Digital iCGPA Simulator

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Highlights:
1. The introduction of iCGPA concept to highlight student and graduate talent is a Malaysia national agenda.
2. It can be seen as a product of implementation of Malaysia Qualification Framework (MQF) that based on eight standard learning outcomes.
3. To speed the adoption at the nation wide, effective mechanism to understand how it works is crucial.
4. Digital simulator is one of effective way to allow user to understand the mechanism and how iCGPA works.

Key words: iCGPA, talent, visualization, digital simulator

Introduction
The Ministry of Higher Education (MOHE) has introduced iCGPA in order to provide better insight of student’s or graduate’s talent. iCGPA is a student or graduate performance analysis that is based on programme learning outcomes, which is defined and standardized in Malaysia Qualification Framework (MQF). According to Ministry of Higher Education, Malaysia is the first country
in the world implementing iCGPA concept. iCGPA is expected to provide useful information to graduates and employer to better match the job specification based on iCGPA analysis. UMP has been selected to be one of the pilot universities implementing iCGPA. However, many students and even academic advisors (academician) still unaware how iCGPA mechanism works. Realizing on how important is the students themselves to full aware and maximizing the benefit of iCGPA system, we are proposing a prototype of digital iCGPA simulator to allow students to understand the idea of iCGPA. We are expecting that iCGPA simulator can be used as an effective tool for student to identify their strength and weakness in the programme learning outcomes and at the same time facilitate the adoption of iCGPA at institutional level. If our findings significantly supporting the hypothesis, most likely the use of iCGPA simulator can be extended to the national level.

Objectives
1. To increase awareness among student about iCGPA.
2. To accelerate iCGPA adoption through digital platform.

Advantages
1. Simulate the academic goal based on competency in programme learning outcomes.
2. Perform sensitivity analysis to produce multiple scenarios based on variables setting (mark for each course and programme learning outcomes).
3. Self-assess their competency level or learning progress in specific programme learning outcomes.
4. Identify the strength and weakness to facilitate the design strategy or decision making. Let say student discover their strength in certain competencies may help them to choose the nature of final year project that they can perform or type of career that matched with their strength.

Commercial Value

- Based on 2015 data, there are 324,894 student enrollment at public universities at undergraduate study (first degree).
- Considering the new generation of student or known as Gen-Y which most of them post a high digital literacy, the adoption of digital iCGPA simulator seems can be adopted smoothly.
- With social networking site, the adoption rate can be increased and the impact can be measured with analytics.
- The model on how this tool can be commercialized is through campus wide license subscription and online advertising.

References

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