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# AIDA MODEL, SOCIAL MEDIA MARKETING AND DECISION TO PATRONIZE OF MUSLIM FRIENDLY HOTEL

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***ABSTRACT***

AIDA model has been applied widely in marketing activities either in traditional marketing approach or social media marketing. As a growing industry, Muslim friendly hotels need to integrate and develop strategies in promoting their new brand. Therefore, social media as a new acceptable platform among customers need to be utilised strategically to ensure the brand becomes competitive, known, and accepted by the market. The objective of this study is to examine the influence of AIDA model and social media marketing to customers' decision to patronize Muslim Friendly hotel.This study applied quantitative approach through survey method. The findings shows that AIDA Model significantly influence Social Media Marketing and decision to patronize Muslim Friendly hotel.

*Key Words: AIDA Model, Muslim Friendly Hotel, Social Media Marketing*

# MODEL AIDA, PEMASARAN DI MEDIA SOSIALDAN KEPUTUSAN UNTUK MENGINAP DI HOTEL MESRA MUSLIM

***ABSTRAK***

Model AIDA digunakan secara meluas dalam aktiviti pemasaran sama ada teknik pemasaran tradisional ataupun teknik pemasaran terkini iaitu melalui media sosial. Industri perhotelan yang menggunakan konsep Hotel Mesra Muslim adalah industri yang kian berkembang, perlu menggabungkan semua teknik pemasaran dalam mempromosikan jenama dan perkhidmatan yang ditawarkan. Justeru itu pemasaran melalui media sosial perlu dilaksanakan kerana ianya adalah satu bentuk pemasaran yang strategik dalam bersaing dan mendedahkan sesuatu jenama agar dapat diterima di dalam pasaran. Objektif kajian ini adalah untuk mengkaji pengaruh Model AIDA terhadap pemasaran melalui media sosial dan pengaruhnya terhadap keputusan pelanggan untuk menginap di hotel Mesra Muslim. Kajian ini menggunakan kaedah kuantitatif melalui edaran borang soal selidik. Kajian mendapati Model AIDA mempengaruhi pemasaran media sosial dan seterusnya mempengaruhi keputusan pelanggan untuk menginap di hotel Mesra Muslim.

*Kata Kunci: Model AIDA, Hotel Mesra Muslim, Pemasaran di Media Sosial*

## INTRODUCTION

Muslim Friendly hotel is still considered as a new concept in Malaysia. Most people still confused with the concept of Muslim Friendly hotel. Some people think that this hotel is only for Muslim. The lack of understanding will create a conflict among customers and hoteliers. This is why the numbers of hotel registered under Muslim Friendly concept is still less compared to conventional hotel. Most scholars agree that the slow development of Muslim Friendly hotel concept is because of lack of understanding on Islamic concept among the hotel owner which is most of them are non Muslim (Mohd Hyrul Abu Karim, 2017). This problem is not only on understanding of the concept but it also related to marketing activities which may influence the attractiveness, awareness and acceptance of the brand. The customers need to be educated on the concept and the things that they will gain when they choose to patronize in Muslim Friendly hotel. Therefore the right marketing strategies need to be applied to cater the needs of the market.

Marketing is important sections in organization. Most hoteliers refuse to transform their hotel to Muslim Friendly concept because of the believe that the hotel will not be attractive anymore without the entertainment which is not Shariah compliant such as alcohol in food and beverage section, dress code and others. However this is actually not the issue. Hoteliers should focus on their marketing strategies on how to make sure customers know about their products and brands and how to create the customers desire to come to them.

Marketing nowadays is more easy but challenging with development in technology which open a broad opportunity to explore the market through social media. The social media uprising has transformed the communication setting and this give impact to marketing communication (Areeba Toor, 2017). Social media marketing is innovative marketing approach where brands and customers will be connected without limitation in time and location and this is an opportunity for hoteliers that apply Muslim Friendly concept to market their products effectively and attractively.

To ensure the attractiveness of social media marketing, the AIDA model needs to be adopted in formulating marketing strategies. This marketing communication model focus on how organization create the intention and action from the customers which is in this contex of study, customer will patronize Muslim Friendly hotel. The emphasize will be given to brand or service recognition and existence. Rowley (2002) stated that in the digital world, marketing communications stress three important steps which are creating the existance of a product or service, building relationship and creating mutual value with customer(Shahizan Hassan, 2015). Therefore the aim of this study is to examine the influence of AIDA model on social media marketing and then to analyze its influence on customers' decision to patronize Muslim Friendly hotel.

## LITERATURE REVIEW

**Social Media in Marketing**

Social media refers to a group of internet based applications that builds on the ideological and technological foundations of Web 2.0, and it allows the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Social media take a variety of forms, including weblogs, social blogs, microblogging, wikis, podcasts, pictures, video, rating and social bookmarking.

Social media marketing on the other hand refers to a connection between brands and consumers, while offering a personal channel and currency for user centered networking and social interaction (Chi, 2011). It is also defined as a form of online advertising that uses the cultural context of social context, including social networks (e.g. Youtube, Myspace and Facebook), virtual worlds (e.g. Second Life, There, and Kaneva), social news sites (e.g. Digg and del.icio.us), and social opinion-sharing sites (e.g. Eopinions), to meet branding and communication objectives (Tuten, 2008). According to (Ahmad Rageh, 2016) social media marketing activities are subset of online marketing activities that complete traditional web-based promotion strategies, such as e-mail newsletters and online advertising campaigns.

In recent years, social media have increased in popularity and have revolutionized marketing practices such as advertising and promotion (Hanna, Rohm, & Crittenden, 2011), have influenced consumer behavior from information acquisition to post-purchase behaviors (Mangold & Faulds, 2009) and influenced patterns of Internet usage (Laroche et al., 2012). Social media allows users to connect with peers by adding them to networks of friends, which facilitates communication, and allows them to interact and share their experiences with any person anywhere in the world (Kozinets et al., 2010). Social media helps connect businesses to consumers, develop relationships and foster those relationships in a timely manner and at a low cost (Kaplan and Haenlein, 2010). It is a medium for consumers to find information about desired products with the best prices (Ahmad Rageh, 2016).

Globally, more than 50 percent of social media users follow brands on social media (Van Belleghem et al., 2011) and 29 percent follow trends and find product reviews and information, and 20 percent provide review and comment on the latest hot and trendy products (Gallup, 2014). In Malaysia social media penetration is 64 percent, which is considered one of the highest in Asia pacific region – second only to Singapore (Ahmad Rageh, 2016).

With all the benefits it has, in addition to the fact that most of the Malaysian population are currently turning to social media platforms (Ahmad Rageh, 2016) this makes social media as a platform of preference by marketers for gaining above average returns and sustainable strategic competitive advantage in the market (Vinerean S., 2013).

**Muslim Friendly Hotel Concept**

Halal tourism it is one of the fastest development segment in a world-wide tourism. According to Pew Research Centre Muslim population is expected to be 2.8 billion in 2050 (Pew Research Centre, 2011; 2015). As top preferred destination for Muslim travellers worldwide, Malaysia have been received 5.2 million Muslim travellers in 2015 from all around the world. The increasing number of Muslim travellers in Malaysia was partly due to the establishment of Islamic Tourism Centre (ITC) under Ministry of Tourism and Culture (MOTAC) (Mohd Hyrul et. Al., 2017).

In conjunction to that, there is a great need for hoteliers to provide a proper accomodation for Muslim travellers' convenience such as Muslim friendly hotel, good service quality, hospitality and halal foods service which are in line with the Shariah requirement. The Islamic Hotel concept and shariah compliant hotel concept is not only for Muslims, this is because the benefits offered by such hotels in terms of quality service and healthy lifestyle can benefit everyone (Mohd Hyrul et. Al., 2017; Henderson, 2010; Ibrahim & Jamal, 2016) as Shariah is considered as a universal divine law (Zakiah & Noorsalwati, 2014).

In previous literatures, Islamic hotel or Shariah Compliant hotel is used interchangeably. It was justified that the operation of the Islamic hotel is just the same with the existing hotel but the operational aspects of the Shariah Compliant Hotel must be adjusted to adheres with the Islamic principle of Shariah law (Mohd Rizal, 2012). However, recent studies highlighted 3 categories of shariah compliance hotel which is shariah compliant hotels, dry hotel and Islamic hotel (Mohd Hyrul et. Al., 2017; Jaswir & Ramli, 2016).

The shariah compliant hotel can be defined as a hotel establishment that provides all the services in accordance to the shariah principles including food and beverage and all the operation and management (Samori & Rahman, 2013). Norain et al. (2015) defines Shariah compliance hotel as the hotel that is governed by Shariah standard which go beyond the concept of dry and Islamic hotels. Actually, there are no formal criteria for the Shariah Compliant hotel or Halal Hotel. However, there are some attributes of the Shariah Compliant Hotel as explained by some scholars as follows: i) Halal foods and no alchohol to be served in the prmises or hotels, ii) Having the Holy Book Quran, prayer mat and arrow that indicating the direction of qiblat, iii) Beds and toilets positioned not to face the qiblat iv) Prayer room available in the premises and hotels v) No inappropriate entertainment vi) Predominantly Muslim staffs with a proper Islamic code of dresssing g) Separate salon, recreational facilities and swimming pool for men and women vii) Separate room/ floor for unmarried couple between male and female ix) Tourists dressing code x) No gambling and alchohol drinks in the hotel lobby or restaurant xi) No prohibited foods and beverages in the hotel fridge (Mohd Hyrul et. Al., 2017; Junainah & Norazla, 2015; Zakiah & Noorsalwati, 2014; Norzafir et.al., 2014; Suhaiza et al., 2011; Rosenberg & Choufany, 2009).

