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# Reflection of The Application of Delphi Method in Developing Corporate Social Responsibility (CSR) Voluntary Disclosure Index

## Syeliya Md Zaini[1], Ayu Ekasari[2]

[1]Faculty of Accountancy, Universiti Teknologi MARA, 42300 Bandar Puncak Alam Selangor, Malaysia, [2]Faculty of Economics and Business Universitas Trisakti, Jakarta, Indonesia
Corresponding Author's Email: syeliya@uitm.edu.my

## Abstract

This paper outlines the experience of applying Delphi's method, using as an example a particular application of the Delphi in the financial reporting, i.e. corporate social responsibility voluntary disclosure in companies' annual reports. Using a review of Delphi method and voluntary disclosure literature, this paper suggests that the application of Delphi method is a beneficial tool in accounting field. The Delphi method is useful in reducing uncertainty through the consensus of panel experts of both users and preparers of the financial reporting. In essence, the Delphi method has potential to provide relevance and in-depth information to accounting researchers. This study outlines the researcher's experience and challenges encountered during the survey and the way to deal with panellists. The main aim of this paper is to offer insights that can support other researchers to foreseen the outcomes when preparing to apply Delphi method within accounting discipline. Furthermore, this paper concludes with a discussion of the value of the Delphi method and provide insights into its limitations.

**Keywords:** Delphi Method, Accounting, Disclosure Index, Panel Expert, Corporate Social Responsibility (CSR)

## Introduction

Delphi technique or also known as Delphi model has becoming prevalent among research studies. This method commonly carries out prior to the used of secondary data in analysis (Habibi et al., 2014; Rowe & Wright, 2011). The Delphi technique is considered as a procedure to conform the selection of research secondary data that is relevant and feasible for a study. Technically by definition, Delphi is a process involves an interaction between the researcher and a group of identified experts on a specified topic, usually through a continuous process of questionnaires. Delphi has been used to obtain a fair consensus regarding future trends and projections using a systematic process of information gathering (Habibi et al., 2014; Hsu & Sandford, 2007). The purpose of this technique is to gain opinions and judgements of experts and practitioners on trends and practices that obtained from secondary data. Nevertheless, this technique is limited by time and distance which are unlikely for the panel and researcher to work together in the same physical place and time (Hsu & Sandford, 2007).

The majority researchers refer the Delphi technique as a method to assist them to seek for solution when dealing with a complex problem (Coy & Dixon, 2004, p.86; Sahari et al., 2018; Calabor et al., 2019). It is a method used to form a systematic group of communication process, in order to gain an effective approach for data collection. For example, constructing a list of index or items for content analysis. Within this technique, it allows the researcher to obtain a series of consensus from a group of panel experts which resulted to identifying and prioritising issues/data/items by the researcher which lead to the development of a framework to recognize the information. One of the primary characteristics and advantages of the Delphi process is the identity of the subject is anonymous which can reduce the effect of dominant individuals when conducting group-based processes. In addition, the risks of data manipulation or coercion also can be reduced because within this technique, the confidentiality of respondent is facilitated by independent electronic communication (Habibi et al., 2014; Ponte et al., 2009; Hsu & Sandford, 2007).

The application of Delphi technique in accounting field remains limited (Coy, 1995; Coy & Dixon, 2004; Sahari et al., 2018). Previous study shows that Delphi technique fall into two camps: (a) those that utilized the method as forecasting tool, and (b) those that use the method to evaluate the relative importance of factors and framework. Hooks et al (2001, 2002); Coy and Dixon (2004); Liu (2014); Samkin and Schneider (2010) are among the empirical studies who employed Delphi technique to evaluate the relative importance of items in financial reporting that reflects to accountability. On the other hand, Garrod and Fyall (2005); Bradley and Stewart (2003); Ilbery et al (2004); Rowe et al (2005) utilized Delphi technique as forecasting tools.

