Implementation of Digital Transformation in Student Organizations

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Abstract

With technological developments that are increasingly significant every year, many organizations or companies are led to change activities digitally without exception for student organizations that are required to do the same thing. Student organizations have the meaning of an organization that is formally and officially registered under the university. Other than that, it is not included in the context of student organizations. However, the implementation of digital transformation encountered many obstacles, such as a lack of prepared human resources, lack of support, and the reluctance to make significant changes. The method used in this research qualitatively uses a literature review method. The results of this research propose implementation steps that can be applied to student organizations, solutions to challenges during implementation, and a new factor in the digital organization, namely the digital mindset.

Keywords
The student organization, digital transformation, digital organization, digital mindset, organization agility.

1. Introduction
The development of increasingly advanced technology demands more significant use of technology not only in large companies or organizations but has also begun to spread to student organizations in every university in Indonesia. One

of the consequences of the increasingly massive use of technology is the digital transformation that occurs in various sectors of life. Digital transformation has become a top priority to be developed in multiple companies or organizations, which is unavoidable (Kuzu 2020), especially after the COVID-19 pandemic, which forces all activities to stay indoors. However, although many organizations have developed digital transformation, student organizations under the auspices of universities are often forgotten, so many student organizations do not adapt to the digital transformation era.

Student organizations have an essential role as a platform for students to improve their self-ability or soft skills (Kosasih 2017). This self-ability can affect students' behaviour and interaction in daily life so that students can hone these skills through student organizations. Based on research conducted by We Are Social in 2022, there are 204.7 million people in Indonesia who are internet users. This very high number proves that digitalization in Indonesia is proliferating, and data from Statista shows that the average smartphone penetration rate will increase by 10% in 2020 (Digital Insights 2022). With such a high number, it is proof that even student organizations also need capable digital transformation capabilities to support adaptation needs. Thus, student organizations must study and prepare for this.

Table 1. Opinion Survey

Answer	Percentage
No, not really	14%
No, not at all	1%
Do not know how to answer	9%
Yes, absolutely	30%
Yes, somewhat	45%

Based on research conducted by the Recherches & Solidarités association and Solidatech, it can be seen from Table 1 above; it indicates that the impact of digital transformation on non-profit organizations, which is equivalent to student organizations, dramatically influences the operational activities of the organization (Rakotoarimanana 2020). Even though there are so many who give positive opinions, but there are still few who implement digital transformation in student organizations. However, there are many obstacles to the development of digital transformation in student organizations, according to the article by Tjaša Poljšak, such as the lack of prepared human resources and support and the reluctance to make significant changes (Mikrocop 2022). Therefore, these obstacles are not obstacles but challenges that must be faced and conquered by students because student organizations are a place where most students develop and express their interests and talents.

Student organizations can obtain various benefits if they implement digital transformation well, such as increasing the organization's performance to 100% better than before and significantly increasing the effectiveness and efficiency of the organization's operational activities (Jadertrierveiler et al. 2019)(Parviainen et al. 2017). With the various benefits obtained, it is appropriate, from the students to the university, not to forget the student organizations, which are a place for them to learn and develop their abilities. In addition, the expertise of human resources within the student organization is also an essential factor as a driver of digital transformation (Osmundsen and Iden 2018). Without them as key players and leading actors, it will be difficult for student organizations to change and adapt to using digital in carrying out their operational activities. Students can obtain these skills through training or workshops organized for the general improvement of understanding and digital literacy and the ability to operate basic technology to implement digital transformation.

1.1 Objectives
This paper will propose how to implement digital transformation in student organizations. The student organization in question is a formal student organization under the direct supervision of the university and at the university level for its scope. There will be little difference in the implementation of digital transformation in student organizations with standard organizations. Therefore, this paper will focus on student organizations to be the main focus because there are still many student organizations that have not made digital transformations.

