

## **CROWDBEES: DIGITAL TALENT MANAGEMENT PLATFORM FOR ACHIEVING GRADUATE ATTRIBUTES IN HIGHER EDUCATION INSTITUTIONS**

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### **ABSTRACT**

As is known globally that higher education institutions have and store a variety of potential talents from various parties; from lecturers, students, staff, to alumni. The potential of these talents can be optimized if the parties within them can be connected to each other in collaboration to work and create new innovations. Currently we are facing the digital era, people of the world are increasingly encouraged to be closer to the latest information and news as long as they are connected to the internet. There is a combination of technology and accurate information, it will be very helpful in finding and solving a need. This study uses a systematic literature review approach and bibliometric analysis of published research to describe issues related to digital talent management, extracting data from Scopus as a reliable index benchmark. From this data extraction it is divided into 3 clusters of the Creative Product Analysis Matrix (CPAM), namely: Novelty, Resolution, Elaboration and Synthesis. From these 3 clusters, the results of a product called Crowdbees can be seen as a platform that can manage creative talent within higher education institutions with the output being the achievement of Good Organization Governance (GOG) and Graduate Attributes (GA) applied at a university to its graduates.

**Keywords:** Digital Platform, Information Technology, Good Organization Governance (GOG)

### **1. INTRODUCTION**

As in educational institutions, especially higher education institutions, BINUS University has student organizations that have work programs that can mutually support organizational activists and faculties or departments. In 2022, BINUS University has 69 student organizations and in 2023 has 65 active and officially recognized student organizations by the Student Club and Activity Center (SCAC) under direct supervision by Student Affairs and Community Development (SACD).[1-4] In carrying out the work program, student organizations summarize the concept of the event to be carried out, expenses and income, analysis of target participants, materials, speakers, resource persons, etc. Everything is contained in a proposal approved by the SCAC to the relevant departments and the dean of the faculty. In this case specifically for the Departmental Student Association (HMJ). The number of HMJs at BINUS University is 22 student organizations. The work programs carried out are usually related to coaching that has been carried out by related sections such as the Student Management Skills Training (LKMM) which is divided into 2 namely Advance and Intermediate. This training is basically related to Good Organization Governance (GOG) which can be applied by student organization activists. Apart from GOG, the action of all the material that has been obtained is directed to BINUS Graduate Attributes (BGA).

BGA is carried out based on BINUS values, namely SPIRIT (Striving for Excellence, Perseverance, Integrity, Respect, Innovation and Teamwork). University. BGA has 9 points, namely: Global Standard Technical Competencies, Digital and Technology Fluency, Critical and Creative Thinking, Applied Management Skills, Growth Mindset, Initiative, Adaptability, Collaboration and Social Awareness. For this reason, in 2022, BINUS Digital, which is a division at BINUS University, is designing a platform that can unite faculties, departments, divisions, that is, with roles by students, lecturers, employees, they can create a project that can become a collaborative experience. new, in working on work programs that can foster and build one another.

Utilization of the platform to achieve this goal can be said as Crowdsourcing. Based on the results of research from Enrique Estelles (2012), people who participate in Crowdsourcing are an association that has a number of characteristics, heterogeneity, and knowledge that are determined based on the needs of the Crowdsourcing action taken (Estelles & Gonzalez, 2012). BINUS University created the platform named "Crowdbees" as a forum for community members to collaborate with each other on projects that are published through digital transformation. Digital transformation can provide major benefits for productivity and speed up the process of increasing the quality of work. Digital transformation is not only about adopting new technologies, but also about creating a culture of innovation in the work environment. Technological innovation has opened the door to optimize productivity. With digital transformation, work processes can become more effective and efficient so that they can bring significant benefits in the future.

