well informed, guided and cared for**

a)	There are arrangements to ensure that each enrolled learner is fully informed in a timely manner about the programme including the schedule of activities and assessments.
b)	Information is provided about learner supports that are available to learners enrolled on the programme.
c)	Specific information is provided to learners enrolled on the programme about any programme-specific appeals and complaints procedures.
d)	If the programme is modular, it includes arrangements for the provision of effective guidance services for learners on the selection of appropriate learning pathways.
e)	The programme takes into account and accommodates to the differences between enrolled learners, for example, in terms of their prior learning, maturity, and capabilities.
f)	There are arrangements to ensure that learners enrolled on the programme are supervised and individualised support and due care is targeted at those who need it.
g)	The programme provides supports for enrolled learners who have special education and training needs.
h)	The programme makes reasonable accommodations for learners with disabilities[19].
i)	If the programme aims to enrol international students it complies with the *Code of Practice for Provision of Programmes to International Students*[20] and there are appropriate in-service supports in areas such as English language, learning skills, information technology skills and such like, to address the particular needs of international learners and enable such learners to successfully participate in the programme.
j)	The programme's learners will be well cared for and safe while participating in the programme, (e.g. while at the provider's premises or those of any collaborators involved in provision, the programme's locations of provision including any workplace locations or practice-placement locations).

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel are satisfied that learners enrolled on the programme are well informed, guided and cared for. The programme team conveyed a genuine commitment to their learners, evidenced in both the documentation provided, and throughout their meetings with the panel. DBS provides an extensive range of learner supports, not least through both Student Engagement and Support Unit (SESU) and the Student Experience Team. The research and supports offered in terms of employability and graduate attribute skill building are to be congratulated. The panel commends the level of staff engagement and enthusiasm demonstrated throughout the programme review process. The programme team are actively involved in supporting learners throughout the programme. Furthermore, where learners appear to be struggling, an early alert response is in place thanks to the highly active and intuitive learning analytics system available through SESU.

---

[19] For more information on making reasonable accommodations see www.AHEAD.ie and QQI's Policies, Actions and Procedures for Access, Transfer and Progression for Learners (QQI, restated 2015).
[20] See Code of Practice for Provision of Programmes to International Students (QQI, 2015)

Panel commendations with reference to learner supports:

- **Commendation 3:** Obvious staff engagement and enthusiasm demonstrated throughout programme review process.
- **Commendation 4:** The panel commends the learning analytics mechanisms in place through the Student Engagement and Support Unit (SESU), and recognises the range of learner supports available to bridge any knowledge gaps.

Criterion 12.   **The programme is well managed**

a) The programme includes intrinsic governance, quality assurance, learner assessment, and access, transfer and progression procedures that functionally interface with the provider's general or institutional procedures.
b) The programme interfaces effectively with the provider's QQI approved quality assurance procedures. Any proposed incremental changes to the provider's QA procedures required by the programme or programme-specific QA procedures have been developed having regard to QQI's statutory QA guidelines. If the QA procedures allow the provider to approve the centres within the provider that may provide the programme, the procedures and criteria for this should be fit-for-the-purpose of identifying which centres are suited to provide the programme and which are not.
c) There are explicit and suitable programme-specific criteria for selecting persons who meet the programme's staffing requirements and can be added to the programme's complement of staff.
d) There are explicit and suitable programme-specific criteria for selecting physical resources that meet the programmes physical resource requirements, and can be added to the programme's complement of supported physical resources.
e) Quality assurance[21] is intrinsic to the programme's maintenance arrangements and addresses all aspects highlighted by the validation criteria.
f) The programme-specific quality assurance arrangements are consistent with QQI's statutory QA guidelines and use continually monitored completion rates and other sources of information that may provide insight into the quality and standards achieved.
g) The programme operation and management arrangements are coherently documented and suitable.
h) There are sound procedures for interface with QQI certification.

	Satisfactory? (yes, no, partially)	Comment
Principal Programme	Yes	The panel are satisfied the programme is well managed. The College and programme management structure was outlined in the documentation provided. The Academic Director is supported by the team of module leaders, administration and support staff, and a subject matter expert. DBS' governing and management structures are clearly outlined in their QAE documentation and reflected in programme management. The panel recommends that QQI can be satisfied that the programme meets this criterion. The thorough programme review process conveyed by the programme team further reflects how well the programme is managed.

