

## Organisational Culture as Mediator for Transformational Leadership in Promoting Sustainability Among the Listed Property Development Companies in Malaysia

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**Abstract:** Sustainability is considered as a significant element for property development. However, implementing sustainability effort and achieving sustainability goals are real challenge debated since three decades ago. According to the United Nations General Assembly Brundtland Report, protecting the environment and the society in the midst of human seeking economic growth is at times taken for granted. The motivation behind this study is to seek deeper understanding of the role of transformational leadership in promoting sustainability among property development companies in Malaysia by determining the relationship between transformational leadership and sustainability through the mediating role of organisational culture that would lead to sustainability in terms of environmental, economy and social. This study employed a purposive sampling method with data collected from top management from a total population of 100 listed property development companies in Bursa Malaysia. Multivariate data normality tests, descriptive statistics, and structural equation modelling through SmartPLS were used for data analysis. Construct validity and reliability tests were performed to ensure the usability of the constructs studied. The findings of this study revealed a positive and significant relationship between transformational leadership and sustainability. Also, the study found significant positive relationship between transformational leadership and organisational culture namely bureaucratic culture, innovative culture and supportive culture. However, the results established insignificant relationship between organisational culture and sustainability. The findings proved that bureaucratic organisational culture mediated the relationship between transformational leadership and sustainability, while innovative culture and supportive culture did not. This result confirmed that the property development company that practices leadership transformation at top management level will promote sustainability with the mediating role of bureaucratic culture. Therefore, this study recommended organisations to invest in transformational leadership trainings to support the leadership behaviours through bureaucratic culture toward achieving sustainability.

**Keywords:** Organisational Culture, Transformational Leadership, Sustainability

### 1. Introduction

The challenge of achieving sustainability is faced by all societies and across nations, whether industrialized or developing. Feyerherm and Parker (2015) explained that sustainability is by nature an interdependent and multifaceted phenomenon that integrates the traditional and predominant economic bottom line with social and environmental imperatives. It refers to the ability to ensure the balance of conserving the natural resources, protecting the environment and social fairness while chasing economic growth. In order to achieve sustainability, the three elements of protection of the environment, economic efficiency and social fairness must be combined. Elkington (1999) argued that in order to achieve long-term successful results of sustainable development, all total concept of sustainability considering the perspectives environmental, social as well as economic, needs to be implemented in organisations core business.

In particular, property development poses one of the highest impact on sustainability. Previous researchers like Keeping et al. (2007), Kibert (2007), Lutzkendorf (2007), Bugl et al. (2009), Kamar et al. (2010), Wilkinson et al., 2011, Thomson and El-Haram (2014), Muhammad Najib and Yasmin Mohd Adnan (2015) and Sim and Putuhena (2015) have opined that the biggest contributor to the global environmental degradation is the real estate sector. Specifically in Malaysia, Sim and Putuhena (2015) mentioned that the challenges in adopting green technologies in its construction industry include short of competency and capacity in green technology, overlapping roles of government agencies, slow government programmes, lack of research and innovation and lack of awareness on

green implementation cost and benefits. Shen et al. (2006) also found the same challenges on achieving sustainability including concerns on financial, contract time limitation, environmental management methods, passive environmental conservation culture in the construction industry and lack of cooperation among project players. Nevertheless, despite the initiatives taken by the Malaysian government to address sustainability issues in its policies and plans, the country is still behind in terms of implementation and assessment of the implementation (Saadatian et al., 2011). This weakness has been regarded as the absence of comprehensive approaches or frameworks and lack of sufficient sustainable development indicators.