Meanwhile, dry hotel can be defined as the hotel establishment which does not provide alcohol in its food and beverages outlet while other operations and services are still in the conventional style (Rosenberg & Choufany, 2009). On the other hand, Islamic hotel, or sometimes called as Muslim-Fiendly hotel refers to hotel that is in between dry and shariah compliant hotel. Muslim-friendly hotel provide facilities that are much better than the dry hotel and the needs and wants of the Muslim travellers in the guest rooms and at the public area are also provided. Most non-Muslim hoteliers prefer the Islamic hotel concept since they do not want to be fully shariah compliance. For them Islamic Hotel concept is more marketable and did not scared the non-Muslim customer (Mohd Hyrul et. Al., 2017).

**AIDA Model**

In 1898, E. St. Elmo Lewis proposed a theory of communication called the AIDA model, the acronym that refers to Attention, Interest, Desire, and Action. Attention stage is aimed at attracting the attention of the customer so that customer will be aware of the existance of products or services offered. In the Interest stage, marketers try to raise customer interest by focusing on and demonstrating advantages and benefits (instead of focusing on features, as in traditional advertising). Meanwhile, in the Desire stage, marketers will convince customers that they want and desire the product or service and that it will satisfy their needs. The final stage is Action stage which is aimed at leading customers towards taking action and/or purchasing (Jiangyu Li & Haibo Yu, 2013).

The AIDA model has different levels. The cognitive level is when the user's attention can be drawn. It is the first step in the communication process where the consumer needs to know about the existence of such a service. At the affective level, consumers have an interest in the services offered and in finding out more about what is being offered. This leads to the desire to acquire the product or service. At the level of behaviour, the action takes place (Shahizan Hassan et. al., 2014).

The AIDA model has been widely adopted in formulating marketing strategies in business. Indeed many studies have confirmed the applicability and feasibility of AIDA model in generating business strategies by using social media marketing. Findings from a study conducted by Shahizan Hassan et. al. (2014) shows that the model can indeed be applied in strategizing the use of social media for marketing purposes. Lagrosen (2005) in similar manner argues that the AIDA model is practical in the context of social media usage especially for the “IDA” components. Furthermore, studies by Ashcroft and Hoey (2001), Hoek and Gendall (2003), and Woodcock and Green (2010) also highlighted that AIDA model application in computer mediated tools has potentials to become effective marketing weapons for business firms.

**Decision to patronize**

Customers often engage in complex situation when they make choice. They are restricted by economic resources and ability to keep and process information. According to Ernani Hadiyati (2016), consumers always evaluate and compare products to differentiate competitive product based on attribute (value). According to Yusniza et. al. (2012), perceived value may be a better predictor of patronage intentions than either satisfaction or quality. Perceived value is defined as the consumer’s overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given.

With regards to halal product/service consumption, study conducted by Norazah et. al. (2014) highlighted attitude as plays the biggest role in determining customer decision to patronize. Attitude is defined as the degree to which a person has a favourable or an unfavourable evaluation of a behaviour in question. The findings are similar to previous studies by other researchers (Mukhtar and Butt, 2012; Shah Alam and Nazura , 2011) which disclosed that attitude hold a significant and positive effect on halal food purchasing intention.

In similar manner, Baker (2011) confirmed that attitude of the Muslim consumers is always justified by religion. Consistent with that is fndings from Gayatri et al. (2005) which reported that a Muslim who holds Islamic cultural values influence his or her evaluation criteria for restaurant, hotel and airlines service quality and in turn, the use of these services. Norazah et. al. (2014) disclosed that attributes such as ingredients, certified halal logo, and ownership were found to hold significant relationship with consumers' attitude toward halal food.

Therefore, it is marketers' roles to plan and execute all marketing activities that can influence a customer along, and beyond, the entire path of purchase, from the point at which the motivation to shop first emerges through purchase, consumption, repurchase, and recommendation.

## METHODOLOGY

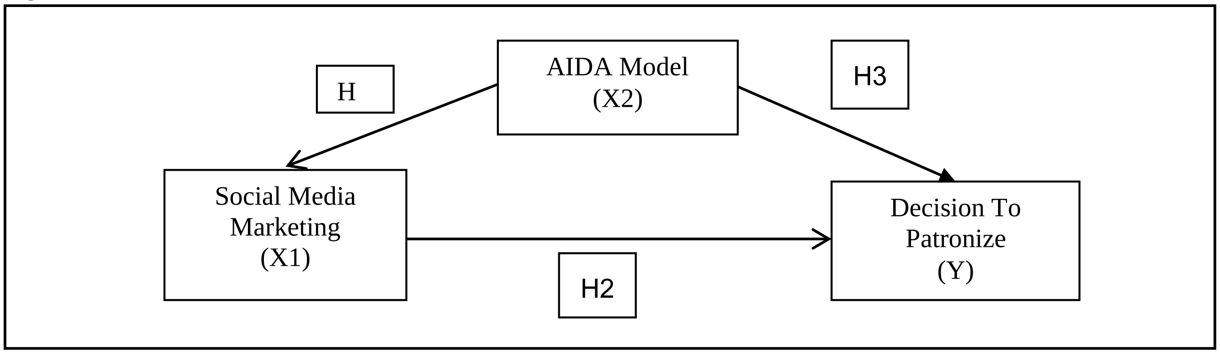
The data gathered for this study was obtained using a survey method.The researchersapplied accidental sampling technique and chose customers who use social media as their method of buying products and services as research object. The sample of the studyconsists of 62 respondents. The data were analyzed using SPSS software.The questionnaire has been divided into four part which is part one is for Social Media Marketing, Part two is for AIDA Model, Part three is for decision to Patronize and part 4 is demographic. Eight items for part one adapting from Kim and Ko (2012), Ahmed and Zahid (2014), Eight items for part two adapted from Ernani Hadiyanti (2016) and four items for part three adapted from McKnight and Chervany (2002).All the items used a five point Likert scales ranging from 1=Strongly Disagree to 5=Strongly Agree. Researchers also conducted reliability test and the result shows that all variables have coefficient value Alpha Cronbach bigger than 0.6 which means that instruments of questions used in this study is valid.

**Table 1: Reliability Test**

| Measures | Numbers of Factor Loading | Cronbach's Alpha |
|---|---|---|
| X1 (Social Media Marketing) | 8 items | 0.842 |
| X2 (AIDA Model) | 8 items | 0.887 |
| Y (Decision to Patronize) | 4 items | 0.840 |

### Research Model

**Figure 1: Theoretical Model**




This study test the direct effect of social media marketing to customer decision to patronize Muslim Friendly hotel. Besides, it also tested the influence of AIDA Model to social media marketing and customer decision to patronize the Muslim Friendly hotel. There are two hypothesis for this study:

H1 : AIDA Model significantly influence the social media marketing.
H2: AIDA Model and social media marketing significantly influence decision to patronize.

## FINDINGS

### Demography of Respondents

A majority age of the respondents are in 20 to 30 years old which is 58.1% while respondents from age 31 and above is 41.9%. This shows that most people within the age range of 20 to 30 have more positive response to social media activities. In terms of gender, 72.6% are female while male are only 27.4%. For occupation, majority of respondents are from private sector which is 48.4% and only 1.6% are doing business. All of this respondents have experience using social media for buying decision.

### Descriptive Analysis of Variable

Descriptive analysis shows items distribution of social media marketing (X1), AIDA Model (X2) and decision to patronize (Y). The data is summarized in table 2, table 3 and table 4.

**Table 2 : Social Media Marketing**

| Items | Percent | Result |
|---|---|---|
| X1.1 (use social media to increase knowledge about the services and brands.) | 50.0 | Agree |
| X1.2 (The social media marketing of brands is very attractive) | 51.6 | Strongly Agree |
| X1.3 (Using social media in finding brand/ product/ service is fun) | 50.0 | Agree |
| X1.4 (Contents shown on social media sites of brands are interesting.) | 58.1 | Agree |
| X1.5 (Social media marketing of brands enable information sharing with | 45.2 | Strongly |

| | | |
|---|---|---|
| others.) | | Agree |
| X1.6 (Conversation or opinion exchange with others is possible through brands social networking sites.) | 46.8 | Agree |
| X1.7 (It is easy to deliver opinion on brands through social media.) | 46.8 | Agree |
| X1.8 (Satisfied with the social media marketing sites of brands) | 50.0 | Agree |

Based on the result above, all respondents agree that social media marketing is a good platform in getting knowledge about the services and brand. The decision on the brand and services offered also are easily access through social media marketing.

**Table 3 : AIDA Model**

| Items | Percent | Results |
|---|---|---|
| X2.1 (Social media provide shocking fact or statistics) | 45.2 | Agree |
| X2.2 (Social media use provoking question or elements of surprise) | 45.2 | Agree |
| X2.3 (Social media create customer interest on service offered) | 46.8 | Agree |
| X2.4 (Social media provides illustration on the usage of service) | 51.6 | Agree |
| X2.5 (Social media highlight the features of services) | 54.8 | Agree |
| X2.6 (Social media demonstrate how the benefits fulfill needs) | 59.7 | Agree |
| X2.7 (Social media create sense of urgency by extending an offer) | 41.9 | Agree |
| X2.8 (Social media provide stand out button) | 41.9 | Agree |

According to the tabulated result of study, the researcher found that majorityof the respondents agreed that the element of AIDA is a must in social media marketing and this elements may increase or create their attention to patronize services offered by marketers.

