

IMPROVING PERFORMANCE THROUGH TRANSFORMATIONAL LEADERSHIP AND UTILIZATION OF INFORMATION TECHNOLOGY: A SURVEY IN MOSQUE-BASED ISLAMIC COOPERATIVES IN INDONESIA

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ABSTRACT

The present study aimed to develop a problem solving model to the lack of performance of mosque-based Islamic cooperatives in Indonesia. This study employed a quantitative method with sequential explanatory strategies through a survey to Islamic cooperatives using a structured questionnaire with a 5-point Likert scale. Data analysis was carried out using Partial Least Square (PLS) with the aid of smart PLS 3 software.

This study used unit analysis of mosque-based sharia cooperatives in the city of Bandung while the heads/managers of the institutions as the observation units. The study was conducted in one time period in 2018.

Based on the results of the study, it revealed that implementation of transformational leadership and utilization of information technology affects the performance achievement of sharia cooperatives either partially or simultaneously. These results also create novelty in developing the model of resource-based performance enhancement of sharia cooperatives (both in human and man-made resources) and contribute to the improvement of the performance measurement of sharia cooperatives which are previously focused only on financial and social aspects. These accommodate triple missions of Islamic cooperatives, i.e. financial, social and sharia performance.

Keywords: Transformational Leadership, Information Technology, Performance of Sharia Cooperatives, Mosque-Based Sharia Cooperatives.

INTRODUCTION

Nowadays, private sectors dominate the economy landscape of Indonesia by 80%, followed by state-owned enterprises (18%), and cooperatives by 2%. Despite its tiny contribution, cooperative has a strategic role in the development of Small and Medium Enterprises (SMEs), particularly those which are not bankable. In addition, cooperatives provide savings and financing products suitable for their members' needs and flexible to be accessed quickly compared to those of formal banking services.

Currently, sharia cooperatives as a form of microfinance institutions which provide microfinance services in accordance with Islamic principles and teachings have developed. The Islamic cooperative implements three missions (triple mission) simultaneously, namely financial,

social and spiritual missions (Wediawati et al., 2018). Although a number of studies revealed the superiority of sharia cooperatives (Hadisumarto & Ismail, 2010; Riwijanti, 2014; Mohamed, 2015), these Islamic institutions are still encountering various obstacles. Out of 3,000 units of sharia cooperatives/BMTs in Indonesia, no more than one-fifth has good performance (Seibel, 2005:2007). Furthermore, growth of sharia cooperatives is still lagging behind those of conventional ones (Masyita & Ahmed, 2013).

A number of studies found that the key problem in sharia cooperatives management is related to the poor quality of human resources (Bank Indonesia-LP3FEB Unpad, 2011; Ismanto, 2011; Sharia Economy Outlook, 2014) and the lack of utilization of information technology (Hossen & Sa'roni, 2012). These drawbacks have an impact on the ability of Islamic cooperatives to achieve optimum performance in an increasingly digital business world (Hossen & Sa'roni, 2012).

In addition, another problem is associated with performance measurement, where so far most of the Islamic cooperatives' performance is measured based on financial capability (Hadisumarto & Ismail, 2010), social measurement (Riwajanti, 2014) or financial and social measurements (Ascarya, 2012; Hosen & Sa'roni, 2012; Wediawati et al., 2018). Meanwhile, measurement of sharia aspect as a means of implementation of its spiritual mission is rarely used, instead. In fact, the sharia cooperative is not merely a financial institution; rather, it has also a missionary institution (Wediawati & Setiawati, 2016; Wediawati et al., 2018). Therefore, in addition to exhibiting a financial and social mission, it also has a spiritual mission also known as triple mission. Given such a fact, the current measurements available so far do not accommodate triple mission in sharia cooperatives.

Given such a fact, this study was aimed to filling the knowledge gap previously described by proposing a model to improve the sharia cooperatives' performance through the implementation of transformational leadership and information technology utilization.

