The Contribution of Localization Management System on Zakat Institution Performance

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***Abstract*— This paper attempts to analyze the concept of localization and its relationship with the psychological performance of zakat. It argued that localization could produce development opportunities from the management decentralization of supply chain in zakat institution. In this study, localization is treated as the mediator, while property rights of zakat and asset specificity performed as the independent factors in determining the performance of zakat. Data from 428 samples of zakat payers reveal that localization was performed as the complementary partial mediation toward the performance of zakat. This is due to the property rights of zakat and the asset specificity have the direct impact on the psychological performance. Hence, further exploration of the innovation in supply chain management, especially on the aspect of decentralization of zakat is needed. This study suggested that development opportunities could be met by applying the concept of localization in the zakat institution.**

***Keywords*—** *Zakat, Localization, Decentralization, Supply Chain Management, Innovation.*

1. Introduction

The institution of zakat is the basis of the Islamic provision for the care of the poor. Zakat was obligatory on every Muslim who has meet to the certain criteria and the third pillars of the faith in Islam. Due to the obligation for the Muslim, in Malaysia, zakat institution has been established and being put under the state administration. Until this recent day, this institution has undergone several transformations in the management system to make it performs better. However, even with the several improvements that have been made, the institution performance is still considered as inefficient [1], where much people still unsatisfied with the distribution of zakat system [2].

Hence, to tackle this issues, several concepts have been introduced to make the delivery system of zakat more efficient. One of the concepts is through the management decentralization of supply chain in the distribution system. Scholars of zakat in Malaysia often emphasis that zakat institution must apply the concept of localization, so that it could balance the operational management system that heavily centralized [3]–[6].

Therefore, in this study, we attempt to further explore the concept of localization that had been proposed by those scholars. We try to understand whether the concept of localization could perform as a mediating role in enhancing the psychological performance of zakat. By this empirical findings, it hopes that scholars of zakat could planning for the innovative supply chain management of zakat distribution system.

2. Literature reviews

We apply the institutional theory as the main theoretical framework of our study. There are two main elements in the institutional theory, which are the ‘structure’ and the ‘performance’; and this theory explains how the structure would effect on performance [7], [8]. For the concept of performance in this study, we mean the psychological performance of zakat. According to Qaradawi [9], there are approximately twelve objectives of zakat, and these objectives could be divided into two main themes, which are the socio-economic performance and the psychological performance of zakat. In this study, however, we only looked at the aspect of psychological performance of zakat.

Zakat also emits psychological impact on the societies that are beyond the physical performance. It was about the internal feeling of people regarding the zakat such as feeling secured with the welfare of zakat, solidarity among the Muslim in the community, increased faith and spirituality of the people as well as have the willingness to pay zakat [9]. In this study, evaluation of the psychological performance was on the zakat payers' perspectives. We want to know the psychological feeling of zakat from the zakat payers' point of views. Do they feel secured (for their future) from paying the zakat? Do they have the willingness to pay the zakat through the zakat organizations? Do they feel the solidarity in their community through the function of zakat? These are among the questions that were asked to measure the psychological performance of zakat.

However, as has been highlighted in institutional theory, the impact on the performance still depend on the structure of the institution [7], [8]. The structure here means the institutional setting of zakat that could give an impact on performance. Two operational concepts from the structure were taken out from the institutional theory which is the property rights and the asset specificity.

2.1 Property rights of zakat

One of the elements that regard as the main structure and could play significant roles in determining the performance is on the ownership and how the property rights have been managed [7]. In the context of welfare institution such as zakat, there are warranties for the specific categories of people (called as asnaf) that are eligible to receive the property of zakat [9]. They are 'the poor', 'needy', 'zakat workers' (amil), 'slaves', 'persons in debt', 'the wayfarer', 'for the sake of Allah' and 'to those people whose hearts are being reconciled'. All these eight categories are guaranteed for the property rights as had been mentioned in the Quran. By the guarantee for zakat, this could make the eight categories of people feel secured regarding their welfare security and at the same time, it also could reduce the incidence of poverty in the country.

