

NELSON MANDELA UNIVERSITY

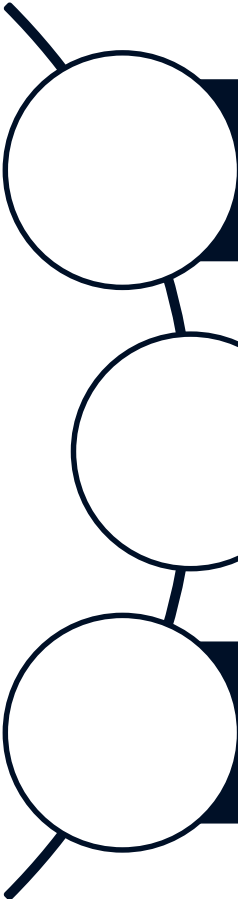


Academic Programme Evaluation

Office for Institutional Planning

Singapore eLearning Conference 12 June 2010

Programme Viability Reviews: Purpose



Enhance strategic alignment and financial viability of programme offerings

Provide a platform to identify and share good practices and areas for improvement as it relates to strategic/academic and financial viability of academic programmes

Assist faculties with qualitative and quantitative information to inform planning, resource allocation and cross-subsidisation

Programme Viability Reviews: Scope

Phase 1

- All undergraduate programmes per faculty
- Science: included all BSc majors

Phase 2

- All UG service courses/departments
- From perspective of “home” departments and faculties receiving “service”

Phase 3

- All coursework postgraduate programmes
- Criteria to be refined

Programme Viability Assessments: Criteria and Weightings

Criteria	Definition	Weighting
Alignment with enrolment plan	Enrolment growth in the programme/discipline is aligned with the University enrolment plan while being mindful of capacity and resource constraints (staff, venues, etc.) 10%	10%
Programme relevance	<p>The programme/major is distinct in terms of international, national and/or regional uniqueness and has a reputation for high quality 10%</p> <p>The programme/discipline is coherently designed and innovative efforts have been implemented to transform the curriculum and develop graduates as holistic and responsible citizens in alignment with Vision 2020 10%</p> <p>Relevance of programme/discipline in addressing international, national and/or regional priorities and/or contributing to creating a humane and democratic society 10%</p> <p>Access, articulation and flexible modes of delivery (i.e. providing learning opportunities for under-served populations through blended learning, part-time offerings, block release offerings, extended programmes, etc.) 5%</p>	35%
Staff profile & capacity	<p>Academic staff in the programme/discipline are suitably qualified, have relevant experience, & produce research outputs 10%</p> <p>Academic staff: student ratios are within acceptable norms for the programme/ discipline 10%</p> <p>Equity profile of academic staff in programme/discipline 10%</p>	30%
Student support & throughput	<p>Acceptable student success, throughput & retention rates 10%</p> <p>Systematic and continuous academic monitoring & support is provided to students to promote student success, and to actively respond to student feedback 5%</p> <p>Opportunities for students to engage in experiential learning opportunities (including work-based learning, service learning, field trips and excursions, simulations, etc.) 5%</p>	20%
Availability of infrastructure, facilities & equipment	Programme/discipline has adequate access to the required infrastructure, facilities & equipment to ensure acceptable levels of quality (e.g. library, ICT, specialised laboratories & equipment, appropriate venues & office space) 5%	5%