This paper is organized as follows: part 1 presents an introduction which elaborates the problem and purpose of the study. In part 2, a literature review is presented and in part 3 hypotheses to be evaluated are presented, part 4 presents the research methods used in this study, part 5 discusses the results of the study, and finally part 6 presents' conclusions and recommendation for future researches.

LITERATURE REVIEW

Transformational Leadership

Transformational leadership can drive organizations to build new visions, carry out transformations, invent something new, and create significant changes both in internal and external aspect (Tichy & Ulrich, 1984). Furthermore, transformational leadership encourages subordinates to achieve and develop themselves, promote and develop groups and organizations (Bass & Avolio, 1990). The effects of the style of leadership felt by subordinates include dimensions of influence idealization, inspirational motivation, individual consideration and intellectual stimulation (Burns & Avolio, 1990). Furthermore, this type of leadership desires to encourage subordinates to carry out work to interact with various parties so that they are able to change, motivate and possess ethics (Nwokah & Ahiazu, 2010; Arnold et al., 2007).

Not only does transformational leadership enhance individuals' performance in organizations, but it is also able to create positive changes as a whole, care for each other and build team work (Warrilow, 2012). These changes are made through the structure and strategy of

the organization (Geib & Swenson, 2013). Furthermore, James & Ogbonna (2013) argued that transformational leadership can enhance motivation, morale and performance of subordinates through various mechanisms; so that it can inspire followers, go beyond their own interests and have a tremendous influence (Robbins & Judge, 2001), which can ultimately increase effectiveness and development despite differences in principles among them (Wongyanon et al., 2015). Thus, the construct of transformational leadership in this study is that which is able to create positive changes in improving organizations and individuals, motivating staff through various mechanisms and improving the performance of Islamic cooperatives.

Information Technology

The role of information technology is indispensable to support organizational performance in business and industry (Melville, 2010). Information technology and managerial capabilities evolves into components of organizational design (Jeffers et al., 2008). Explicitly, technological resources greatly depend on information technology which will greatly influence technological resources so that it eventually influences organizational performance.

Currently, the utilization of information technology is a way for business development, whether it is small, medium or large businesses. Information technology is a means to seek opportunities, development and use of knowledge to support the success of the company's strategy (Amirbekova, 2016). Therefore, to support organizational performance, information technology becomes a medium for interaction of resources and technological capabilities which evolve to support it in an increasingly intense competition. The extent to which information technology is utilized is indicated by dissemination of information, development of database, and quality of knowledge improvement/mobile data systems (Jeffers et al., 2008; Melville, 2010; Amirbekova, 2016).

Based on the underlying concept of previous research, the construct of information technology in this research is that which is used to support the performance of Islamic cooperatives to deal with competition through data storage, information dissemination and mobile systems.

Sharia Cooperative Performance

There still lack researches on the performance of sharia cooperatives which accommodate triple mission. As a consequence, to reveal the variable, first approach of the concept of organizational performance is used.

An organizational performance is a result achieved through a combination of abilities and traits (Gibson et al., 2006), effort and support which are measured through efficient and effective work patterns (Bernardin & Russel, 1998); thus, it leads to a transformation from input to output (Lebans & Euske, 2006) and measured through financial, customer, business processes and learning and growth perspectives (Kaplan & Norton, 1992).

A number of researchers used more measures of financial performance (Afandi, 2014; Hadisumarto & Ismail, 2008), social performance (Riwajanti, 2014) and measurements of both (Ascarya, 2012; Hosen & Sa'roni, 2012; Wediawati et al., 2018). On the other hand, the studies which measure spiritual performance (sharia) are still hardly found. In fact, a number of studies (Hadisumarto & Ismail, 2010; Sanrego & Antonio, 2013; Wediawati & Setiawati, 2016) highlighted the importance of spiritual performance as the part of the spiritual aspect in sharia cooperatives/BMT since the aspect is one of Islamic microfinance (sharia cooperatives) missions

in addition to two other missions (dual mission), i.e. financial mission and social mission, as well as microfinance mission (Ledgerwood, 2000).