2. Literature Review

2.1 Differences between Student Organization and Standard Organization
Student organizations understand that an organization or club that is under and officially registered by a university or campus that primarily operates meets and practices around the university (Coppedge 2019). All organizations, forums,

or clubs that are not official from a university are not included in the definition of a student organization in question. Student organizations have a function to train various soft skills for students who participate in these activities to become a provision for the world of work (Wibowo 2015).

Compared with organizations in general, there are several differences between student organizations and standard organizations. An organization is a group of people who come together to form a community to pursue a common purpose or goal (Ingen et al. 2015). Organizations usually have their uniqueness and respective goals to distinguish one organization from another. The difference between standard and student organizations lies in the location that student organizations are under and are given direct support by an educational institution such as a university. Therefore, this research focuses on student organizations rather than standard organizations because there is still tiny that discusses student organizations even though they have a significant influence on students.

2.2 Digital Transformation, Organizational Agility, and Digital Transformational Leadership

Digital transformation can be interpreted as a change in an organization that initially still uses a lot of manual activities to use various technologies such as analytics, cloud, mobile communication technologies, and social media platforms (Hanelt et al. 2021) Digital transformation is connected with organizational agility and digital transformational leadership to support the success of digital transformation itself.

Organizational agility is related to an organization's ability, not focused on large-scale organizations only, to identify sudden changes and respond swiftly and quickly using existing internal resources (Jesse 2018). Organizational agility is closely related to digital transformation because it will be one of the critical factors for the success of digital transformation in student organizations. Student organizations that are responsive and quick to respond to changes will increasingly impact digital transformation.

In addition, digital transformation is also influenced by digital transformational leadership. Digital transformational leadership is closely related to the existing human resources in the organization. In organizations that have human resources with a digital mindset, it will be much easier to implement digital transformation so that people in student organizations become vital players in digitizing, not only the chairman but all existing human resources (Ardi et al. 2020).

These three things are interrelated and influential on student organizations' digital transformation process (Alnuaimi 2022). It can be seen from Figure 1 below that the correlation between these three things; digital transformation, organizational agility, and digital transformational leadership. Therefore, it must be ensured that there are no obstacles or even failures in implementing digital transformation in student organizations.
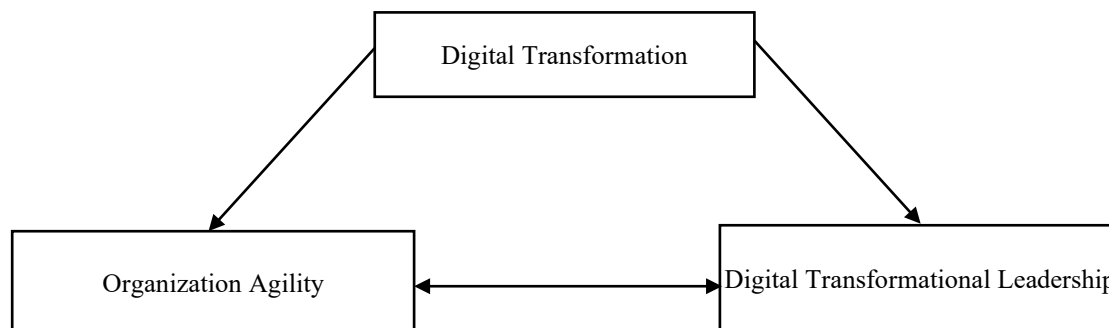
Figure 1. Digital Transformation, Organizational Agility, and Digital Transformational Leadership

2.3 Digital Organization

Digital transformation brings a lot of advantages or benefits for student organizations if implemented. These benefits are not limited to internal only but also open up new opportunities that can be offered to external or customers (Parviainen et al. 2017). But the thing to remember is that the implementation of digital transformation can bring disruptive changes that not all human resources will be ready for and impact them.