**Table 4 : Decision to Patronize**

| Items | Percent | Results |
|---|---|---|
| Y1 (Using social media sites of brands help in making decisions better before purchasing goods and services.) | 54.8 | Agree |
| Y2 (Using social media sites of brands increase my interest in buying products and services.) | 58.1 | Agree |
| Y3 (Very likely to choose hotel recommended by my friends on social media.) | 53.2 | Agree |
| Y4 (Definitely choose hotel as marketed on brand's social media sites, I follow) | 54.8 | Agree |

According to the result above, most of the respondents agreed that their decision to patronize depends on information highlighted through social media.

## Hypotheses Testing

This study use path analysis in measuring relationship between the variables. The researcher also used least square method.

**H1 : AIDA Model (X2) significantly influence the social media marketing (X1).**
The result is shown at table 5.

**Table 5 : The result of path analysis of Social media marketing (X1) to AIDA model (X2)**

| Variable | Beta | t | Sig t | R Square | Relationship |
|---|---|---|---|---|---|
| X2 | 0.509 | 3.510 | 0.001 | 0.361 | Significant |

Based on the result above, the value of R Square is 0.361 or 36.1%. This means that AIDA Model variable (X2) influence social media marketing (X1) by 36.1%, while the 63.9% is influenced by other variable out of free variable under this study. The equation of standardized regression is $Z_Y=0.509Z_X$. The value of sig t shows that AIDA Model variable has significant value of 0.001 which is less than alpha 0.05. Therefore based on the test, social media marketing (X1) is significantly influenced by AIDA model (X2).

**H2 : AIDA Model (X2) and social media marketing (X1) significantly influence decision to patronize (Y).**

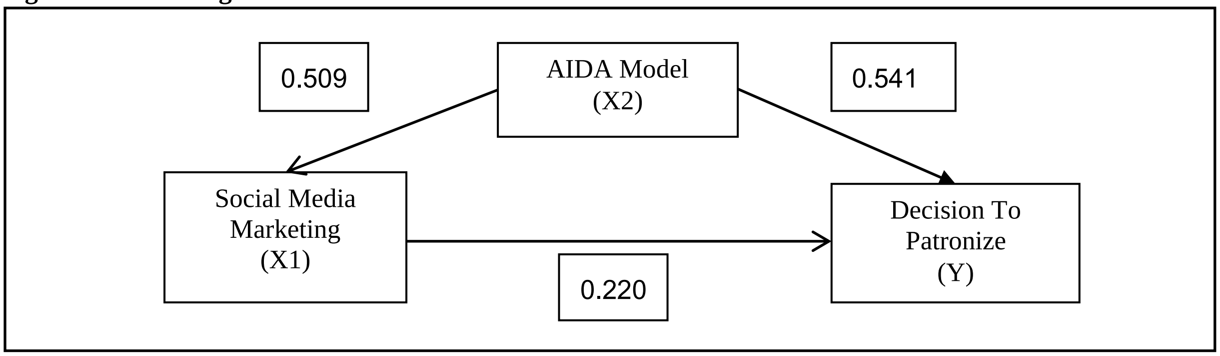
The result is shown below.

**Table 6 : The result of path analysis of Social media marketing (X1) to Decision to patronize (Y)**

| Variable | Beta | t | Sig t | Relationship | R Square |
|---|---|---|---|---|---|
| X1 | 0.220 | 2.116 | 0.039 | Significant | 0.396 |
| X2 | 0.541 | 5.196 | 0.000 | Significant | |

Based on tabulated result, the value of R square is 0.396 or 39.6% which means the social media marketing influences customer decision to patronize by 39.6%. The rest of 60.4% is influenced by other variables out of free variable under this study. The equation for standardized regression is $Z_Y=0.220Z_{X1}+ 0.541Z_{X2.}$ The significant value for social media marketing variable (X1) is 0.039 which is less than alpha 0.05. Therefore, social media marketing variable (X1) significantly influence customer's decision to patronize.The AIDA Model variable (X2) on the other hand has significant value of 0.000 which is also less than 0.05. Therefore, AIDA Model variable (X2) has influence towards customers decision to patronize.

**Figure 2 : Path Diagram**




From the above figure, researchers applied Goodness of fit test by using total determination coefficient. The amount of data diversity which can be explained by model is measured as follows:

$R^2_m = 1-(P^2_{e1})(P^2_{e2})$

$R^2_m = 1-(0.361 \times 0.396) = 0.857$ or 85.7%

The result indicates that the data diversity which can be explained by the model is 85.7% while the rest of data diversity which is 14.3% is explained by another variable which is not tested in the model.

Based on the model, total influence of each variable to dependent variable is as follows:

**Table 7 : Total Influence**

| Independent Variable | Dependent Variable | Mediator Variable | Path |
|---|---|---|---|
| AIDA Model (X2) | Social Media Marketing (X1) | - | 0.509 |
| AIDA Model (X2) | Decision to Patronize (Y) | - | 0.541 |
| Social Media Marketing (X1) | Decision to Patronize (Y) | - | 0.220 |
| Social Media Marketing (X1) | Decision to Patronize (Y) | AIDA Model (X2) | 0.509 x 0.541 = 0.275 |
| **Total Influence = 0.220 + 0.275 = 0.495** | | | |

Since the AIDA Model significantly influence Social Media Marketing and Decsion to patronize, the relationship between Social Media Marketing to decision to patronize by considering AIDA Model as a mediator is also significant.

## DISCUSSION AND CONCLUSION

This study analyse the influence of AIDA Model in social media marketing to customer's decision to patronize Muslim friendly hotel. Based on the findings, Social media marketing has direct influence to decision to patronize. However without the existence of AIDA model, social media itself could not influence much. This shows that in order to provide information and educate customers as well as attract them to patronize the new Islamic concept, hoteliers need to focus on the development of marketing strategies and try to make it attractive and interesting for customers. By marketing through social media, the competition is more challenging. Therefore, it is important to adopt the element of AIDA in their marketing strategies.

Result also shows that customers will decide to buy products or decide to patronize hotel when they are attracted with marketing information and design of communication in social media. This indicates that hoteliers whose consider AIDA elements in their social media marketing will be able to create public attention to their website or advertisement. It is not easy to make customers focus and read our advertisement when a lot of competitors also doing the same things. Besides, the social media marketing also must able to create customers' interest to know more and keep searching for the information that are provided. It is an advantage if the social media marketing able to create desire and finally motivate them to patronize or purchase the products or services. This is why Muslim friendly hotel owners or potential owners need to consider in designing their social media marketing strategies. Marketing requires a lot of cost which need to be properly and effectively managed so as to ensure favourable returns on investment.

As a conclusion, hoteliers need to give attention to everything that they want to communicate and share with customers. The successful of marketing activities is not only depends on how much information that you provide to customers or how many promotional tools that you gave but it needs a proper strategy to ensure all effort give the expected returns. As a new products in hospitality industry where the market is competitive and a lot of misunderstanding on the concept such as the rise of Islamicphobia, hoteliers need to change their marketing strategies by using creative and innovative ideas which may help in creating people awareness towards their brands and service offered. Indeed, it is not easy to market Muslim products but with the addition of Muslim Friendly terms and attractiveness marketing communication which may potray the efficiency, professionalism and value proposition to the brands, Muslim friendly hotel may gain competitive advantage and able to compete and sustain in the market.

There are some limitations in conducting this study. The sample size is quite small which might not represent the whole population involved. However the sample is targeted to those who have experience in making decision in buying products and services through social media. Future research may consider other methods such as deep interview to clarify more on the social media strategies. This study may becomes a reference for those in the industry especially for Muslim friendly hotel to consider AIDA elements in their social marketing strategies.

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# FIRM'S STRUCTURE AND PROFITABILITY: AN EMPIRICAL EVIDENCE FROM MALAYSIA CONSTRUCTION SECTOR.

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*ABSTRACT*

This study investigates the effect of firm's internal characteristics on profitability of construction sector in Malaysia for 10 years. A panel data of 38 public listed companies from year 2006 to 2015 has been used. Firm's profitability as measured by return on asset (ROA) was analyzed against four variables which are firm size, firm age, debt ratio and directors' ownership. The results were generated using Ordinary Least Square (OLS) method. The empirical finding based on the random effect model (RE) suggests that firm size and debt ratio appear as the important factor affecting profitability. On the other hand, directors' ownership and firm age has no significant effect on profitability. The finding further reveals that an increase in firm size will increase ROA while an increase in debt ratio will reduce ROA.

***Keywords-*** Directors' Ownership, Profitability, Return on Asset (ROA), Construction Sector

## INTRODUCTION

The relationship between firm structure and performance cannot be ignored.A firm depends on the improvement in performance in order to sustain in the market. The examples of performance include efficiency, profitability as well as growth and in this research we decide to choose profitability to represent firm performance.The firm structure is defined as the overall system in the workplace that explaining the rules and regulations, roles and responsibility of worker and how they are controlled and coordinated. In other word, the firm structure can be measured by firm size, firm age, ownership structure, and debt ratio. We are interested to conduct a study on construction sector because this sector is vital for Malaysia to achieve a developed country status by 2020. According to Khan, Liew and Ghazali, (2014)the construction sector has been playing a significant role in aggregate economy of the country that enable to support the gross domestic product (GDP) and sosio-economic development in Malaysia. This sector can give contribution through Gross Domestic Product (GDP), Gross Net Income (GNI) and Gross Fixed Capital Formation (GFCF), creation of job opportunities, generation of income and re-distribution, as well as strategic tool to achieve sustainable development. More than half of GFCF comprises of construction output (Olanrewaju& Aziz, 2015). Outputs of construction sector are home, offices, shopping mall, roads, and factories. Looking at these crucial roles of construction sector in growth development in Malaysia, it is necessary to give attention and focus on this sector.