Within financial reporting, particularly voluntary disclosure in companies' annual reports, the problems relating to the level of additional information expected to disclose would seems crucial. Voluntary disclosure in annual reports draws heavily from a wide variety of accounting perspectives and disciplines, including accountability, transparency, earnings management, managers' behaviour, finance, sustainability reporting, strategic management, and corporate governance. Given this rich milieu, the voluntary disclosure reporting has diversity in phenomena, and methodological approaches.

In recent research, Rezaee and Tuo (2017) contended that voluntary disclosure (i.e. non-financial information) can influence companies' earnings quality and sustainability performance reporting. The authors advocated in the view of the voluntary disclosure on alternative methods that have potential to investigate the disclosures released from other sources such as annual reports, website and etc. Focusing on the disclosure information, some studies addressing the disclosure research in various forms of bibliometric perspectives. Studies such as Oliveira and de Andrade Martins (2019); Sahari et al (2018); Worrell et al (2013) contended that evaluating of information items can varied and complicated due to uncontrollable factors that might occur during the research study. This constraint has resulted to subjective, and difficult consensual tasks to establish what type of information and useful items to be incorporated in the report. In this study, the researcher wishes to extend the literature by providing an explanatory research on the application of Delphi method in developing a set of corporate social responsibility (CSR) voluntary disclosure index for a content analysis in companies' annual reports. The aim of this study are:

- to demonstrate on how Delphi technique can provide an objective view which derived from accurate decisions, and
- to exhibit the method's strength and weaknesses so that researchers can make an informed decision on the suitability of Delphi technique for their current inquiry.

This paper is structured into four parts. The first part consists of an overview of Delphi technique. This is followed by a brief background and issue of voluntary disclosure reporting in current environment. Next, the paper will present the research strategy consisting Delphi scoring process in terms of study's sample, variables and measures are presented in Section 3. The research results and findings are presented in Section 4, followed by a conclusion and implications for further research in the final section.

**Literature Review**
**The Delphi Method**
Extant literature acknowledges Delphi technique as a tool to assist in various fields such as program planning, needs assessment, policy determination, and resource utilization. The Delphi technique, originated in early 1950s at the Rand Corporation, can be used for data collection through several ways namely (a) to develop a range of framework or model as alternative, (b) to explore information leading to different judgements, (c) to identify information which may generate a consensus on the part of the respondent group, (d) to correlate informed judgements, and (e) to educate the participants as to the diverse and interrelated aspect of the research topic (Rowe et al., 2005; Skinner et al., 2015).

As mentioned beforehand, Delphi technique contains four basic features. A study by Rowe et al (2005) shows that the four core features of Delphi technique are anonymity, iteration, controlled feedback, and statistical aggregation. *Anonymity* refers to a process which the respondents and interactions between researchers and respondents are free from individual or group influence and conflicts. The respondents are unknown among themselves. *Iteration* is a process that involves multi rounds (a repetitive process) that allow the respondents to modify, or change their answers before confirmed. *Controlled feedback* is a process that requires the researcher to communicate and share with the participants for re-evaluation in individual opinions. The information can be in the form of measurement description (such as percentage, weightage, and statistic). Finally, *statistic group response* refers to a stage which compile the respond a statistical analysis information will be represented in the final iteration process. The information will be in aggregate opinion and judgement for further modification and confirmation.

In the context of application, the Delphi technique will be executed in the following ways. First, the Delphi method employs knowledgeable participants as respondents. The participants often call as 'panel experts'. This technique enables the participants to opine the problem according to their knowledge and experiences. Therefore, Delphi technique is important because the main objective of this approach is to obtain a correct and accurate decision on the topic discussed. Second, all members of panel experts are anonymous and unknown each other throughout the research period. Anonymity between panellists is crucial as a means to prevent the effects of dominant individual influence that can lead to biasness, unethical and replication of opinion/thought (i.e. groupthink) to reach a consensus. Within this process, anonymity allow the panellists to respond to the researcher for alterations of

answers, suggestions and recommendations as well as solutions without fear of reprisals of judgement. Third, a compilation of panellists feedbacks will be utilized and group communication between researcher and panellists is carried out. At this round, the group communication and response are used to develop consensus. At the final process, the lists of consensus are distributed to the panellists for confirmation. The panellist has the opportunity to revise their judgements if necessary. This round also indicates the iteration process involved in defining and confirming the final construction of the model/items/framework.