The sharia cooperative, other than a financial institution, is also a missionary institution (religious institution), so that in addition to performing financial and social missions (dual mission), the sharia cooperatives are also expected to implement a sharia mission as the realization of the objectives of sharia (maqasid syariah) which emphasizes the balance of worldly life and the hereafter (falah) purposes. Based on the relevant regulations with sharia cooperatives and performance measurement used by a number of researchers, the construct of sharia cooperatives' performance in this study is the ability of sharia cooperatives to realize the welfare of members and society which is measured through three dimensions of: 1) financial performance, 2) social performance, and 3) sharia performance.

The Islamic cooperative is an organization consisting of members or legal entities of cooperatives which have coverage area of activities of savings, financing, financial transfers and payment services in accordance with sharia principles. Meanwhile, cooperative's performance is measured through its ability to realize member welfare through financial performance, social performance and sharia performance.

HYPOTHESES

This study is expected to deal with the problem of the poor performance of sharia cooperatives by improving the aspects of both human and artificial resources (technology). Therefore, several hypotheses have been formulated through the following questions:

Does transformational leadership implementation affect the performance of sharia cooperatives?

The relationship between implementation of transformational leadership and the performance of sharia cooperatives is still very rarely discussed in previous researches, so this relationship is revealed through transformational leadership in other organizations. Transformational leadership has a positive effect on competent and influential managers when the trust is very high (Purvee & Enkhtuvshin, 2015). Therefore, the emphasis of transformational leadership style is significantly positive in improving organizational performance (Singh, 2015; Ekiti & Taiwo, 2015; Li & Richard, 1999). Thus the hypothesis is proposed as follows:

H₁: Transformational leadership has a positive effect on the performance of sharia cooperatives.

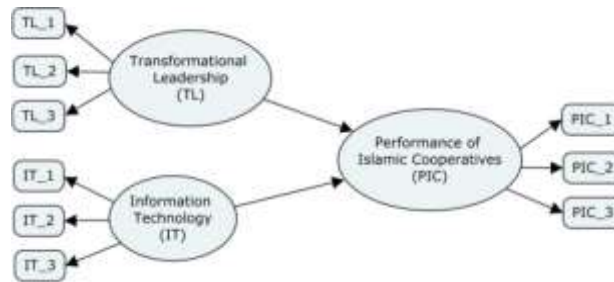
Does information technology affect the performance of sharia cooperatives?

There still lack previous researches focusing on the relationship between information technology and the performance of Islamic cooperatives. Meanwhile, the relationship between these two aspects are revealed somewhere through other organizations. In fact, information technology utilization is vital for leaders who are able to make changes (transformers), ease of use of information technology to facilitate organizations (Schepers et al., 2005). The importance of information technology for transformational leadership styles can enhance virtual global in increasingly intense competition (Hickman & Akdere, 2018). When information technology is utilized in e-business, it can significantly contribute to transformational leadership; thus, information technology is an important factor in improving individual performance for

organizational performance improvement (Sajeet et al., 2016). Thus, the second hypothesis is proposed as follows:

H₂: Information technology has a significantly positive effect on the performance of Islamic cooperatives.

Based on the literature review of previous studies and proposed propositions, the research model is proposed to overcome the performance drawbacks which the sharia cooperatives are encountering as follows (Figure 1).



**FIGURE 1
RESEARCH MODEL**

RESEARCH METHODOLOGY

Used Variables

In this study, the variables used consist of two free latent variables, namely transformational leadership (X1) and information technology (X2), and one dependent variable which are the performance of sharia cooperatives (Y1). The variable operationalization of the study is summarized in Table 1.

