ORGANIZATIONAL CHARACTERISTICS IN INFLUENCING GREEN HOMES DEVELOPMENT

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**ABSTRACT**

The advances of green technology had contributed to the preparedness of all the stakeholders in the housing industry into perspective. The housing developers in particular, were urged to develop new housing scheme by adopting green technology into their developments. Therefore, these organizations were required to implement changes to their operations due to sophisticated of technology made in this industry. Drawing on theory of organizational change, the organizational characteristics were acknowledged have significant roles in influencing the organization to embrace new ideas, approaches and practices. Hence, this paper is aimed to examine the relationship between the organizational factors in influencing housing developers to develop green homes in Malaysia. Quantitative method has been used in this study. A total of 395 sets of questionnaires have been distributed to the housing developers in eight distinct state branches of Real Estate and Housing Developers Association (REHDA) Malaysia. This study successfully received 249 (63.03%) completed questionnaires. The result of Pearson Correlation revealed that the Organizational Culture, Organizational Climate and Organizational Structure have a positive relationship in persuading Malaysian housing developers to develop green homes development.

**Keywords:** Organizational Change, Organizational Climate, Organizational Culture, Organizational Structure

1. INTRODUCTION

The competitive competition in today’s business environment and vast array of other internal and external factors has forced the organizations in the public and private sectors to embark on new ideas in their organization operations and management. According to Watson (2009), the environments such as physical, social, economic, political, competitive, and institutional are among the contributors to constant change; the organizations must change appropriately in response to their ever-changing environments. However, it should be noted that, the organizational change must be tailored to compensate the different types of environmental change encountered to ensure the effectiveness of organizational change (Oswick, Grant, Michelson and Nick Wailes, 2005).

It is well acknowledged by the scholars (for instance, By, 2005; Muir, 1996; Weiner, Amick, and Lee, 2008) that the organizational change may run into failure. One of the key that lead to the failure of organizational change is the resistance from the organizational members towards new environment of organization. In the study by Dent and Goldberg (1999), the resistance to change among the organizational members occurred due to misunderstanding, emotional side effects, lack of trust and fear of failure, personality conflicts, poor training, and faults of change. Therefore, to create supportive behavior on the organizational change among the organizational members, the organization needs to proactively prepare the organization as the organization begins any change efforts. The most important preparation should be taken by the organization while adopting change is by shaping the organization internally. The internal organizational factors (organizational climate, organizational culture and organizational structure) has been addressed (for example; Lehman, Greener,
Simpson, 2002; Weeks, Roberts, Chonko, and Jones, 2004) as an important elements in influencing the participation of organizational members in the organizational change programs.

The organizations in the housing industry were also urged by many parties such as the government, non-government organization, academia and public to adopt certain changes while developing new housing projects. The new changes include the adoption of green approach into the housing design and development by the housing developer firms. Hence, this paper is attempts to identify the relationship between the internal organizational factors and organizational change among the housing developer firms in Malaysia to embark on green homes development.

2. ORGANIZATIONAL CHANGE

Lewin (1947) has proposed three-stage model of change; "unfreezing – moving – freezing". Bamford and Forrester (2003) suggested that the Lewin’s model of change required the organization members to discard old behavior, structures, process and culture before embracing the organizational change. Interestingly, Holt, Armenakis, Harris, and Field (2007) has offered new thought on the stage model of change; "readiness – adoption – institutionalization". However, Bernerth (2004) and Shah (2009) agreed that the both models of change have similar idea and concept on the organizational change. The first stage of organizational change occurred once the organizational members interested to involve in the forthcoming change and ideally become a supporter (Armenakis and Harris, 2002). The second stage of organizational change refers to the process of altering the behaviors and attitudes to conform the probable change, whilst the last stage of organizational change occurred as soon as the change become a half part of organizational member's behavior (Holt, Armenakis, Field, and Harris, 2007).

Generally, organizational change may be defined as any modification in organizational composition, structure, or behavior (Bowditch and Buono, 2002). As suggested by Cao, Clarke, and Lehaney (2004), the organizational change can be divided into four types, namely, organizational change of process, organizational change of functions, organizational change of culture and organizational change in power distribution. According to Walker, Armenakis, and Bernerth (2007), the researchers attempted to provide insight into change dynamics which aims to facilitate the adoption of organizational change. This process is necessarily important to build a support of change among the organizational members.

With the aim of creating a support for change, Muir (1996) suggested that the organizational leaders should develop a 'change message' which it assimilates the needs of change by considering the internal and external factors. Continuing in the same vein, Burke -Litwin’s (1992) model of organizational change proposed that the success of organizational change were determined by external environment and internal organizational operations. Drawing on these models of change, it can be concluded that the internal and external organizational factors have a significant impact in influencing any organization to adopt organizational change.