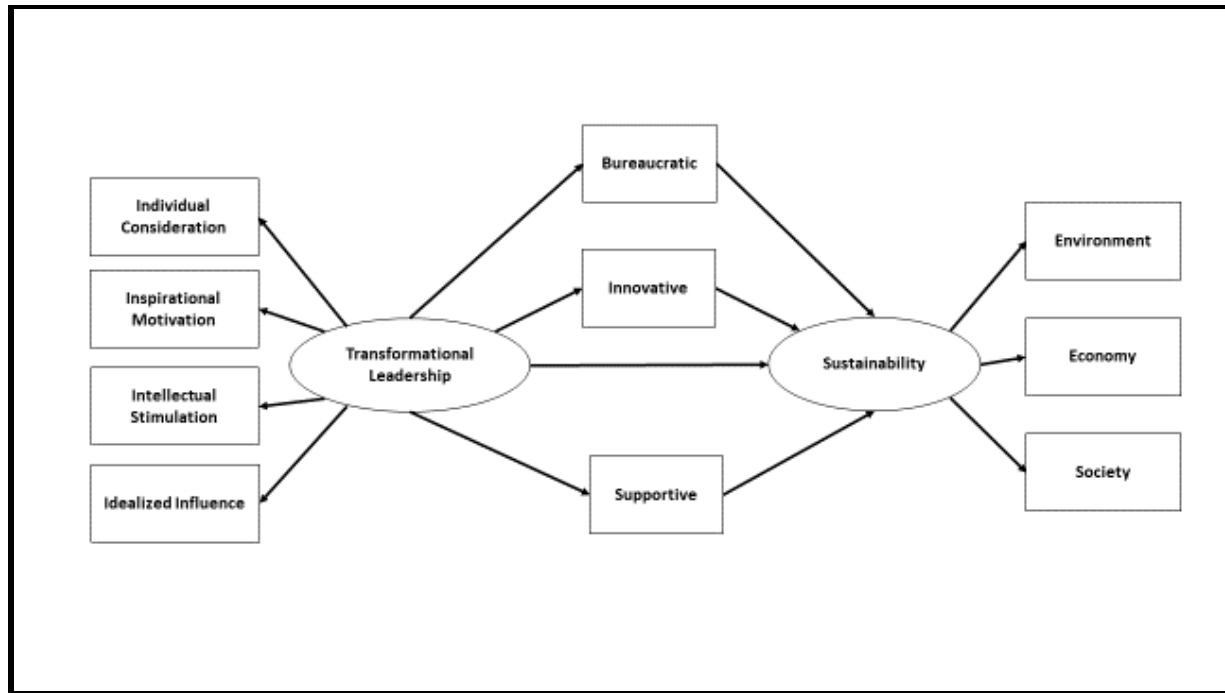
With all the struggles towards sustainability worldwide since 1970s described above, leadership is believed to be one of the key success factors to achieve the targets (Feyerherm and Parker, 2015). Previous literatures have indicated that one of the attributes of sustainability today is the role of leadership (Chan and Chan, 2005; Müller and Turner, 2010; Yang et al., 2011, Müller et al., 2012, Meng et al, 2015, Robertson, 2017 and Muralidharan and Pathak, 2018). Researchers believed that while organisations manoeuvre their sustainability strategies, they need to have leadership to guide organisations towards achieving sustainability especially at times of uncertainty and dynamic environment. At the same time, researchers also found that, not only leadership can instil control, leadership will also enable collective intelligence and informal dynamics in human systems (Uhl-Bien and Marion, 2008). Dess and Picken (2000) suggest that the demands of the changing environment present a complex set of challenges. It requires a shift in focus where leaders need to meet the challenges by stimulating innovation, creativity, and responsiveness, and learning to manage change without losing strategic focus or spinning out of control. Muralidharan and Pathak (2018) also highlighted the importance of the role of leadership in developing and implementing agendas for sustainability that in turn maximizes the goals of sustainable development of society. They argued that transformational leaders that instill sustainability practices into the fabric of society and also quoted Avolio et al (2009) that the transformational leaders “raise followers’ aspirations and activate higher order motives (of sustainability), such that followers identify with the leader and his or her mission or vision. Meanwhile, Robertson (2017), Robertson and Barling 2017a Graves et al. (2013) and Robertson and Barling (2013) also argued that leaders can encourage their subordinates to engage in workplace pro-environmental behaviors by focusing the four transformational leadership behaviors.

In the meantime, organisational culture is also argued to be needed for an organisation that strives to achieve sustainability (Sanyal and Pal, 2017). The development of a sustainability-oriented organisational culture is essential to ensure sustainability goals are achieved (Crane, 1995). Organisational culture is promoted by Bass (1985) transformational leadership’s Four I’s which consist of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, leaders promote long term commitments where they share mutual interests and interdependence with their followers (Ramaidu, 2011). Other researchers like Bate, Khan and Pye (2000), Carrillat, Jaramillo and Locander (2004) and Smith (2004) also argued that transformational actions respond to culture and structure in the overall leadership process. They also argued that transformational leadership drives organisational change that leads to organisational culture. Transforming characteristics include focus of attention, goal directed activity with systematic monitoring and assessment of progress, modelling of positive behaviour and human development and empowerment (Schein, 1991; McAdams and Zinck, 1998). In other words, employees will follow leaders towards achieving organisational goals if the leader is seen as trustworthy. Employees, having shared values and norms, create an organisational culture essential to achieve common goals (Wallach, 1983).

Ofori and Toor (2008) found that leadership is essential to drive the construction industry towards sustainability where transformational leaders provide vision, strategy and direction towards society’s common goal of a sustainable future by embedding sustainability strategies in their organisational culture. Other previous studies also link transformational leadership and organisational culture (Ramaidu, 2011; Tucker and Russell, 2004; Niehoff, Enz, and Grover, 1990; Mink, 1992; Smith, 1990). Both transformational leadership and organisational culture play important roles on the success of an organisation (Ramaidu, 2011). For example, transformational leaders influence organisational culture by helping organisations see the world in different ways (Mink, 1992). As the external environment of the organisation changes, transformational leaders influence organisational culture by helping organisations adapt to this new environment (Smith, 1990). Furthermore, Opopu and Fortune (2011) maintained that leadership plays a vital role towards achieving sustainability through an organisational culture that understands and supports the endeavour. This is similar to the opinion of Taylor (2009) that believe that to change an organisation towards the organisational culture that supports sustainability, we must change the leaders’ behaviour and attitude towards sustainability.

## 2. Methodology

For the purpose of this study, Wallach's (1983) framework is adapted as illustrated at Figure 1. This model demonstrates an important mechanism through transformational leadership enhances employee motivation by shaping the appropriate organisational culture and in turn, achieves sustainability. In the same context, this study suggests that organisational culture is an important mediator that could play an effect between transformational leadership and sustainability. Specifically, based on earlier arguments, transformational leadership is expected to have significant impact on organisational culture.