Digital transformation is applied to student organizations and will change three main things: the workplace, workforce, and human resources (ZIGURAT Innovation School 2022). With digital transformation, a student organization will change drastically using technology, but several things can be taken as benefits by the student organization. For example, they are increasing efficiency and effectiveness in carrying out operational activities of the organization,

reducing the time required for an action, and even saving internal resources (Jadertrierveiler et al. 2019). The following is Figure 2 from digital organizations that have implemented digital transformation.
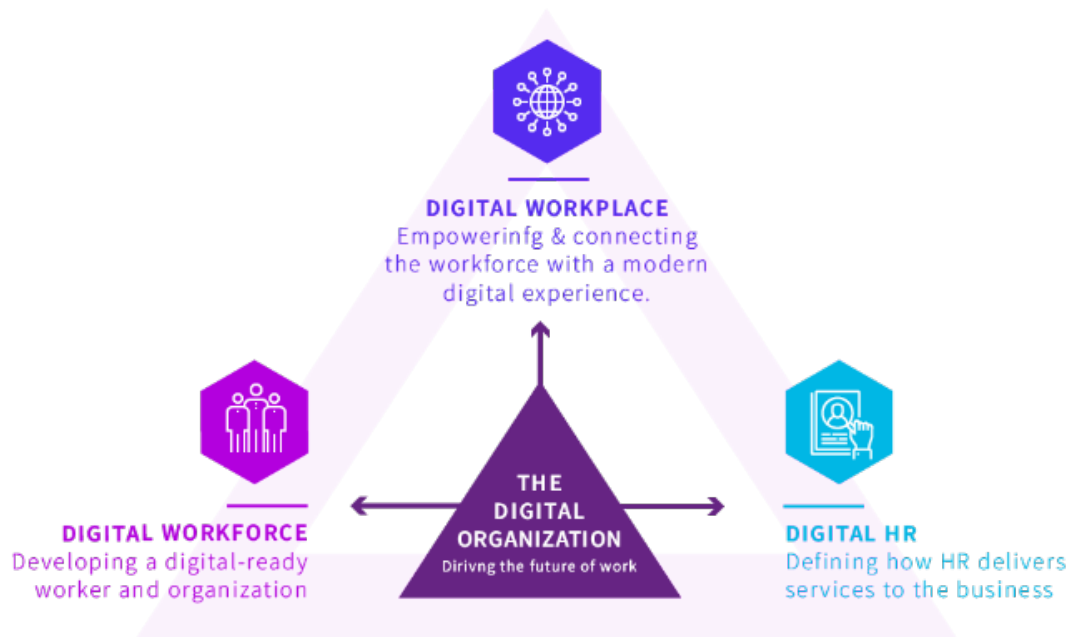

Figure 2. The Digital Organization

2.4 Obstacles and Barriers to Digital transformation

All things have their obstacles, without exception, when implementing digital transformation. In addition, digital transformation has several obstacles that can slow or even derail digitalization. Therefore, knowing the possible obstacles when implementing digital transformation is very important.

Obstacles in the transformation can be in the form of unprepared human resources, lack of support from university management, and reluctance to make changes and adjustments in adapting to digital conversion (Henriette et al. 2016).

Table 2. Barriers to Digital Transformation

Barriers	Percentage
Excessive Competing Priorities	41%
Insufficient Funding	37%
Lack of organizational agility	27%
Insufficient Technical Skills	23%
Fear of taking risks	19%

Based on Table 2 above from Deloitte Insights in 2021, it is stated that these five things are one of the many obstacles and challenges in digital transformation. Therefore, these five things should be watched out for and attention to in implementing digital transformation in student organizations.

3. Methods

This research uses qualitative methods by focusing on documents, journals, and paper reviews. This research seeks information through various sources such as news, journals, books, and white papers to be used as sources of reference and reference in helping determine and propose strategies or frameworks for implementing digital transformation in student organizations. First, this research begins by looking for data from various sources to define a gap in the context of digital change in student organizations, then searches for material from different credible places such as IEEE

