# AN EMPIRICAL INVESTIGATION OF KNOWLEDGE SHARING ON TEAMWORK PERFORMANCE: THE MEDIATION EFFECT OF TRANSFORMATIVE INTERACTION CAPABILITY

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#### **ABSTRACT**

This study aims to build a new conceptual model based on the novelty produced by previous researchers called Transformative Interaction capability. Transformative interaction capabilities are expected to resolve the results of research between frequent and team performance. Structural study methodology adopted adoption in this study and a sample of 320 samples was taken from analysis units spread throughout Indonesia as a Merchant marine college. Data collection was carried out using a questionnaire and data analysis was carried out using Amos 25. The findings in this study indicate that there is a strategic path to improve the performance of the public organization team at the Merchant marine College. There are two ways to improve team performance. The strategy includes transformative interaction capabilities to improve team performance. The results of this study bring benefits for theoretical and practical development.

### 1.BACKGROUND

In the era of globalization and the industrial revolution which is changing progressively, it has demanded competition in various public organizations. These conditions forced the organization to understand the increasing preferences of consumers. Especially in the last few decades, Central issues related to the competence of various employees which significantly affect team performance have shifted the paradigm regarding conventional performance improvement which so far has only focused on Individual implementation. Employees are expected to be able to work in teams and produce a form of competency complexity and flexibility so that they can provide existence against anticipation to face change (Brzeziński and Bak (2015).

Based on this assumption, the successful adaptation of the organization is expected to encourage employees to work aggressively in the face of changes that occur in the organizational environment. Organizations with various individuals and teams have been surrounded by various environments that are quite complex in competition and very fast changes in the environment. This environment requires a holistic form of thinking from organizational managers to survive in the competition (Stephenset al., 2013; Meneghelet al., 2016).

A team that is quite solid and ready to face the competition in their environment. To reach targets as an implementation of organizational goals. This is expected to have various demands that must be contained within the organization, including the existence of a form of positive, effective, and appropriate adaptation in the face of change. When a process is understood cognitively by team members it will require them to emphasize the importance of knowledge.

Team members must understand that knowledge can be viewed as an independent level of a concept in improving team performance. Ethics is a process of sharing knowledge including documenting a portfolio of experiences among members this will be able to have an impact on improving team performance optimally. when this is done comprehensively when knowledge sharing is carried out by members of the team, it will indirectly be able to realize work effectively within the organization (Cam et al., 2017). When a work process is considered as learning that must be possessed from the point of view of knowledge by team members, then the ways or methods in understanding a conception within the organization are expected to be better and able to provide access to correct actions in achieving organizational goals.

If this can be realized in the organization by team members, it will produce a form of cognitive process that will affect the cooperation between team members. An effective process can be used to understand a form of the work process, this requires team members to be directly involved in the interest, responsibility, motivation, caring spirit, inspiration, and responsiveness because this will be able to support an optimal form of the work process. The concept of knowledge sharing has so far positioned itself as a fairly well-established concept in driving team performance. Various academic criticisms have been given by previous researchers to provide reviews related to the central role of Knowledge sharing, which can be considered as a cross between individual and teamwork units and can be seen as a medium that is able to provide identification of the creation of new knowledge. Knowledge sharing can be articulated as an increase in core work capacity in dealing with various problem solving when the organization faces a problem. Based on this argument, knowledge sharing will be able to provide a form of providing a way to understand goals and act quickly when trying to achieve them (Qamari, 2018).

Furthermore, the work process will be understood as an effective knowledge-sharing process within the organization which is considered as a response from team members who have the skills to identify the creation, and collection of new knowledge and increase work capacity, especially in responding to the dynamics of environmental problems that have changed progressively (Wang & Wang, 2012). Various previous studies have provided a debate that shows the inconsistency of the results of research conducted by (Han & Beyerlein, 2016; Park & Lee, 2014; Tung & Chang, 2011). These results show evidence of the contribution of sharing in improving team performance in their research. It was studied that researchers at the academic level and researchers at the practitioner level have provided evidence of knowledge sharing. This not only has a direct impact on the Team's performance but is also capable of producing further elaboration. however, it has not been able to comprehensively link the relationship between shared values and team performance in providing potential for improving organizational performance. This inconsistency is the basis of this research to open a gap that still provides an opportunity to provide an academic argument for improving team performance. To overcome the gaps that exist in this study, we propose a new concept that has been found by previous researchers, namely the transformative interaction capacity that has been found by Qamari 2019, from the transformation theory of the mapping results of the 2 concepts then synthesized and produces a new concept called transformative. interaction capabilities.

