Academic Regeneration Modelling: Factors Influencing the Attractiveness of Young Academic Talent

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ABSTRACT

This research is crucial because universities need to compete to draw and keep the greatest talent for the improvement of society’s growth and education. The purpose of this study is to examine how organizational culture, information technology infrastructure, and sustainability values influence the attraction of young academic talent. Young academics at Satya Terra Bhinneka University serve as the research objectives. This study employed partial least squares (PLS) analysis using the SmartPLS program. Validity and reliability of the study variables are tested initially using the outer model. Then inner model test to evaluate the impact of various study factors. The findings of this study show that organizational culture, information technology infrastructure, and sustainability values have positive and significant effect on the attraction of young academic talent.

Keywords: organizational culture; the attractiveness of academic talents; information technology infrastructure; The value of sustainability.
INTRODUCTION

Higher education has a key role in national development, with academics as human capital that develops students' knowledge, skills and character. Educational organizations need to maintain and develop quality human resources. A key challenge is recruiting and retaining talented young academics in the “talent war” faced by organizations around the world. There is a lack of insight into the factors that attract the talents of young academics in choosing a higher education organization as a place for a career. Even though academic workers play an important role because they contribute to achieving economic growth, reducing poverty and providing skills. In it, academics as human capital in higher education organizations play a major role in transferring knowledge, developing skills, and shaping student character. For this reason, universities as organizations need to orchestrate their resources, including human resources, to synergistically realize the organization’s big goals (Soeharso, 2020).

The issue lies in the higher education sector, where there is a growing need for academic workers in higher education institutions. The economic outlook indicates that this demand will only grow in the future, which presents a challenge that needs to be anticipated (Theron, et al., 2014). The second issue is that there is a significant financial cost associated with not being able to retain qualified academic workers (Selesho & Naile, 2014). Numerous researchers concur that expenses can have a substantial impact on organizations. These expenses include those associated with hiring new staff, training and development, induction and orientation programs, employee turnover costs, reduced productivity, and lower work morale (Kramar, et al., 2014); (Pienaar & Bester, 2008). Therefore, it can be said that having skilled people resources will help the company achieve its goals and develop sustainably; conversely, losing them will hurt the company (Netswera & Rankhumise, 2005).

In addition, it is important for educational organizations to maintain and develop quality human resources in the academic environment. Because in any organization, human capital is life blood and a source of innovation and improvement for new and good ideas created or produced by humans (Soeharso, 2020). The main driver of an organization’s excellence is the people who work in the organization. A productive organization must have qualified and innovative people, therefore, from the start of the organization’s founding, they must choose workers selectively. However, the challenge is that many organizations experience difficulties in recruiting and retaining talented young talents (Linkedin, 2023) (Li, 2020).

Furthermore, as faced by business organizations and other leading organizations, the "talent war" is the main agenda of organizations throughout the world (Kim, 2008). One important factor in attracting talent is organizational culture, which creates a work environment that influences the interest and desire of young talents to join an organization (Earle, 2003). Organizational culture is a
description of the values, tools, beliefs, communication and behavioral processes that provide direction to people in the organization (Soeharso, 2020). It is important to develop organizational culture because organizational culture reflects employee experiences and is often a determinant of organizational failure or success (Weiner, 2018). So, the first research objective is to find out how the role of organizational culture can attract young academic talent.

Then another factor that can attract talent is information technology infrastructure (Earle, 2003). Because in the digital era that continues to develop, information technology infrastructure facilities play a significant role in changing the organizational landscape significantly. This research will look at how the role of information technology infrastructure can influence young academics’ views of their career potential in the academic field. Engagement in technological innovation, access to digital resources, and adaptation to technological change are aspects that need to be further explored (Benitez-Amado, 2013). So, the second research objective is to find out how the role of information technology infrastructure can attract young academic talent.

The next factor identified as attracting talent is the value of sustainability in the organization (Blindheim & Meyer, 2023). Sustainability is not only about environmental aspects, but also about the positive contributions that academics can make in the academic realm and society at large (Alshuwaikhat & Abubakar, 2008). This research will analyze how the role of sustainability values can attract young talent in the academic world. So, the third research objective is to find out how the role of sustainability values can attract the talents of young academics.

