Team Leadership: Implementation in the Digital Era

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ABSTRACT

This study aims to determine team leadership on FEB UNRI in the Digital Era. In this study, there are four variables: virtual management skills, transformational leadership, leader-member exchange, and empowerment. The population in this study includes all lecturers of the FEB UNRI, amounting to 154 people
Methodology/approach – . The sampling technique in this study used the Purposive non-random sampling method so that the sample in this study amounted to 98 people (lecturers who are members of team teaching). Collecting data in this research used interviews and distributing questionnaires to respondents. While the data analysis in this study used descriptive statistical analysis using the SPSS program. Findings – The results of this study indicate that: Team Leadership at the FEB UNRI has been implemented well, which can be seen from: 1) leaders can manage virtual teams with quality. 2) transformational leadership was implemented individually. 3) leader-member exchange has been implemented with quality. 4) empowerment at the FEB UNRI has been appropriately implemented. 5) Virtual team management skills are the most readily implemented factor in teams in the digital era.

Keywords: Team Leadership, Virtual Team Management Skills, Transformational Leadership, LMX, Empowerment

INTRODUCTION

The industrial revolution 4.0 became something that any human being or organization could not avoid. The industrial revolution is a change in all aspects of industrial production through digital technology and the internet. Very rapid technological advances also support the era of the industrial revolution 4.0, so to balance these developments, quality human resources are certainly the primary key to achieving goals in an organization, including in the education sector.

Industrial revolution 4.0 has an influence on education, including higher education. Universities are changing various operational lines, one of which is in the teaching and learning process. The teaching and learning process that is carried out online requires a teaching team that can manage the teaching and learning process virtually or utilizes technology. The implementation of virtual teams is one of the changes in the era of revolution 4.0. The main characteristic of this virtual team is an adaptation of the IPO (Input-Process-Output) model consisting of three categories, namely: Organizational Factors, Leadership Teams (Team Leadership), and Composition Teams (Hoch, 2017).

Input-Process-Output Model of Virtual Team

Based on the model proposed by Hoch (2017), leaders in virtual teams need to have relevant virtual skills and leader behaviors that can reduce face-to-face meetings with members. Team leadership used to create an online teaching and learning process requires several elements, namely virtual team management skills, transformational leadership, leader-member exchange, and empowerment. Several factors can affect the skills of a virtual team leader, namely:

1. Have additional communication skills.
2. Have the ability to understand collaborative technologies.
3. Have the ability to influence and facilitate the involvement of virtual team members.
4. Able to appreciate cultural diversity.
5. Can influence and build trust and relationships with all geographically dispersed team members.

In higher education, the virtual team carries out a virtual learning process. Satriyo & Anistyasari (2020) argues that virtual learning is an enhanced learning experience through the use of computers or the internet in educational organization facilities. The most common instruction is done online, where the teacher and learner are physically separated (in terms of place, time, or both). Feb UNRI's virtual team consists of lecturers and students, both of whom play an essential role in the successful implementation of distance learning (online).

Online learning media at FEB UNRI uses two modes, namely the first asynchronous mode (indirectly), where online learning media with indirect mode FEB UNRI lecturers as much as 70% use classroom and 22% use group WA. Both synchronous modes (directly) WhatsApp groups are online learning media with a widely used live mode of 39%. In addition to WhatsApp, Other media groups used in this mode are Google Meet and Zoom. Meanwhile, online learning media with the in-person mode that is rarely used is Classroom with 1% presentation.

The detection of Covid-19 in Indonesia is the beginning of the implementation of lectures using the remote method (online) at FEB UNRI. However, the obstacles faced can still be accepted/overcome or accepted. Based on respondents' responses, there were 21 people with 34% presentations. In situations and conditions like today, the role of team leadership is certainly needed to maintain the performance of lecturers. The model proposed by J.H. Dulebohn and J.E. Hoch shows that transformational leadership is characterized by an ideal leader in influence, inspirational leadership, intellectual stimulation, and individual considerations (Bass, 1985; Avolio, Waldman, & Yammarino, 1991).