The concept of interaction is the ability to interact which will encourage the development of the personal capacity of team members. it aims to build and provide organizational added value by empowering various ideas in work, providing complementary competencies in future-oriented knowledge development and being active in learning and new competencies, and being able to collaborate in producing integrated knowledge this will be able to have an impact on improving team

performance (qamari 2019). So that academic confirmation is given in this study that this study aims to provide common ground for new concepts that have been discovered by previous researchers so that they will be able to make the concept established when applied on the basis of building a new empirical research model. Specifically, this study aims to build a new conceptual model to improve team performance based on transformative interaction capability.

The study from this research will later be discussed in public organizations engaged in the education sector at Shipping Commerce colleges located in the territory of the Ministry of Transportation in Indonesia. The basic assumptions that strengthen the selection of the object of this research are, among others. Public sector organizations are organizations whose performance cannot be measured directly in terms of output, but perceptions are also given as a benchmark for assessing the performance of public sector organizations. Assessment of the performance of public sector organizations, especially in the scope of education, places more emphasis on outcomes than outputs. When the perception of the service user community from this public sector organization is later combined holistically with the output achieved by the public organization, it will produce a form of outcome that shows the achievement of the performance of public organizations. Public sector organizations, especially in the education sector, especially in vocational education under the Ministry of Transportation, still have various tendencies of difficulty in achieving the expected output rather than just the output that can be achieved by the organization.

Various responses from the public perception have determined the level of achievement of the performance of public organizations. This condition, especially in the education sector, requires a form of holistic understanding that requires the role of external stakeholders in this case the community and internal stakeholders of the managers of public organizations and their management. This study aims to improve team performance in public organizations in the education sector, a concept of knowledge sharing is needed but other concepts also need to be presented such as the ability to adapt to technological changes, this is in line with the view given by Maurer and Weiss (2010) which emphasizes that the concept of learning will continuously be able to provide a form of consequence that is quite essential for the success of the job. How will public organizations successfully improve team performance? What are the factors that determine the success of the public organization? This study aims to answer these questions through the mediating role of the transformative variable Interaction ability.

### 2.1 Literature Review and Hypothesis Development

Knowledge Sharing and Transformative Interaction Capability

Knowledge Sharing and Transformative Interaction Capability of researchers to provide an antecedent existence in increasing the consequences of organizational performance. This study has attracted the interest of researchers at the undergraduate and practitioner levels in applied research to express an in-depth exploration of the role of existence of the existence of the concept of knowledge sharing. From a social perspective and the nature of this research, it is hoped that it will contribute to the importance of the concept of knowledge sharing in improving organizational performance in a professional manner. The results of empirical studies have been shown by the following researchers who at least provide a form of existence that knowledge sharing can improve organizational performance. Aubke et al., 2014; Ferdinand & Wahyuningsih, 2018; Matošková & Smná, 2017; Mueller, 2014; Nesheim & Hunskaar, 2015; Nissen et al., 2014). However, in perspective, there are various arguments that suggest that the theoretical relationship is that the concept of sharing knowledge within team members will have an impact on a form of sense of meaning. In addition, activities that occur in the concept of knowledge sharing will be able to provide information that has a positive impact on increasing work productivity (Aubke et al., 2014). Knowledge sharing can be considered as an exchange of knowledge that occurs among team members