Programme Viability Assessments: Evaluation Rubric

□ An **evaluation rubric** was developed for each of the 12 criteria

Criteria	Weighting	Definition	4	3	2	1
Alignment with university and faculty enrolment targets	10%	Enrolment growth in the programme/ discipline is aligned with the University enrolment plan while being mindful of capacity and resource constraints (staff, venues, etc).	High demand for the programme/ discipline demonstrated by enrolment growth that is consistently well above the institutional and faculty average enrolment growth rates. For capped programmes, enrolments are within 90% of the cap.	Relatively high demand for the programme/ discipline demonstrated by enrolment growth that is consistently slightly above the institutional and faculty average enrolment growth rates. For capped programmes, enrolments are within 70-89% of the cap.	Relatively low demand for the programme/ discipline demonstrated by enrolment growth that is consistently slightly below the institutional and faculty average enrolment growth rates. For capped programmes, enrolments are within 50-69% of the cap.	Low demand for the programme/ discipline demonstrated by enrolment growth that is consistently well below the institutional and faculty average enrolment growth rates. For capped programmes, enrolments are below 50% of the cap.
Programme/ discipline uniqueness, relevance, reputation and contribution to transformation.	10%	Relevance of programme/discipline in addressing international, national and/or regional priorities and/or contributing to creating a humane and democratic society.	Programme/discipline directly addresses international, national and regional priorities &/or contributes significantly to creating a humane and democratic society.	Programme/discipline addresses international, national and/or regional priorities &/or contributes to creating a humane and democratic society.	Programme/discipline does not directly address international, national &/or regional priorities &/or does not directly contribute to creating a humane and democratic society.	Programme/discipline does not address international, national and/or regional priorities and/or does not contribute directly to creating a humane and democratic society.

Note: This rubric is to be read in conjunction with Vision 2020, relevant institutional policies, the institutional enrolment plan, historical data trends, and the outcomes of professional body accreditation reports and/or internal quality reviews.



Interface of Quality Review Process with Programme Viability

- ❑ Internal Quality Reviews of 187 programmes took place from 2007-2012 in the 1st Cycle.
- ❑ Professional Body accreditation reviews - HPCSA; ECSA; SAICA, CAA; SABPP; SACPCMP, etc. which involve QA unit for preparation.
- ❑ Improvement Plans are implemented.
- ❑ The findings from these reviews were used to inform the rating of relevant strategic criteria. This proved useful to counterbalance the rating departments gave themselves.



Programme Viability Assessments: Process

- ❑ Planning team met with each faculty separately, for 4-5 hours.
- ❑ Integrated support team consisting of Planning and Finance members was established.
- ❑ Each faculty was requested to ensure that the Dean; DoS; HoD and programme coordinators would, as far as possible, be present.
- ❑ Each academic programme had been rated prior to the meeting by the academics.
- ❑ Financials, dashboard and the QAU information were prepared.
- ❑ Planning team and faculty engaged in lively discussion around the ratings until consensus was reached around the final rating awarded.
- ❑ The scores were captured and fed into the academic viability model.
- ❑ Academic/strategic viability was cross referenced with financial viability and consolidated on a scatter plot per faculty to indicate an integrated overview of the strategic and financial viability of all programmes/disciplines.

Programme Viability Assessments: Scoring Sheet

- ❑ **Data Used:** evaluation rubric, MIS data, institutional enrolment plan, Vision 2020, institutional policies, and outcomes of professional body & internal quality reviews
- ❑ **Consensus rating on a scale of 1-4**

Qual Name	Alignment with university and faculty enrollment targets	Programme/discipline uniqueness, relevance, reputation and contribution to transformation.				Staff profile and capacity			Student support and throughput			Availability of infrastructure, facilities and equipment
		Uniqueness	Coherently designed & innovation	Relevance	Access, articulation & flexible modes of delivery	Qualified, relevant experience & research outputs	Student: Staff FTE ratios	Equity profile	Acceptable student success, throughput & retention rates.	Academic monitoring & support, and student feedback.	Opportunities for students to engage in experiential learning opportunities	
Dip. A	4	4	4	3	4	4	3	3	3.5	3	4	4
Degree A	2.5	4	3	3.5	3.5	4	3	3	4	3	2	4

Programme Viability Assessments: Scoring and Weighting

- The ratings were then converted to a range between -2 and 2, and then weighted.

Score	Normalised Score
1	-2
1.5	-1.5
2	-1
2.5	0
3	1
3.5	1.5
4	2

- In this way it was possible to arrive at an overall Academic Viability score for each programme.