There are several studies that also have take a look at the elements of efficiency on the distribution of zakat [10]–[12] and the performance of zakat institution [13]–[15]. However, all the study have not taken a look at the aspect of securing the property rights of zakat and how this security system could impact on the psychological performance. Hence, based on the theoretical stand, it would be interesting to explore and try to understand whether securing on the property rights of zakat could affect the psychological performance of the people. Thus, in order to test the relationship of these two elements, the first hypothesis is proposed:

H1: *Secured on the property rights of zakat will positively enhance the psychological performance.*

2.2 Asset specificity of zakat

Asset specificity is related to the sites, physical asset, and human asset. This concept has often been discussed in the transaction costs economics. It was about the investment made with inter-party relationship on the assets for achieving the certain institutional purposes [16]. In the context of zakat, investment on the human assets could be related to the zakat workers (amil) or the expertise in the related field, while the physical asset is the facilities such as transportation, technological instrument and so on. The human asset, for example, needs for training in order to develop themselves with the speciality in their field [17]. Investment in training, however, could be highly costing and time-consuming. Hence collaborate with specialize partners such as expertise in the field of development and entrepreneurship could be able to reduce the cost [18]. Through the collaboration, it could increase the human asset for the zakat institution.

The same collaborating concept on the human asset also could be applied for the physical asset. For example, Hairunizam, Radiah, and Sanep [6] suggested zakat institution had to use mosques as the asset to collect and distribute the zakat. By using mosques as one of the asset specificity of zakat, it indirectly could increase the coverage area of the zakat institution. Through big collaborative partners and increase on the asset specificity of zakat, it seems that it could give an impact on the psychological performance of zakat. People will have more confidence with the institution of zakat and will have the willingness to pay zakat directly to the zakat institution. From the discussion on the asset specificity of zakat, the second hypothesis could be proposed to test the statement, which is:

H2: *Increase in the asset specificity of zakat will positively enhance the psychological performance.*

2.3 Localization of zakat institution

Localization is the element under the concept of decentralization. Some writers use these terms interchangeably, however, some argued that these terms have little difference [19], [20]. The term decentralization is about where the decisions are made, while localization is about who has the authority to make the decision [20]. For example, zakat institution in Malaysia has performed the decentralization system, where they have placed the down level managers in the locals to ensure their service agents were near to the citizens. However, the down level managers could not make the decision. All the decision, supply or provision are still from the center.

Localization, on the other hand, explains that the decision authority was on the local managers. The supply, the income of zakat, and the distribution system were under the local authority decision. From the concept of decentralization that had been applied by zakat institution, it then was strengthened by the concept of localization. The center only monitors and supports the management through their decentralization system. Center will provide the need for the local management. This is due to the perspective that the local managers could make the better decision related to the geographical context, environment and the need of their people that near to them.

Recent study by Hairunizam, Radiah and Sanep [4] shows that zakat workers are ready for the implementation of localization in their local community. This is because the locals know more regarding their local community and could provide the appropriate property of zakat to meet the need of their local recipients. Furthermore, different local areas would have the different economic sectors. For example, in the seafront areas, fisherman was the main sector of the economy, thus, the asset specificity must be something that has to be related with the sector and also could provide development to the sector. Hence, from this point of view, it natural to insist that secured on the property rights of zakat and the asset specificity of zakat could affect on the need to use the concept of localization of zakat institution. Thus, to test the statement, two hypotheses were proposed, which are:

H3: *Secured on the property rights of zakat will affect on the use of localization.*

H4: *Increase in the asset specificity of zakat will affect on the use of localization.*

In addition, through localization, it also seems could give an impact on the psychological performance. Where people could feel that the institution of zakat was near to them. From the feedback of zakat workers and zakat recipients, they already gave the positive assessment on the implementation of localization [6]. Thus, it could be meant that they have the feeling that improvement and development opportunities could be achieved through localization of zakat institution. From that point of views, this study attempts to test this statement from the zakat payers' perspective, hence, the fifth hypothesis is proposed:

H5: *Localization of zakat institution will positively enhance the psychological performance.*

In order to have a better understanding of this study, Figure 1 illustrates the developed research model that will be tested.

3. Method

This study takes positivism paradigm to test the relationship of the research model, thus quantitative design seems to be the appropriate method for conducting this research. In collecting the data, we employ a survey base strategy. 500 questionnaires were distributed to the zakat payers in three selective states in Malaysia, namely Perlis, Perak and Kelantan. Of these, 457 questionnaires were returned and after the data screening process, only 428 were usable for further analysis.