through teaching and learning activities that aim to convey the knowledge learned between team members. however the crucial existence of knowledge sharing has contradictedly shown that when innovation enhancement is considered as a tool that is expected to improve the performance of team members. it will be able to bring the achievement of organizational performance better (Ferdinand & Sulistiyani, 2018). Knowledge that is quite essential is the knowledge sharing process that can be seen from the interaction between members of the organization which is heavily influenced by various factors such as motivational attitudes and skills as well as knowledge itself that will be able to lead to better performance improvement (Matošková & Směšná, 2017). Sharing knowledge sharing knowledge that occurs more between team members will provide lessons that are quite important for organizational improvement. Because it is driven by the essence of an output orientation and has the nature of objective transparency between team members (Mueller 2014). This study proposes a new concept that has been proposed by Qamari in 2019, namely transformative Interaction capability where the definition of the concept when it was discovered by the researcher was in the process of synthesis and tends to be just trying to be generalized. The concept has an existence related to the ability of team members to form an interaction. The excesses of the existence of this interaction will later produce an empowerment, personal capacity and other members of the organization. In addition, it also refers to interactions that encourage the development of ideas that provide added value. for the organization so that it can be interpreted that the achievement of developing a sensemaking, through transformative learning and knowledge creation. This will be able to produce a proposition that transformative interaction will improve the performance of the sensemaking team in general is regulated Define as a process to change the current situation to become a situation that can be understood explicitly in various words and has a function as a leap in producing an action (Weick et al., 2005). Starting from the definition presented above, the team must be able to provide an action will Based on the information obtained .So that in the completion of the project with the various information collected will have a meaningful pattern to customers, competitors as well as various transectors, we should also consider the existence of a form of transformative learning because this learning aims to create new understandings and practices related to continuous learning. The quality of this learning is increasingly needed by individuals in corporate teams and various communities that are included in the existence of advanced learning organizations consisting of various cognitive, social and emotional factors. Moreover, transformative learning is considered as a process where individuals and teams are able to provide a form of change to an organization, frame of reference related to problem solving related to the perspective of the meaning of mindset and freedom of thinking habits. This can be assumed as a set of arguments and expectations that will be inclusive, open, reflective, discriminatory and easy to socialize. opinion This is supported by previous researchers who explained that reformative learning will provide rules for a process permanently in influencing the conceptualization experience and interaction of individuals within the organization with their environment Hoggan (2016).

Informative learning can be identified as various assumptions that future orientation indicators and active learning have positioned themselves as a profession capable of measuring transformative learning. Knowledge creation can be done to provide an existence to fill gaps in knowledge from organizations or working groups within an entity. This knowledge creation activity can occur through various knowledge conversions which are expected to be able to provide existence in building knowledge and provide a form of knowledge relationship. departing from these assumptions is very important to strengthen the knowledge creation process in order to improve organizational performance. so that the creation of knowledge can be promoted in the form of developing knowledge and concepts of new competencies as well as collaboration in producing knowledge that has a fairly strong integration. as previously mentioned sharing knowledge among team members will influence each other and even help to realize a collaboration in achieving organizational goals. This will encourage the creation of transformative learning, knowledge creation and encourage sense-making in teamwork. This is not only It is hoped that he will be able to create various ideas. But he is also expected to be able to provide a form of tendency in understanding the work behavior and thought processes of team members because it will be able to create a concept of transformation in their interaction ability. Based on this description, the following hypothesis can be drawn

H1 Knowledge Sharing is Positively Associated with Transformative Interaction Capability.

## **Transformative Interaction Capability and Team Performance**

The team has been viewed as a group formed from an entity consisting of two or more people. The team is given a task and various wars or certain functions but dynamically or interdependently and has an adaptive nature to the goals or achievement of the general mission object of an organization but the concept of the mission is not as common as the organizational vision (Savelsberghdkk., 2010). A teamwork can be formed from various actions, feelings that are interrelated between team members and thoughts that are cognitive to achieve organizational goals. Team members are expected to be able to bring their workload into the team and join together to provide coordination assistance and the achievement of adaptive performance and work on task goals that are expected to have added value (Salasdkk.,2005;Mataharidkk.,2017).

The team is expected to be able to provide a form of existence of the best results because it is considered a commitment to the high-quality standards expected in the organization (van de remdkk., 2018). Various previous studies have provided an academic argument regarding the existence of teams to reveal the identity of the types of teams. However, a focus is needed on the actual implementation of tasks carried out by the team which is expected to result in a process of forming a direction towards team effectiveness.

The team will be called effective if it is able to meet and even exceed what is needed by the team (Jambekar and Pelc., 2007). Hoggan (2016). Previous researchers have provided an academic argument related to transformative interaction. This concept refers to a process that is expected to produce a form of significant change and cannot be changed by a person in interacting, experiencing, and conceptualizing himself with his environment Hoggan (2016).