The construction sector in Malaysia generally falls into three sectors namely residential construction, non-residential construction, and civil construction. The residential construction includes the condominiums and houses construction whereas the non-residential is construction of all building other than residential like industrial and commercial buildings. Other category is civil construction or civil engineering which refers to the construction of public infrastructure such as bridges, railway, school and highways. Malaysia tends to develop this sector since its independence on 1957 after realizing its significance. The transformation of the economy structure intensively involves in reaching year 2020. The government is responsible to outline an economic road map to ensure the country is transformed to developed country and being recognized. Target of country by 2020 is to sustain the robust growth and specifically this entails average growth of 6.0% in GDP annually during the Tenth Plan Period. The economy sectors are the important player in order to realize this target especially the construction sector that active and features obviously in terms of policy formulation and implementations.

**Problem Statement**

Construction sector in Malaysia, is in the growth phase and show the better performance year-by-year. Nevertheless, some facts state that the construction company facing the problem in term of profitability. Based on the article titled “Malaysia’s construction sector to keep growing,” (2016) the 47 listed construction companies brought a different performance in year 2015. They only generated RM3.6 billion of profit before tax and it is generally satisfactory, with only a handful boasting margins on earnings before interest and tax, depreciation, amortization (EBITDA). It shows only marginally more than half of them recording a better year on year performance. In addition, Master Builders Association Malaysia (MBAM); (as stated in Wahida, 2014) belief that the weaken ringgit has been a distress to many construction firms. This is due to the cost of production will be higher than usual. The president of MBAM said that the profit margin for construction sector just begin to tight and would have be more tough for some construction firms with the weakening of ringgit (Wahida,2014). The situation was, where they had tender company project when the ringgit is stronger but once the ringgit was falling, they are in difficult when it comes to accepting the grant.

The falling in ringgit resulting in the increasing of production cost as raw material price is more expensive and lead to higher price of finished goods, then the volume of sales may have affected as well. Based on the annual report for year 2015 of one of construction company, they suffered a loss on the current year that caused by the lower business volume as well as the fixed expenses incurred. Therefore, this research is interested to investigatewhether firm structure as represented by firm size, firm age, capital structure and ownership structure affect profitability of Malaysia construction companies from year 2006 until 2015. The study also aims to see the most significant variables that provide contribution towards profit.

**Scope of study**
This research focuses on the construction sectors in Malaysia. The data like ROA, firm size, firm age, ownership structure, and capital structure will be obtained from 38 construction companies that were listed on the main market of Bursa Malaysia covering 10 years of financial statement beginning 2006 to 2015.

## LITERATURE REVIEW

The relationship of firm size, firm age, ownership structure and capital structure are usually related to the firm's profitability. Review on previous researches will provide a more complete view and better understanding on this topic.

**Profitability**
According to Ang (1997), profitability is the measurement for company performance because it indicates the earnings that companies are able to produce in future through their main activities which are operating and investing activities. Agus, (2001) explains that profitability is the company's capacity to achieve incomes related to revenue, total assets and capital of the company. Therefore, the profitability is important to both long term and short term investors before initiating an investment in a particular company. Investors would make an analysis regarding profit of company so that they are able to minimize the risk and get high return or dividend.

**Firm Size and Profitability**
Firm size is an important variable to determine the profitability of the organization. The idea known as economies of scale which can be found in the traditional neo classical perspective of the firm. Firm size is the amount and variety of production and services firm provides along with to its customers. Haliland Hassan, (2012) did a study on 143 companies listed on the Istanbul Stock Exchange from year 2005 to 2011 and found that bigger firms earn a higher return. Other than that, John and Adebayo, (2013)also found the positive relationship between firm size and profitability of companies listed on the Nigerian Stock Exchange market from 2005 until 2012. Velnampy and Nimalathasan, (2010)investigate the relationship between firm size and profitability of all branches of Bank of Ceylon and Commercial Bank in Sri Lanka over the period of 10 years from 1997 until 2006 and discovered that larger bank size will result in a higher profitability. Based on the fixed effect model result, Vinasithamby Sritharan, (2015) shows that firm size is positively related to profitability of Sri Lankan hotels and travel sector firms.(Ilaboya and Ohiokha, (2016)also support the previous findings where there is a significant and positive relationship between size and profitability of Nigerian listed companies. On the other hand, a negative relationship has also been established between firm size and profitability. It means that smaller firm will earn a higher return than a bigger firm. Goddard, Tavakoli and Wilson, (2005) focused on 4 European countries from 1993 until 2004 and found a negative

relationship between firm size and profitability of manufacturing and service sector. According to Becker, Kaen, EtebariandBauman, (2010), small firm has a greater earnings. The research focused on the firms operating in manufacturing sector in USA using the data of years 1987 until 2002.

**Firm Age and Profitability**

Firm age also influence the organizational structure. The older the firm will make it more stable in nature. When the firm is more stable it will give many advantages such as developing more business activities, and earn greater profit from the business. The relationship between firm age and profitability can be in a positive or negative way. Coad, Segarra, and Teruel, (2013)reported a positive relationship between firm age and profitability of firm. The study used a sample of Spanish firms from year 1998 until 2006 and found the profit of the firm increase with the increase in the firm age. It also can be proved by Basti, Bayyurtand Akin, (2011) who conducted a comparative performance analysis of foreign and domestic manufacturing companies in Turkey using the sample of 160 listed firms covering the period from 2003 to 2006. However, the relationship of the firm age and profitability can also be proven otherwise; the older the firm, may reflect lower level of productivity and profitability. Doğan, (2013) used return on assets running a multiple regression on data from 200 listed companies between years 2008 to 2011 and found a negative relationship between firm age and profitability.

**Ownership Structure and Profitability**

The main objective of a corporation is to maximize shareholder's wealth through expanded firm profitability. Salvatore, (2005) pointed out that assets management, financing and investment decision are the wealth of company and shareholder. The purpose is to maximize growth rate and the profit of the company because the position of the company can be maintained by maximizing profit and growth rate. There is various measurement of ownership had been applied on determining a firm's profitability. Sugiarto, (2009), used managerial share ownership and institutional ownership as proxy for ownership structure, in which the company having a going public status, the management is separated into two; becoming institutional ownership and managerial ownership functions. Sugiarto, (2009) defines institutional ownership as companies of insurance, investment and banks that have proportion of share in the firm. However, it excludes the institutions that have special relationship with the firm or affiliated firm such as subsidiaries. According to John andServaes, (1998), larger institution ownership will result in higher profit. It also can be proved by Fauzi and Locke, (2012)who found the positive results which are the larger the board of directors, institutional ownership and board committees will results in the better firm performance using companies listed in New Zealand. IrsaandNaveed, (2016) investigating financial performance of companies listed on the Philippine Stock Exchange (PSE) over the period of 2009 to 2014 show a different result which is the larger institutional ownership will lead to lower firm's profitability. Besides that, other researchers also use government ownership structure. For example, Irsaand Tariq, (2016) discovered that the government ownership is significant and negatively related to the firm profitability.Tran, Nonneman, and Jorissen, (2014) also indicates government ownership, reduces the firm profitability.

**Capital Structure and Profitability**

Eugeneand Houston, (2007) defined the capital structure as the composition of the company's capital which is seen from its particular source, showing the portion of the company's capital coming from debt sources (creditors) and at the same time also showing portion of capital from the owners of the capital itself. Capital structure is very important in order to achieve the company's goal. Capital structure is divided into two which is debt and equity.

Miller's andModigliani, (1958) work had been an inspiration for many researchers for years. Researchers are trying to analyze and find the existence of an optimal capital structure. Optimal capital structure can be defined as "the capital structure at which the weighted average cost of capital is minimum and thereby the maximum value of the firm." The difference of opinion between researchers can be observed about the effect of debt on profitability.

Abor, (2005)did a study on the effect of capital structure on profitability of the Ghana stock exchange listed firms and found that smaller shareholding will cost return on equity and total assets to improve the short term debt. The same result can also be found in Gill, Biger, and Mathur, (2011)whom investigating a sample of 272 service and manufacturing firms listed on New York. Another research on capital structure, equity ownership and firm performance also found the positive results, and proved that debt ratio positively affect the profitability of the firm where firm in high debt ratio will have a high profit. In contrast, a negative effect of debt on profitability was also confirmed. Shubita and Alswalhah, (2012)used a sample of 39 Amman Stock Exchange based companies and analyzed the role of debt in profitability. The result indicated significant but negative relationship between short-term debt, long-term debt, total debt, and return on equity (ROE). Kebewar, (2013)performed a study on French companies totaling to 2325 trade sector companies over a period of eight years between 1999 to 2006 and found that debt have negative effect on profitability.

Based on the review of the previous researches, we formulate the following hypotheses:
Hypothesis 1: Firm size affects profitability
Hypothesis 2: Firm age affects profitability
Hypothesis 3: Ownership structure affects profitability
Hypothesis 4: Capital structure affects profitability

## RESEARCH METHODOLOGY

The methodology provides a brief description of the model, estimation method, data source, and measurement of the variables. This study will explain more about the profitability of Malaysia construction companies and it might be influenced firm structure like firm size, firm age, ownership structure and capital structure. A panel data method will be employed in this study.