## 2. METHOD

In the process of creating Crowdbees, BINUS Digital applies 3 project management approaches, namely Agile, Scrum and Kanban. Agile with 7 steps starting from planning, designing, developing, testing, deploying, reviewing, and improving. [9–13] Scrum is organized into a regular time frame called a Sprint, lasting 2 weeks and 4 main phases, namely planning meetings, daily scrum, sprint review, and sprint retrospective. Then Kanban, namely with a simple approach that aims to work on time without overloading team members. [14–16] As in scrum (to do, in progress, and done). [10, 14, 16] After all these stages, followed by the finalization of visual identity design, UI and UX, logos, colours, typography, and other design elements.

### 2.1 A broad and diverse concentration of creativity

In general, the concept of creativity has broad and varied meanings or in other words multiple, multidimensional, assessed from observations on the dimensions it highlights. "Creativity is a broad construct at multiple meanings for children, adults, and professionals." (Klein, Coleman, 1985: 215). There are also other opinions that say that, "Creativity is a function of knowledge, imagination, and evaluation." (Parnes, 1967:6). And "Creativity showing the integration of the four major areas of human function: thinking - cognitive, feeling - affective, physical - sensing, and intuitive." (Clark, 1988:45, 47).

Of the three views, none of these defines can be considered representative of this understanding, as we often know from the view of society in general, that to evaluate a creativity requires a value method from a certain point of view. It is on this concept of creativity that, in designing Crowdbees, benchmarks are determined from the point of view of student organization development, namely the 8 pillars of GOG

### 2.2 Consensual (Creative Product) and Conceptual (Creativity Criteria) Definitions

In the consensual definition, which refers to creative product design, a product will be considered creative if the product is new, unique, useful, correct and valuable in terms of specific needs. Then it is heuristic, which displays methods that have never been done before.

### 2.3 Tables Creative Product Analysis Matrix (CPAM)

According to Basemer and Treffingger (1981; 161) states that a product is creative if it has three categories known as the Creative Product Analysis Matrix (CPAM); Novelty (new), Resolution (solving), Elaboration (details) and Synthesis (synthesis). As in the table below.

Creative Product Inventory (CPI)	Creative Product Analysis Matrix (CPAM)	Creative Solution Diagnosis Scale (CSDS)
Generation	Novelty	Genesis
Reformulation	(Surprising & Original)	Novelty
Originality		(Problematization & Propulsion)
Relevance	Resolution	Relevance & Effectiveness
Complexity	(Logical, Useful, Valuable & Understandable)	
Condensation	Style	Elegance
Hedonics	(Organic, Well-crafted & Elegant)	(Internal Elegance & External Elegance)

Table 1. Creative Product Analysis Matrix

Novelty can be interpreted as the extent to which the product created has innovation in several ways, new processes and techniques, new concepts involved, including that the product was created with relatively the same experience or training. Products can surprise, give rise to new, original ideas. Solving (Resolution) relates to the extent to which the product has met needs such as Valuable (the product has meaning), Logical (acceptable common sense), Useful or useful (the product is able to combine elements that are either dissimilar or become a whole that is coherent so that it can survive and be accountable). There are 5 criteria that are tested in the creation of the Crowdbees platform, namely Organic (the product must have meaning as to why the product was created), Elegant (has added value), Complex (there is a combination of various elements), Understandable (the product is acceptable to common sense and can be accounted for any skills).

### 3. RESULT AND DISCUSSION

#### 3.1 Systematic Literature Review

From Based on the 3 theories put forward by Klein, Coleman, 1985: 215., Parnes, 1967: 6., and Clark, 1988: 45, 47. That the assessment of creativity is usually subjective, it is necessary to provide a basis that becomes a standard of assessment. the assessment is set with the 8 pillars of GOG. Because Crowdbees is for student organization activists. Then based on the definition of consensual (creative product) based on the assumption of creative product or observed response, it is analyzed from the manifestation of creativity that has been applied in the development of student organizations. This creative process is shared by the divisions involved. Then it was mutually agreed upon as a creative product that would be applied to Crowdbees. Then seen from the difference in degrees, Crowdbees was agreed as a product that was more creative than what had been created before, namely Scribees.