Based on these assumptions we can provide an argument in producing a proposition. that transformation can be formed requires interaction so that there is a need for a form of activity in learning the mutualistic participation carried out by individuals in teams or groups and the organization will be able to bring a form of completion of tasks owned by team members to be completed on time so that goals and work completion will be able to be resolved optimally (Qamari, 2019). This will have the potential to increase team performance. Based on this argument, the following hypothesis can be drawn

H2 Transformative Interaction Capability Positively Affects Team Performance

# Transformative Interaction Capability, Adaptabillity to technological change

### , Team Performance.

The group can be considered as an entity in which there is a process that involves various activities among individuals in obtaining, combining, and sharing knowledge. This knowledge-sharing process can be carried out through the exchange of experiences with each other. This has shown that the existence of group learning will be able to make alliances with changes in knowledge both explicitly and implicitly that occur as a result of collaboration (Argotedkk., 2001). As learning can be deepened or expanded, the team's ability is expected to have a fairly rapid adaptation to changes. This adaptation can be carried out in various ways, including using various skills and knowledge as well as integrating with new behaviors which are expected to become a sophisticated unit. Based on these assumptions we can make a holistic understanding that the existing cycle is expected to have a sustainable impact which will later include various recognition of learning needs.

The concept of learning readiness and the learning process is expected to have a form of practical application to improve various abilities to adapt to technological advances. Research conducted by RoZak 2015 has found that there are factors that dominantly affect the success of employees in the

use of information technology and these data have shown that there is a form of independence in the use of employee skills. If these things can be understood comprehensively, then there is one factor, namely the motivation that can encourage them to work smarter and faster in adapting to the use of more complex information technology. Their cognitive thinking is to have communication skills in using various digital technologies. In addition, they also have a form of experience in terms of using digital technology to increase their practical experience and knowledge. The concept of adaptability has been derived from the Resource-based theory, then the mapping is carried out on the human capital theory. The theory contains a role for knowledge, skills, abilities, and qualifications possessed by individuals (Chang & Chen, 2011; Gonzalez & de Melo, 2018). Human capital can be interpreted as a social attribute competence of knowledge and personality including creativity where it can be manifested in various forms of ability to do various jobs. Individual competence is considered as part of the organization's core capabilities, it can be considered in terms of the significant challenges that have been experienced and will shape employee competencies (Mandal, 2017).

Competencies and skills possessed by managers can be seen as an organizational way to see in real terms the efforts to achieve organizational goals. This means that the point of view of how managers work with various competencies and skills to be oriented towards achieving organizational targets will be a reflection of agreement on organizational goals within an entity (Muafi et al., 2018). Measurement can be done by increasing the skills possessed in communicating, understanding, motivating, and supporting other employees and adapting to any changes that exist in the organization both internally and externally.

In public sector organizations engaged in the service sector, the strength of competitiveness is strongly influenced by the various technologies used by the organization. In providing appropriate services and providing a sense of security to consumers. However, from this emphasis, there is a form of thing that is more important and quite essential, namely a review from the point of view of the ability of human resources in adapting to have a fairly good performance in fairly progressive technological changes. organizational goals, one of which is to be reviewed internally as an increase in employee performance (Jabbouri et al., 2016; Park & Koh, 2017).

In this case, the product produced by the organization, a product formed through a touch of technology, will be able to produce a form of product that has good enough quality and has a low price Park and Koh (2017). It has provided a perspective that digital technologies, especially wireless technology, are very significant in stimulating various business benefits. Lee et al. (2016). This is because investment in technology is able to provide quite positive information on the company's performance in achieving organizational goals optimally. Jabbouri et al. (2016). Based on the arguments described above, the following hypotheses can be described:

H3: Transformative Interaction capability has a positive effect on Adaptability to technological change

H4: Adaptability to technological change positively affects team performance.

# Transformative interaction capability mediates knowledge sharing and team performance

In the organization, employees are expected to have communication with other employees. This communication can be stated in the form of various skills and expertise possessed as well as consultation with their presses to make the learning of the knowledge of skills and expertise possessed between employees. The process is expected to have an impact on an increase in effectiveness and efficiency in the organization. The higher the knowledge and skills and expertise possessed by employees, the more they will be able to carry out their work and reduce failures in completing their work, the abilities possessed by employees when they are able to share knowledge optimally will have an impact on the team's capacity to build some transformative learning, knowledge creation, and sense-making (Qamari, 2019).