**Population and sample set of the study**

The target population for this study is the construction firms listed on the main market of Malaysia Stock Exchange; the Bursa Malaysia. Based on the equity section in Bursa Malaysia website as at October 2016, there were 46 listed construction companies. The following conditions must be met for the companies to be selected as sample:

- The companies should be listed before 2006 and still operating in the year 2015
- The annual report of the company must be available in the website.

After the screening process, eight companies were excluded, some of them were newly listed companies and for some companies, the financial reports were not available in the website. Finally, our sample consists only 38 companies representing 83% of the total population.

**Measurement of Variables**

The dependent variable in this study is profitability while the independent variable is firm structure which is represented by firm size (SIZE), firm age (AGE), ownership structure (OWN), and capital structure or Debt Ratio (DEBT). The next section will explain the measurement of each variable.

**Return on Asset (ROA)**

There are various measurement of profitability, for example Angela, Komala and Nugroho, (2013)used return on equity (ROE) and claimed that it is one of the important indicators that are often used by investors to assess the profitability of the company before investing. Shaskia, (2012) used ROA that is calculated as net profit divided by total assets. Mahmoud Abu-Tapanjeh, (2006) employed both ROE and return on investment (ROI) as the dependent variables for firm structure of Amman Stock Exchange. Salim and Yadav, (2012)took up four dependent variables which are ROE, ROA, Tobin Q and earnings per share (EPS) for the case of Malaysian companies. ROA or also known as ROI which is return on investment for the company, measuring the performance of the company to generate income based on their total assets(Ichsani & Suhardi, 2015). This study measures firm profitability by Return on Assets (ROA) and it is calculated as net profit divided by total assets:

*ROA=Net Profit / Total Assets*

**Firm Size**

Previous researchers measure the firm size in a different way such as total sale, market capitalization, total assets and other measurements. Vijaykumarand Tamizhselvan(2010) used the sales and total assets while Vijh and Yang, (2013) used the sales, total assets, and market value of equity to measure the firm size. In this research, firm size is represented by taking up the total sales of the company for the current year.

**Firm Age**

Firm age also have a different measure. Mahmoud Abu-Tapanjeh, (2006) and Shumway, (2001) defines firm age as the number of years of establishment of the company even though some researcher (for example (Loderer & Waelchli, 2009) believe that listing age, should define the age of the company and listing age is more economical since listing is a defining moment in the company's life. We decided to follow measurement used by Mahmoud Abu-Tapanjeh, (2006) and Shumway, (2001).

**Ownership Structure**

Mahmoud Abu-Tapanjeh, (2006) measured the ownership structure by Government Ownership, Non- government ownership, and director's ownership. This research will take directors ownership as proxy for ownership structure. Board of directors is a group of

individuals that are elected as, or elected to act as, representatives of the stockholders to establish corporate management related policies and to make decisions on major company issues. Every public company must have a board of directors. Some private and non-profit companies also have a board of director. The director ownership means the person who has the ownership's title in the company, they hold the company's shares. The director ownership is calculated as follow:
*Director Ownership = Total shares held by directors / total company shares*

**Capital Structure**
Capital structure is source of financing that raised up by company like debt or fund from shareholders. Capital structure for this research is represented by debt ratio. Debt ratio is calculated as percentage of debt over total assets:
*Debt Ratio=Total debt / Total Asset*

All the data for dependent and independent variables are obtained from the annual report of the selected companies from the year 2006 to 2015.

**Data Analysis**
This research has modified the mathematical model that has been employed by Aman, (2011) as per below:
$ROA_{i,t} = \beta 0 + \beta 1 SIZE_{i,t} + \beta 2\ AGE_{i,t} + \beta 3\ OWN_{i,t} + \beta 4\ DEBT_{i,t} + \mu_{i,t}$
*Where,*
$\beta 0$ = *Constant term*
*ROA* = *Return on Asset*
*SIZE* = *Firm Size (companies sales for the current year)*
*AGE* = *Firm Age (number of years of establishment)*
*OWN* = *Ownership structure (Director Ownership)*
*DEBT* = *Capital structure (Debt Ratio)*
$\mu_{i,t}$ = *Error term*

**Descriptive Statistic**
Statistical software Eviews9 is used to compute all the data gathered. Descriptive statistic is used to describe the basic features of the data in a study. It presents quantitative descriptions in a manageable form.

**Correlation coefficient**
Correlation coefficient is to measure the degree of two variables movements. The range of value is -1.0 to 1.0. If the result is greater than 1.0 or lower than -1.0, a mistake has been make. A correlation of -1.0 indicates a perfect negative correlation, while a correlation of 1.0 indicates a perfect positive correlation.

**Regression analysis**
In order to get the best result, this research employs three regressions which are Pooled effect model, Fixed Effect Model and Random Effect Model. In order to select the most preferable

result from those three methods, the diagnostic tests then will be applied which are likelihood ratio (LR), Lagrange multiplier (LM) and Hausman test.

**Likelihood Ratio**

Likelihood ratio is conducted to differentiate between Pool and Fixed Effect Model. The hypothesis is as follows:
$H_0$: Pool Effect Model is appropriate model
$H_1$: Fixed Effect Model is appropriate model

**Lagrange Multiplier**

Lagrange Method is employed to differentiate between Pool Effect Model and Random Effect Model. The hypothesis is as follows:
$H_0$: Pool Effect Model is appropriate model
$H_1$: Random Effect Model is appropriate model

**Hausman Test**

Hausman Test is employed to differentiate between Random Effect Model and Fixed Effect Model. The hypothesis is as follows:
$H_0$: Random Effect Model is appropriate model
$H_1$: Fixed Effect Model is appropriate model

## FINDINGS AND DISCUSSION

### Descriptive statistical analysis

**Table 1 Descriptive statistical analysis of ROA and firm structure**

| | ROA | Size | Age | Own | Debt |
|---|---|---|---|---|---|
| Mean | 4.1 | 5.8 | 23 | 12.65 | 62.81 |
| Maximum | 1105 | 60 | 55 | 61.73 | 1040 |
| Minimum | -301 | 0 | 3 | 0 | 2.1 |
| Std. Dev. | 63.44 | 9.22 | 13 | 14.67 | 95.51 |
| **Observations** | **387** | **387** | **387** | **387** | **387** |

Table 1 presents the descriptive statistics for the ROA and firm structure (firm size, firm age, ownership structure and debt ratio) of the selected companies.The statistical data reveals the ROA varies as low as -301% to the highest value at 1040%. Along the 10 years period, there is a company suffers a pretty bad loss on 2006 and the company achieved a rare profit on 2007 with small value of assets. Minimum value for ownership structure is 0, reflecting that somecompanies directors do not have any equity shares and some of them more than half is denominated by director ownership as the maximum value is 61.73%.The youngest firm in our sample has 3 years of establishment since 2006 and the oldest is 55 years. This shows variety of company background both new and well established. The mean of debt ratio is 62.81% implies that companies in construction sector relies heavily on debt capital.

## Correlation Analysis

**Table 2 Correlation Matrix**

| Variables | Log ROA | Log Size | Age | Own | Log Debt |
|---|---|---|---|---|---|
| **Log ROA** | 1.000000 | | | | |
| **Log Size** | 0.384266 | 1.000000 | | | |
| **Age** | 0.151060 | 0.245475 | 1.000000 | | |
| **Own** | 0.089769 | -0.061796 | 0.041461 | 1.000000 | |
| **Log Debt** | -0.213798 | 0.088142 | -0.228222 | -0.066320 | 1.000000 |

Table 2 presents correlation analysis for ROA and the firm structure. The data suggests that all independent variables except for debt ratio are positive and weakly correlated with ROA. The high profit of the company is contributed from the large value of revenue earns, the longer period the company in the market and the higher percentage of ownership held by its own director. Debt ratio is weakly and negatively correlated to ROA, means that more debt is risky for the company and lead to poorer profit due to higher cost of borrowing. All independent variables are correlated to each other and fortunately, values of correlation matrix among independent variables are less than *r=0.80*, thus it can be concluded that there is no of multi-collinearityproblem.

## Regression results

This research employs three regression methods to examine the effect of firm structure on profitability. Table 3 shows the statistical results of Pool, Fixed and Random effect model.

**Table 3 Regression Results of Pool, Fixed and Random Effect Model**

| | **POOL** | **FIXED** | **RANDOM** |
|---|---|---|---|
| **Variables** | Coefficient (std. error) | Coefficient (std. error) | Coefficient (std. error) |
| **Log size** | 0.964957** (0.110144) | 1.036241** (0.230551) | 0.976379** (0.160434) |
| **Age** | -0.001251 (0.005447) | 0.009545 (0.020751) | 0.001152 (0.009161) |
| **Own** | 0.009974* (0.004558) | -0.018222 (0.011181) | -3.79E-05 (0.007001) |
| **Log debt** | -1.200324** (0.229532) | -1.627375** (0.332247) | -1.454386** (0.281868) |
| **C** | -6.341117 (0.939975) | -6.122955 (1.933005) | -5.943400 (1.355813) |
| **$R^2$** | 0.219329 | 0.482717 | 0.138809 |
| **Adjusted $R^2$** | 0.211133 | 0.419376 | 0.129768 |
| **F-statistic** | 26.76045 | 7.620957 | 15.35270 |
| **Prob(Fstatistic)** | 0.0000 | 0.0000 | 0.0000 |

Note: * and ** Significant at 5% and 1% levels respectively.