In this study, the organizational change is referred to the organization of housing developers in Malaysia to embark on the green homes development. This paper aims to examine the relationship of internal organizational factors that may influence the housing developers in developing green homes. The internal organizational factors that will be discussed in this paper are organizational climate, culture, and structure.

Organizational Climate

According to Neal, Griffin and Hart (2000), the organizational climate can be described as multidimensional construct that encompasses a wide range of individual evaluations of the work environment. Furthermore, the organizational climate is accepted as one of the key factor that influences the perception among the organizational members to be involved in their organization. It is suggested that the involvement of organizational members will increase by creating an internal collaborative working environment (Marir and Mansar, 2004). Similarly, in the aspect of organizational change, Crowe, Fong, Bauman and Zayas-Castro (2002) suggested that, the collaborative environment inside the organization has contributed to the success of organizational change. Therefore, Abdolvand, Albadvi, and Ferdowski (2008) insisted that the organizational members need to trust with others, work together, and interact friendly in order to create collaborative working environment inside the organization.

Organizational Culture

Organizational culture denotes much more than just “the way things are done inside the organization” (Scott, Manion, Davies, and Marshall, 2003). As stated by Robbins and Judge (2007), the organizational culture refers to a system of sharing meaning held by the organizational members that distinguished the organization from other organizations. Jones, Jimmieson, and Griffiths (2005) pointed out that, the organizational culture needs to
be addressed in the context of organizational change because it has a potential to create readiness among the organizational members. Continuing in the same vein, Siemieniuch and Sinclair (2004) added that the organizational culture is the most important element in that possibility to determine whether the organizational members become a supporter or inhibitor towards the change program. Hence, Schein (1985) suggested the need of modification on the organizational culture because this element was identified as a root cause to the resistance to change among the organizational members. The modification on the organizational culture is believed could provide sufficient readiness to change among the organizational members and indirectly avoid the failure of change program (Kotter, 1996).

Organizational Structure
Walton (1986) defined the organizational structure as basis for organizing which includes hierarchical levels and spans of responsibility, position and roles and mechanism integration and problem solving. It could be said that the top management is responsible for any business related to administrative management because they are in top position of hierarchy. However, to create a healthy environment inside the organization, the gap between the top management and lower level organizational members should be reduced by producing the effective communication between them as well as the top management motivates the movement inside the organization (Abdolvand, Albadvi, and Ferdowsi, 2008). Hence, as suggested by Holt, Bartczak, Clark, and Trent (2007), it can be summarized that the top management is the party that responsible to determine the success of organizational change. This statement is supported by the study which has been conducted by Line (2007) which concluded that the person who has higher hierarchical level in the organization are more powerful at implementing change as compared to person who has lower amount of position power.

3. RESEARCH METHODOLOGY
Participants and Sampling Procedures
The target population of the study is defined as housing developer firms that registered with eight selected state branches of Real Estate and Housing Developer’s Association (REHDA) Malaysia; Kedah/Perlis, Pulau Pinang, Selangor, Kuala Lumpur, Kelantan, Pahang, Johor and Melaka. The total population of housing developer firms in this study is 815. The sampling design of study was based on probability sampling method. According to Teddlie and Yu (2007), this technique involves a random selection of sample where the probability of inclusion for every member of the population is determinable and also proficient to achieve representativeness, which is the degree to which the sample accurately represents the entire population. The researcher contacted the firms through REHDA Directory 2010 to receive permission to distribute the survey form. Therefore, a total of 395 survey forms were distributed to the respondents. As a result, this study accomplished to have 249 completed survey forms, capitulating 63.04% response rate. Interestingly, the response rate of the study is in line with Baruch (1999) who suggested that the average response rate in various researches was 55.6% with standard deviation 19.7%.

Instrumentation
This study used a descriptive quantitative cross sectional survey design. Therefore, this study has designed a set of questionnaires in a booklet form as a medium for data collection. In the opinion Gay and Diehl (1996), this approach is proficient to identify the current status of the population. Furthermore, Dornyei and Taguchi (2010) indicated that this technique is effective to reduce the bias of interviewers, and improved the consistency and reliability of results besides involving a low amount of expenditures and little time to collect and process the data. The distribution of the survey form was conducted by adopting self-administrated technique. This technique gave the opportunity to the researcher to brief the respondents about the research, any doubts can be clarified on the spot, and motivated the respondents to give their answer frankly (Sekaran and Bougie, 2009).

According to Hilmi, Ramaya, Mustapha and Pawanchik (2010), a single representative from each organization is sufficient as a respondent in serving the purpose of examining the whole status of population. Thus, this study has selected the managers or their representatives from each housing developer firms to participate in this survey study.