When in a team there is a very optimal learning process, for the team it will be very important to adapt to an environment that changes quickly enough to maintain high performance which will indirectly be able to drive team performance (Abrantes et al., 2018). Empirically related to the role of transformative and team performance (Huang and Li, 2012; Santosodkk., 2015), qamari, 2019. A very transformative learning process will be able to encourage various improvements in efforts to achieve the targets carried out by the team. Knowledge-making and creation is also fairly fundamental factor as a contribution from transformative Interaction capabilities to improve team performance. Based on the arguments above, the following hypothesis can be proposed.

H5: Transformative interaction capability mediates the effect between knowledge sharing and team performance.

# 3. Methodology

Studies and procedures of existing managers in public organizations and operational staff in educational organizations under the Ministry of Maritime Affair who are involved in a project to develop a new product or service form of the organization and tend to be involved in teamwork. There are 9 commercial shipping universities under the marine center under the Human Resources Development Agency( BPSDM transportation). These include Stip, PIP Semarang, PIP Makassar, Poltekpel Surabaya, Poltekpel Banten, poltekpel Malahayati Aceh, Poltekpel Sorong, Poltekpel Padang, Poltektrans Palembang.

The public organizations selected as objects in this study are located in the same geographic area and are Shipping Commerce universities that are engaged in the service sector. Used to make a preliminary study to ensure the quality of the questionnaire instrument to obtain the validity of the data. The data was distributed to 40 respondents to get a test of the validity and reliability of the instrument from all indicators in this study. Questionnaires were returned as many as 30 questionnaires. These results indicate that there is a critical value for the correlation degree of freedom value of ar ar 30 and an Alpha value of 0.05, a value of 0.325 is obtained as a minimum guideline to be declared valid. And the reliability test used the Cronbach alpha test with a value rule above 0.7. From the measurement results, all variables were declared valid and reliable when tested with the research instrument.

The sampling technique used is a purposive sampling technique using the concept of judgment sampling. Respondents are selected and they are the leaders of the university and several operational staff. There were 320 questionnaires distributed in this study, but only 278 were returned, but due to the presence of a player, the questionnaire could only be used as many as 260.

Table 3. Characteristic of respondents

Characteristic	Number	Percentage
GENDER		
Male	158	60,7 %
Female	102	32,9 %
EDUCATION		
DIPLOMA	46	17,6 %
Undergraduate	125	48 %
Postgraduate	89	34,2 %

Strategic Staff	13	5 %
Supervisor	117	45 %
Manager	130	50 %
WORK EXPERIENCE		
<5 years	17	6,5 %
6–10 years	43	16,5 %
11–15 years	46	17,6 %
Years	26	10 %
>21 years	138	52,3 %

Data analysis and data testing were analyzed using Amos 25 software and a series of relationships between variables were tested in this study using the software. In addition, to test the mediating effect of the transformative Interaction ability variable, Sobel test was used. The results of the validity and reliability test can be tested based on the reliability of the variance extraction construct and discriminant validity making several factors and each construct to show results that reflect the variable. This can be seen from the construct reliability value. of 0.7 on average above the extraction variance value of 0.5 and discriminant validity above 0.7 as in discriminant validity. Finally, the KMO test (Kaiser Meyer-Ohlin) was used in this study to provide a test of the suitability of the data with and the results were significant because p < 0.0

Table 1. Standardized loading factor, composite reliability and average variance extract

No	Variable	Items	Stan- dardi- zed Loading Factor	Com- Reli- (CR)	posite ability	AVE	KMO Bartlett's Test
1	Knowledge sharing	KS1 KS2 KS3 KS4	0.881 0.826 0.830 0.799	0.943		0.703	451.342**
2	Trabsforma tive interaction capability	TIC1TIC2TIC3 TIC4	0.885 0.892 0.821 0.884	0.929		0.752	295.678**
3	Adapt- ability to techno- logical change	ATC1 ATC2 ATC3ATC4	0.798 0.883 0.860 0.879	0.918		0.758	456.133**
4	Teamwork perfor- mance	TP1 TP2 TP3 TP4	0.883 0.889 0.876 0.897	0.938		0.764	462.721**

