

A photograph of the University of the Witwatersrand building, a grand neoclassical structure with a prominent portico and columns. The building is set on a hillside, surrounded by lush green trees and large purple jacaranda trees in full bloom. In the foreground, a circular stone fountain with multiple water jets is visible. The sky is clear and blue.

University of the Witwatersrand

Siyaphumelela Partner Convening April 2024

Interacting Contextual Elements: Predictive Modelling for Student Success



UG throughput rate in minimum time for 2020 cohort: 35.4%

People (5) ***

- Teaching and learning interaction in class
- Tutoring and mentoring
- Advisors arranging interventions
- Divisions offering student support

Process (3)

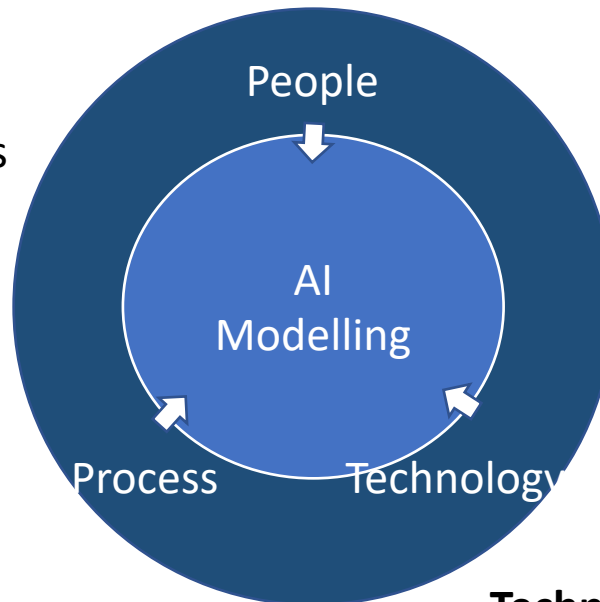
- Capture of course structures in LMS
- Capture of Marks
- Capture of Interventions

AI Models (1)

Enables faculties to proactively identify the students that will need support before entering campus. Refined (BQ, LMS, marks etc.)

Technology (2)

- Data Warehouse
 - Data Lake
- Store/QA the data that feeds the models



Governance (4)

- Student Success Framework
- Data Governance Framework
- Monitoring & Evaluation Framework
- Student Success Committee



Leading and Lagging Indicators
Course Pass Percentage Reports



Monitor progress and make Adjustments to max impact

Stages of Analytic Maturity (Davenport, 2013)



Analytics 3.0 (Impact)

Organisations realise measurable business impact from the combination of traditional analytics and big data. They begin to understand what type of interventions work for which students and at which point in the learning cycle, and which policies and practices can avoid roadblocks to contribute to student success

M&E of all student success projects



Analytics 2.0 (Predictive)

Capitalises on the emergence of large, fast-moving, external, and unstructured data from sources such as learning management systems (LMS), biographical questionnaires, food bank access records, lab access, classroom attendance to understand the factors that lead to student success



Analytics 1.0 (Descriptive)

- Assembling business intelligence systems and expertise to drive reporting and descriptive analytics
- Standard measures of student success
- Persistence, completion and placement rates



Lessons Learnt from Siyaphumelela 2.0

- Student success is not a project, it's a programme
- People come and go but the programme needs to remain intact
- Sustained support from the highest level is crucial
- You can't get to Cape Town without going through the Karoo
- Engage the academics – student success begins in class
- Foreground students in the student success efforts
- Regularly engage the advisors
- Bring everyone along – Deans, HOS, ... (Faculty Executive)
- Coordinate and manage all parts of the system (people, process, technology)

Plans for Siyaphumelela 3.0

- Need to drive impact to move the needle
- Establish a monitoring and evaluation framework
- Be clear on where you want to go before beginning the journey (KPIs)
- Every student success project will have a monitoring and evaluation component
- Understand who our advisors have been helping and which interventions lead to success