The self-administered questionnaire that has been distributed consisted of the instrument for measuring four relating constructs, namely property rights (7 items), asset specificity (4 items), localization (5 items) and psychological performance (5 items). The instrument was developed to ensure that the employed instrument was appropriate with the respondents' situation and applicable with the context of study [21]. All the instrument items were measured using 5 points Likert scale, ranging from (1 = totally disagree to 5

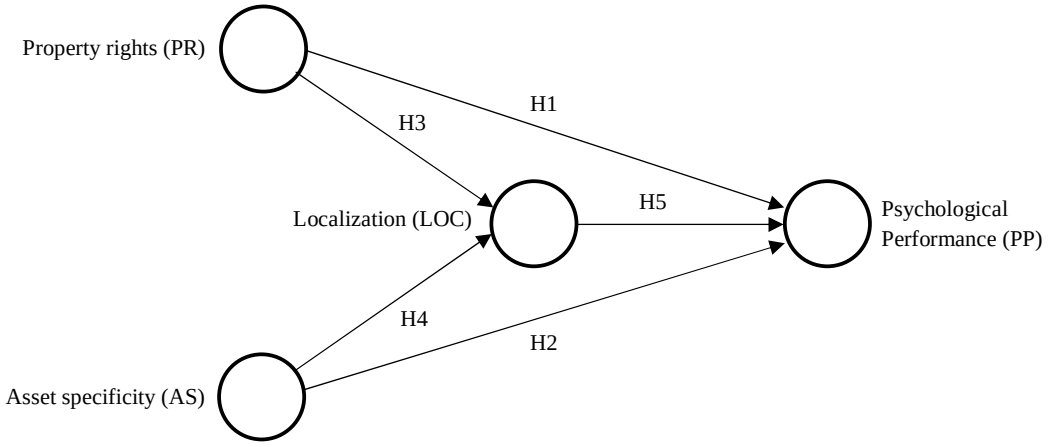

Figure 1. Research model

= totally agree). All the 428 data then analyzed using partial least square - structural equation modeling (PLS-SEM) method of analysis through the SmartPLS software [22].

4. Analysis of result

Before analyzing the research model, we first analyze the characteristic of the respondents to understand their demographic structure. We found that majority of our respondents (64.95%) are male. Most of them are 41 years old and above (70.32%). Their education background is from secondary school (30.37%), certificate or diploma (35.05%) and bachelor degree (30.84%). Majority respondents have the monthly income around RM1,000 to RM4,000 (79.67%). For the details of the characteristic of respondents in this study, Table 1 shows the descriptive profiles of the respondents.

As above-mentioned, this study employs PLS-SEM method of analysis to analyze the hypothesis model. According to Hair, Hult, Ringle and Sarstedt [23], there are two stages of conducting the analysis of PLS research model. The first stage is the assessment of the measurement model, and the second stage is the assessment of the structural model.

For the first stage, it will assess the aspect of validity and reliability of the research model. Assessment such as convergent validity, discriminant validity, the reliability of indicators and the consistency reliability of the constructs are performed. After has ensured the model is valid and reliable, then the second stage of assessment is performed, which is the structural model. In this stage, the hypotheses testing are performed by evaluating the significant relationship of the path model among the constructs [23].

Table 1. Profile of respondents

Characteristic	Frequency	%
Gender		
Male	278	64.95
Female	136	31.78
Age (Years)		
21 – 30	58	13.55
31 – 40	69	16.12
41 – 50	111	25.93
51 – 60	91	21.26
61 and above	99	23.13
Level of education		
Secondary school	130	30.37
Certificate/Diploma	150	35.05
Bachelor degree	132	30.84
Master degree	13	3.04
Level of income		
MYR 1,000 – 2,000	70	16.36
MYR 2,001 – 3,000	179	41.82
MYR 3,001 – 4,000	92	21.49
MYR 4,001 – 5,000	48	11.21
MYR 5,001 and above	15	3.50

4.1 Assessment of measurement model

For the assessment of measurement model, we first analyze the indicator outer loadings to assess the indicators reliability for each construct. For the

recommended threshold, the value above 0.70 was acceptable and considered the construct has the indicator reliability. In our study, all the indicator outer loadings have the values above 0.70 (see Table 2) and considered the constructs have the indicators reliability.