**Figure 1:** Conceptual Model

The previous studies described Malaysian companies as adopting a mixture of bureaucratic culture, innovative culture and supportive cultures (Rashid et al., 2003; Rashid et al., 2004; Lee Huey Yüing and Kamarul Zaman Bin Ahmad, 2009). Here, organisational culture refers to the shared values embraced in property development companies in Malaysia and the norms essential to achieve common goals of, in the context of this study, sustainability. Wallach's (1983) culture for this study refers to:

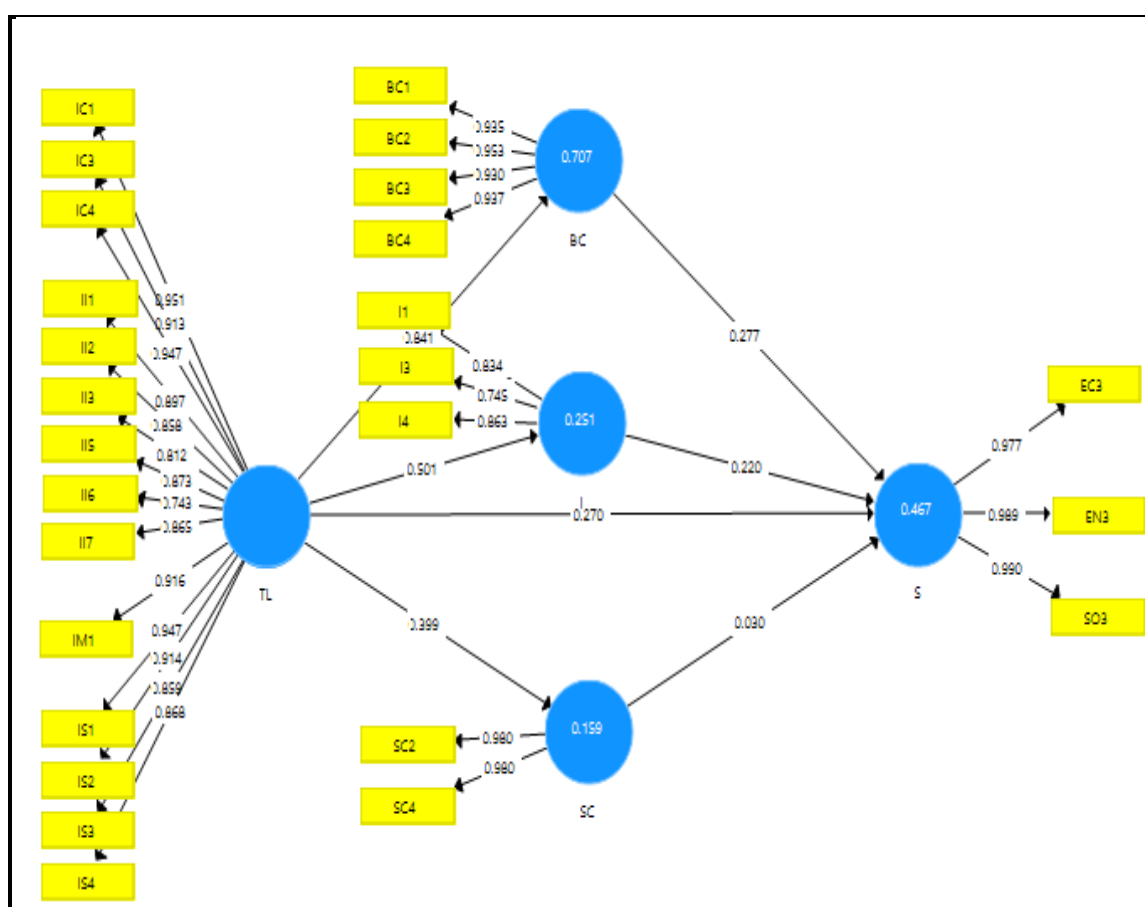
- i. Bureaucratic culture – company culture that is hierarchical and compartmentalized, with setting clear lines of responsibility and authority
- ii. Innovative culture – company culture that is creative, results-oriented and challenging work environment
- iii. Supportive culture – where teamwork and a people-oriented, encouraging and trusting work environment is displayed

This study argues that organisational culture is an important factor to help leaders achieve sustainability. The researcher suggest that transformational leadership do have significant impact on sustainability but the mind-set and values of all other individuals and stakeholders of the organisation must also be align with what the leaders and organisation want to achieve. Meanwhile, in the context of built industry in Malaysia, promoting sustainability and facing its challengers, leaders must have adaptability and create organisation systems and initiatives that go beyond their traditional boundaries. Leaders need to go beyond ordinary acts and operate with passion and purpose of all of the individuals involved. Property development companies in Malaysia need leadership that provide the vision, strategy and direction towards a sustainable future. This include inspiring, stimulating,

motivating and influencing the employees to have common values of sustainability as part of the organisational culture, thus together achieve sustainability goals.

Subsequently, questionnaires were used to obtain information from the management staffs at the property development in Malaysia as respondents. It was developed from the “Transformational Leadership” Short-form Multifactor Leadership Questionnaire (MLQ-5X) by Bass and Avolio (1995), the “Organisational Culture Index” questionnaire by Wallach (1983) and the “TBL of Sustainability” questionnaire by Elkington (1997). Data was collected through e mails and phone calls to 100 companies by using the purposive sampling method, to identify the top management staffs to answer the questionnaires. The selection of respondents were based on their position which reflects on their in providing leadership and decision making, the operational definition of a management staff who is involve in managing subordinates making decisions and also the knowledge and understanding of the respondents on leadership, sustainability and organisational culture of their company. The data is then analysed by using the Structural Equation Modeling (SEM) SMARTPLS software.