This study has developed 16 items of organizational factors (6 item of organizational culture, 5 items of organizational climate, and 5 items of organizational structure) with the aims of determining these factors in influencing the housing developers in developing green homes. The whole items was assessed by 5-point Likert scale, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly disagree. In order to ensure the reliability appropriateness of instrument of the study, the Cronbach alpha (α) was used to verify the reliability of instrument, while judgments from the five expertise in this area were considered before conducting a further survey. Interestingly, the result of the reliability test revealed that all constructs has exceeded the minimum value of alpha coefficient (α = 0.7) as suggested by Nunally (1978). The alpha coefficient for all construct are as
follows: Organizational Climate = 0.847, Organizational Culture = 0.822, and Organizational Structure = 0.919. These values indicated that the data survey is fit for further analysis.

**Statistical Analysis**
Based on the theory and empirical evidence on organizational for change, it is expected that these three constructs have positive relationship to contribute to the organizational for change. As a guideline to determine the correlation of variables, this study referred to the idea of Cohen, Manion, and Morrison (2000) which proposed that the relationship between the dependent and independent variables can be divided into four distinct groups, namely, “Very Slight” (0.2-0.35), “Significant” (0.35-0.65), “Accurate” (0.65-0.85), and “Close” (over 0.85). Therefore, the Pearson product moment linear correlation was utilized in this study to determine the relationship between the organizational factors and organizational change.

4. **RESULT AND DISCUSSION**
Table 1 depicts the detail result of Pearson Correlation analysis that was obtained from SPSS Version 20. The result of the analysis demonstrates that the correlation coefficient for Organizational Culture construct is $r = 0.369$ at $p < 0.01$. While, Organizational Climate and Organizational Change constructs are correlate with $r = 0.422$ at $p < 0.01$. Finally, the correlation coefficient for Organizational Structure construct is $r = 0.369$ at $p < 0.01$. Drawing on this result, it indicates that these three constructs support the previous studies on organizational change where there are positive relationship between Organizational Factors and Organizational Change. Furthermore, the value of Pearson Correlation for these three constructs can be classified as “Significant”. Therefore, it can be concluded that the Organizational Culture, Climate and Structure are likely influenced the housing developer firms to develop green homes in Malaysia.

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**. Correlation is significant at the 0.01 level (2-tailed).

This result also discovered that the Organizational Culture and Organizational Structure have a lower value of Pearson correlation compare to Organizational Climate in influencing housing developer firm to develop green homes. From the results obtained, this study discovered a few reasons that contribute to the differences of value of Pearson correlation in contributing to organizational change:

1) Organizational Culture:
   a) Lack of leadership style in creating and shaping the organizational members in adapting organizational change;
   b) The leader of organizations did not create sufficient readiness among the organizational members to participate in the organizational change; and
   c) The lack of relationship between the leaders and subordinates.

2) Organizational Climate:
   a) There was collaborative working environment between the co-workers; and
   b) There was a friendly interaction among the co-workers.

3) Organizational Structure:
   a) There was a gap between the top managers and lower level organizational members; and
   b) Insufficient supports and commitments of top management towards organizational change.
It can be concluded that the higher hierarchical level in the organization (e.g. managers and top management) play a vital role in shaping their organization. Therefore, this study outlined a few recommendations to boost the effectiveness of housing developers in adopting organizational change towards green homes development:

1. The top management should stressed the goals, vision and mission of the organization in embracing green homes development;
2. The top management could exposed the organizational members to the green technology that currently adopted in housing industry;
3. Creating a change message to the organizational members; and
4. Closing the gap between the higher and lower hierarchical level by creating a friendly communication channels.

5. CONCLUSION
This study was carried out with the objective to examine the correlation of organizational factors which was represented by Organizational Culture, Climate and Structure in contributing to the housing developer’s readiness in developing green homes in Malaysia. Therefore, the respondents for the present study were randomly selected among the REHDA’s members in 8 distinct state branches. The total of 395 set of survey form was distributed to the respondents by adopting self-administered approach. This study then utilized SPSS Version 20 to analyze 249 useable responses that was obtained during the survey period.

The result of analysis exposed that the organizational factors (represented by Organizational Culture, Organizational Climate, and Organizational Structure) are positive correlated with housing developer to develop green homes. Moreover, the relationship between these three constructs and organizational change are at the category "significant". This result suggested that there is important for the housing developers in Malaysia to have an efficient organizational management for the reason that the internal organizational factors play a vital role to determine their success in exploring new area of business such as this green homes development. This study is significant to the relevant organization of housing industry, especially housing developer firms who acted as a housing project initiator because this study exposed the elements that are needed to be addressed if they are intended to embrace green homes development in the forthcoming day. In addition, this study presents the theoretical and empirical research on the organizational change relation to Malaysian housing industry in the case of green homes development.

REFERENCES