Table 2. Descriptive statistic and correlation

	Mean	Standard Deviation	1	2	3	4
Pro-com- mitment to learning	32.67	2.934	1.000			
Professio-nal expe- rience portfolio	26.13	2.199	.546**	1.000		
Adapt- ability totechno- logical change	33.43	2.939	.466**	.824**	1.000	
Employee perfor- mance	33.56	2.947	.476**	.748**	.824**	1.000

Table 4. Line test results coefficient: knowledge sharing, transformative interaction capability, adaptability to technological change, employee performance

## Measurement model testing

The results of AMOS 25 have shown that the value of the chi-square statistic is 154.977, which means the model is not fit because the chi-square statistic is > from the chi-square table. Because the chi-square value is very conservative and depends on a large number of samples, it can cause type II error (rejecting the correct model) so it is possible to look at other fit indices (Hooper et al., 2008). However, due to the large number of samples used (> 200), the chi-square value can be neglected. Other test results show that the value of CMIN/df is 1.763 < 2.00 (Fit); TLI/Tuckle Lewis Index score 0.983 > 0.90 (Fit), AGFI/Adjusted Goodness of Fit score 0.861 < 0.90 (Medium), CFI/

Comparative Fit Index score 0.889 < 0.90 (Medium), CFI 0.906 > 0.09 (Suitable); and RMSEA score is 0.056 < 0.08 (Fit)

# 4. Finding

# Hypothesis test

The CFA model was transformed into a structural model to test the hypotheses of this study. Table 3 shows the test results. All hypotheses were validated with a significance level of p < 0.001. In addition, the path regression coefficient for H1 = 0.380; H2=0,378;H3=0,637; and H4 = 0.510, with a critical ratio or t value > 2.0. This shows that all the proposed hypotheses are accepted.

### 4.3 Mediation effect

The mediating effect of TIC on the relationship between QWL and TP was tested using the Sobel test (Hayes, 2009). The statistical test value of Z is 6.7834219, where the result is higher than the

cut-off value of 1.96. This shows the mediating effect of the tested variables. In other words, transformative interaction capability mediates the effect between frequent and team performance.

Hypothesis	dize	Standar- dized path coefficients		Prob	Result
H1	knowledge sharing → Transformative interaction capability	0.380	2.972	0.001	Significan t
H2	Transformative interaction capability  →team work performance	0.378	4.129	0.003	Significan t
НЗ	Transformative interaction capability  →Adaptability to technological change	0.637	5.759	0.001	Significan t
H4	Adaptability to technological change  →Teamwork performance	0.510	5.821	0.000	Significan t
Н5	Transformative interaction capability  →mediated Transformative interaction capability and Team work performance	Z-nilai = 6,7834219		0.000	Significan t

#### **Discussion**

This study focuses on efforts to share knowledge to improve team performance by using two theoretical concepts as the basis for the emergence of new concepts presented by qamari 2019 namely human capital and transformation theory. (1991). In this discussion section, we will review how the relationships between variables are presented in this study and the contributions of these friends to science and the underlying theory. First, knowledge sharing affects transformative interaction capabilities in organizations. When various activities such as sharing knowledge between work employees are considered as units that are quite easy to carry out, the better knowledge sharing activities carried out between employees will be able to encourage the creation of fairly good cooperation between individuals. The more knowledge sharing activities carried out by employees in generating creative ideas and can be used to improve innovation, both process innovation, and product creation. Knowledge-sharing activities that are quite effective between individuals in an organization are expected to be able to provide a form of expression between individuals in the organization. This is expected to have an impact on improving and improving the knowledge and skills of these employees and will be able to have an impact on capacity building. Capacity building of a team member will refer to the ability of the system within the team to access and generate knowledge relevant to a sustainable system. This system is often known as greeting in the transformative proxy Interaction capability of Qamari 2019.