Table 1 RESEARCH VARIABLE OPERATIONALIZATION		
Dimension	Indicator	Scale
Transformational leadership (TL) Transformational leadership is a style of leadership which is able to create positive changes in improving organizations, individuals and motivating staff and employees through various mechanisms		
1. Able to make positive changes (TL_1)	1. Change in administration system (TL_11) 2. Change in payroll system (TL_12) 3. Change in system, service (TL_13) 4. Change in organizational culture (TL_14)	Ordinal
1. Able to motivate staff/ employees (TL_2)	1. Inspiring figure (TL_21) 2. Exemplary behavior (TL_22) 3. Creativity (TL_23)	Ordinal
2. Able to improve performance (TL_3)	1. Establishing performance standards (TL_31) 2. Directing achievement (TL_32) 3. Evaluating performance (TL_33)	Ordinal
Information Technology (IT) Media interaction, resources and technological capabilities which evolve to support organizational performance in the face of competition through data storage, information dissemination and mobile systems		
1. Technology in data storage (IT_1)	1. Updated member database (IT_11) 2. Automatic sprint out system (IT_12)	Ordinal

	3. Detection of bad financing (IT_13)	
Information technology in information dissemination (IT_2)	1. Use of SMS/ whatsapp/ e-mail/ telegram (IT_21) 2. Use of Facebook/ website (IT_22) 3. Use of leaflets or brochures (IT_23)	Ordinal
4. Information Technology in a mobile system (IT_3)	1. Online registration system (IT_31) 2. Online transfer service (IT_32) 3. Online payment service (IT_33)	Ordinal
Sharia cooperative performance (PIC)		
The ability of sharia cooperatives to realize the welfare of members and society through social, sharia and financial performance.		
1. Social performance (PIC_1)	1. Net active borrower (PIC_11) 2. Capacity building for members (Education/ training activities) (PIC_12) 3. Service to the poor (depth outreach) (PIC_13)	Ordinal
2. Sharia performance (PIC_2)	4. Understanding of board of management about sharia principles (PSC_21) 5. Functions of sharia supervisory board according to its duties (PSC_22) 6. Periodic sharia audits (PSC_23) 7. Sharia cooperatives' operations in accordance with sharia contract guidelines (PSC_24)	Ordinal
3. Financial performance (PIC_3)	1. Growth in total assets (PIC_31) 2. Growth in the amount of savings (PIC_32) 3. Increased dividend (PIC_33)	

Meanwhile, the latent variables as used variables in this study are built using dimensions and indicators through 5-point Likert scale questions.

Samples

In the present study, mosque-based sharia cooperatives in the city of Bandung were set as analysis unit. The objects were selected based on the consideration that the sharia cooperatives under the management of a well-coordinated mosque continually develop since it started in 2006 in Bandung. Since the establishment, these unique institutions have developed on the initiative and independence of the community to empower the economy of the mosque congregation and to eradicate moneylenders. The number of mosque-based sharia cooperatives in Bandung accounted for 197 units. The observation unit was the chairmen/managers of the sharia cooperative considering that these persons understand all activities related to information technology, the implementation of transformational leadership and the achievement of cooperative performance. The sampling technique was carried out by purposive sampling, selecting active Islamic cooperative and regularly conducted annual member meetings. Based on these criteria, there were 66 units of sharia cooperatives which fulfilled the requirements.

Method

This study employed a quantitative approach with explanatory survey method which explains the causal relationship between variables through testing hypotheses (Hair et al., 2017). In the study, cross section/one shot observation was used where the data which had been collected was analyzed directly at the scene empirically at one time (Malhotra, 2010). The data collection was conducted in June 2018.

Meanwhile, Partial least square (PLS) based SEM was used as analytical tool considering that PLS is suitable for use when the research sample is relatively small in number. PLS is also very robust to predict orientation so it is also suitable to be used to develop theories in exploratory research (Hair et al., 2017), according to the variables of this study, i.e. transformational leadership and information technology which is still rarely discussed in previous studies.