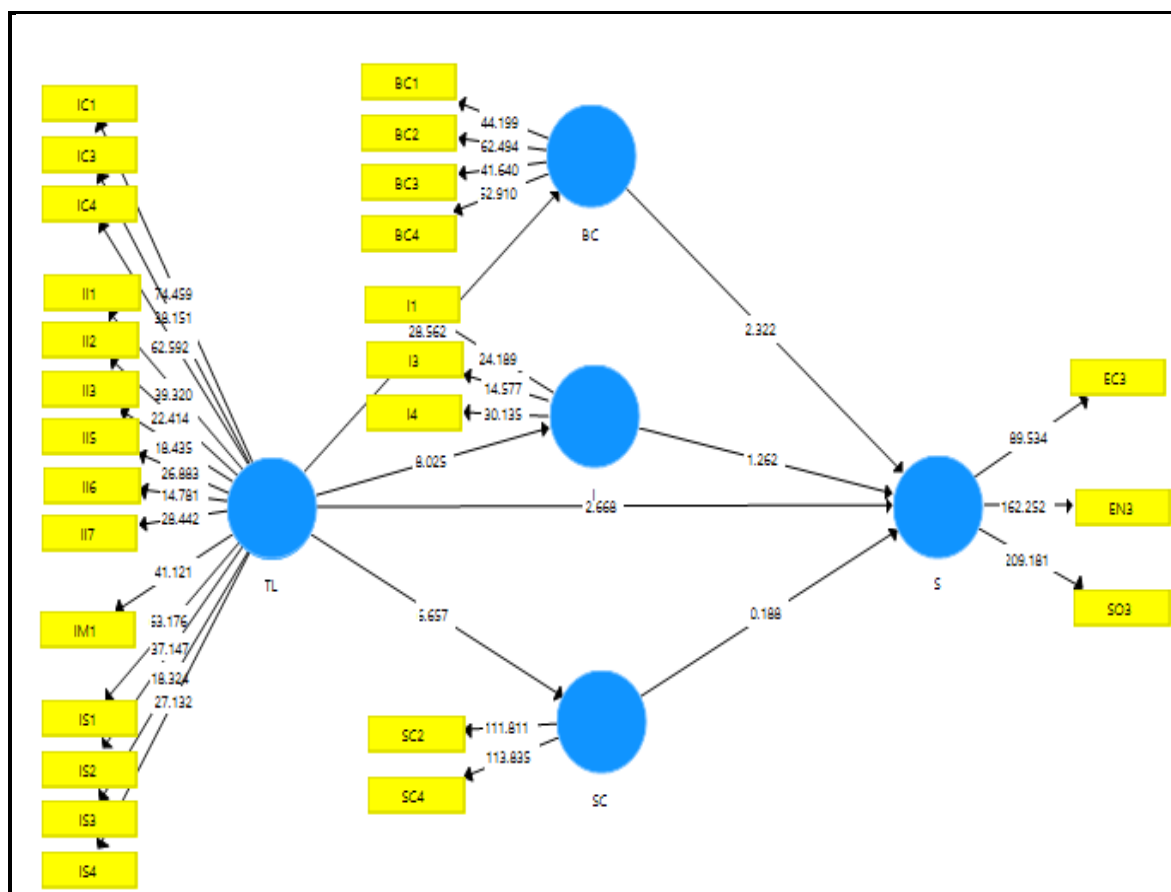
### 3. Findings



**Figure 2 :** Results of Structural Model. The variables are labelled ad TL = Transformational Leadership, II = Idealised Influence, IS = Intellectual Stimulation, IC = Individualised Considerations, IM = Inspirational Motivation, BC = Bureaucratic Culture, I = Innovative Culture, SC = Supportive Culture, S = Sustainability, EN = Environment and EC = Economy, SO = Social

Figure 2 above shows that 46.7% of the variance in sustainability based measures was explained by organisational culture namely bureaucratic culture, innovative culture and supportive culture. The values were acceptable as they meet the criteria as stated by Cohen (1988) that claimed R<sup>2</sup> values for endogenous latent variables are assessed as substantial for value of 0.26, moderate for value of 0.13 and weak for value of 0.02. This research also focused on

R<sup>2</sup> of organisational culture and transformational leadership that has been grouped to four main constructs or transformational leadership 4I's namely, idealised influence, intellectual stimulation, individualised consideration and inspirational motivation. Transformational leadership were able to explain 70.7% of the variance in bureaucratic culture, 25.1% of variance in innovative culture and 15.9% of variance in supportive culture. Furthermore, the R<sup>2</sup> for the constructs in this research were found comparable to the findings in the literature (Lepak et al., 2012).



**Figure 3:** Results of Direct Relationship where the variables are labelled ad TL = Transformational Leadership, II = Idealised Influence, IS = Intellectual Stimulation, IC = Individualised Considerations, IM = Inspirational Motivation, BC = Bureaucratic Culture, I = Innovative Culture, SC = Supportive Culture, S = Sustainability, EN = Environment and EC = Economy, SO = Social

Figure 3 shows that sustainability was directly influenced by transformational leadership with the value( $\beta=0.70$ ,  $t=2.651$ ,  $p<0.05$ ). Similarly, bureaucratic culture, innovative culture and supportive culture were also directly influenced by transformational leadership with the respective value ( $\beta=0.841$ ,  $t=29.99$ ,  $p<0.05$ ), ( $\beta=0.501$ ,  $t=7.57$ ,  $p<0.05$ ) and ( $\beta=0.399$ ,  $t=6.060$ ,  $p<0.05$ ). On the other hand, sustainability was influenced directly only by bureaucratic culture ( $\beta=0.265$ ,  $t=2.495$ ,  $p<0.05$ ) but not by innovative culture ( $\beta=0.248$ ,  $t=1.644$ ,  $p$ =not significant) and supportive culture ( $\beta=0.007$ ,  $t=0.047$ ,  $p$ =not significant). Meanwhile, sustainability was directly influenced by idealised influence ( $\beta=-0.419$ ,  $t=3.375$ ,  $p<0.05$ ) and inspirational motivation ( $\beta=0.927$ ,  $t=9.319$ ,  $p<0.05$ ). However, sustainability was not influenced directly by intellectual stimulation ( $\beta=-0.098$ ,  $t=0.569$ ,  $p$ =not significant) and individualised consideration ( $\beta=-0.090$ ,  $t=0.452$ ,  $p$ =not significant).