Transformation can be considered as learning that involves various qualitative changes. but from a perspective, the frame of reference or habit of mind cognitive mental structure possessed by team members can be used as an effort to regulate understanding of themselves and their lives in the organization. In addition, the concept of transformative interaction will be able to emphasize the existence of their role's influence on the world in general and emphasize the role of Central. This role is expected to be able to provide the critical reflection and be able to open discourse. It will be in a relationship and will have significance in the application of new insights into practice in the academic and professional world. Transformative interactions are expected to have a goal of creating various understandings and the existence of various forms of a new practice in holistic

understanding. What shows the increasing importance needed by individuals and community companies is the existence of three fundamental dimensions mental learning, emotional, cognitive, and social. The results of this study also provide comprehensive support for previous findings that knowledge creation at a high level of knowledge sharing will have a positive effect on team performance. Hong et al. (2016). The creation of knowledge that is sufficiently optimal will have the potential for the organization and team members in it to strengthen their core competencies to adopt various information technologies.

This study also supports the strengthening of studies that have been carried out by previous researchers which state that exploration of ideas has been able to create uniqueness and openness to openly sharing information on parallel tasks. Magnus and DeChurch (2009),. It is hoped that it needs to be developed in-depth and thoroughly for the team. This study specifically also succeeded in discussing broad information that will allow for in-depth information processing and quality improvement of team decisions. When the team is open during discussions it will be able to increase various impacts to improve quality performance Qamari, 2019. This can be realized through the concept of information sharing, a new transformative concept. Interaction capability has been able to provide an empirical study in this research.

Team empowerment is expected to be realized through extracting ideas from various media used in working to build a solid team in improving the structure and evaluation with training workshops. interaction by sharing and adapting it will be able to strengthen self-capacity, dedication, and adaptation to market changes and orientation to the future. When team members continue to interact by continuously learning and following developments in design and technology it will be able to produce a collaboration with the team to always update and do an overall evaluation. A transformative interaction capability is a form of interaction between team members that are oriented towards learning adaptation and mutual empowerment to changing times and is always future-oriented based on this assumption. Externally building a mental model of togetherness and carrying out experimental actions, active participation in gathering information is oriented toward improving the performance of the Qamari, 2019

# Research and managerial implications

The results of this study contribute to the development of new concepts produced by previous researchers with the underlying theory. Such as resource-based theory, transformation theory, and time interaction theory performance. The results of this study are expected to be able to contribute to the strengthening of the three theories. be evidence of the strengthening of these theories. The academic discussion in this research was built. This research provides direction on strengthening basic reinforcement such as the concept of group learning, changes in teamwork behavior and group processes, and group dynamics.

This has succeeded in providing a form of explanation for the research gap in this study regarding the gap in influence between knowledge sharing and team performance. Strengthening the new concept from previous researchers, namely the transformative concept of Interaction capability of the empirical research model proposed in this study with various antecedents to improve the consequences of team performance. It has been tested significantly from statistical results. These results show that strengthening the new concept of transformative interaction capability is a mediator that is a key strategy to bridge the research gap between knowledge sharing and team performance. Team performance can be developed by implementing various empirical findings in this study. Optimizing the team with maximum service, short planning, open communication, and responsibility, will be able to follow up on any problems encountered when there is a division of work specifications among team members. Meanwhile, the skills of appropriate work results will be able to exceed the target with positive appreciation from external and internal parties, and team activities with efficient resources will be able to be realized through the use of communication technology which is the existence of adapting the use of technological change which is also an antecedent for improving team performance.

There are limitations to this research and future research agenda. The first limitation is that the sample used in this study is a public organization engaged in the education sector. Further research is expected to be able to apply the research model used in this study to be applied to companies or the

manufacturing industry or BUMN institutions. based on the theory of social exchange, intelligence theory, or service-dominant logic theory. Future research is expected to be able to integrate various theories and other variables that can improve team performance such as group processes, decision making, and leadership styles, and to explore organizational behavior further to expand the model developed in this study.

To improve team performance, various arguments that have been described previously regarding the limitations of the study and recommendations for future research agendas, this study was able to demonstrate its existence by accepting all hypotheses that occurred indicating this model was feasible even though it was still simple in improving team performance. Interaction variable mediating role has influenced knowledge sharing to improve team performance. This is one of the core competencies that must be possessed by public organizations. This research proves that the role of mediating variables has a significant effect on team performance variables.

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