RESULTS AND DISCUSSION

Respondents Characteristics

The characteristics of the respondents include the aspect of gender, age, and level of education. Generally, the head/manager of the sharia cooperative comprises 80% male and the remaining 20% are women. Based on the results of the survey, it is found that in this area, there is a gender bias where men dominate the chair position. Meanwhile, women generally hold positions as secretaries or treasurer.

Generally (around 50%), the age of sharia cooperative heads/managers ranges from 41-50 years, 45% is over 50 years old, and the remaining 5% are 31-40 years old. The figure shows that the leadership of the sharia cooperative is held by productive age and is considered mature to lead sharia cooperatives; however, this position is less attractive to young people due to uncompetitive compensation compared to the same position as in other financial institutions. It also indicates that regeneration goes unsuccessfully in sharia cooperative leadership.

Based on educational background, the majority of chief executive is high school graduate (78%); while the remaining (18%) is university graduates and 4% is post-graduates. Furthermore, 68% of cooperative leaders have attended training and the remaining 32% have not. This fact indicates that the members of cooperatives realize that to lead sharia cooperatives to achieve excellent performance in a globalized and increasingly digital business world, educated and trained leaders are mandatory prerequisite.

Hypothesis Testing

Prior to testing the hypotheses, a goodness of fit test was conducted to ensure whether the research model is in accordance with empirical conditions through two stages, i.e:

Measurement model testing (outer model)

Test of the measurement model (outer model) was performed on indicators and dimensions which form latent constructs, using Confirmatory Factor Analysis (CFA). The study used multi-dimensional constructs; thus, the model validity test was carried out through two stages, namely second order and first CFA order (Table 2). Meanwhile, the construct properties in the study were considered reflective since they were assumed to have the same content domain.

Validity test used convergent and discriminant validity while reliability test used composite reliability method. Convergent validity of the measurement model was assessed based on the correlation between the estimated item score/component score (loading factor value). The value is claimed to be high if it correlates with the measured construct of more than 0.70 (Hair et al., 2017).

Table 2			
SECOND ORDER CFA			
Manifest Variable	Loading Factor	T_{count}	P-value
Transformational leadership			
TL_11	0.797	6.148	0.000
TL_12	0.802	9.994	0.000
TL_13	0.868	18.827	0.000
TL_14	0.879	32.101	0.000
TL_21	0.846	18.208	0.000
TL_22	0.758	55.410	0.000
TL_23	0.894	27.828	0.000
TL_31	0.968	73.642	0.000
TL_32	0.948	32.381	0.000
TL_33	0.873	20.500	0.000
Information technology			
IT_11	0.950	69.233	0.000
IT_12	0.929	29.702	0.000
IT_13	0.900	23.349	0.000
IT_21	0.889	32.863	0.000
IT_22	0.871	12.757	0.000
IT_23	0.800	10.750	0.000
IT_31	0.937	28.117	0.000
IT_32	0.918	21.106	0.000
IT_33	0.861	10.832	0.000
Sharia cooperative performance			
PIC_11	0.814	10.132	0.000
PIC_12	0.903	16.772	0.000
PIC_13	0.897	24.349	0.000
PIC_21	0.858	17.602	0.000
PIC_22	0.827	11.140	0.000
PIC_23	0.893	27.884	0.000
PIC_24	0.865	16.509	0.000
PIC_31	0.867	18.496	0.000
PIC_32	0.925	39.001	0.000
PIC_33	0.862	18.404	0.000

Note: Two tailed test $\alpha=0.05$ and (T-table=1.96).

From the results of the second order of CFA, it is found the value of loading factors for all manifest variables of the latent variable dimension of transformational leadership (X_1), information technology (X_2) and performance of Islamic cooperatives (Y) is greater than 0.70 and that of t-statistics is also greater than 1.96. Thus, it can be said that all manifest variables are valid and meaningful to measure the variable dimensions under the study. Furthermore, it is also found that all indicators in measuring the dimensions of the three variables under investigation have a positive and significant relationship. Subsequently, first order of CFA analysis was conducted to observe the dimension validity to the variables under the study. The results are presented in Table 3.