Panel commendation with reference to programme management:

- **Commendation 5:** The panel commends the rigour and depth of engagement with the review process conveyed by the programme team.

---

[21] See also QQI's Policy on Monitoring (QQI, 2014)

Part 6. Overall recommendation to QQI

6.1 Principal programme:

Select one	
	Satisfactory (meaning that it recommends that QQI can be satisfied in the context of unit 2.3) of Core policies and criteria for the validation by QQI of programmes of education and training;
✓	Satisfactory subject to proposed special conditions (specified with timescale for compliance for each condition; these may include proposed pre-validation conditions i.e. proposed (**minor**) things to be done to a programme that almost fully meets the validation criteria before QQI makes a determination);
	Not satisfactory.

Reasons for the overall recommendation

The panel considered the principal programme to be fit-for-purpose in all regards bar one condition and are happy to recommend the programme for revalidation.

Commendations

1. The panel commends the implementation of stakeholder feedback to enhance the Diploma in Big Data for Business going forward.
2. The panel commends the programme team for identifying and delivering a Big Data programme at Level 7.
3. Obvious staff engagement and enthusiasm demonstrated throughout programme review process.
4. The panel commends the learning analytics mechanisms in place through the Student Engagement and Support Unit (SESU), and recognises the range of learner supports available to bridge any knowledge gaps.
5. The panel commends the rigour and depth of engagement with the review process conveyed by the programme team.

Special Conditions of Validation (directive and with timescale for compliance)

1. The programme team must explicitly articulate and thread 'Big Data' throughout the programme documentation, learning outcomes, module content and assessment strategy.

   This condition must be actioned before the commencement of the revised programme.

Summary of recommended special conditions of validation

Through discussing the revised programme with the team, the purpose of the programme is clear. In discussing the module content with the lecturing staff, the purpose and rationale for the programme and modular content was. However, this clarity was not apparent in the programme documentation given to the panel. Thus, a more explicit articulation of Big Data throughout the documentation must be provided to satisfy this condition, as described above.

Summary of recommendations to the provider

1. Explicitly embed the transversal skills as minimum intended module learning outcomes throughout the programme.
2. Rewrite MIPLO 4 to remove the reference to *attitudes* as this is too difficult to measure as an outcome.
3. Proofread documentation to ensure consistency throughout, especially in relation to entry requirements, programme schedules and timetables.
4. Review and update reading lists to include more contemporary material.
5. Thread data-related ethics and governance principles throughout the curriculum.
6. Set realistic expectations for learners in terms of the Big Data focus in the programme to ensure they are aware it is developed as an introduction to Big Data, focusing on the fundamental concepts and their application in a business setting (particularly a small to medium enterprise setting).
7. Draft group and individual grading rubrics for group assessment tasks to ensure learners are fully informed on assessment criteria and include protocols around group work disharmony (or equivalent) for transparency.
8. Consider the integration of assessment across modules and include more emphasis on the application of data-related skills in assessment, where possible.

Declarations of Evaluators' Interests

This report has been agreed by the evaluation panel and is signed on their behalf by the chairperson.

Panel chairperson: Therese Moylan   Date: 2/6/2022

Signed:
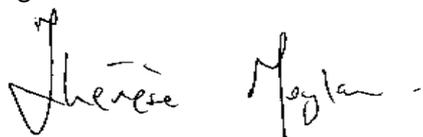
6.2   Disclaimer

The Report of the External Review Panel contains no assurances, warranties or representations express or implied, regarding the aforesaid issues, or any other issues outside the Terms of Reference.

While QQI has endeavoured to ensure that the information contained in the Report is correct, complete and up-to-date, any reliance placed on such information is strictly at the reader's own risk, and in no event will QQI be liable for any loss or damage (including without limitation, indirect or consequential loss or damage) arising from, or in connection with, the use of the information contained in the Report of the External Evaluation Panel.

Part 7.   Proposed programme schedules (post panel feedback and consequent amendments, if any)