Further from the analysis, bureaucratic culture was not directly influenced by idealised influence ( $\beta=0.116$ ,  $t=0.693$ ,  $p$ =not significant), intellectual stimulation ( $\beta=0.246$ ,  $t=1.311$ ,  $p$ =not significant), individualised consideration ( $\beta=0.469$ ,  $t=1.793$ ,  $p$ =not significant) and inspirational motivation ( $\beta=0.023$ ,  $t=0.200$ ,  $p$ =not significant).

significant. Meanwhile, innovative culture was directly influenced by idealised influence ( $\beta=-0.333$ ,  $t=2.241$ ,  $p<0.05$ ), intellectual stimulation ( $\beta=0.719$ ,  $t=2.293$ ,  $p<0.05$ ) and inspirational motivation ( $\beta=-0.382$ ,  $t=1.997$ ,  $p<0.05$ ). However, innovative culture was not influenced directly by individualised consideration ( $\beta=0.486$ ,  $t=1.953$ ,  $p=\text{not significant}$ ). Finally, supportive culture was directly influenced by idealised influence ( $\beta=-0.540$ ,  $t=3.130$ ,  $p<0.05$ ), intellectual stimulation ( $\beta=0.942$ ,  $t=3.176$ ,  $p<0.05$ ) and inspirational motivation ( $\beta=-0.530$ ,  $t=3.491$ ,  $p<0.05$ ). However, the results showed that supportive culture was not influenced directly by individualised consideration ( $\beta=0.506$ ,  $t=1.519$ ,  $p=\text{not significant}$ ).

Based on the research findings, sustainability influenced positively by transformational leadership and organisational culture i.e. bureaucratic culture, innovative culture and supportive culture, were also found to be influenced positively by transformational leadership. However, when the 4I's are analysed individually on their relations with sustainability, only individualised consideration and inspirational motivation that did not receive statistical support from analysis. Similar with organisational culture, when the 4I's are analysed individually, not each of the 4I's are found to be positively influenced by them. Moreover, the results showed that sustainability was not influenced directly by innovative culture and supportive culture. Sustainability was only influenced directly by bureaucratic culture.

Statistical studies have suggested the significance of evaluating the indirect effects, provided that the whole impact is unnecessary in determining mediation (MacKinnon, 2000; Preacher and Hayes, 2008; Shrout and Bolger, 2002). Furthermore, the indirect effects of the mediating correlation could be determined by employing the bootstrapping method of the direct effects among the items. As such, the bootstrapping technique, which is a non-parametric re-sampling method, had been acknowledged as an effective approach to determine the mediating effects (Hayes, 2009; Shroud and Bolger, 2002; Zhao et al., 2010). Additionally, the confidence interval (CI) had been reported with both lower and upper limits for indirect effect of the population in this study. The indirect effect magnitude of market orientation and knowledge management capabilities and the mediators are evaluated by the variance accounted for (VAF) value through the ratio of indirect effect to the total effect (Helm, Eggert and Garnefeld, 2010; Iacobucci and Duhachek, 2004; Shrout and Bolger, 2002). Hypotheses support of the mediating relationship is decided by comparing the obtained t-value with the critical t-value of two-tailed test at the significance level of 0.05 to reject the null hypothesis (Eberl, 2010; Robinson and Chiang, 2002).

Based on the mediation analysis, bureaucratic culture mediates the relationship between transformational leadership and sustainability, the indirect effect determined was 0.222 ( $0.841*0.265$ ) and was significant with t-value of 2.187,  $p<0.05$  at 95% CI [0.023-0.421]; indicating the significance of mediating relationships thus H8 was supported. On the other hand, innovative culture did not mediate the relationship between transformational leadership and sustainability, the indirect effect determined was 0.124 ( $0.501*0.248$ ) and was not significant with t-value of 1.229,  $p<0.05$  at 95% CI [-0.078-0.277]; indicating the insignificance of mediating relationships thus H9 was not supported. Finally, supportive culture also did not mediate the relationship between transformational leadership and sustainability, the indirect effect determined was 0.861( $0.399*0.113$ ) and was not significant with t-value of 0.175,  $p<0.05$  at 95% CI [-0.106-0.169]; indicating the insignificance of mediating relationships thus H10 not supported. Table 4.11 showed the summary of indirect effect, confidence interval and t-values. Overall, bureaucratic culture was found to have significant mediation effect on the relationship between transformational leadership and sustainability but innovative culture and supportive culture were not.