In this case Scribees developed into Crowdbees to be able to answer the needs of various parties, can be used in the scientific and artistic fields, especially those concerning products, work programs, people, processes, and the environment for creative workers to develop their creativity. In the conceptual definition, creativity criteria are developed that emphasize the innovation offered by Crowdbees. This creativity criterion is divided based on the level of need. At Crowdbees, the areas of creativity are divided according to the needs of the campus environment, as shown in the table below:

No.	Consensual Definition (Creative Product)	Conceptual Definition (Creativity Criteria)	BINUS Graduate Attributes
1	Research Activity	<ul style="list-style-type: none"> <li>• Advanced Research</li> <li>• Applied Research</li> <li>• Basic Research.</li> </ul>	<ul style="list-style-type: none"> <li>• Global Standard Technical Competencies</li> <li>• Digital and Technology Fluency</li> <li>• Critical and Creative Thinking</li> <li>• Growth Mindset</li> <li>• Collaboration</li> </ul>
2	Event	<ul style="list-style-type: none"> <li>• Benchmarking</li> <li>• Coaching</li> <li>• Company Visit</li> <li>• Study Tour</li> <li>• Competition</li> <li>• Conference</li> <li>• Mentoring</li> <li>• Performance</li> <li>• Seminar</li> <li>• Talkshow</li> <li>• Training</li> <li>• Tutoring</li> <li>• Workshop</li> </ul>	<ul style="list-style-type: none"> <li>• Global Standard Technical Competencies</li> <li>• Critical and Creative Thinking</li> <li>• Applied Management Skills</li> <li>• Growth Mindset</li> <li>• Social Awareness</li> </ul>
3	Talent Team	<ul style="list-style-type: none"> <li>• Web Developer</li> <li>• Web Designer</li> <li>• Project Relationship</li> <li>• Quality Assurance</li> <li>• Account Executive</li> <li>• UI/UX Designer</li> <li>• Graphic Design</li> <li>• Photography</li> <li>• Digital Illustration</li> <li>• 2D/3D Animation</li> <li>• etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Global Standard Technical Competencies</li> <li>• Digital and Technology Fluency</li> <li>• Critical and Creative Thinking</li> <li>• Applied Management Skills</li> <li>• Growth Mindset</li> <li>• Initiative</li> <li>• Adaptability</li> <li>• Collaboration</li> </ul>

- Social Awareness

Table 2. Consensual Definition (Creative Product) and Conceptual Definition (Creativity Criteria) in Crowdbees

Based on the consensual and conceptual definitions compiled by Crowdbees, the standards for evaluating success are based on the 8 pillars of GOG, because the 3 existing creative products and creativity criteria are all related to student organizations and BGA. Then the standard assessment becomes like the following table:

No.	Good Organization Governance (GOG)	Before 2017-2021	After 2022-2023
1	Accountable	The clarity of functions, structures and responsibilities is assessed subjectively (there is no rating standard) from the performance results carried out by the work program committee.	The clarity of functions, structures and responsibilities is assessed using the Crowdbees system, in the form of a star rating of work results which are assessed based on the ability to complete mutually agreed-upon projects.
2	Participatory	Limited only to organizational activists who own the event.	All students, both those who have become part of student organization activists and those outside the organization, can be part of the ongoing project.
3	Consensus Oriented	Mediation in making new decisions or policies is not recorded properly, so that inaccuracies often occur in project implementation.	Mediation is carried out online and recorded in Crowdbees, negotiating an extension of time on both the project owner and project implementing members, carried out within a mutually agreed time in the Crowdbees system, can be monitored and maintained together.
4	Equitable & Inclusive	Policies and regulations are unlimited, meaning that they cannot be jointly accounted for, because there is nothing to lock them up.	All policies or regulations can be agreed and implemented together, apply to all parties involved. Locked from the start to comply.
5	Transparant	All existing policies and information can only be accessed by the parties involved / core committee only.	All existing policies and information can be seen by anyone, including those related to or impacted by existing policies.
6	Responsive	Slow response in completing a decision for change.	The system is bound by time, cannot be changed without mutual agreement, has the capacity to respond to change.
7	Effective & Efficient	Human Resources (HR) is limited only to the organizational environment.	Get more optimal Human Resources (HR) according to needs. Not only from the organization but from outside the organization.
8	Follow the Rule of Law	Framework is uncertain, subject to change, does not work as it should (for a small organization this is very impactful).	The framework, policies and governance are in accordance with the Rules and Regulations of Campus Life (PTTKK) and policies designed by Crowdbees, approved by the university.