Dimension-Variable		Loading factor (λ)	T _{count}	Pvalue
Transformational leadership				
TL change	TL 1	0.977	179.623	0.000
TL Motivation	TL 2	0.956	65.794	0.000
TL performance	TL 3	0.927	34.112	0.000
Information technology				
IT information dissemination	IT 1	0.852	14.746	0.000
IT data storage	IT 2	0.844	16.467	0.000
IT mobile system	IT 3	0.709	6.755	0.000
Sharia cooperatives' performance				
PIC-Social	PIC 2	0.833	16.467	0.000
PIC-Sharia	PIC 3	0.823	6.755	0.000
PIC-financial	PIC 1	0.886	14.746	0.000

The value of loading factors of 9 dimensions from 3 latent variables which are transformational leadership (X_1), information technology (X_2) and the performance of sharia cooperatives is greater than the recommended value of 0.7. Therefore, the construct (manifest variable) of all variables is eliminated from the model. The t-statistic values of all dimensions are greater than 1.97; thus, it can be stated that the manifest variable used is meaningful to measure the used variables in this study and has a positive and significant relationship in determining the performance of Islamic cooperatives. Thus, the first orders of CFA results satisfy convergent validity.

Furthermore, to investigate the validity of the instrument was also performed through discriminant validity using the value of Average Variance Extracted (AVE). A construct is considered good provided that the AVE value is above 0.50.

Latent variables	AVE	Composite reliability
TL_1	0.702	0.904
TL_2	0.697	0.873
TL_3	0.866	0.951
Transformasional leadership(X_1)	0.680	0.955
IT_1	0.859	0.948
IT_2	0.729	0.890
IT_3	0.821	0.932
Information technology(X_2)	0.514	0.904
PIC_1	0.784	0.916
PIC_2	0.761	0.905
PIC_3	0.741	0.920
Performance of Islamic cooperatives (Y)	0.543	0.922

Based on Table 4, it can be seen that all variables in the predicted model are valid with the value of Average Variance Extracted (AVE) is greater than 0.5. In addition, according to the table, it is found that the composite reliability value of the three variables as a measure of reliability is greater than 0.70. Thus, it can be stated that all variables have good reliability.

Structural model (inner model) testing

Structural model (inner model) used the R-square value and the size effect (f^2). The R^2 value indicates the prediction accuracy of the criteria model it used (Table 5). The study used these criteria, such as 0.25 which indicates weak, 0.5 for moderate and 0.75 for substantial effect. The value shows the contribution of each construct to the performance of the Islamic cooperatives. The criteria used are 0.02 for small, 0.15 for medium and 0.35 for great effect (Hair et al., 2017)

Table 5 R-SQUARE	
Performance of Islamic cooperatives (Y)	0.635

Based on the test results as presented in Table 5, it shows that the value of R-square indicates 0.635 which is classified as moderate. These results indicate that 63.5% of the Islamic cooperatives performance variables are influenced by implementation of transformational leadership and information technology utilization. Furthermore, the value of the size effect f^2 is presented in the following Table 6.

Table 6 EFFECT SIZE (F^2)	
Endogenous construct	Effect size(f^2)
Transformational leadership (X_1)	0.6237
Information technology (X_2)	0.4606

Based on Table 6, it is found that the value of the size effect f^2 of transformational leadership (X_1) is 0.6237 while that of information technology (X_2) is 0.4606 which is greater than 0.35. Therefore, it is classified as large category.

Hypothesis Testing

To test the hypotheses, t-statistic values were used. The hypothesis is either rejected or accepted depending on the value within the range of -1.96 to 1.96. Statistic estimation results are described as follows (Table 7).