The problem solving approach is carried out using data collection methods through in-depth interviews, Focus Group Discussions (FGD); and surveys of research respondents. The urgency of this research can help universities and higher education institutions in developing strategies to attract and retain young academic talent, which will be a driver of change and innovation in the world of higher education.

LITERATURE REVIEW
Attraction of Talent

In the higher education sector, it is important to attract and retain academic workers because they are human resources who help ensure that the university’s vision and mission are achieved (Musakuro & De Klerk, 2021). Jim Collins is of the view that one of the important steps to becoming a great organization is to recruit good workers who become human capital for the organization (Collins, 2009). It is further said that great organizations ensure that they have placed their best employees in optimal opportunities for organizational growth. Organizations focus on character, ideals, values (which are in accordance with the values adopted by the organization), behavior, and also direct experience. So
it can be concluded that organizations value individuals according to their circumstances and show the same traits as organizational culture.

Based on the Theory of Planned Behavior (Ajzen, 1985), the attraction of academic talent can be formed based on individual behavior and intentions through various attitudes, norms and controls that are deliberately created. For higher education organizations such as universities, attitudes, norms and control can be formed through organizational culture and the values espoused (Wilson, 2001). So it can be said that an individual academic's intention to join a higher education organization is a reflection of the attitudes, norms and controls developed by the organization to obtain the best people and place them according to their talents (Sule & Wahyuningtyas, 2016). Attitudes, subjective norms, and perceived behavioral control can be dimensions to measure an individual's intention to join an organization or are said to be the attraction of talent (Ajzen, 1985) (Highhouse, et al., 2003).

**Organizational Culture**

Academic organizations must be able to create an organizational culture that supports the learning process. Organizational culture is reflected as a pattern of basic assumptions created by the organization as learning to solve problems of external environmental adaptation and internal integration and can improve organizational performance (Hogan & Coote, 2014). Organizational culture is also related to how employees perceive the characteristics of an organization, not with whether employees like the culture or not. Organizational culture is about how learning organizations relate to the environment which is a combination of assumptions, behavior, stories, myths, ideas, metaphors and other ideas to determine what it means to work in an organization (Rivai, 2018).

Organizational culture also contributes to the performance of several other functions within an organization. These include: (a) giving members of the organization a sense of identity; (b) facilitating the emergence of commitment to something larger than one’s personal interests; (c) strengthening the social system, which acts as a social glue to help unify an organization by setting acceptable standards for what employees should say and do; and (d) serving as a control and meaning-making mechanism that directs and shapes employees’ attitudes and behavior (Robbins & Judge, 2017). The following are the elements of organizational culture: (a) norms, or standards of behavior, such as expectations for the amount of work completed; (b) philosophy, in which the organization’s views on how to handle customers and/or employees are shaped by policies; (c) guidelines, which state that newcomers must master established methods and procedures in order to be welcomed as members of the growing team and that standards pertaining to the company’s accomplishments must be followed; (d) cooperation: this is the general “feeling” that is expressed through
the environment, participant interactions, and the way members of the company engage with clients and other people (Luthans, 2016).

**Information Technology Infrastructure**

It is critical to align information technology with the organization and manage the information technology as a service model. Information technology infrastructure is a technology related to processing data into information and the process of distributing that data/information within the boundaries of space and time (Soeharso, 2020). Organizations that develop the ability to manage their information technology infrastructure and take advantage of opportunities to manage information technology powerfully and quickly, will gain important benefits (Soeharso, 2020). Previous research emphasizes that organizations that control information technology infrastructure have the potential to have a competitive advantage, including attracting the best workforce (Benitez-Amado, 2013). Furthermore, the role of information technology infrastructure for organizations includes: (a) having a higher availability of information technology resources; (b) resulting in better system and application functionality; (c) reduce costs; (d) increasing organizational flexibility; and (e) reduce financial risk. The dimensions of information technology infrastructure are: hardware; networks; data center and storage facilities; virtual and remote assets; wireless and wired access; and software (Soeharso, 2020).