Explore, Science Direct, Research Gate, Google Scholar, and Scopus to ensure quality. From this research. When searching for materials, it is limited to digital terms or keywords, transformation, student, and organization so that there is no widening of focus. Then from the data and materials that have been collected, analysis and data extraction are carried out. Figure 3 below is a form of the procedure for analyzing documents, journals, books, and white papers in this research.
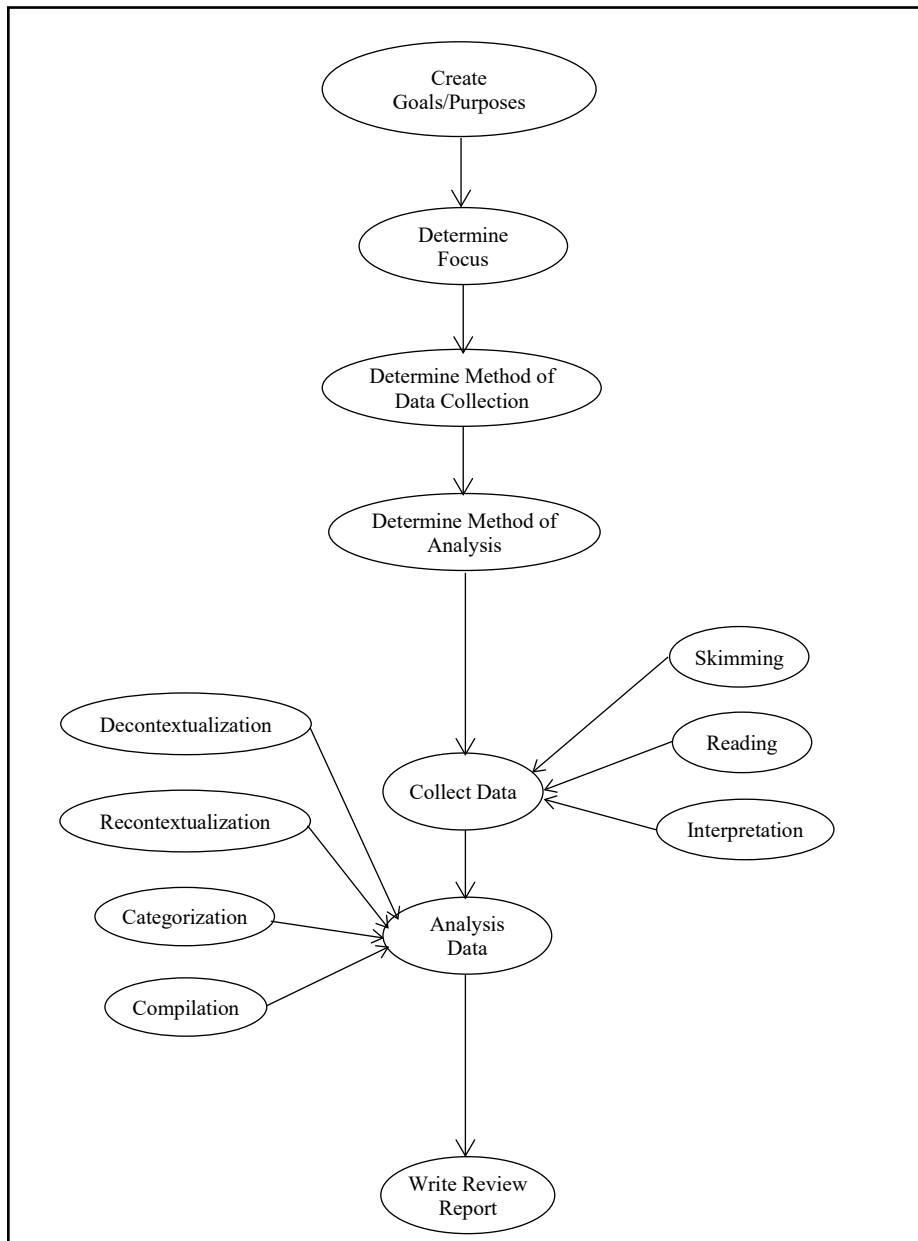

Figure 3. Qualitative Method's Procedure

This method begins with determining and making the goals and purposes of this research, then the focus of these goals must be chosen so as not to get out of the initial focus (Bengtsson 2016). Furthermore, the method of data collection and data analysis is determined. The data collection is divided into skimming, reading, and interpreting the documents collected to collect various materials. When the research needs to be done, decontextualization, recontextualization, categorization, and compilation are the four main stages. Finally, writing a review report for the results of this research.