**Table 1 :** Summary of Indirect Effect, Confidence Interval and T-values (Indirect Relationship)

Hyp	Relationship	Path a	Path b	Indirect Effect	T-value	Bootstrapped Confidence Interval		Result
						95% LL	95% UL	
H8	TL -> BC ->	0.841	0.265	0.222	2.187	0.023	0.421	Mediating

	S							
H9	TL -> I -> S	0.501	0.248	0.124	1.229	-0.078	0.277	No Mediation
H10	TL -> SC -> S	0.399	0.113	0.045	0.175	-0.106	0.169	No Mediation

Note: TL = Transformational Leadership; BC = Bureaucratic Culture; I = Innovative Culture; SC = Supportive Culture; S = Sustainability

#### 4. Discussions

##### 4.1 The Relationship between Transformational Leadership and Sustainability in the listed property development companies in Malaysia

In this study, sustainability was found to be influenced positively by transformational leadership. This result was consistent with previous literatures which indicated that one of the attributes of sustainability today is the role of transformational leadership (Muralidharan and Pathak, 2018; Robertson, 2017; Baldo and Baldarelli, 2017; Tabass et. al., 2016; Abd Rahim, 2016; Feyerherm and Parker, 2015; Meng et al., 2015; Yang et al., 2011, Müller et al., 2012 and Opoku and Fortune, 2011; Müller and Turner, 2010 and Chan and Chan, 2005). This study results therefore revealed that transformational leadership is significant variable for promoting sustainability in property development in Malaysia. This is because transformational leadership is essential to sustainable achievement where management possess the necessary leadership competencies, skills and knowledge to be able to achieve sustainability in property development.

Not only in terms of environment, this study results also revealed the relationship between transformational leadership and sustainability in terms of economy and social aspect. In terms of economic aspect, sustainability has a positive relationship with transformational leadership in the context of the listed property development companies in Malaysia. Transformational leadership’s role is important in ensuring resilient business model through its influence on company performance and organizational outcomes. In terms of social aspect, progress towards the goals of sustainable development is spearred by social care that requires active leadership. The importance of leaders’ passion has been established and the role of transformational leadership can therefore be inferred to have an important influence on entrepreneurial agency that effect societal change. This showed that most of the respondents indicated that concern for sustainability was an important value within a leader. In other words, the findings have led to the understanding that transformational leadership has positive relationship with sustainability in terms of the three aspects of the TBL which are environment, economy and social.

The results showed that only idealised influence and inspirational motivation were significantly related to sustainability. The other two dimensions namely intellectual stimulation and individualised consideration were found not significantly related to sustainability. This links to the reason that idealised influence and inspirational motivation provide positive influence on creating passion among subordinates. Transformational leaders are more likely to show their passion to subordinates given that transformational leadership relies upon idealised influence and inspirational motivation which have direct impact on individual performance towards achieving sustainability. Through these attributes, leaders give vision and mission in order to influence followers to find meanings or purpose in what they do and to achieve. This study results can interpret how the listed property development companies in Malaysia use their top management to lead their subordinates towards achieving sustainability goals by inserting influence and giving motivation. In an industry that plays a vital role in meeting the needs of society and enhancing quality of life in Malaysia, leaders in property development companies give inspirations to their followers to realise sustainability. Without inspirations and motivation, it is challenging to balance profitability with environmental and society elements. In the context of Malaysian property development companies, the study found that the majority of top management engaged in communicating sustainability goals to influence staffs and this finding is significant as it confirms that people need inspiration and motivation to achieve sustainability.

On the other hand, the other two behaviours namely intellectual stimulation and individualised consideration were

found not showing positive relations with sustainability. This showed that leaders were found not encouraging their subordinates' intelligence towards careful problem solving. This is due to the fact that today's leaders deal with the competing demands of simultaneously managing social, environmental as well as financial performance, being held accountable for excellent performance of all of them. This balancing act is not an easy task that transformational leaders are needed to show people the way and stimulate their creativity in solving a global issue. This leads to top management are less engaged in intellectual stimulations. They encourage employees to use non-traditional thinking to deal with problems but not to the extent of challenging their intellect. Moreover, this result can interpret how Malaysian property development employees cannot afford dynamic situations of new technologies in built environment. The key is that they prefer not to think outside the box as much as long as they are influenced by their leader's charismatic leadership. Therefore, this study results also confirmed that the attribute intellectual stimulation and individualised consideration should be enhanced to promote sustainability.

#### **4.2 The Relationship between Transformational Leadership and Organisational Culture at the listed property development companies in Malaysia**

There was a significant relationship between transformational leadership and bureaucratic culture, innovative culture and supportive culture, respectively, in the listed property development companies in Malaysia and it was found that the hypotheses are accepted. This indicated that as the environment of the organization and the world changes, transformational leaders influence organizational culture by helping organizations adapt to new environment. Leaders in property development companies are required to access the current culture, and decide when and how it need to be changed as they are able to create and manage culture. Furthermore, when linking transformational leadership with organisational culture, top management in property development in Malaysia perceive bureaucratic culture as the closest to them. This explained that the leaders have the power to influence organizational culture through very organized and systematic efforts with clearly defined responsibilities and authority based on power and control. It also shows that they are able to foster organisational culture that is mature, structured, hierarchical, power oriented stable, procedural and regulated.

At the same time, innovative culture was also found to have significant relationship with transformational leadership. This was rationalised as property development sector should be closely linked with innovation and smart technology. This showed that the leaders at Malaysian property development companies strived to adopt creative, results-oriented and challenging work environment type of culture. To achieve sustainability goals, an innovative culture is needed where organisations portrayed as being ambitious, stimulating, driven, and creative and risk-taking to achieve sustainability through green technologies, prudent financial system and social care. Moreover, supportive culture also found to have significant relationship with transformational leadership in this study. This showed that the supportive culture is cultivated by the leaders in the listed property development companies in Malaysia where they promote teamwork, people-oriented, encouraging, trusting work environment to achieve sustainability goals together.