**Sustainability Values**

The role of sustainability values in organizations has been proven to provide added value for any organization. It was discussed in previous research that organizations that have sustainability values can support organizations to employ talents that are in line with these values (Das & Singh, 2016); (Aranganathan, 2018); (Sarkar, et al., 2023). The value of sustainability in higher education organizations can be implemented through an integrative model with dimensions, including administrative activities, campus operations, and including the tridharma activities of higher education (teaching, research and community service) as well as other organizational activities. The dimensions of sustainability values were adopted from previous research (Larran et al., 2016) which used the dimensions: eco-initiative, eco-civic engagement, and eco-helping.

**RESEARCH METHOD**

The location of this research is Universitas Satya Terra Bhinneka with the unit of analysis being young academics (millennial generation). This research analyzes the role of sustainability values and information technology infrastructure through the perspective of young academics to identify intentions to join as an attraction for talent using a case study approach at Universitas Satya Terra Bhinneka. This research was conducted from October to February 2024.
This university was chosen because this organization has a high proportion of young academics. This research has a library and field research design with a quantitative causality approach.

The population of this research includes young academics in all Satya Terra Bhinneka University work units consisting of the Faculty of Economics and Business, Faculty of Technology and Computer Science, Faculty of Health, Faculty of Agriculture and Forestry, Academic Bureau, Student Affairs Bureau, Finance and Human Resources Bureau, General Affairs and Infrastructure Bureau, Innovation Bureau, Public Relations Bureau, Research and Community Service Institute, Internal Quality Assurance System, Monitoring and Evaluation, and External Quality Assurance System.

**Figure 1.** Conceptual Model and Research Thinking Framework

Research hypothesis:

H1: Organizational culture has a positive and significant effect on the attraction of young academic talent.

H2: Information technology infrastructure has a positive and significant effect on the attraction of young academic talent.

H3: Sustainability values have a positive and significant effect on the attraction of young academic talent.

**RESULTS AND DISCUSSION**

This research was conducted in Medan City (North Sumatra) with respondents who participated in filling out the research questionnaire being academic workers at Satya Terra Bhinneka University.

**Table 1.** Demographics of Research Respondents

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Work</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Based on data from Table 1, the demographics of respondents in this study are dominated by academics who have worked for 1-2 years (56.36%), then worked for less than 1 year (43.64%). Most of the respondents were women (54.55%). The majority of respondents were lecturers (81.82%).

This research uses four variables, namely: 1) Organizational Culture which is measured by X1.1 (Norms), X1.2 (Philosophy), X1.3 (Rules), and X1.4 (Cooperation); 2) Information Technology Infrastructure as measured by X2.1 (Hardware), X2.2 (Network), X2.3 (Data Center and Storage Facilities), X2.4 (Virtual and Remote Assets), X2.5 (Wireless and Wired Access), and X2.6 (Software); 3) Sustainability Values as measured by X3.1 (Eco-initiative), X3.2 (Eco-civic Engagement), and X3.3 (Eco-helping); and 4) Attractiveness of Young Academic Talent as measured by Y1.1 (Attitude), Y1.2 (Subjective Norms), and Y1.3 (Perceived behavioral control). The factor loading value of each indicator is examined in order to evaluate the latent variable measurement model. Based on the study results in Figure 1 and Table 1, the factor loading value in PLS can be observed. It is strongly advised if the number is greater than 0.7, but a factor loading value of 0.5 to 0.6 is still acceptable.

Figure 1. PLS Algorithm Analysis Results

Source: Data Processing Results with Smart PLS (2024)
The factor loading value can be shown in the following table.