**Voluntary Disclosure Practices**

Companies in Malaysia are required to disclose mandatory information in the companies' annual reports as per requirements of statutory regulations. Nonetheless, the mandatory information is unlikely to engender disclosure of all information that is perceived important by annual reports users. As for voluntary disclosure, given that companies are not required by law, the decision to provide voluntary disclosure is an option to elect (Zaini et al., 2018).

Voluntary disclosure is an important ways of communication between a company and external stakeholders. The content of voluntary disclosure can create valuable information for the stakeholders as the information can reduce the uncertainty surrounding future companies' performance, financial position as well as the use of resources that can affect the society as a whole (Wang et al., 2013). Moreover, high and quality voluntary disclosure is often related to the internal corporate governance system for accountability and transparency (Akhtaruddin et al., 2009; Sharma & Davey, 2013; Liu, 2014). A number of scholars such as Akhtaruddin et al (2009); Belal et al., (2013); Ghazali (2008); Bakar et al (2011) contended that voluntary disclosure is a mechanism use to reduce criticism about the lack of transparency in a company. According to Ghazali and Weetman (2006), after the 1997 financial crisis, additional information or voluntary disclosure has create awareness among managers when providing the companies' annual reports. Several studies suggest that voluntary disclosure complements the mandatory information in the companies' annual reports, and can restore and improve the degree of accountability and transparency of a company.

As for Malaysia, the voluntary disclosure practices emerged since the execution of two policies i.e. New Economic Policy implementation in 1971, and the adoption of a disclosure-based regime in 1996. These policies were initiated by the government to encourage listed companies to improve their level of voluntary disclosure in published companies' annual reports. Following these two policy changes, the Malaysian Accounting Standards Board with the authority to regulate accounting practices. Simultaneously, the Malaysia Securities Commission has issued the Malaysia Code on Corporate Governance (MCCG) in 2001 in order to encourage best governance practice which is based merely on self-regulation. Along with the best practice, the Bursa Malaysia Securities Berhad also took an initiative to strengthen the new disclosure regime by incorporating disclosure as part of the listing requirements. The numerous revolutions on accounting practices and reporting emerged continuously until Malaysia became fully convergence with IFRS in 2012. Simultaneously under this revolutions process, the enforcement and regulation of accounting practices and reporting promulgated a series of development strategies to enhance disclosure. Although there are some attempts that have been outlined by the regulators for the companies to use as guidelines the management discretion over accounting numbers and information limit the additional

disclosure reporting practices. One of the reasons is the preparers perceived the importance of the information based on their perspective for the benefits of the companies. Differences in views and opinions in disclosure reporting therefore, can impair the quality of accounting reporting. The debates questioning the relevance and usefulness of voluntary disclosure has increased academically.

Study by Akhtaruddin et al (2009); Hashim (2011, 2012); Zaini et al (2018) found that the level of voluntary disclosure by Malaysian listed companies in their annual reports remains low. The low level of voluntary disclosure in companies' annual reports has also considered as one of the causes for low reporting quality. These study show that one of the constraints faced by the annual reports preparers is due to discrepancy of voluntary disclosure reporting in the companies' annual reports. Research found that the amount of information disclosed voluntarily is deemed less than is desirable.

The majority of studies measure the level of voluntary disclosure using a set of disclosure index that is constructed or adapted by the researchers in order to reflect the varying amount of information provided voluntarily in the companies' annual reports (Coy & Dixon, 2004; Hooks et al., 2001; Zaini et al., 2018). The concept of disclosure items measurement often links to the higher or lower points of the scale to measure the level of the disclosure items provided in the companies' annual reports. For the purpose of this study, the level of voluntary disclosure is measured through a set of CSR voluntary disclosure index constructed using Delphi approach.