Table 3. GOG 8 Pillars Assessment Standards for Student Organizations at BINUS before and after using Crowdbees products.

### 3.2 Bibliometric Analysis

According to Basemer and Treffinger (1981; 161) states that a product is creative if it has three categories known as the Creative Product Analysis Matrix (CPAM); Novelty (new), Resolution (solving), Elaboration (details) and Synthesis (synthesis). Then the Crowdbees product CPAM is as follows:

1. The authors, in the form: initials of the first names followed by last name (only the first letter capitalized with full stops after the initials),
2. Novelty owned by Crowdbees is how a platform designed specifically for student organization activists can collaborate with professional parties within the campus environment, such as student departments and divisions. No longer carrying out work programs within the organization but can collaborate directly with other

organizations and even with lecturers and employees to have better experience in gaining knowledge and developing skills contained in BGA. There are new processes, new techniques, materials, and new concepts involved in fostering student organizations in gaining organizational skills.

3. The solution on Crowdbees is that this platform has answered the needs of student organization activists in fulfilling Human Resources (HR) for a project, can be selected according to work program committees, has a work system that is clear, recorded, and accountable, and has a standard assessment when the project runs to completion. It's not strange that Crowdbees don't charge anything, because in truth Crowdbees were created to increase the value of skills. This value is based on the previously described GOG, SPIRIT and leads to BGA.
4. Elaboration (Synthesis) in Crowdbees can be applied practically, in this dimension it refers to the degree to which Crowdbees can answer the needs of organizational activists, student divisions, and departments. All parties can be involved, collaborate, work together in empowering others, in accordance with the vision and mission of BINUS University, Fostering and Empowering the Society or Indonesia. So that can survive logically in answering the needs of many parties.

### **3.3 FUTURE RECOMMENDATION**

During the design of the Crowdbees platform, it is hoped that this platform will be able to meet other needs on various campuses, be able to collaborate more broadly with ideas from campuses around the world, to create something bigger, from student organizations, lecturers and employees through science, research become new knowledge that can be developed into products that are more responsive to world challenges.

### **4. CONCLUSION**

The Crowdbees platform is designed to meet five criteria in its testing and creation. At the Organist stage, Crowdbees has a philosophy or meaning as a product that can answer the needs of student organization activists, the needs of each student division, the needs of lecturers and employees, in the form of collaboration with the aim of achieving the vision and mission of BINUS University, namely fostering, and empowering the society or Indonesia.

At the elegant stage, Crowdbees has a novelty in creating workspaces, online collaboration, utilizing the Internet of Things (IoT) that is relevant to the current generation, namely the Zoomer generation, as well as responding to challenges in achieving increased quality of campus graduates, fulfilling soft skills and hard skills. skills from students in the form of GOG and BGA.

Crowdbees also has a complex that combines various Human Resources, of all ages, positions, scientific fields, to answer research needs and development in the form of creative products and creativity criteria that exist in Crowdbees. The Crowdbees platform can ultimately be understood and used together in advancing Education or knowledge with qualified skills.

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