In addition, Epitropaki & Radulovic (2020) states that the most influential leaders are the ones who enhance their transformational leadership in a virtual team. His research also found that transformational leadership has a more significant effect on team performance in virtual teams than in traditional (face-to-face) teams. Transformational leadership includes the behavior needed to lead a virtual team. This is because transformational leadership is ideal for influencing, inspirational leadership, intellectual stimulation, and individual considerations. Transformational leadership is a leadership style where a leader can encourage subordinates or members, and can increase the morale of subordinates, and be able to motivate subordinates to be better than before. Transformational leadership is undoubtedly needed during this pandemic in an organization.

In this regard, the author sees that FEB UNRI needs transformational leadership to improve the performance of lecturers in delivering teaching materials and can increase the motivation of lecturers to be more creative in online learning media. Such as making interesting learning videos, making material, and delivering more exciting material so that it is easier for students to understand. In addition to transformational leadership. J.H. Dulebohn and J.E. Hoch explained that another leadership behavior needed in virtual teams is leadership that has relationship-oriented behaviors such as LMX. LMX's behavior is needed because the leader can pay attention to the quality of the mutual relationship between the leader and his members. This kind of leader can be said to be a leader who maintains good communication with members. The behavior of this LMX leader is also relationship-oriented. During the Covid-19 pandemic, LMX needs to be created where a leader needs to pay attention to the harmony of relationships with subordinates to establish good communication.

FEB UNRI leaders need to establish relationships with lecturers so that they can find out the obstacles that are being faced during teaching during this pandemic. If there are obstacles, one of the solutions is to hold training related to technology and information in learning media so that they can improve the performance and quality of teaching lecturers. Leadership behaviors that are also needed in leading an organization in today's digital era are leaders who can facilitate the involvement of virtual team members, such as empowerment and participatory management.

Leading a virtual team requires leaders to keep in mind the empowerment and participatory management of members by facilitating the involvement of each team member. This is because the empowerment of team members will help the process of improving the ability of members. Besides, members better understand the development of technology and information, so it is expected to improve the quality of human resources during a pandemic. Employee empowerment can improve employee performance which will affect employee job satisfaction. Based on the results of research by Nesia & Dewi (2020), empowerment influences employee job satisfaction. Leaders must still pay attention to employee job satisfaction in this digital era. Being an educator has more significant challenges in teaching during the Covid-19 pandemic. Lecturers are required to master and follow the development of information technology so that the learning material is forged and understood by students so that learning can run effectively.

Objectives

This study aims to analyze the implementation of team leadership in the digital era, where learning is carried out by the teaching team using the e-learning method.

LITERATURE REVIEW

Team Virtual

Bell & Kozlowski (2017) suggests that a virtual team is a work arrangement where team members are not bound in one geography but are scattered but have limited face-to-face contact. So that through the use of electronic communication media, team members can work by relying on each other for the achievement of common goals. Thus, it can be concluded that virtual teams can be formed due to a group of people who are geographically scattered and in different areas or more than one location and have limitations to interact directly (face-to-face). So that through the use of electronic communication technology, team members can still work by relying on each other to achieve common goals.

Virtual Team Managing Skills

The virtual team's success is undoubtedly also influenced by a leader with the competence and behaviors that can lead a virtual team. According to JH Dolubohn and JE Hoch, the competencies and appropriate behaviors that leaders must have to manage virtual teams include:

1. Have additional communication skills
2. Depth of understanding in collaborative technologies
3. Ability to influence and facilitate team engagement
4. Appreciation of cultural diversity
5. The ability to opt-in influences and builds trust and relationships with team members spread across different geographic regions.

Transformational Leadership

A leader is someone who can influence the behavior of others without using force so that members can accept a leader as a figure worthy of being a leader for all its members (Tisnawati Sule & Saifullah, 255: 2012). Transformational leadership is charismatic and has a central role and strategy in bringing the organization to achieve its goals (Drajuraidi & Layli, 2020). Thus transformational leadership is part of a delivery process in providing an overview of the organization's vision. The key to success lies in the role and expertise of a leader in convincing his members to carry out all organizational achievement targets. According to Drajuraidi & Layli, 2020 transformational leadership indicators consist of 4 indicators, namely:

1. Ideal Influence.
2. Individual Considerations.

3. Inspirational Motivation
4. Intellectual Stimulation.

Leader-Member Exchange

The LMX was introduced by Dansereau, Graen, and Cashman in 1975. LMX is a picture of a social relationship between subordinates and superiors (Si & Satrya, 2020). LMX is a model in leadership practice that pays great attention to the quality of mutual relationships between superiors and subordinates in an organization (Patoni, 2020). In addition, patrons also explained that leader-member exchange is a reciprocal relationship that involves communication between leaders and employees through familiarity with one another, contributing to mutual loyalty and mutual respect. Thus, LMX can be used as a figure that can move an organization, and this is because the leader-member exchange can create harmony with all members. Jing-zhou et al. (2014) stated that there are four LMX indicators, namely:

1. Affection
2. Loyalty
3. Contribution
4. Professional respect
5. Empowerment

Empowerment is a new topic characterized by its importance in a fast-moving business environment, which demands intelligence and speed in decision-making, both from leaders and subordinates (Al-Asoufi & Akhorshaideh,2017). Empowerment is the granting of responsibility and authority to workers to take matters related to all product development and decision makers (Indra, 2020). Meanwhile, according to Sudarmayanti in Thus empowerment, empowerment is a process to improve the ability of organizational members to create quality resources and master and understand the development of science and technology.

According to Lestari & Siregar (2021), empowerment has six indicators, namely:

1. Desire
2. Belief.
3. Confidence.
4. Credibility.
5. Accountability.
6. Communication.

METHOD

The population in this study includes all 162 people in Business and Economic Riau University. The sampling technique in this study used the purposive non-random sampling method so that the sample in this study amounted to 98 people (lecturers who are members of team teaching). Data retrieval in this study is by interviewing and distributing questionnaires to respondents. While the data analysis in this study used descriptive statistical analysis using the SPSS program. The collection of research data was carried out by distributing a questionnaire of questions for lecturers who were samples in the study. In addition to obtaining more objective and complete results, researchers also conducted interviews with several decision-makers.

RESULT AND DISCUSSION

The results of the study in this study consisted of the results of the descriptive and inferential analysis. The descriptive analysis produced in this study includes variables of virtual team management skills, transformational leadership, leader-member exchange, and empowerment. The following are the results of respondents' responses to these variables.

Table 1
Virtual Team Management Skills

| No. | Question | | Scale | | | | | Jlh | Average | Ket |
			SS	S	CS	TS	STS			
1	Have additional skills.	F	25	49	8	0	0	82	4,20	Good
		Score	125	196	24	0	0	345		
2	Deep understanding related to collaborative technology.	F	23	48	10	1	0	82	4,13	Good
		Score	115	192	30	2	0	339		
3	Influence and facilitate member involvement in virtual teams	F	20	47	14	1	0	82	4,04	Good
		Score	100	188	42	2	0	332		
4	appreciate the cultural diversity in the virtual team.	F	23	46	11	2	0	82	4,09	Good
		Score	115	184	33	4	0	336		
5	Engage in influencing and building trust with geographically dispersed team members.	F	20	46	12	4	0	82	4	Good
		Score	100	184	36	8	0	328		
	Mean								4,10	Good

Source: Processed Data, 2022

Based on the table above, respondents' responses to the virtual team management skills questionnaire had an average score of 4.10 with a good category. Respondents perceive that leaders have additional skills in managing virtual teams with a mean score of 4.20. However, on the other hand, respondents considered that the government had not had the opportunity to influence the relationship with geographically dispersed team members. Thus, it can be concluded that the virtual team management skills aspect (virtual team management skills) in team leadership at FEB UNRI is good. However, efforts are still needed to improve the leadership's ability to influence and build trust with team members who are geographically dispersed.