Academic Viability Benchmarks	Good	2
	Above Average	1
	Average	0
	Below Average	-1
	Poor	-2

Programme Viability Assessments : Scoring

Sample output of the final programme review scores and application

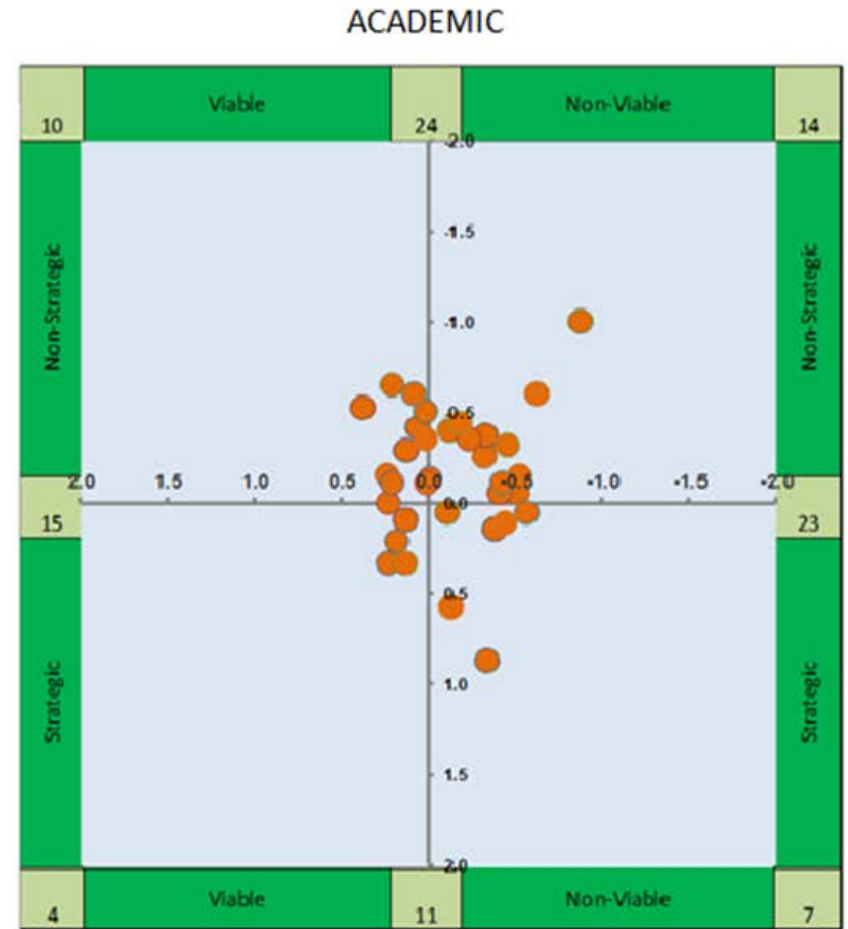
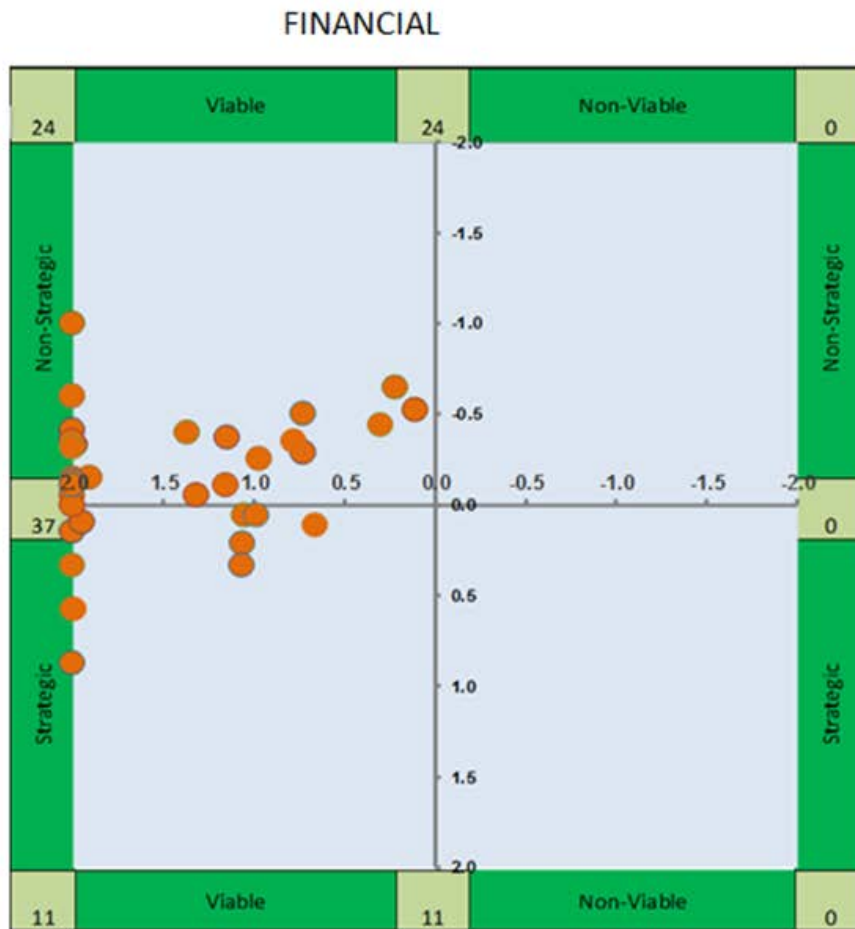
		Criteria scoring													
Qual Code	Qual Name	Alignment with university and faculty enrolment targets	Programme/discipline uniqueness, relevance, reputation and				Staff profile and capacity			Student support and throughput			Availability of infrastructure, facilities and equipment	Comments	
			Uniqueness	Coherently designed and innovation	Relevance	Access, articulation and flexible modes of delivery	Qualified, Relevant experience and Research outputs	Student Staff FTE ratios	Equity profile	Acceptable student success, throughput and retention rates.	Academic monitoring and support and student feedback.	Opportunities for students to engage in experiential learning opportunities			
1111	Programme Name One	4	4	4	3	4	4	3	3	3.5	3	4	4	4	
2222	Programme Name Two	2.5	4	3	3.5	3.5	4	3	3	4	3	2	4	4	
3333	Programme Name Three	3	3	2.5	2.5	2.5	2.5	4	2	4	4	4	2.5		
		Criteria scoring													
Qual Code	Qual Name	Alignment with university and faculty enrolment targets	Programme/discipline uniqueness, relevance, reputation and				Staff profile and capacity			Student support and throughput			Availability of infrastructure, facilities and equipment	Total Weighted Score	
			Uniqueness	Coherently designed and innovation	Relevance	Access, articulation and flexible modes of delivery	Qualified, Relevant experience and Research outputs	Student Staff FTE ratios	Equity profile	Acceptable student success, throughput and retention rates.	Academic monitoring and support and student feedback.	Opportunities for students to engage in experiential learning opportunities			
	Weight	0.1	0.1	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.05	0.05	0.05	1	
1111	Programme Name One	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.15	0.05	0.1	0.1	1.6	
2222	Programme Name Two	0	0.2	0.1	0.15	0.075	0.2	0.1	0.1	0.2	0.05	-0.05	0.1	1.225	
3333	Programme Name Three	0.1	0.1	0	0	0	0	0.2	-0.1	0.2	0.1	0.1	0	0.7	