This is consistent with the cultural values of Malaysian managers where trusting work environment with open, harmonious, trusting, safe, equitable, sociable, humanistic and collaborative characteristics. It implies that employees are effective in doing their job and realizing their full potential when they understand their shared values. It also implies that transformational leaders created warm and "fuzzy" places to work in where people are generally friendly, fair and helpful to each other at the property management companies in Malaysia. The leaders created open, harmonious, trusting, safe, equitable, sociable, relationships oriented, humanistic, collaborative environment, and likened to an extended family which is the values of the Malaysian society.

However, when the transformational 4I's was analysed individually to see whether they support the sub-hypotheses, bureaucratic culture was not found to have any relationship with any of the 4I's. The significant relationship between transformational leadership and bureaucratic culture revealed that the 4I's did not have individual dimensional relations with bureaucratic culture but rather the relationship takes effect when it is combined as transformational leadership. Meanwhile, when seeing innovative culture and supportive culture, the results are a mixture of significant relationship and insignificant relationship with the 4I's.

This has shown that individualised consideration are found to have insignificant relationship among the 4I's which



revealed that it is lacking in the top management at the listed property development companies in Malaysia. The leaders may use a lot of charismatic character of idealised influence in promoting and aspiring their followers, intellectual stimulation to encourage new ways of looking at old methods and problems in the company, while motivating and encouraging the use of intelligence and creativity to enhance capabilities. This is rationalized by the nature of property development which is a complex working environment with constant changes especially in keeping up with the latest demand in property business. This includes the property regulations, requirements, laws as well as social and environmental obligations. Therefore, the leaders use a lot of charisma to influence the organizational culture by reminding their followers of practical and ethical considerations. The leaders need to understand the vision, mission and goals of the organization and have a strong moral outlook for what is the best for the organization.

At the same time, top management at the listed property development companies in Malaysia also encourage intelligence, rationality and problem solving in their organisational culture by motivating people to and rethink old issues with creative results. Intellectual stimulation increases job satisfaction which reflects on the society's collectivist nature; this orientation could be why employees at Malaysian property development companies are receptive of a leadership influence that exhorts them to think "out of the box". Therefore, this study results also confirmed that the attribute individualised consideration should be enhanced to promote sustainability. The top management should show concern over their staffs' needs by spending time teaching and coaching them, treating them valuable individuals rather than just as workers working for the company in order to get each of them on-board on the sustainability endeavour.

#### **4.3 The Relationship between Organisational Culture and Sustainability in the listed property development companies in Malaysia**

The findings indicated that bureaucratic culture at the Malaysian property development companies supported sustainability. This is in line with previous studies that found organisational culture is needed to support any organisation that strives to achieve sustainability (Ibrahim et al., 2018; Rehman, et al., 2018; Kubo, et al., 2018; Küçükoglu and Pinar, 2018; Jamiu and Ndubuisi, 2017; Opoku et al., 2015; Opoku and Fortune, 2011; Baumgartner, 2009 and Taylor, 2009). It implies that bureaucratic culture in the listed property development companies in Malaysia influenced sustainability and the employees are systematically related to pro-sustainability behaviour at the workplace. It also implies that property development in Malaysia advocated the concept of green, financial sustainability and social care in their organisational culture. This may be due to employees understanding the impact of sustainability to support the endeavour. At the same time, it may also be due to sustainability being part of the mind-set of the organisation hence sustainability activities are able to affect the core business efficiently.

As the results revealed, bureaucratic culture was found significant in achieving sustainability. Bureaucratic style in an organization has become means in implementing sustainability due to its top-down communication. The degree of hierarchy control is high between leaders and subordinates in a very organized and systematic culture with clearly defined responsibilities and authority based on power and control. Moreover, the command and control style or bureaucratic culture has ensured effective to-down communication among the employees. This integrates the common values and understanding on sustainability. The findings are in line with the Weber's Theory of Bureaucracy, where bureaucracy is seen as an ideal organization culture that would be perfectly rational and would provide maximum efficiency to an operation as it provides a rational authority where its leaders recognize and obey in the subscription of logical reasons, values and efficiency (Weber, 1990). Meanwhile, Wallach (1983) explained that organisations with the element of bureaucratic culture are stable, cautious, usually mature, power-oriented, established and solid. This type of culture is actually essential to assert stand on sustainability since although Malaysia has taken initiatives and has addressed sustainable development in its policies and plans, the country is still behind in terms of implementation and assessment of the implementation. Strong policy and regulations must be in place to penalize organizations that violates the environmental laws and at the same time incentives given for those who abide.

However, innovative culture is found to have no significant relationship with sustainability. This implies that the internal orientation of a group culture does not lead to ambidexterity in innovation which underlines the dilemma

organisations have to face when they have to be efficient in its management of today's business but unable to be adaptable for coping with tomorrow's changing demand by being innovative. This study indicates that this dilemma is a challenge for innovation management in the listed property development companies in Malaysia. In other words, as companies strive to keep up with current innovation and change, it still does not influence sustainability. The listed property development companies in Malaysia value efficiency especially in terms of cost hence are generally less directed towards innovation. This result was in line with the concept of culture as a form of control that is deliberately influenced and maintained by leaders. Leaders therefore should encourage the balance both efficiency and creativity to influence an innovative culture.