Transformational Leadership

| No. | Question | | Scale | | | | | Jlh | Average | Description |
			SS	S	CS	TS	STS			
1	Idealized Influence	F	30	41	11	0	0	82	4,23	Very Good
		Score	150	164	33	0	0	347		
2	Intellectual Stimulation	F	20	44	15	3	0	82	3,98	Good
		Score	100	176	45	6	0	327		
3	Inspirational Motivation	F	21	47	14	0	0	82	4,08	Good
		Score	105	188	42	0	0	335		
4	Individual Consideration.	F	23	42	16	1	0	82	4,06	Good
		Score	115	168	48	2	0	333		
	Mean								4,08	Good

Source: Processed Data, 2022

Tabel 5.2 describes respondents' answers to questions related to informational leadership issues, which have an average score of 4.08 with a good category. Respondents have a high perception of the leader's ability to be a positive example in behaving, with a mean score of 4.23. The behavior of leaders who can set positive examples can have a positive influence on lecturers. Thus these results can also illustrate that the leader has charisma that can foster trust and respect from his followers.

On the other hand, leaders pay enough attention to lecturers to always be enthusiastic about working in this digital era. The lowest value on all indicators in the statement is found in the Individualized Consideration indicator. Thus, the transformational leadership aspect of lecturers is qualified, but there is a need for the development of individualized consideration indicators.

Leader-Member Exchange

| No. | Question | | Scale | | | | | Jlh | Average | Ket |
			SS	S	CS	TS	STS			
1	Affection	F	24	46	11	1	0	82	4,13	Good

			SS	S	CS	TS	STS	Jlh	Average	Desc
		Score	120	184	33	2	0	339		
2	Contribution	F	22	50	9	1	0	82	4,13	Good
		Score	110	200	27	2	0	339		
3	Loyalty	F	20	44	16	2	0	82	4	
		Score	100	176	48	4	0	328		Good
4	Professional Respect	F	23	40	18	1	0	82	4,03	
		Score	115	160	54	2	0	331		Good
Mean									**4,07**	**Good**

Source: Processed Data, 2022

Based on the table above, it is known that respondents' responses to *the Leader-member exchange* questionnaire statement had an overall average value of 4.07 with quality categories. All indicators, the highest value found in numbers 1 and 2, with the first statement that the leader can build a good relationship with each member with a value of 4.13. The second statement is that the leader contributes with the team lecturers in specific tasks to achieve common goals with a score of 4.13. From these results, it can be seen that *leaders can apply affection indicators* by creating familiarity between superiors and lecturers. In addition, *the contribution* indicator illustrates that leaders contribute together with lecturers in completing specific tasks to achieve organizational goals. The lowest score on the entire indicator is in number 4 of 4, with a quality category in the statements of leaders and lecturers supporting each other in all situations. Thus, *leader member exchange* in *team leadership* is already good, but it is necessary to develop *loyalty* indicators or increase mutual support for leaders and lecturers in every situation.

Table 5.4

Empowerment

| No.	Question		Scale					Jlh	Average	Desc
			SS	S	CS	TS	STS			
1	Desire	F	13	42	23	4	0	82	3,78	Good
		Score	65	168	69	8	0	310		
2	Confidence	F	13	55	13	1	0	82	3,97	Good
		Score	65	220	39	2	0	326		
3	Self Confidence	F	16	53	13	0	0	82	4,03	Good
		Score	80	212	39	0	0	331		
4	Credibility	F	18	45	16	3	0	82	3,95	Good
		Score	90	180	48	6	0	324		
5	Accountability	F	13	56	10	3	0	82	3,96	Good
		Score	65	224	30	6	0	325		
6	Communication	F	17	51	13	1	0	82	4,02	Good
		Score	85	204	39	2	0	330		
Mean									**4**	**Good**

Sources: Processed Data, 2022

Based on the table above, it is known that respondents' responses to the *empowerment* dimension have an overall average value of 4 with good categories. Of all the highest score indicators, there is number 3 of 4.03 with a suitable category in the statement in the current digital era. Leaders build the confidence of lecturers by appreciating the abilities I have. The highest value in the alignment of indicators is the indicator of self-confidence, which is undoubtedly an essential one to be created by leaders in this digital era by appreciating the ability of lecturers to carry out and complete work, especially in the midst of the rapid development of communication technology. The lowest score of the overall indicator is 1 of 3.78, with a suitable category in the statement that the leader can always involve the lecturers in some way.