Interactive Activity

- ❑ **Activity: Consider the academic viability criteria and ratings:**
 1. Which criteria would you consider appropriate to measure academic viability? What criteria would you have added/deleted?
 2. Would you have used different weightings? Why?
 3. What scoring/evaluation approach would you use?

UG plots showing financial and academic viability separately

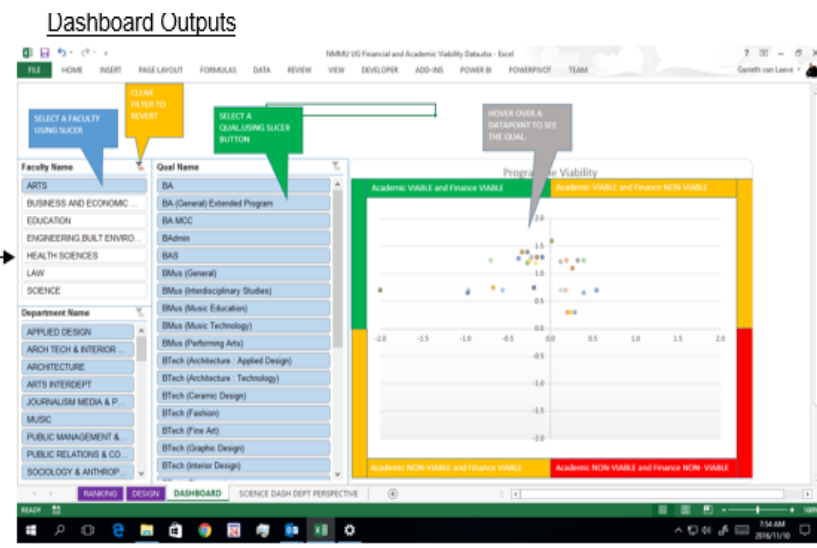
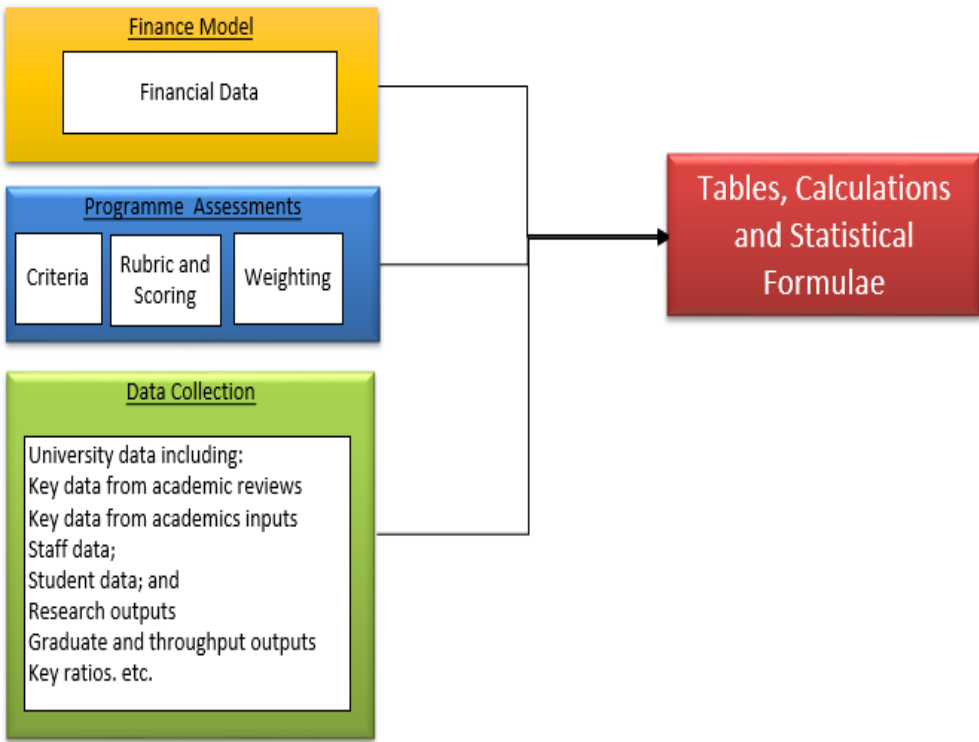


UG programmes financially viable. The spread into non-viable quadrants increases when only academic viability is used.

Programme Viability Assessments: Data Sources

❑ The source data which was mapped on the scatter plot comprised:

- Finance module costing
- Programme assessments and weightings
- Key identified staff, student and research data



Programme Viability Assessments: Financial Formula

□ A statistical formula was applied

Normalising Formula:

$$X_{i,-2 \text{ to } 2} = 2 * \left(\frac{X_i - \left(\frac{X_{max} + X_{min}}{2} \right)}{\left(\frac{X_{max} - X_{min}}{2} \right)} \right)$$

Where:

$X_{i,-2 \text{ to } 2}$ = The data point i normalised between -2 and 2

X_i = Each data point i

X_{min} = The minima among all the data points

X_{max} = The maxima among all the data points

Actual Score	Normalised Score
1	-2
1.5	-1.5
2	-1
2.5	0
3	1
3.5	1.5
4	2

Programme Viability: Financial Normalising

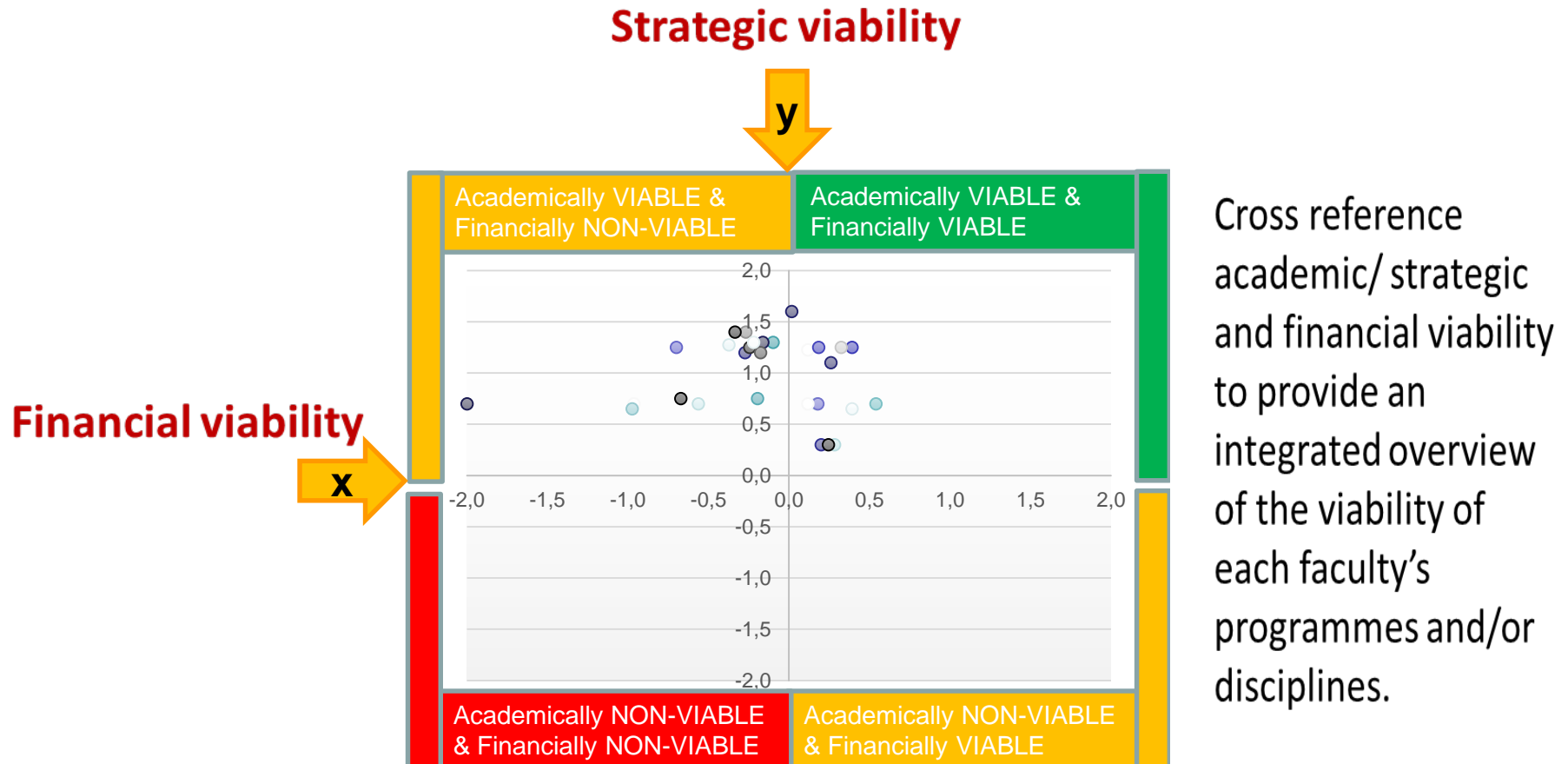
- Sample out of the final viability score after the formula has been applied which can now be plotted alongside the academic weighted scores

FACULTY OF ARTS

Qual Code	Qual Name	Total Weighted
1111	Programme Name One	1.6
2222	Programme Name Two	1.225
3333	Programme Name Three	0.7