In order to select the best regression that fits with our data, we have conducted three model specification tests namely Likelihood Ratio, Lagrange Multiplier, and Hausman test. The results are shown in the following table:

**Table 4: Model specification test results**

| Model Specification Test | Result | Decision |
|---|---|---|
| Likelihood Ratio | Significant | Accept $H_1$: Fixed Effect Model is appropriate model |
| Lagrange Multiplier | Significant | Accept $H_1$: Random Effect Model is appropriate model |
| Hausman Test | Not significant | Failed to reject $H_0$: Random Effect Model is appropriate model |

Based on the above results, Lagrange Multiplier and Hausman Test suggest that the Random Effect Model is most preferable for this research. Therefore, in the next section we will interpret the regression result of Random Effect Model.

**Ordinary Least Square (OLS) Random Effect Model**

Based on table 3, (Random Effect Model) the $R^2$ is about 14%. It indicates that 14% variations of firm's ROA can be explained by the variations in independent variables which are firm size, firm age, ownership structure and capital structure (debt ratio) while another 86% were explained by other factors that are not included in this study. F-statistic describes the overall fitness of the model. The test statistics is F (15.35) with p-value (0.0000) which is less than alpha, $\alpha$ (0.05), indicating that the overall model is significant.
The following equation model has been generated for this study:

$$ROA = -5.9434 + 0.9764SIZE_1 + 0.001152AGE_2 - 3.79OWN_3 - 1.4543Debt_4$$

The equation model reveals that firm size (total sales) and capital structure as represented by debt ratio is significantly affecting firm's return on assets at 1% significant level. Therefore, hypothesis 1 and 4 is supported. On the other hand, hypothesis 2 and 3 was not supported because firm age and ownership structure (director ownership) is not significant. Furthermore the result indicates that firm size affect ROA in a positive direction. Firm with higher sales will generate higher return for the business.Whereas debt ratio affect ROA negatively, implies that company with higher debt capital will earn a lower profit. This may due to the burden of interest expenses.

## CONCLUSION AND RECOMMENDATION

This study aims to investigate whether firm structure which represented by the firm size, firm age, director ownership and debt ratio will affect profitability of construction companies in Malaysia. The model specification tests suggest the Random effect model to estimate the effect of firm structure on profitability. There are two significant variables which are firm size and debt ratio. The most significant variable that influencing the profit is debt ratio at coefficient value of -1.4544; higher than coefficient value of firm size which is at 0.9794. This implies that debt ratio must be considered as the most important factor in determining the companies' profit. The debt as one of the sources of financing for large company like construction firm cannot be denied. However, the firm will face the problem of decreasing in profit if the debt is not well managed. The revenue will decrease when the company have to pay high interest expenses. In addition, if the company cannot meet the obligation, it will be worsening and risk of bankruptcy will be high.Therefore we would like to suggest the construction firms with high debt capital to use it efficiently to avoid cash flow crisis and lower rate of return. Total sales have been proved in this research as a reason of a better profitability. The company has a chance of getting high income if they are talented in selling many homes under their construction, get the tender or entitle for big projects that available in Malaysia.

This study makes significant contribution to the management of construction company where it assists them in identifying which factor they must concern to generate better profitability. Besides, results of this study will also aid as a reference for researchers who undertaking a related field.

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# THE EFFECT OF THE BOARD OF DIRECTORS' CHARACTERISTICS ON CORPORATE SUSTAINABILITY REPORTING

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***ABSTRACT***

This paper explores the corporate sustainability reporting by Public listed companies of Bursa Malaysia. Specifically the objective is to examine the effect of board characteristics on corporate sustainability reporting (CSR) disclosure. This study postulates that board characteristics (board size, board independence, CEO duality, women director) influence the level of CSR. Development of research hypotheses are based on legitimacy theory. Sample consists of 260companies listed on the Main Board of Bursa Malaysia. Results show a positive significant association between board size, board independence and women director and CSR disclosure. Duality CEO has no significant association impact on CSRdisclosure among listed firms in Malaysia. This studysuggests the need for improving the current practice of corporate governance for public listed companies by focusing on the board of directors'characteristics. The findings of this study are useful for policy makers in evaluating thepresent corporate governance standards and whether these requirements are sufficient for users of CSR, such as investors in making investment decisions

***Keywords:*** *Corporate governance, Board of directors' characteristics,Corporate sustainability reporting*

***ABSTRAK***

Kajian ini dilakukan bagi menguji kesan ciri-ciri ahli lembaga pengarah ke atas pelaporan kelestarian korporat oleh syarikat tersenarai di Malaysia. Kajian ini menjangkakan bahawa ciri ahli lembaga pengarah (saiz lembaga pengarah, kebebasan pengarah, CEO dua peranan, pengarah wanita) akan mempengaruhi pelaporan kelestarian korporat oleh syarikat tersenarai di Bursa Malaysia. Hipotesis dibangunkan berdasarkan teori legitimasi. Sampel kajian terdiri daripada 260buah syarikat tersenarai di Bursa Malaysia.Hasil kajian mendapati bahawa saiz lembaga pengarah, pengarah bebas dan pengarah wanita mempengaruhi pelaporan kelestarian korporat. Manakala CEO dua peranan didapati tidak mempengaruhi pelaporan kelestarian korporat oleh syarikat tersenarai di Malaysia.Kajian ini mencadangkan supaya terdapat penambah baikan dari segi tadbirurus korporat syarikat tersenarai di Malaysia terutama dari segi ciri-ciri lembaga pengarah. Hasil kajian adalah berguna kepada pembuat polisi dalam menilai standard tadbir urus dan adakah keperluan penyenaraian di Bursa Malaysia mencukupi bagi pengguna CSR terutama sekali pelabur dalam membuat keputusan pelaburan

***Kata kunci:*** *Tadbir urus korporat,Ciri-ciri Lembaga Pengarah, pelaporan kelestarian korporat*

## INTRODUCTION

Corporate sustainability reporting (CSR) is attracting the attention of governments, business communities, academia, stakeholders and society as a whole. Sustainability issues have captured the public's interest as well as business organisations (Sharifah 2010). Companies have reported on their Corporate Sustainability Reporting by addressing the needs and expectations of stakeholders such as investors, customers and suppliers, regulators and society (Deegan 2013). CSR is costly and voluntary in nature but the companies still embrace in CSR and the number of companies that informing their stakeholders of their CSR performance is increasing. . Investors look for evidence of sound business strategy and effective management of risk, some customers are concerned with product origins and the conditions under which they are manufactured, and employees want to work for organisations that visibly account for their responsibilities to society and the environment (Belal &Owen 2007). These have all led to an increased prevalence in corporate sustainability reporting (Lee 2008).CSR has been accepted as a business strategy and a way to gain legitimacy from society (Jamali &Mirshak2007).

CSR has been described by Marrewijk (2003) as demonstrating the inclusion of social and environmental. Sustainability also means as business strategies that meetthe needs of the enterprise today and its stakeholders while sustaining the resources,both human and natural, which will be needed in the future" (KPMG 2011). Sustainability practices in corporations revealed the interrelationshipbetween society, environment and economic development (WCED 1987). Providing more sustainability reporting on the annual report is expected to increase firms' chances to attract investors and analysts to give better analysis. This study define CSR as commitments undertaken by the firms, which covers the non-financial aspects, such as the economic, environmental and social disclosures with the intention to preserve a sustainable future for the rights of the stakeholders.Providing more sustainability reporting on the annual report is expected to increase firms' chances to attract investors and analysts to give better analysis.
The term of CSR can be explained as follows:
1. Economy

The impact on the economic conditions of stakeholders (procurement practices, community investment) and the interaction or relationship with the economic systems at local, national and global levels. It does not merely focus on the financial condition of the organisation.

2. Environment

The interaction with living and non-living natural systems, including land, air, water and ecosystems.

3. Social

The interaction or relationship with social systems within which frm's operate. These may include their relationships with communities, employees, consumers, etc.

(GRI G4 Guidelines)

Corporate governance (CG) in particular board of directors can play a significant role in enhancing corporate sustainability reporting (CSR) performance (Zahra, 1989). The shareholders are unable to engage in management when there is a separation of ownership between the owners-shareholders (principals) and the managers (agents), thus, it is the task of the board to represent the shareholder's interest, monitor the effectiveness of management and to ensure that managers of corporations use the assets to maximize shareholders'value. Good corporate governance is required to safeguard the interest of various stakeholders (Al-Malkawi et al. 2014) as it can improve public faith and confidence in the business environment (Güler & Crowther 2008). The companies need to contribute for the well- being of the communities by considering the financial and non financial needs on setting the company's objective. Thus, this study aims to examine the influence of good corporate governance (CG) specifically board characteristics on sustainability reporting. This study extend prior studies by investigating the effect of board's characteristics on the level of CSR in public listed firms in Malaysia. To compliment these prior researches, the current study provides relevant input in these two contributions: (1) using a more recent data, which is the CSR in the 2016 annual reports (2) examine the effect of board's characteristics on the level of CSR by using more comprehensive CSR dimensions (economic, environment and social).

Issues such as pollution, waste, resources depletion, product quality and safety, the rights and status of workers and the power of large corporations have become the focus of increasing attention and concern (Hussainey & Walker 2009). In order to cope with such issues, sustainability engagement has become a vital plan in dealing with such matters. (Muttalib et al.2014).It is crucial to examine if the CSR in Malaysia is comply with reporting regulation imposed by the Malaysian government and Bursa Malaysia and what are the board of directors' effect on corporate sustainability activities in their annual reports in Malaysia. This paper proceeds with literature on corporate sustainability reporting in the next section. Section two will discuss literature review and Section three will discuss hypotheses development. The methodology will be presented in section four. Section five will present results and discuss research findings and finally section six will conclude overall paper.