Table 2. Assessment of measurement model

LVs	Ind.	Outer loadings	AVE	CR
PR	PR1	0.703	0.591	0.910
	PR2	0.778		
	PR3	0.834		
	PR4	0.745		
	PR5	0.771		
	PR6	0.817		
	PR7	0.722		
AS	AS1	0.878	0.771	0.931
	AS2	0.886		
	AS3	0.907		
	AS4	0.840		
LOC	LOC1	0.830	0.717	0.927
	LOC2	0.784		
	LOC3	0.901		
	LOC4	0.844		
	LOC5	0.871		
PP	PP1	0.915	0.807	0.954
	PP2	0.931		
	PP3	0.926		
	PP4	0.816		
	PP5	0.898		

Next, we examined the constructs internal consistency reliability. In PLS, internal consistency is measured using the composite reliability (CR). The recommended CR value is above 0.70 [23], and in our study, the CR values are ranging between 0.910 and 0.954 showing that the constructs have the internal consistency reliability.

In the next step, we assessed the convergent validity and discriminant validity of the constructed model. The convergent validity is assessed through the average variance extracted (AVE), where the AVE value above 0.50 indicates the construct have achieve the convergent validity [23]. The analysis result indicated all the AVE values of the constructs are above 0.50, where all the values are ranged between 0.591 and 0.807. This confirmed the constructed model had a good convergent validity. For the discriminant validity, this study analyzes using the heterotrait-monotrait correlation rations (HTMT). Table 3 shows the HTMT values of the constructs.

Table 3. Heterotrait-monotrait ratios of correlation

	PR	AS	LOC	PP
PR				
AS	0.637			
LOC	0.747	0.732		
PP	0.749	0.740	0.832	

The traditional approach to assess discriminant validity is through the Fornell-Larckell criterion. However, Henseler, Ringle and Sarstedt [24] found that the traditional approach is not reliable to detect the lack of discriminant validity, hence suggesting the HTMT as the alternative approach to assess the discriminant validity. The acceptable discriminant validity was when the HTMT value is below than 0.85 [23], [24]. Based on the values in the table 3 indicated all the HTMT values are below 0.85 which providing evidence that the constructed model has the discriminant validity.

Based on the assessment of measurement model, it now confirmed that the constructed model is valid and reliable. Hence, the next assessment could be performance, which is to assess the structural model.

4.2 Assessment of structural model

After the model has been confirmed is valid and reliable, in this structural model we performed the analysis regarding the relationships between the constructs. However, prior to examining the significant relationship of the constructs, we made sure there no collinearity issues among the predictor constructs. We are using the variance inflation factor (VIF) analysis to perform this task. The VIF value below 5 indicates that there are no collinearity issues between the predictors' constructs [23].

From the VIF analysis, we confirmed that all the VIF values are below 5 with the VIF values are ranging between 1.488 and 2.377. After confirmed there are no collinearity issues, next, we assessed the significant relationship testing between the constructs through bootstrapping procedure (428 cases, 5000 samples). The bootstrapping result reveals that all the five hypotheses are significant at the level of $p < 0.01$ (see Table 4).

Table 4. Hypotheses testing result

	Path	Path Coeff.	*p* values	Decision
H1	PR → PP	0.242	0.002***	Supported
H2	AS → PP	0.251	0.000***	Supported
H3	PR → LOC	0.450	0.000***	Supported
H4	AS → LOC	0.408	0.000***	Supported
H5	LOC → PP	0.442	0.000***	Supported

*** Significant at level, $p < 0.01$

This means that all the proposed hypotheses in this study are supported by the statistical evidence, where all the predictors' constructs have a direct significant effect on the localization and on the psychological performance of zakat.

4.2.1 Mediation analysis

When both of the property rights of zakat and the asset specificity have the direct effect on the psychological performance, this means localization is performed as a partial mediation toward the psychological performance of zakat. The indirect effect of property rights of zakat toward the psychological performance via localization is 0.199, and the indirect effect of asset specificity on psychological performance via localization is 0.180. However, to understand how strong the total effect through mediator localization, the corresponding total effect could be calculated with the following equation:

Total effect = direct effect + indirect effect

Table 5. Total effects

Relationships	Total effect
PR → LOC → PP	0.441***
AS → LOC → PP	0.431***

*** Significant at level, $p < 0.01$

As shown in table 5, the total effect is much stronger than the direct effect of property rights (0.242) and asset specificity (0.251). This result is underlining that the important role of mediator localization in enhancing the psychological performance. In addition, it also interesting to measure the strength of the localization partial mediation. It could be done by calculating the ratio of indirect-to-total effect [25]. This ratio is called as variance accountant for (VAF) value and calculate using the following formula:

VAF = indirect effect / total effect

The VAF ratio value for localization in mediating the property rights and psychological performance is 0.451, while localization mediates on the asset specificity and psychological performance is 0.417. Both VAF ratio values are above 0.20 [25], indicating that localization was performed as the complementary partial mediation on the psychological performance.