4. Data Collection

5. Results and Discussion

After conducting a document analysis of various books, journals, news, and white papers on digital transformation in multiple organizations, especially student organizations and non-profit organizations, this paper will propose how to implement digital transformation in student organizations. Although there has been much digitalization in organizations or companies, in particular, student organizations are still few and often ignored. In addition, this paper will also propose things needed in digital implementation in student organizations.
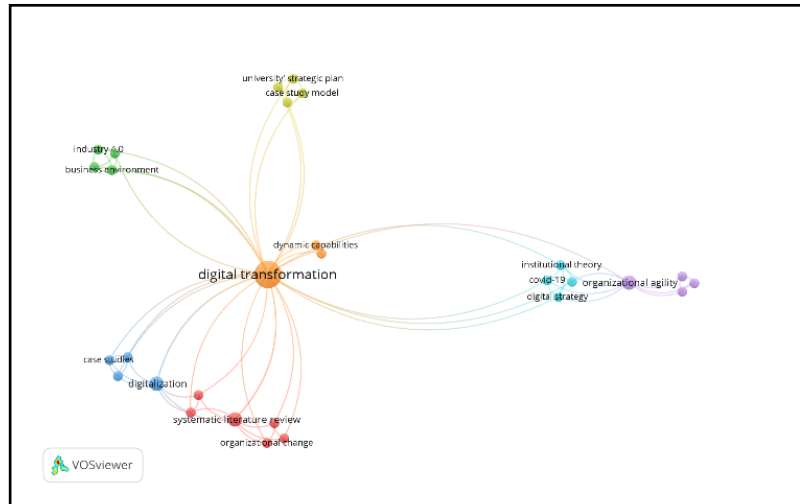
5.1 Data Analysis

Figure 4. Network Visualization

Based on data analysis from Figure 4 above using VOSviewer, it was found a fact that there are still very few papers that discuss digital transformation in student organizations. The source of the analysis data above is generated from 24 different papers from various credible sources such as IEEE Explore, ScienceDirect, ResearchGate, Google Scholar, and Scopus with keywords about digital transformation and student organizations. The main reason for choosing different keywords and papers is to analyze and review with a broad point of view to produce accurate results related to digital transformation in student organizations.

It can be seen that the digital transformation keyword is the primary source that binds other keywords. In addition, there are the words digitalization and organizational agility, which also have a relatively large circle. The relationship between these keywords indicates that one keyword with other keywords has a similar discussion and cannot be separated from one another. And these keywords indicate that the bigger the circle a keyword has, the more that keyword is used and discussed in the 24 papers collected, while the smaller it is, the less it is discussed so that it becomes a novelty.

Although digital transformation is a topic that many people have discussed, the context for its application to student organizations is almost nowhere to be found.

5.2 Steps for Implementation of Digital Transformation in Student Organization

Figure 5 above proposes a form of a model diagram of the steps for implementing a digital transformation. This model is the result of a combination of several models of digital transformation stages. It is provided with improvisations to suit the conditions of the student organization that the university supervises. In addition, because most student organizations do not have good IT quality, comprehensive support from universities is needed to ensure the success of digital transformation in student organizations.