## LITERATURE REVIEW

Many of the corporate sustainabilityreporting (CSR) studies have been carried out in developed countries(Clarkson et al 2008, Isaksson 2009; Sutantoputra 2009; Zeng et al 2010; Suttipun & Stanton 2012, Hahn & Kuhnan 2013). These studies provide insight on the types of sustainability information reported and understanding the development of CSR in those countries. Similar study need to be carried out in Malaysia, since the social, economic, and political environment in Malaysia are different from other countries. In recent years the interests in CSR have been partly contributed by the increasedawareness on corporate accountability. Corporate governance became an attractive issue for Asian researchers especially after financial crisis in 1997. The Malaysian Institute of Corporate Governance was established in 1998 and subsequentlythe Malaysian Code on Corporate Governance was released in 2000. Oneof the best practices in corporate governance included in the Code is that the board shouldreceive information that is not only financial-oriented but other performance indicators suchas customer satisfaction, product and service quality, and environmental performance. (Esa &Ghazali 2012). Finance Committee on Corporate Governance in Malaysia has defined corporate governance as ‘the process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and corporate accountability.

A few studies have investigated several corporate governance and sustainability reporting issues in Malaysia. Amran and devi (2008)investigate the influence of government and foreign affiliatesparticularly; multinational companies on (CSR) development in an economy,where CSR awareness is low coupled with weak pressure group activism.Saleh et al.(2010) explore corporate social responsibility (CSR) disclosure and itsrelation to institutional ownership (IO) of Malaysian public listed companies (PLCs). Results which confirmed earlier estimations indicated that there are positive andsignificant relationships between CSR disclosure (CSRD) and IO.
Esa & Ghazali (2012) investigate whether there has been a change in the level of corporate social responsibility (CSR) disclosure and to determine whether corporate governance attributes influence CSR disclosure in corporate annual reports of Malaysian government-linked companies (GLCs). They analysed the annual reports of 27 GLCs for two years (2005 and 2007) using content analysis. Multiple regression analysis was performed to identify factors influencing CSR disclosure in annual reports.Their findings showed that the extent of CSR disclosure was increase and the multiple regression analysisrevealed that board size was positively associated and statistically significantwith the extent of CSR disclosure.

## 3. Theoretical framework and hypothesis development

Legitimacy theory is widely used in the literature to explain CSR reporting practices.According to legitimacy theory, a corporation discloses CSRinformation in order to establish or sustain its legitimacy by obtaining the communityacceptance of its actions (Deegan 2002).Legitimacy theory looks at the “society” within which an organisation operates.There are many groups of individuals who may be interested in the organisation’s social and environmental activities.such as shareholders,creditors, employees, customers and suppliers. These groups have been identifiedas stakeholderswho may affect or be affected in the process of theachievement of the organisation’s objectives (Freeman 1984). Stakeholders have thepower to influence managerial strategic decisions in the form of control over resourcesrequired for the survival of the companies(Ullmann 1985). CSR reporting isexpected to be an effective firm management strategy for developing and maintainingsatisfactory relationships with various stakeholder groups within the society so as tolegitimise the firm’s operation. Based on the legitimacy theory,a corporation must disclose more social activities following changes in the marketplace.Therefore, the corporate governance structure of board of directors (board independence, board size, CEO dualityand women director) is expected to play an important function in reducing the legitimacy gap by expanding the disclosure of CSR.Thus, managers are motivated to disclose more information to support their claim on legitimacy(Shamil et al.2014).Many studies adopted this theory to examine the movement of CSR responding toincidents (Donovan 2002; Tsang 1998;Haniffa & Cooke 2005; Esa d Ghazali 2012, Monfardini et al. 2013).

**Hypotheses Development**

This section discusses the development of hypotheses in this study. This study postulates that board of director's characteristics influence the level of sustainability reporting (SR) among firms in Malaysia. The overall theoretical framework of this study is based on the legitimacy theory (Freeman 1984). Seven hypotheses are developed in this study.to determine the effect of board of director's characteristics on corporate sustainability reporting in Malaysia..Therefore, the corporate governance structure of board of directors (board size,board independence, CEO duality and women on board) is expected to play an important function in reducingthe legitimacy gap by expanding the disclosures of CSR. The control variables are profitability, company size and leverage.

**1.Board size**

Jensen (1993) argued that larger board size may result in disagreements while proponentsof board size suggest that more board members would lead to wider exchange of ideas and experiences. On the other hand, larger boards offer more expertise andincreased monitoring capacity (Belkhir, 2009). Large boards could also offer differentbackgrounds, knowledge, different ideas, Different backgrounds and expertise that can inspire firms to undertake sociallyresponsible activities, especially in times of crisis and regulatory changes.Several studies have examined the relationship between board size and CSRdisclosures (Said et al. 2009; Esa & Ghazali 2012; Rao et al. 2012). WhileSaid et al. (2009) did not observe any correlation between CSR disclosures and board size. Rao et al. (2012) and Esa and Mohd Ghazali (2012) both documented a significant positive relationship between the extent of CSR disclosures and board size in Australia and Malaysia, respectively.In the Malaysian context, the Code (revised 2007) does not specify the number of boardmembers rather let the board decides taking into consideration the impact of size on boardeffectiveness. Therefore, the hypothesis is as follows:

Hypothesis 1: There is likely a significant positive relationship between board size effect on CSR disclosure

**2.Board Independence**

The presence of independent directors in the board isconsidered to be a major corporate governance mechanism.It is generally believed that independent outside directorswill strengthen the board by monitoring the activities of themanagement, and ensure that interests of the investors areprotected (Petra 2005).In a corporate governance context, independent directors are expected to perform amonitoring role ensuring that shareholders' interests are taken into consideration whenarriving at board decisions.In Malaysia, the Code requires that independent directors to be at least one-third of the board membership. This requirement can be interpreted as expecting more independent boards to be more effective in its monitoring role. However, the relationship between independent directors andthe extent of CSR disclosure is unclear. (Cheng & Courtenay 2006; Donnelly & Mulcany 2008) found a significantpositive association between independent directors and voluntary disclosure (Cheng &Courtenay 2006; Donnelly & Mulcany2008). Eng and Mak 2003 and Barako et al. 2006) found a negative association between independent directors and the extent ofdisclosure. Haniffa and Cooke (2002) and Mohd Ghazali and Weetman (2006) did not find independent directors to be a significant variable influencing voluntary disclosure in Malaysia. The hypothesis is as follows:

H2. There is a significant positive association between independent directors and the extent ofCSR disclosure in Malaysia.

**3. CEO Duality**

In Malaysia, it iscommon to find that the chairman of the board is also the chief executive officer.Considering this, the Malaysian Code on Corporate Governance recommendsthat there needs to be a balance on the board of directors with at least one-third of the membersbeing independent. Their inclusion is based on (i) their experience and knowledge, (ii) theircontacts, and (iii) their independence from the CEO.Empirical evidence on the relationship between role duality and corporate performance is mixed. Chau and Gray (2010) reported a positive association between dual leadership andvoluntary disclosure. Forker (1992) and Gul and Leung (2004) had reported anegative association between CEO duality and voluntary disclosures previously. Haniffaand Cooke (2002) and Barako et al. (2006) found no evidence of an association betweendual leadership and voluntary disclosures.Based on the above argumentsand empirical evidence, the following hypothesis is proposed:

Hypothesis 3: The separation roles of the CEO and chairman has a significant influence on CSR

**4. Women Directors**

The board diversity is associated with high intensity of social performance and CSR disclosure(Ibrahim & Angelidis 1994). Women directorsare less economically oriented and more philanthropically driven than male directors (Ibrahim& Angelidis 1994). Presence of women directors in board tend to engage in more charities as compared to the firms having smaller proportion of womenon boards (Williams 2003). However, empirical evidence on the relationship between women directors and CSR is mixed.Barako &Brown (2008), Bear et al. (2010) and Zhang (2012) found a positive linkbetween boards with female directors and CSR disclosures. Ntim and Soobaroyen(2013) found no relationship between gender diversity and CSR disclosures and Postet al. (2011) found having three or more women on board did not relate to social andenvironmental disclosures. Based on the above arguments and empirical findings, it ishypothesized that:

H4. There is a positive association between boards with female directors andsustainability reporting.

**5.Company size**

Larger companies can be expected to disclose more CSR information to show or portraytheir corporate citizenship, thereby legitimizing their existence (Mohd Ghazali 2007). According to Cowen et al.1987, larger companies that usually undertake more activities will make a greater impact onsociety and the annual report can be an efficient means of communicating thisinformation (Cowen et al. 1987).Evidence from previous studies supports the existence of a positive relationship betweencompany size and disclosure level (Mohd Ghazali 2007, Said et al.2009).A similar finding was also reported by (Musteen et al.2010, Lu et al.2015). Based on the empirical results of prior studies, a positive relationship is expected betweencompany size and CSR disclosure. The hypothesis is as follows:

H5. There is a significant positive association between company size and the extent of CSR disclosure.