TABLE 7 HYPOTHESIS TESTING					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	p-value
TL → PIC	0.515	0.5149	0.1377	3.745	0.000
IT → PIC	0.443	0.243	0.131	3.867	0.000
Critical value two tailed test is 1.96 (level of significance=5%)					

Previously, *Hypothesis 1* predicted the effect of transformational leadership on sharia cooperative performance. Based on the test result of *Hypothesis 1*, the relationship of the variable of transformational leadership with Islamic cooperative performance is indicated by the value of path coefficient of 0.515, value of t_{count} of 3.745 and p value of 0.000. It shows that the t-statistic value is greater than critical (1.960) and p value is less than that of alpha of 0.05. These results

indicate that transformational leadership has an effect on the performance of sharia cooperative. It reveals that the results are in accordance with the *Hypothesis 1*. In other word, the first hypothesis is accepted.

Hypothesis 2 predicts the influence of information technology on the performance of sharia cooperatives. The results of testing the second hypothesis indicate that the relationship of information technology variables with sharia cooperative performance is indicated by the path coefficient value of 0.443 with a t_{count} of 3.867 with p value=0.000. The obtained t-statistic value is greater than critical (1.960) and the p value is less than 0.05. This result means that information technology has an effect on sharia cooperative performance. In other words, it is in accordance with the second hypothesis or *Hypothesis 2* is approved.

To investigate the effect of transformational leadership and information technology simultaneously on the performance of sharia cooperative, a hypothesis test was carried out by observing the value of F_{count} (F-Test). To test these influences simultaneously, the F-test was used with the test criteria α of the study of 0.5 at the critical limit, in which, it is considered significant when the value of F_{count} is greater than that of F-table ($db_1=3$ and $db_2=nk-1=30-2-1=27$)=3.354.

The value of F test statistics is obtained using the calculation as follows:

$$F = \frac{(n-k-1) \times R_{YX_1X_2}^2}{k \times (1 - R_{YX_1X_2}^2)} = \frac{(30-2-1) \times 0.635}{2 \times (1 - 0.635)} = 46.983$$

The above results show that the value of F-statistic is greater than that of F-table ($F=46.983 > 3.354$). Therefore, it can be stated that transformational leadership and information technology simultaneously affect the performance of the Islamic cooperatives. This finding supports the results of the research conducted by Raluca (2015) and Elenkov (2002) which found that transformational leadership is an important factor to achieve organizational performance and effective organizational development. The results also support those of the research conducted by Li & Richard (1999) which found that information technology has a positive impact on company performance, and also in agreement with the conceptual study of Jacks et al. (2011) by conducting a meta-analysis on 76 articles about the impact of technology on organizational performance, in which the finding reveals that information technology will extend the life cycle of the organization.

The performance of mosque-based Islamic cooperatives to realize the welfare of the member and community which is achieved through social, sharia and financial performance is greatly determined by the leaders who are able to make positive changes in improving organizations, individuals and motivating employees through performance improvement (Tichy & Ulrich, 1984; Bass & Avolio, 1990; James & Ogbonna, 2013). Resource support which evolves in the information dissemination, data storage and the use of the mobile system for mosque-based sharia cooperatives is significantly supportive in dealing with the competition (Amirbekova, 2016).

CONCLUSIONS

The results of the study reveal that both transformational leadership and information technology partially and simultaneously influence the performance of mosque-based Islamic cooperatives. So as to achieve good performance, these sharia institutions require to manage transformational leadership and information technology within the organization. The leaders are

expected to have the ability to make positive changes, motivate staff and improve performance, while management of information technology is carried out through data storage, information dissemination and the mobile system. This research produces novelty models for improving the performance of Islamic cooperatives based on human resources and information technology.

Moreover, this research finding contribute to improve the concept of measuring the performance of Islamic cooperatives which accommodates triple mission of Islamic cooperatives, i.e. financial, social and sharia performance, instead of merely focusing on financial and social aspect as the performance measurement. Thus, this study contributes to the scarcity of literature in Islamic cooperatives regarding the variables being studied. Meanwhile, individual factor regarding skill, motivation and commitment, team work, work method and environmental changes can be the agenda for future research.

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