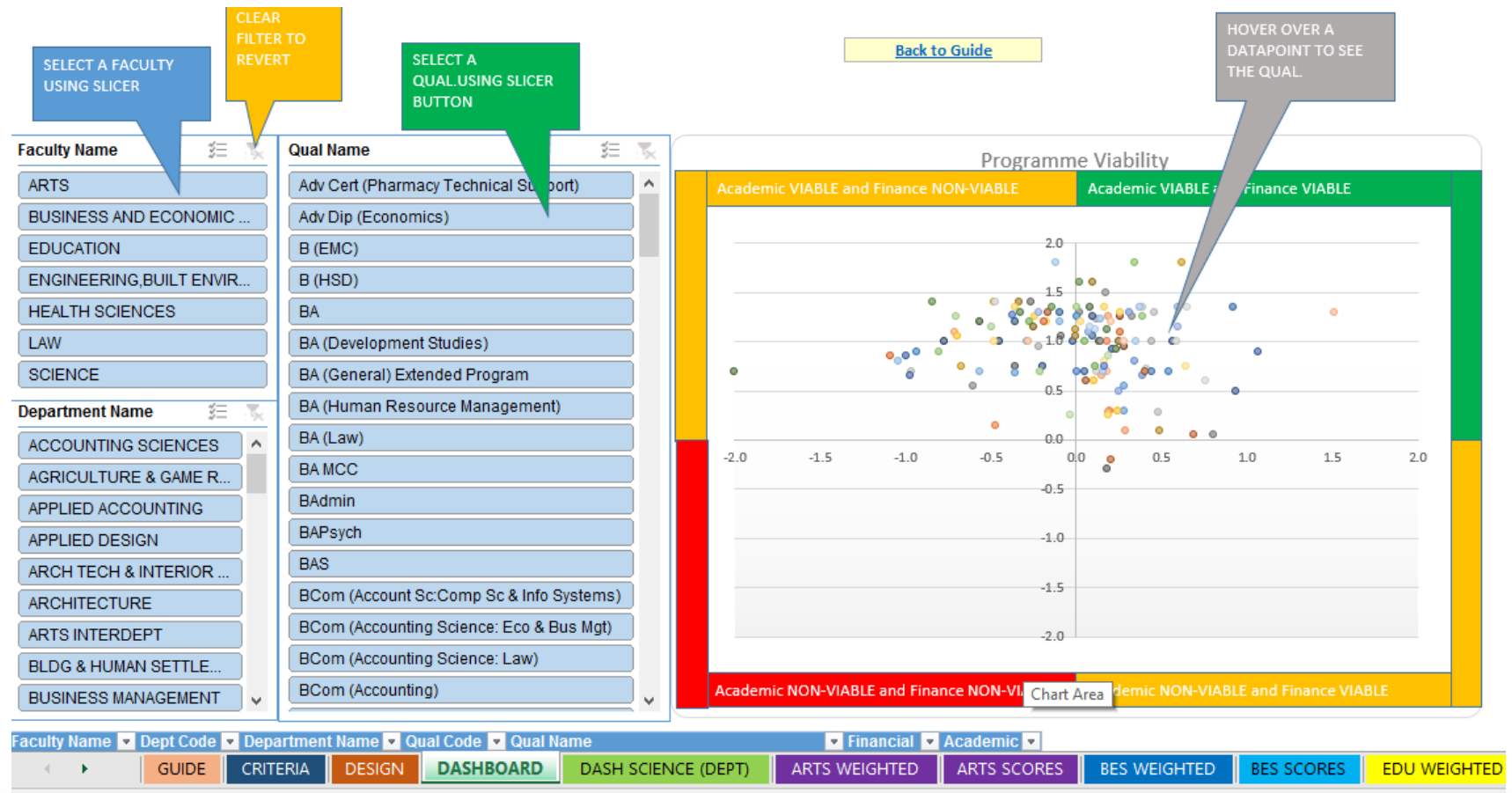
Programme Viability Assessments: Matrix

- The normalised and weighted scores for the financial and academic viability of the academic programme were then plotted in a matrix by plotting academic viability on the vertical y axis and financial viability on the horizontal x axis



Programme Viability: Dashboard

- ❑ Easily accessible and user-friendly
- ❑ Easy user interface using Excel
- ❑ Data is mapped on a quadrant indicating programme viability





Programme Viability Assessments: Presenting The Data

□ Demo: Presenting the data in Excel

Demonstrations of:

- Sample student, staff and research data used
- Pulling the data together
- The scatter plot in Excel using sample smoothed data
- Slicers to drilldown the data