However, the lowest value of the indicator does not have a destructive impact because it is still included in the excellent category. Thus, *the empowerment* aspect of *team leadership* is good, but there is a need for development in the engagement indicators.
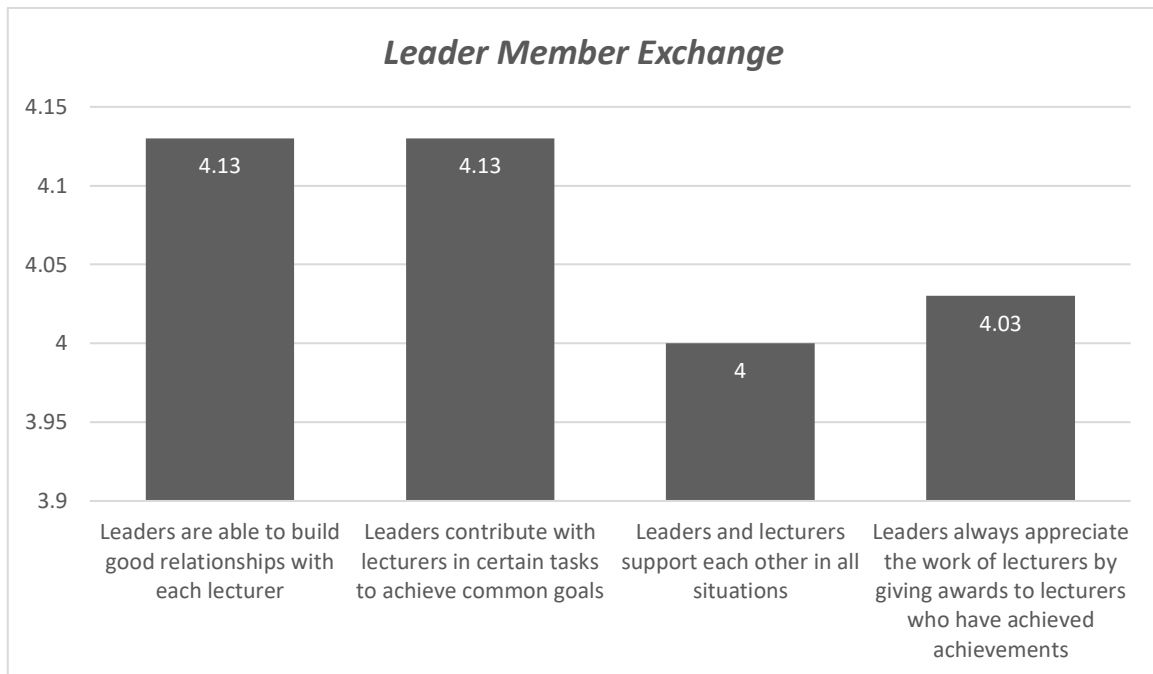
Graphically, the results of the tabulation of such data can be depicted in the following bar graph:
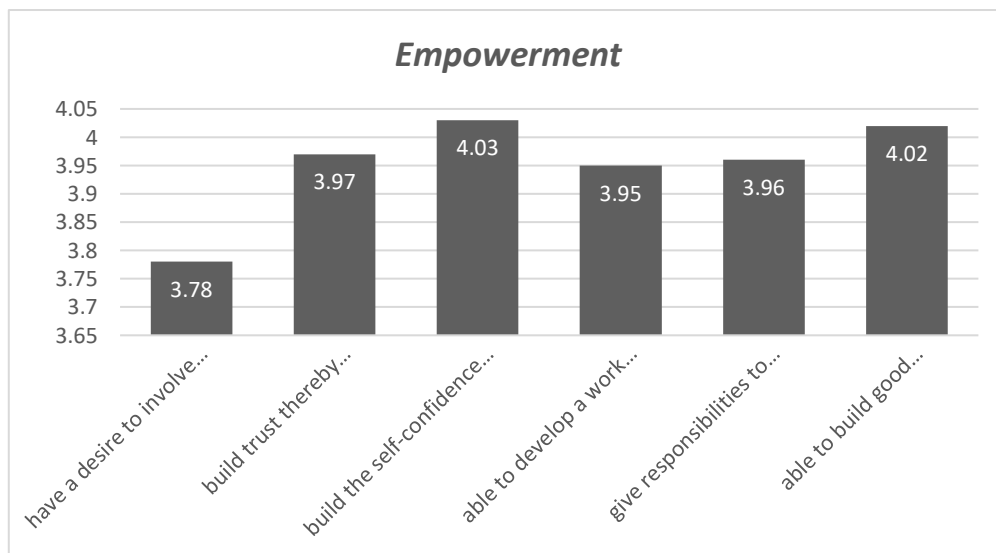
Virtual Team Management Skills
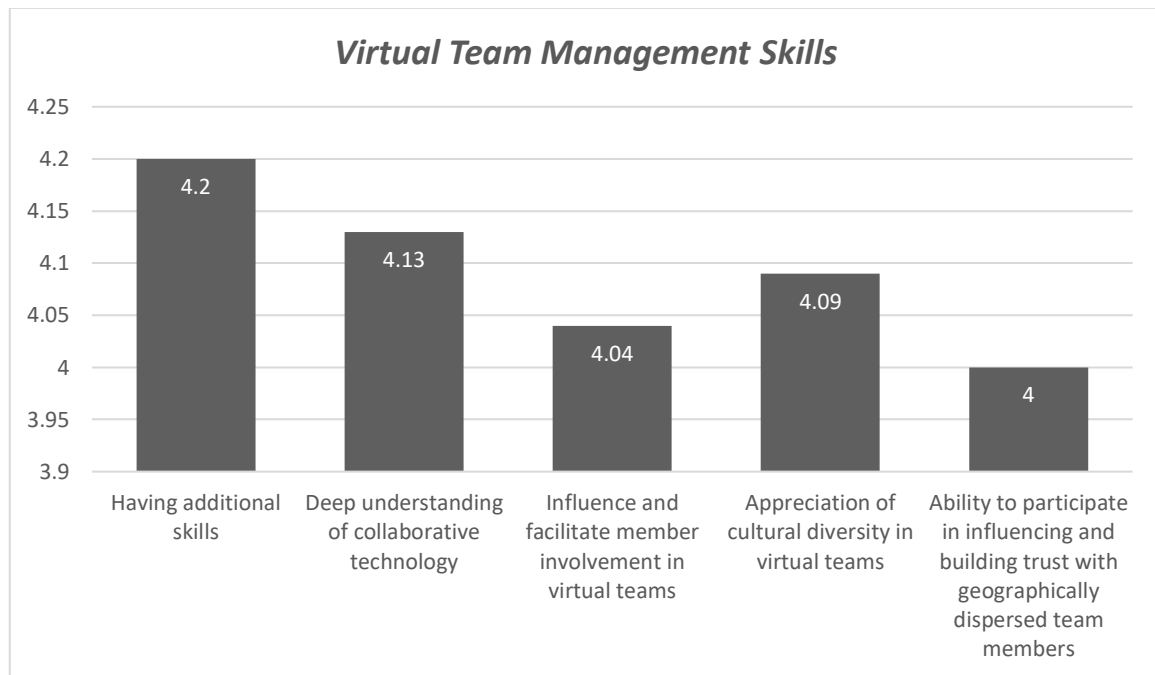
The skill of the team and the leadership material is the dimension that is best implemented. In contrast, the leader's ability to influence and build the team's trust needs to be improved and has a mean score that compared to other dimensions.

