Application Engineering and Development – University Model

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Model Purpose:

Performance Measurement Solution that enables the Universities to track and measure the quality of the education they provide to their students. Quality means keeping courses fresh and aligned to industry trends and the approach here will depend upon an educational system involving faculty, courses, employers contribute to the professional growth of the student.

Business Problems addressed:

Performance measurement metrics has been applied for a student during their undergrad /grad program at the university and after graduating. This model involves interconnection between student, professor, course metrics and alumni data .By tracking the interconnection of course metrics and alumni data, we could get the professional growth of the student and also we can get to a conclusion if GPA matters to the professional growth of the student. This can be accomplished by utilizing the following metrics:

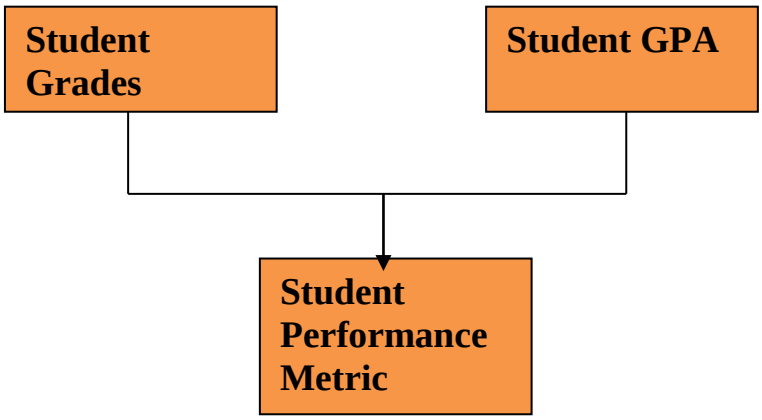
1. Student Performance Metric
2. Professor Performance Metric
3. Courses Performance Metric
4. Professional Growth Performance Metric
5. Career Success Metric

Even after graduation, the student's performance is tracked through Employment performance measurement from the employer throughout a period of time. The most relevant courses can be tracked by the proposed solution, and this would help the university tweak existing course offerings or introduce new courses

Performance Metrics

1. Student Performance Metric (SPM) :

This measures the student's performance at the University and is based on the student's grades, research papers published, and projects created.



The performance of a student is based on the following factors:

1. Grades
2. GPA

Grade	GPA(Points)
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C-	2.0

Calculation of SPM:

The Student Performance Metric is calculated on the scale of 10

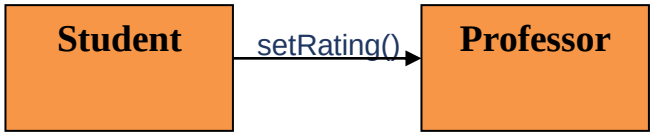
SPM = (GPA*2 + 2)

Grade	GPA	SPM
A	3.8	**3.8 * 2 + 2 = 9.6**

2. Professor Performance Metric (PPM) :

This metric gives us an insight about the professor's performance in the university based on Ratings that student provide.

Based on the Ratings that student provide we are using a custom sort to Rank the professor.



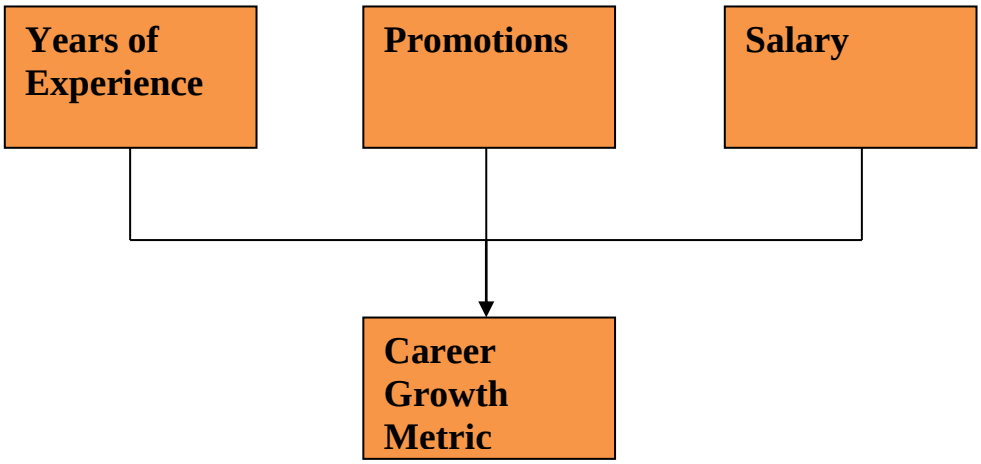
3. Courses Performance Metric (CPM):