**Research Strategy**
The Delphi technique in this study was structured in three different ways (a) preconsultative procedures and pilot test (seeded list), (b) Delphi scoring processes (i.e. narrow down and constant sum), and (c) construction of voluntary disclosure items for coding.

*Preliminary process for voluntary disclosure items*
The selection of preliminary voluntary disclosure items involved two procedures. The first involved a review of previous national and international disclosure studies. The second stage entailed an examination of Malaysian companies' annual reports to identify items that may not have been considered in previous studies. This process yielded a list of 13 CSR items. These items were then used in a preconsultative procedure with 12 stakeholders to refine the items included in the voluntary disclosure list.

*Preconsultative Procedure*
The main aim of this preconsultative process is to obtain external validation on the draft disclosure items (Coy & Dixon, 2004; Cooke, 1992; Linsley & Shrives, 2006; Ho & Wong, 2001a). Furthermore, the preconsultative in this research serves as a basis to enhance the accuracy of the measurement instruments (i.e. disclosure index). In this study, a consensus on investigative approach through a pilot study can enhance the validity of the items used as measurement instrument in the content analysis.

The preconsultative process involved a survey and interviews with government agencies, professional accountants, corporate legal representatives, fund managers and university professors. Two representatives from government agencies, two analysts, one fund

managers, two accountants, two corporate consultants (each from conventional and Shariah[1] compliance sector respectively), two representatives from corporate legal compliance, and one professor were involved in this pilot study. Given Malaysia is recognized as one of the Islamic hubs for Shariah compliance products and services, the disclosure items provided in this research are also inclusive of an Islamic perspective for stakeholders' review. The individual selected were intended to reflect the subjective nature of this exercise to capture and use stakeholders' opinions.

The participants were contacted through email, along with a follow-up telephone call to check their availability and willingness to participate in the pilot study. Once the participant confirmed and agreed to participate in the pilot study, the draft of voluntary disclosure items was sent to them via email. Each participant was required to complete the survey questionnaire, which consisted of the initial disclosure items, by scoring each item and providing comments as well as opinion with regard to clarity of description for each item. Each participant was required to complete the draft of the survey questionnaire in order to check the validity and reliability of the questionnaire structure.

Subsequent to having received the responses, those participants were contacted for further interviews and discussions on the survey questionnaires and voluntary disclosure items. Any unavailable respondents were substituted with others from the same or another organization of similar background and/or profession to complete the survey and interview.

During the preconsultative duration, the questionnaire consisting of 13 (see Table 1) CSR disclosure index was distributed to the participants. The primary reason for this exercise is to validate and identify disclosure items in the questionnaire which allow the researcher to remove irrelevance items from the set. The validation process also enables the researcher to test whether the description of each item is clear and understandable (Gunawan, 2007; Kothari, 2009; Cooke, 1992; Marston & Shrives, 1991). The final result obtained from the validation resulted to 17 CSR voluntary disclosure items. The set of 17 voluntary items were then used for Delphi scoring process.

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[1] Shariah is a term use for Islamic law

Table 1

*CSR voluntary disclosure items*

| 1 | CSR policy, a statement of compliance, and graphic images |
|---|---|
| 2 | Discussion of participation in government social campaigns |
| 3 | Discussion of community programs carried out (including health/education/charity) |
| 4 | Discussion of environmental protection program(s) implemented |
| 5 | Discussion of support rendered for public/private action designed to protect environment. |
| 6 | Corporate policy on employees' benefits and training. |
| 7 | Discussion of employees' benefits and training. |
| 8 | Breakdown of workforce by line of business distribution or categories of employees by level of qualification. |
| 9 | Amount spent on employees' benefits and training |
| 10 | Retrenchment/redundancy information |
| 11 | Information about employees' workplace safety |
| 12 | Discussion of health and safety standards |
| 13 | Cost – average compensation per employee |

Results from the preconsultative session had further add 5 voluntary information suggested by participants, and some of the items were suggested to be adjusted (i.e. removed and separated) during the preconsultative phase. For example, item such as 'cost – average compensation per employee' were removed, and 'discussion of employees' benefits and training' were suggested to be separated into two information. Table 2. shows the additional CSR items suggested by the preconsultative panellists.