Implementation begins by analyzing what the problems of student organizations are, and then members of student organizations must understand digital transformation to help accelerate performance. Then the analysis of the needs and planning strategy for the implementation and mapping out the technology needed is a sequential sequence in planning. Furthermore, seek university support in the context of IT staff and digitalization and technology

transformation can be implemented. Finally, maintenance related to technologies and digital transformation must continue to ensure quality through maintenance.(Figure 5)
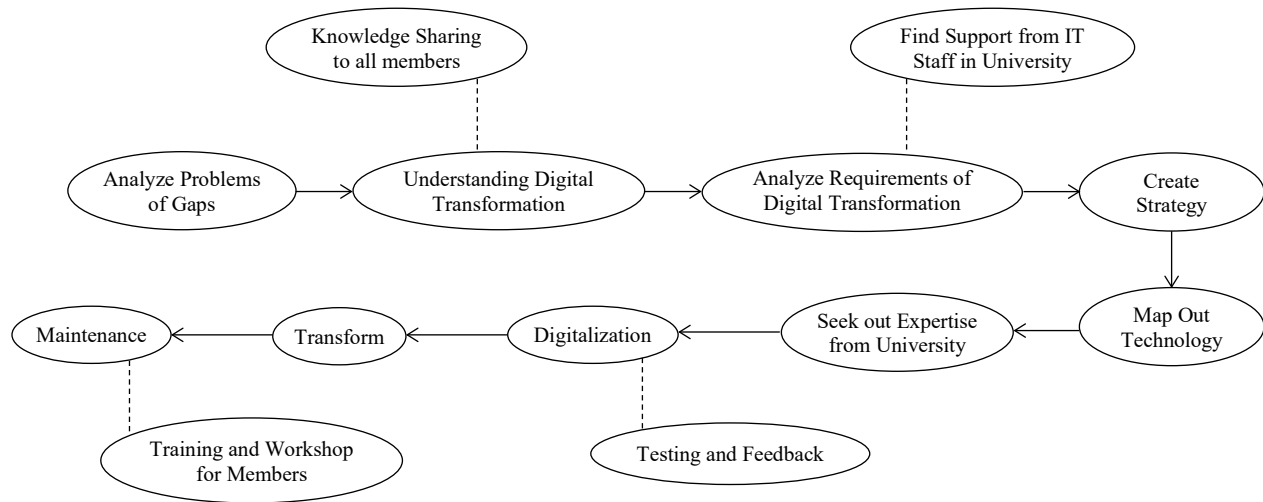

Figure 5. Digital Transformation's Steps

5.3 Solutions for The Barriers to Digital Transformation

The Figure 6 below proposes solutions related to barriers and barriers to implementing digital transformation in organizations, especially student organizations. For every existing obstacle, several solutions can be used to resolve these obstacles. Furthermore, these solutions are flexible, which means that only one answer can be chosen or applied entirely, but there are limitations according to the existing conditions. Therefore, these solutions are expected to solve the barriers of digital transformation to create a student organization that puts forward the concept of digitalization.
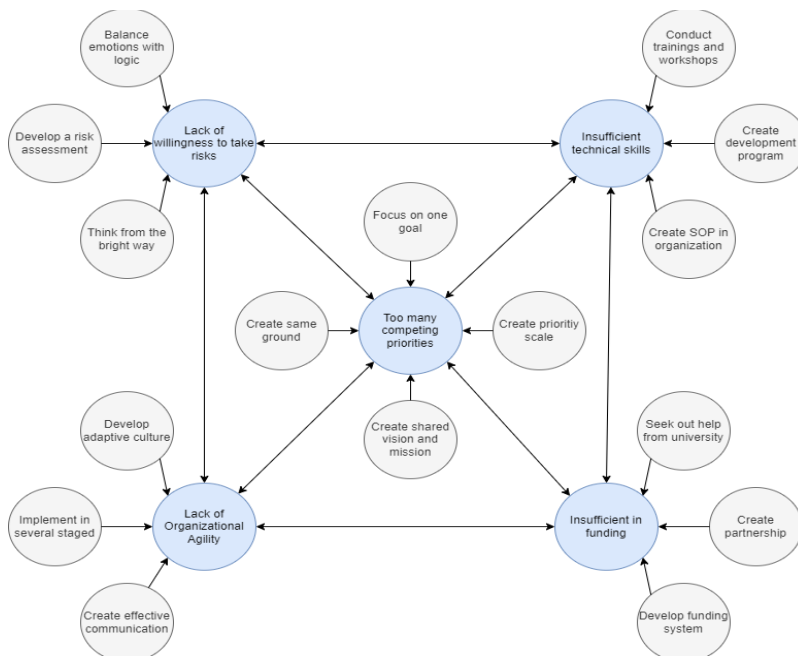