It was also interesting to find that supportive culture has no significant relationship with sustainability. In other words, teamwork and collaborative work environment in the listed property development companies in Malaysia is not towards sustainability. Supportive cultures were predominantly associated with higher levels of job satisfaction and performance which implies that employee's feel attached and involved in their companies but towards other critical factors such as cost, profitability and productivity. This study results rationalised that employees are committed to the organizations, often bearing hopes of finding an ideal working environment, rewarding salary package and promotion opportunities, and an exciting job. Therefore, leaders need to be aware of what exactly keeps their employees happy and supporting each other in achieving sustainability.

#### **4.4 The Mediating Effect of Organisational Culture on the Relationship between Transformational Leadership and Sustainability in the listed property development companies in Malaysia**

This study measured the mediating relationships based on theoretical reasoning that suggests organisational culture as a mediating factor that influenced the relationship between transformational leadership and sustainability. However, based on the result of analysis, only bureaucratic culture has significant relationship with sustainability while innovative culture and supportive culture did not. In other words, the relationship between transformational leadership and sustainability was mediated by bureaucratic culture.

This finding is in line with previous studies that found the mediating effect of organisational culture (Wipulanusat, et al., 2018; Pradhan, et al., 2017; Al-Ali et al., 2017; Sattayaraksa and Boon-itt, 2016; Hussain et al., 2016; Shim et al, 2015; Cegarra-Leiva et al., 2012 and Panuwatwanich et al., 2008) which is rationalised by the influence of transformational leadership itself on sustainability which requires mediation of bureaucratic culture in the context of the listed property development companies in Malaysia. This is because charismatic and influential leaders could encourage every participant to achieve organisational vision of sustainability (Meng et al., 2015) and sustainable property development projects through bureaucracy as a significant predictor of employee motivation to achieve and perform. It revealed that top management in the listed property development companies in Malaysia practice clear lines of responsibility and authority. Their leadership is needed to hold the responsibility to ensure sustainability of the organisation and the planet and leaders aspire the sustainability goals.

Therefore, this study has established this mediating link, adopting a sequential approach. First, transformational leadership theory is defined and its effect on sustainability is established. Then, the direct effects of bureaucratic culture on sustainability is found. Finally, bureaucratic culture as a mediating link between transformational leadership and sustainability is established (Hussain, Wan Ismail, Rashid and Nisar, 2016). Through the mediating effect, the study recognized the significance of bureaucratic culture in the context of Malaysian setting. In other words, based on this study, it showed that bureaucratic culture reinforced the transformational leadership influences. The success or failure of sustainability depends on many factors, but leadership perhaps the main force that hinders or facilitates it.

This study contributes to the existing knowledge in that leadership is revealed to be key contributor to sustainability and bureaucratic culture mediated it. Subsequently, it is evident that leadership development is a critical area that needs to be addressed in order to achieve sustainability in property development. More leadership training programs need to be developed to shape the present and future projects leaders on how to develop organizational culture that is structured, procedural and stable to ensure sustainability.

The findings conclude that there is a significant relationship between transformational leadership and sustainability and also significant relationship between transformational leadership and organisational culture namely bureaucratic culture, innovative culture and supportive culture in the property development companies in Malaysia. However, there is no significant relationship between bureaucratic culture, innovative culture and supportive culture and sustainability in the property development companies in Malaysia. The results of analysis demonstrated that bureaucratic culture, innovative culture and supportive culture do not mediate the relationship between transformational leadership and sustainability. In other words, the relationship between transformational leadership and sustainability is not mediated by organisational culture. This finding is in contrast with previous that found the mediating effect of organisational culture (Wipulanusat, Panuwatwanich and Stewart, 2018; Pradhan, Panda and Jena, 2017; Al-Ali, Singh, Al-Nahyan and Sohal, 2017; Sattayaraksa and Boon-itt, 2016; Hussain, Wan Ismail, Rashid and Nisar, 2016; Shim, Jo and Hoover, 2015; Cegarra-Leiva, Sánchez-Vidal and Cegarra-Navarro, 2012 and Panuwatwanich, Stewart and Mohamed, 2008).

Transformational leader's direct behaviour on employees, such as motivation, relationship orientation could influence their emotional interests and enable direct and clear hints that leaders expect them to pursue sustainability. In other words, transformational leadership itself is an essential element in achieving sustainability. This is as highlighted by Opoku and Fortune (2011) that leadership plays a vital role towards achieving sustainability through an organisational culture that understands and appreciate the notion. Similarly, Taylor (2009) also highlighted that to change an organisation towards the organisational culture that supports sustainability, it must come hand and in hand with changing the organisational leaders behaviour and attitude towards a more sustainable organisation. This is because the leaders will lead the culture towards what their vision and goals. Meanwhile, Opoku et al (2015) also believed that the key element in achieving sustainability is culture. This is because culture frames people's relationships and attitudes towards the built and the natural environment. This shows that in the context of property development companies in Malaysia, organisational culture is not towards sustainability.

## 5.0 Conclusion

The practices of transformational leadership lay the foundation for organisational culture, which in turn results in promoting sustainability. Leaders in the property development companies have the responsibility to create the organisational culture that supports the sustainability endeavour. Organisational culture is needed to achieve sustainability while leadership is needed to embed such organisational culture to influence all stakeholders to achieve the common objectives. The shared values in an organisational culture enhance sustainability awareness which have influence on pro-sustainability behaviour at workplace. Therefore, the property development companies in Malaysia should include transformational leadership programs and training courses in their annual plans, with more attention to intellectual stimulation towards employees. They should take into consideration investing in transformational leadership trainings to support the leadership behaviours that encourage organisational culture that in turn support sustainability and overcome resistance resulting from changes and challenges. Therefore, these companies should focus on hiring managers that have attributes of transformational leadership in order to promote sustainability.

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