Transformasional Leadership
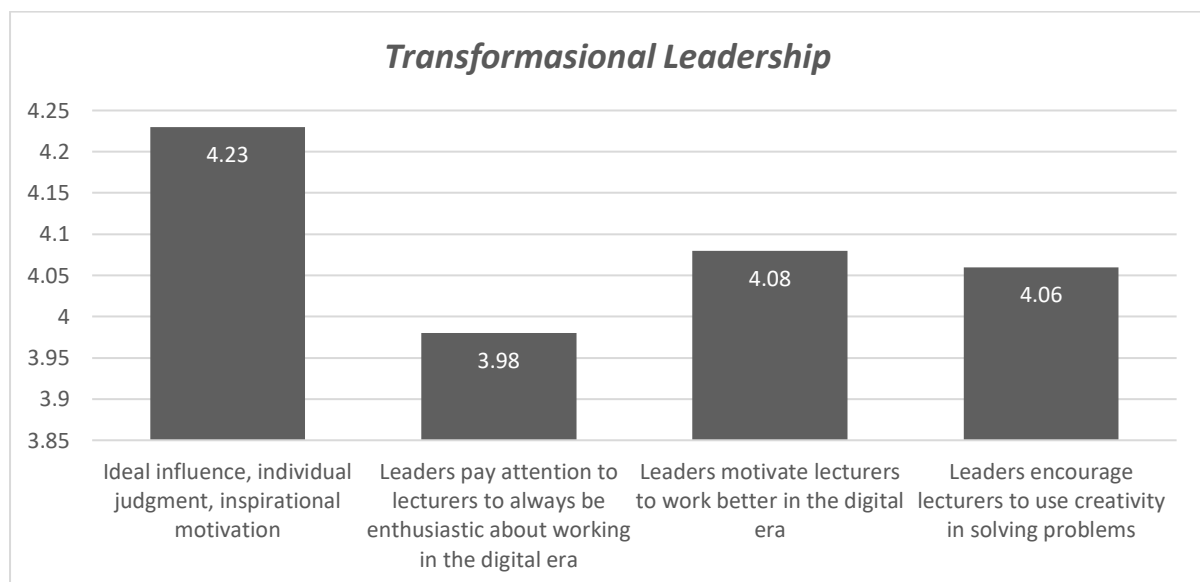
The team leader has not given full attention to the lecturers in providing enthusiasm for work in the current digital era. This is based on its lowest mean score compared to other dimensions. On the contrary, the leader can set an excellent example to subordinates, who become the leader as an exemplary figures for the lecturer.