4.2.2 The Model's predictive power

This study also measured the endogenous constructs' predictive power based on the coefficient of determination (R^2). The coefficient represents the amount of variance of the endogenous construct explains by the exogenous constructs. Generally, R^2 values of 0.75, 0.50 and 0.25 represent substantial, moderate and weak respectively, regarding the predictive power of the endogenous construct [23].

In this study, the construct of localization and the psychological performance have the moderate predictive power when the value of R^2 is 0.573 and 0.674 respectively. This explains that property rights and asset specificity have predicted 57.3% of the variance on the localization. While for psychological performance, the predictors' constructs including the localization explained 67.4% amount of variance for the psychological performance.

In addition to evaluating the R^2, it also interesting to evaluate whether the exogenous construct has produced the substantive impact on the endogenous constructs. This measure is referred as the f^2 effect size. The f^2 values of 0.02, 0.15 and 0.35 indicate an exogenous construct's small, medium and large effect respectively.

From the analysis, the property rights and the asset specificity have the medium effect size on the localization with the f^2 values of 0.323 and 0.266 [23]. In contrast, these two constructs have small effect size on psychological performance with property rights ($f^2 = 0.094$) and asset specificity ($f^2 = 0.105$). Localization, however, has the medium effect size on the psychological performance ($f^2 = 0.258$).

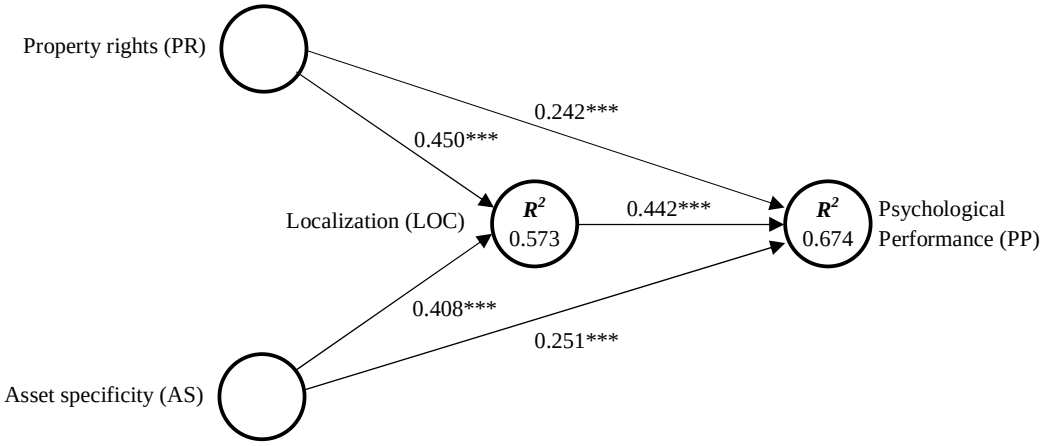

Figure 2. Result of PLS analysis, *** $p < 0.01$

These findings indicated that property rights and asset specificity could produce the medium effect size on localization, while localization then produces the medium effect size on the psychological performance. Thus, it safe to argue that localization was able to perform as the complementary partial mediator with the medium effect size on psychological performance.

Next, we evaluated the model predictive relevance (Q^2) by performing the blindfolding with omission distance of seven. The result shows that both endogenous constructs values are above zero, where localization (Q^2 = 0.389) and psychological performance (Q^2 = 0.523) supported the model's predictive relevance. Figure 2 shows the result of PLS analysis on the model.

5. Discussion and Conclusion

From the result, we learn that localization performed as the complementary partial mediation. It could produce the medium effect on psychological performance, compared to the direct effect from property rights and asset specificity of zakat, which only produced the small effect on the performance.

Through the evidence regarding the important roles of localization. This study suggested that zakat institution needs for the innovation in supply chain management through the concept of localization. We see that the economic development opportunities could be achieved through the open innovation strategy of localization in the zakat institution. Superior planning on the localization collaboration with related partners will be able to produce innovative supply chain management system of zakat institution.

Thus, for future research, we suggested, the concept of localization of zakat institution should have a look at the element of open innovation. Based on our findings, we have the positive view that the localization of supply chain management could be better by applying the open innovation strategy in the structural system of zakat institution.

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