**6. Profitability**

Socially responsible companies can beexpected to be more profitable as these companies would have the necessary ingredients ofa successful company (Belkaoui & Harpik 1989). However, investment in CSRactivities may require additional costs and hence reduce the profits of a company (Balabanis et al., 1998).In the Malaysian context, empirical results on the association between profitability and theextent of CSR disclosure are mixed. Company size and profitability did not have significant relationship (Abdul Hamid 2004; Esa & Ghazali 2012).CSR has a significant positive relationship with profitability (Haniffa &Cooke2005; Said et al.2009). The hypothesis is expressed as follows:

H6. There is a significant association between profitability and the extent of CSR Disclosure.

**7. Leverage**

Firms with high debt levels are expected to incur high monitoring costs. Therefore, managers of high debt firms may seek to reduce these costs by disclosing more informationin annual reports (Ahmed and Courtis, 1999). In other words, highly leveraged companiesare expected to disclose more information to assure creditors that shareholders andmanagement are less likely to bypass their covenant claims. Leverage has been found to besignificant and positively associated with the extent of disclosure by Naser et al. (2002) andFerguson et al. (2002). In contrast, Ho and Wong (2001), Chau and Gray (2002) andsa & Ghazali (2012) did not find leverage to be significantly associated withvoluntary disclosure. Haniffa and Cooke (2005) did not find leverage to be a significantfactor influencing corporate social disclosure. As the empirical evidence is inconclusive, noexpectation is formed regarding the direction of association between leverage and theextent of CSR disclosure. The hypothesis is as follows:

H7. There is a significant association between leverage and the extent of CSRdisclosure.

## RESEARCH METHOD

The first aim of this study is to examine the effect of board's characteristics on corporate sustainability reporting. The dependent variable is the CSR which is measured based on a disclosure index. The sample of this study comprise of 260 companies listed on main board of Bursa Malaysiausing stratified random sampling and data was collected from the company annual report for the year 2016. Thisapproach is consistent with previous studies by Clarkson (2008) and Aras et al.(2010).

**Measurement of Variables**

The dependent variable in this study, corporate sustainability reporting (CSR), is measured based on Global Reporting Initiatives(GRI3) performance indicator. The indicator isconsidered to be a valid and suitable measure of CSR because it contains comprehensive measure of socialand environmental performance (Sutantoputra, 2009).This study adopts CSRdisclosure rating by Sutantoputra (2009) and Clarkson (2008), which has 83 total score of disclosure items for social performance, 95 total score for environmental performance and 19 total score for economic performance.This rating system is developed based on GRI 2002guidelines which categorized the score based on twocategories: hard disclosures and soft disclosures. TheCSR score in this study was obtained by content analysedannual reports of selected sample companies.

**Regression Model**

The aim of the regression model is to provide empirical evidence on the effect of board of directors' characteristics on corporate sustainability reporting. Therefore the dependent variable is the corporate sustainability reporting or CSR. The independent variables of interest include board size (BSIZE), board independence (BIND), CEO duality(DUAL) and women Director(WD) We include three control variables commonly found significant in prior studies examining disclosure level issue, that is, firm size (SIZE),profitability(PRFT) and leverage (LEV). Below is the full regression model utilised in this study:

$$SR_{it} = \beta_0 + \beta_{1SIZAw}n_{it} + \beta_{2INDit} + \beta_{3CEODUALit} + \beta 4WD + \beta 4SIZE_{it} + \beta 5PRT_{it} + + \beta 6LEV_{it} + \varepsilon_{it}$$

Where:

| | | |
|---|---|---|
| $SR_{it}$ | = | IsLevel of CSR for firm i at time t |
| $BSIZE_{it}$ | = | Board sizeand is measured by number of directors on the board (Nazli et al 2010)for firm i shareholders at time t |
| $BIND_{it}$ | = | Board independence is measured by Proportion of INDs to total directors |
| $CEODUAL_{it}$ | = | Duality of CEO is measured by percentage of shares owned by shareholders at 5 % or more (Mustarudin et al 2010) |
| WDIR | | Women director is measured by Proportion of women on the board of directors |
| CSIZE | = | Firm size is measured by Total assets |
| $PRT_{it}$ | = | Profitability is measured by Return on asset (ROA) Nazli et al.201 |
| $LEV_{it}$ | = | Leverage is measured by Debt Ratio |
| $\varepsilon_{it}$ | = | is error term for this regression model |

**Multicollinearity Issue**
To check for multicollinearity issue, Pearson correlation was undertaken among independent variables. Table 1 shows that all variable did not have multicollinearity problem. Multicollinearity issue is considered under control because it is still below 0.80 (Cooper & Schindler, 1998; Griffiths, Hill & Judge, 1993).

**Table 1.** Pairwise Correlation among All Variables (N=100)

| | **CSR** | **Bsize** | **Bind** | **Dual** | **wdir** | **Csize** | **prft** | **Leve** |
|---|---|---|---|---|---|---|---|---|
| **CSR** | 1 | | | | | | | |
| **Bsize** | 0.038* | 1 | | | | | | |
| **Bind** | 0.112 | 0.000 | 1 | | | | | |
| **Dual** | 0.208 | 0.071 | 0.071 | 1 | | | | |
| **Wdir** | 0.000** | -0.028** | 0.074 | 0.071 | 1 | | | |
| **Csize** | 0.035* | 0.000** | 0.002** | 0.341 | 0.233 | 1 | | |
| **Prft** | 0.032 | 0.063 | 0.331 | 0.065 | 0.000** | 0.035* | 1 | |
| **Lev** | 0.45 | 0.519 | 0.165 | 0.081 | 0.566 | 0.530 | 0.089 | 1 |

****,*Statistically significant at the 0.05 and 0.10 levels, respectively.**

**Table 2**Result of Regression Analysis on Independent Variables

| **Variables** | **Pred Sig** | **Beta** | **t** | **Sig** | **Collinearity Statistics Tolerance** | **VIF** |
|---|---|---|---|---|---|---|
| CSR | | | | | | |
| BSIZE | + | 0.145 | 2.428 | 0.010*** | 0.832 | 1.202 |
| BIND | + | 0.110 | 1.921 | 0.050** | 0.893 | 1.120 |
| CEODUAL | NO | 0.073 | 1.322 | 0.187 | 0.979 | 1.021 |
| WDIR | + | 0.456 | 9.928 | 0.000*** | 0.892 | 1.121 |
| CSIZE | + | 0.064 | 1.087 | 0.278 | 0.8601.162 | |
| PRFT | + | 0.010 | 0.167 | 0.860 | 0.877 | 1.141 |
| LEV | + | 0.066 | 1.203 | 0.230 | 0.9911.010 | |

| | |
|---|---|
| F value | 12.434 |
| Adj. $R^2$ | 0.236 |
| N | 260 |

*,**,*** Denote significance at the 10%, 5%, and 1% (two-tailed) levels, respectively

**EMPIRICAL RESULT AND DISCUSSION OF FINDINGS**

Table 2 presents the empirical findings of regressing the independent variables on the CSR. The coefficient of R2 is 26 percent, and the adjusted R2 is 24 percent,indicating a reasonable variance proportion. The table also shows that the p-value of themodel is significant at 0.2 per cent. The values of Tolerance are higher than 0.10, and thevariance inflation factor (VIF) for all independent variables did not exceed 10, indicating thatthere is no multicollinearity problems between the variables (Kennedy 1998). Table 2 alsoshows that board size, board independence and women director have significant effects on CSR disclosure at the 0.01, 0.05 and 0.00 levels, respectively. This means that both variables are considered importantfactors by public listed companies in deciding whether to disclose CSR information.Board size has positive significanteffect on CSR disclosure, and thus supporting hypothesis 1.

This finding is consistent with previous studies (Haji 2013; Said et al., 2009).The same applies for board independence which shows a positive relationshipwith CSR disclosure. Thus, hypothesis 2 is accepted This result is also supported by previousstudies (Esa & Ghazali 2012). Women director also shows a significant positive effect on CSR disclosure. This is also supported by previous literature (Devi et al.2016) Further, the result shows nosignificant relationship between CEO duality and CSR disclosure. It implies that theseparation of function between the CEO and the chairman does not affect CSR disclosure,thus supporting hypothesis 3. This finding is consistent with the studies by Li et al. (2008; Said et al. 2009).. Company size, profitability and leverage are not significant which means that decision to disclose CSR information in the annual reports is not influenced by these three factors.The non-significance of profitability is consistent with Esa & Ghazali 2012 ; Abdul Hamid (2004).

**6.0 CONCLUSION**

The objective of this study was to examine the effect of board of directors characteristics (board size, board independence, CEO duality, and women director) on CSR disclosure by public listed companies in Malaysia. The study found that Board size, board independence and women directors have an impact on CSR disclosure. Aspredicted,CEO duality has no effect on CSR disclosure.The findings of this study can help Malaysian policy-makers and business leadersto formulate strategies to make firms more socially responsible and reputable. It is suggested that the government and policy makers need to make continuous efforts by providing more detailed guidanceregarding CSR behaviours and reporting to assist firms to become sociallyresponsible by communicating their CSR activities effectively to regulatory bodiesand other stakeholders.This study fills a void inthe contemporary research on the influence of board characteristics on CSR reporting in the context of a developing country. This study also adds to theresearch on board characteristics as important governance signals influencingcorporate sustainability reporting by investigating this issue in the context of Malaysian public listed companies.However, it should be acknowledged that the use ofa single year's data for testing the relationships hypothesised in this study canrestrict generalisability of findings. The above limitations and findings of our studycan provide a springboard for further research. For instance, a future study maycontinue to examine CSR reporting, board characteristics and their influenceon corporate social sustainability reporting under different theoretical frameworks and overseveral reporting periods.

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