Leader Member Exchange

Leaders are able to build good relationships with each lecturer	4.13
Leaders contribute with lecturers in certain tasks to achieve common goals	4.13
Leaders and lecturers support each other in all situations	4
Leaders always appreciate the work of lecturers by giving awards to lecturers who have achieved achievements	4.03

Judging from the dimension of leader-member exchange, the dimension that is best implemented is the leader who always values lecturers by giving awards to outstanding lecturers. Mutual support between leaders and lecturers has the best mean score. This means that this dimension is a dimension that is of concern to the leadership in order to produce motivation or excellent team performance in the digital era.

Empowerment

have a desire to involve…	3.78
build trust thereby…	3.97
build the self-confidence…	4.03
able to develop a work…	3.95
give responsibilities to…	3.96
able to build good…	4.02

PROPOSED IMPROVEMENT

1. In the aspect of Virtual Team Management Skills (Ability to Manage Virtual Teams), leaders need to improve their ability to participate in influencing and building trust with geographically dispersed team members. Leaders can carry out open communication and regular discussions involving lecturers to increase lecturer involvement. The existence of open communication in the virtual team can certainly create lecturers' trust in the leader.
2. In the aspect of Transformational Leadership (transformational leadership), leaders need to increase attention to lecturers so that they are always enthusiastic about working in this digital era. Leaders can provide solutions to obstacles experienced by lecturers during the e-learning process, such as holding training on creativity in developing learning methods by utilizing technology.
3. In the aspect of Leader-Member Exchange, leaders need to increase mutual support between leaders and lecturers in all situations. In the digital age, an attitude of mutual support for each other is essential to be created to achieve the objectives.

In the empowerment aspect, leaders need to improve their ability to develop the work environment to improve lecturers' performance

CONCLUSION

Based on the results of the research that has been carried out, it is concluded that the following:
Team leadership has been well implemented to support e-learning now and in the future. Especially aspect of virtual team management skills (virtual team management skills) is in a suitable category. However, there is a need for development in empowering human resources in lecturers. Aspek virtual team management skills (virtual team management skills) are good in the sense that the leader can run e-learning at this time and in the future. The transformational leadership aspect is good because the leader is ready to support the implementation of e-learning in the future. Especially leaders can exert ideal influence on lecturers. The Leader-member exchange aspect is well implemented in the sense that the leader has been able to support the implementation of e-learning in the future. The empowerment aspect is good in the sense that the leader has been able to implement the empowerment of lecturers in the current digital era. That is, leaders can build lecturers' confidence by appreciating their lecturers' abilities. Virtual Team management skills (skills in managing virtual teams) are the best team leadership factors implemented in this digital era.

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