This metric measures the Rating of the courses provided by the employer to the relevant courses assigned to his employees. This gives a insight to the employers about the courses that his employees have taken and also to rate them.

Based on the Ratings that Employer provides we are using a custom sort to Rank the courses that listed to the corresponding employees.

4. Professional Growth Metric:

This metric measures the weightage of the student's experience as a professional which indicates how well the university has contributed to student performance during work.



i. Years of Experience:

0-2 years	2.5 Points
3-5 years	5 Points
6-8 years	7.5 Points
Over 9 years	10 Points

ii. Promotions:

0 promotions	2.5 Points
1 promotions	5 Points
2 promotions	7.5 Points
3 promotions	10 Points

iii. Salary

70k – 80k	2.5 Points
80k – 90k	5 Points
90k – 130k	7.5 Points
130k+	10 Points

Calculating Professional Growth Metric:

Professional Growth Metric can be calculated on the scale of 10 by taking Years of experience, Promotions, Salary and we can take the average of the metrics.

Years of Experience	4 years	5
Promotions	1 promotion	5
Salary	95k	7.5
Overall Career Growth Metric (CGM)	Average of all metrics	(5+5+7.5)/3 = 5.83

5.Career Success Metric:

This evaluates the student's academic and career growth metrics. This indicates the overall performance of the student during the College period and over the period of 5 years .

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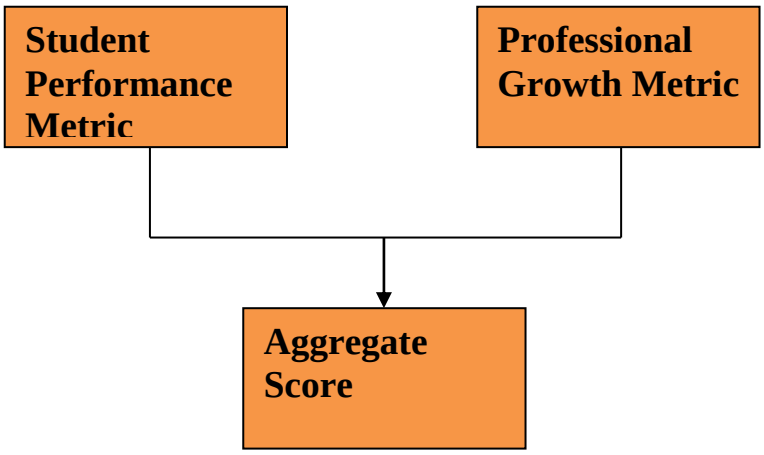

Career Success = $\frac{\text{Student Performance Metric + Professional Career Growth}}{2}$

$$= \frac{(3.8 * 2 + 2) + 5.83}{2} = 7.71 \text{ out of } 10$$

Conclusion:

Career Success is calculated on the scale of 10. Even when the GPA Metric is high(9.6) and since the Professional Growth Metric is at 5.83 it reduces the overall Career Success value. This gives us the clear idea that GPA doesn't matter for a successful Professional growth Success.

Developing Countries should provide quality education which aligns to the current industry trends which contains all the metrics mentioned above and also providing relevant Job opportunities**.**