Programme Viability Assessments: Unviable Programmes

- ❑ **What to do with programmes that are financially and strategically unviable?**
 - Reconsider and rethink the purpose of these programmes within V2020, enrolment plan and faculty strategic plan
 - Identify reasons for non-viability and implement turnaround strategies to improve viability
 - Turnaround strategies:
 - **Renew** and re-curriculate
 - **Replace** with new programmes that are strategically aligned and viable
 - **Remove**, phase out or deactivate





What to do differently: Lessons learnt

- ❑ The process was approached developmentally and may have been too **lenient**.
- ❑ External **peer evaluation** should be included to minimise subjectivity.
- ❑ The process may need to be adapted for certain programmes. **Subject/majors evaluation must be carried out for faculties having a general bachelor degree where subjects are selected as majors.**
- ❑ **Service modules** need to be reviewed, although this may require slightly different criteria and considerations.
- ❑ **Research-based and coursework postgraduate programmes** should also undergo a separate review exercise to provide a more accurate and holistic picture of a department and/or school.

What to do differently: Lessons learnt

- ❑ Where a rating allocated to a criterion was related to infrastructural and staff constraints, the programme should not be penalised because such resource constraints are not within the control of the department or faculty.
- ❑ A debriefing session should be scheduled with each faculty to discuss the implications of the viability assessments and how the faculty can best respond to the issues identified.
- ❑ Each HoD, DoS and Dean should work through the viability assessment findings and draw up a five-year plan where realistic goals are set for each year in order to address areas for improvement.
- ❑ This type of viability review process should happen more frequently, particularly in a context where programmes are being phasing in and out, as it would allow the department/school to have an overview of what is working for their programmes and to attend to areas that require attention. Linking with Quality reviews an option.

What to do differently: Lessons learnt

- ❑ A suggestion to include more members of a faculty, including those who lecture, to provide a more nuanced and textured evaluation.
- ❑ Suggestion that Faculty Management Committee (FMC) was not an appropriate forum for the viability reviews and that these should have been conducted at school level.
- ❑ FMC cumbersome and a smaller group would have been less intimidating.



Programme Viability Assessments: Surveying faculties

Survey questions

- ❑ In your opinion, was the academic programme viability assessment process a useful exercise? Please give a reason for your answer.
- ❑ Were the academic viability criteria appropriate? If no, can you suggest how these could have been improved?
- ❑ Were the weightings attached to the academic programme viability criteria appropriate? If no, can you suggest how these could have been improved?
- ❑ What recommendations would you make concerning the academic programme viability assessment process going forward?



Programme Viability Assessments: Positive feedback

- ❑ It assisted us to critically reflect on our offerings with a certain level of **objectivity**. The whole process was **collegial** and supportive.
- ❑ It was a very **open and transparent** process and we were allowed to put our explanations forward.
- ❑ Made us **engage** with one another and clarified misconceptions that could have arisen.
- ❑ Good opportunity to reflect on viability of programmes with constructive input from a variety of institutional stakeholders.



Programme Viability Assessments: Positive feedback

- ❑ It has pointed out weak and strong points of the programmes so that we **plan better**.
- ❑ We know **what to concentrate on** to improve our programme's viability.
- ❑ It has given us the opportunity to **compare** our programmes with those of other departments and hear how they address possible shortcomings.
- ❑ It got academics to consider and reflect on their programmes in terms **other than `financial`**.

Interactive Activity

Reflecting on the Mandela University case study, consider the following from the perspective of your institutional context:

- Create a **timeline** of the steps that you would need to put in place to implement an academic viability model.
- Which **key stakeholders** would need to be part of the:
 - Consultative process?
 - Viability review process?
- What would be the role of various **line function(s)** involved in the viability review processes?



Way forward: What next?

- Faculties use model to assess implications for:
 - Academic planning, curriculum transformation and innovative delivery modes
 - Enrolment planning and target setting
 - Staffing: ‘shaping’ the future academy at all levels
 - Resource allocation and cross subsidisation (across and within faculties)
 - Quality enhancement – e.g. student feedback
 - Space utilisation and future infrastructure development needs



Enkosi! Thank you! Dankie!

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