**Tabel 2. Outer Loading**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Outer Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>Norm</td>
<td>0,939</td>
</tr>
<tr>
<td></td>
<td>Philosophy</td>
<td>0,919</td>
</tr>
<tr>
<td></td>
<td>Rule</td>
<td>0,920</td>
</tr>
<tr>
<td></td>
<td>Cooperation</td>
<td>0,934</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Hardware</td>
<td>0,917</td>
</tr>
<tr>
<td></td>
<td>Network</td>
<td>0,886</td>
</tr>
<tr>
<td></td>
<td>Data Center and Storage Facilities</td>
<td>0,946</td>
</tr>
<tr>
<td></td>
<td>Virtual and Remote Assets</td>
<td>0,882</td>
</tr>
<tr>
<td></td>
<td>Wireless and Wired Access</td>
<td>0,818</td>
</tr>
<tr>
<td></td>
<td>Software</td>
<td>0,805</td>
</tr>
<tr>
<td>Sustainability Values</td>
<td>Eco-initiative</td>
<td>0,930</td>
</tr>
<tr>
<td></td>
<td>Eco-civic Engagement</td>
<td>0,920</td>
</tr>
<tr>
<td></td>
<td>Eco-helping</td>
<td>0,917</td>
</tr>
<tr>
<td>Attraction of Talent</td>
<td>Attitude</td>
<td>0,922</td>
</tr>
<tr>
<td></td>
<td>Subjective Norms</td>
<td>0,887</td>
</tr>
<tr>
<td></td>
<td>Perceived behavioral control</td>
<td>0,892</td>
</tr>
</tbody>
</table>

Source: Data Processing Results with SmartPLS (2024)

The analysis presented in Figure 1 and Table 2 above reveals that each indicator’s factor loading value is more than 0.7, indicating that all variable indicators are either valid and significant or have satisfied convergent validity requirements. When assessing latent variable measures, discriminant validity and composite reliability are the two additional criteria in addition to convergent validity. The outcomes of the analysis are as follows.

**Table 3. Construct Reliability and Validity**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Culture</td>
<td>0,946</td>
<td>0,957</td>
<td>0,961</td>
<td>0,861</td>
</tr>
<tr>
<td>Attraction of Talent</td>
<td>0,883</td>
<td>0,884</td>
<td>0,928</td>
<td>0,811</td>
</tr>
<tr>
<td>Information Technology Infrastructure</td>
<td>0,939</td>
<td>0,946</td>
<td>0,952</td>
<td>0,769</td>
</tr>
</tbody>
</table>
All Average Variance Extracted (AVE) values are > 0.5, which indicates that the AVE value is good for the four latent variables—Organizational Culture, IT Infrastructure, Sustainability Value, and Attraction of Young Academics Talent—because it has added value of 0.5, according to the analysis results in Table 3. It might also mean that the latent variable has satisfied the requirements for use validity. For every latent variable, the values of rho_A, Cronbach’s Alpha, and Composite Reliability are more than 0.7. This indicates that using the four latent variables is dependable.

A comparison between the tcount value and the ttable value, or between the pvalue and α, can be used to test the effect between variables. With a t table of 1.96, the error rate (α) utilized is 5%, or 0.05. The test conditions that are employed are pvalue < α (0.05) or tcount > ttable if H0 is rejected. The outcomes of the PLS bootstrapping analysis of path coefficient testing are shown in Figures 2 and 3.

**Figure 2. PLS Boostrapping Analysis Results (Path Coefficients and Pvalue)**

Source: Data Processing Results with SmartPLS (2024)
The Influence of Organizational Culture on the Attraction of Young Academic Talent

The analysis results show the estimated coefficient value is 0.406. The coefficient has a positive sign, which means that organizational culture has a positive influence on the attraction of young academic talent. The obtained value of tcount (2.292) > ttable (1.96) with a significance value or pvalue (0.000) < α (0.05). Thus, H1 which states that organizational culture has a positive and significant effect on the attraction of young academic talent is accepted, so it can be said that organizational culture is a factor that significantly influences the attraction of young academic talent. This is in line with research by Kim & Lee (2022), Li & Wang (2021) and Chen et al., (2020). Having a positive influence means that the better/improved the organizational culture implemented, the better/increased the attraction of young academic talent. This is because an organizational culture that has values that are in line with the personal values of young academics such as the values of sustainability, inclusivity, or innovation can attract them to join and remain in the organization and a culture that supports individual development provides opportunities for young academics to continue learn and grow in their careers.