Figure 6. Solutions to Digital Transformation's Barriers

Figure 6 above consists of two types of circles. The smaller process indicates the solution to a problem, while the large circle indicates one of the barriers to digital transformation in student organizations. Of course, these solutions can be used simultaneously, but the thing to remember is whether the student organization can use all of these solutions or not. In addition, each barrier connects with other walls because all obstacles are interrelated and connected.

5.4 Digital Mindset

The Figure 7 below explains the digital mindset that a digital organization must have. A digital perspective, in essence, is a significant part of digital student organizations. Without a digital perspective that is the connecting component and the main driver, it will not be easy to carry out digital transformation in student organizations.
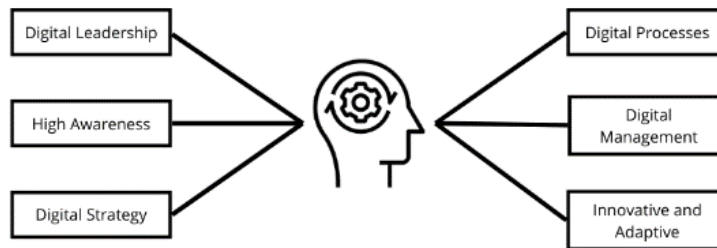

Figure 7. Digital Mindset

Figure 7 above proposes that six factors are part of the digital mindset. Digital leadership, high awareness, digital strategy, digital processes, digital management, and innovative and adaptive are the six factors. Without a minimum of these six factors, a student organization can be declared not to have a digital mindset that is the core of digital transformation in student organizations.
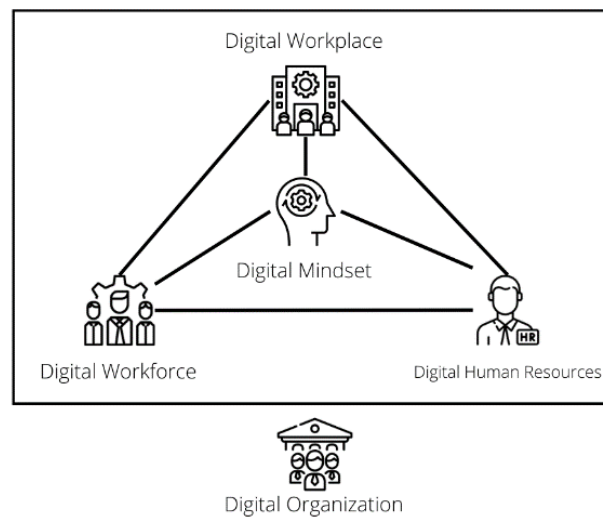

Figure 8. The New Digital Organization

Figure 8 above proposes a new form of digital organization after the digital mindset. It can be seen that the digital mindset is the link and key to the factors that exist in student organizations.

6. Conclusion

The digital transformation carried out in student organizations is expected to significantly influence the organization, such as increasing effectiveness and efficiency and solving problems in student organizations that carry out operational activities manually. In addition, the steps proposed in this paper can accelerate the implementation of digital

transformation in student organizations. The solutions proposed in this paper can also have a positive impact when implementing digital transformation encounters obstacles. Finally, the digital components of the organization can also be a reference in forming an ideal digital organization.

Thus, the paper's results are expected to be used as a reference and applied in the implementation of digital transformation in student organizations.

7. Future Research
Various companies or organizations are growing and implementing digital transformation to increase effectiveness and efficiency in operational activities. However, the implementation of digital transformation in student organizations is still being forgotten and sidelined. Therefore, further research and analysis are needed to implement digital change in student organizations. Further, digital transformation needs to be developed so that all organizations, without exception, take advantage of the implementation of digital transformation.

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Acknowledgment

Biographies

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