The Influence of Information Technology Infrastructure on the Attraction of Young Academic Talent

The analysis results show the estimated coefficient value is 0.249. The coefficient has a positive sign, which means that information technology infrastructure has a positive influence on the attraction of young academic talent.
The obtained value of tcount (2.236) > ttable (1.96) with a significance value or pvalue (0.026) < α (0.05). Thus, H2 which states that information technology infrastructure has a positive and significant effect on the attraction of young academic talent is accepted, so it can be said that information technology infrastructure is a factor that significantly influences the attraction of young academic talent. This is in line with research by Li & Zhang (2022), Chen & Wang (2021), and Liu & Wu (2020). Having a positive influence means that as information technology infrastructure improves, the attraction of young academic talent will also increase. This is because the sophisticated information technology infrastructure can support work flexibility, visibility, access to collaboration and modern research and teaching facilities with high-tech equipment attract young academics with a supportive work environment to carry out their research and teaching.

The Influence of Sustainability Values on the Attraction of Young Academic Talent

The analysis results show the estimated coefficient value is 0.322. The coefficient has a positive sign, which means that sustainability values have a positive influence on the attraction of young academic talent. The obtained value of tcount (2.111) > ttable (1.96) with a significance value or pvalue (0.035) < α (0.05). Thus, H3 which states that the value of sustainability has a positive and significant effect on the attraction of young academic talent is accepted, so it can be said that the value of sustainability is a factor that significantly influences the attraction of young academic talent. This is in line with research by Smith & Johnson (2023) and Brown & Garcia (2022). Having a positive influence means that the greater the value of sustainability, the greater the attraction of young academic talent. This is because the value of sustainability emphasized by the organization offers a vision and mission that is in line with the values and goals of academics, especially in implementing the SDGs. Organizations that emphasize the value of sustainability also provide opportunities and innovation for young academics to contribute and take initiatives in improving sustainability, either through research, teaching, or innovative practices in organizational operations.

The variability in the variable of attracting young academic talent can be explained by the variability in the variables of organizational culture, information technology infrastructure and sustainability values amounting to 74.2%, while the remaining 25.8% is influenced by other factors not explained in this research.

Table 4. R square (R²) Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attraction of Talent</td>
<td>0.742</td>
<td>0.727</td>
</tr>
</tbody>
</table>
The variable that has the highest influence on the attraction of young academic talent is the organizational culture variable with an effect size ($f^2$) value of 0.245. Indicators of organizational culture in this case are norms, philosophy, rules and cooperation.

**CONCLUSION**

This research provides empirical evidence about modeling academic regeneration with the influencing factors of organizational culture, information technology infrastructure and sustainability values which influence the attraction of young academic talent. The findings of this research reveal that organizational culture (norms, philosophy, rules, and cooperation), information technology infrastructure (hardware, networks, data centers and storage facilities, virtual and remote assets, wireless and wired access, and software) and sustainability values (eco-initiative, eco-civic engagement, and eco-helping) have a positive and significant effect on the attractiveness of young academic talents (attitude, subjective norms, and perceived behavioral control).

This study emphasizes the importance of organizational culture and ideals with the personal values of young academics. They foster a sense of purpose and belonging when its ideals are shared. This alignment promotes a happy workplace where young academics are inspired and involved, which raises retention rates. The importance of having a high-tech IT infrastructure is also emphasized in this study. This infrastructure makes it easier to collaborate, work flexible hours, and get access to cutting-edge teaching and research facilities. In order to support their work, young academics frequently look for settings that include the newest technology tools and resources. Organizations show their dedication to fostering professional development and academic achievement by offering these kinds of resources, which attracts young academics. Last, this study emphasizes how important sustainability values. Many academics find that organizations that place a high priority on sustainability not only share their personal values, but also provide them with opportunity to make important contributions to addressing societal and environmental issues. Organizations can show a strong commitment to building a better future by highlighting sustainability in their vision and mission.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational Culture</th>
<th>IT Infrastructure</th>
<th>Sustainability Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attraction of Talent</td>
<td>0.245</td>
<td>0.091</td>
<td>0.232</td>
</tr>
</tbody>
</table>

Source: Data Processing Results with SmartPLS (2024)
statements. This is particularly appealing to young academics. Additionally, these organizations give young scholars a platform to experiment and lead the way in promoting sustainability in the fields of teaching, research, and organizational practices.

Future research can build predictive models that integrate organizational culture factors, information technology infrastructure, and sustainability values to predict the future attraction of young academic talent. This can help organizations identify areas for improvement and plan strategies to attract and retain young academic talent.

REFERENCES