Table 2

*Additional CSR items suggested by the preconsultative panellists*

| 1 | Riba/gharar/maysir activities |
|---|---|
| 2 | Zakat |
| 3 | Sadaqa/donation |
| 4 | Waqf |
| 5 | Qard Hassan |

The information suggested were then carefully evaluated and discussed further with the panellists. Table 3 shows the 17 redefined list of CSR voluntary items for Delphi method.

Table 3

*Redefined CSR voluntary disclosure items from preconsultative process*

| 1 | CSR policy, a statement of compliance |
|---|---|
| 2 | Discussion of participation in government social campaigns |
| 3 | Discussion of community programs carried out (including health/education/charity) |
| 4 | Discussion of environmental protection program(s) implemented |
| 5 | Discussion of involvement in public/private action designed to protect the environment. |
| 6 | Corporate policy on employee's benefits |
| 7 | Corporate policy on employees' training |

| 8 | Discussion of employees' benefits |
|---|---|
| 9 | Discussion of employees' training |
| 10 | Breakdown of workforce by line of business distribution or categories of employees by level of qualifications |
| 11 | Amount spent on employees' benefits and training |
| 12 | Retrenchment/redundancy information |
| 13 | Information about employee workplace safety |
| 14 | Discussion of health and safety standards |
| 15 | Sadaqa/donation (description on the recipients and purpose) (if applicable) |
| 16 | Waqf (description on the policy and amount spent) (if applicable) |
| 17 | Qard Hassan-borrowing without profit and interest (details on the policy, accounting treatment, and recipients) (if applicable) |

### 3.3 Selection of panel experts for Delphi scoring

This Delphi panel further validated the voluntary disclosure items drawn from the preconsultative process in the initial stage for their disclosure importance in annual reports (Hooks et al., 2001, 2002; Coy & Dixon, 2004; Rowe & Wright, 2011). The choice of panel experts is a vital step to ensure the relevant, reliable and the breadth of knowledge is represented among panellists. To build an appropriate cluster of panellists, two important factors have to consider: (1) defining the relevant expertise (i.e. criteria for skills, and knowledge of the subject matter), and (2) identifying individuals with the relevant knowledge (i.e., experience and roles in the selected areas).

In the context of criteria used to guide the selection of Delphi panellists, the individuals are considered eligible to participate in a Delphi survey if they have somewhat related backgrounds, knowledge and experiences concerning the target issue. The aim is to establish a fair consensus based on their capability to contribute helpful inputs, and are willing to revise their initial judgements for the purpose of attaining consensus. As quoted by Hsu and Sandford (2007, p.3), the individuals within three categories; (1) the top management decision makers who will utilize the outcomes of the Delphi study; (2) the professional staff members together with their support team; (3) the respondents to the Delphi questionnaire whose judgements are being sought. To further the selection process, a matrix for the identification of experts was developed to support this selection process (see Table 4). The matrix was used to populate the panellist selection within the three categories stated beforehand in order to attain a greater understanding on the type of information users expected.

Table 4
*Panellists selection matrix*

| Categories | Sector(s) | Division | Criteria selection |
|---|---|---|---|
| Preparer | • Government <br> • Government agencies <br> • Private / public listed companies | Finance/Accounting/Audit/Tax/Corporate governance | *reporting knowledge <br><br> *professional background <br><br> *engagement with preparing and/or analysing annual reports in their work (min. 10 years) |
| User | • Government agencies <br> • Analysts <br> • Business consultant <br> • Regulatory bodies/authorities <br> • Academics <br> • Media | Finance/Accounting/Audit/Tax/Corporate governance | |

The interview respondents for this study were identified in three different ways: (a) identified by the researcher on the basis of corporate contacts, (b) introduced by key respondents, and, (c) through snowballing, that is, one respondent leading to another potential respondent (refer to figure 1). The panellists were selected on the basis of their reporting knowledge, professional backgrounds, and engagement with preparing and/or analysing annual reports in their work over a period of at least 10 years.
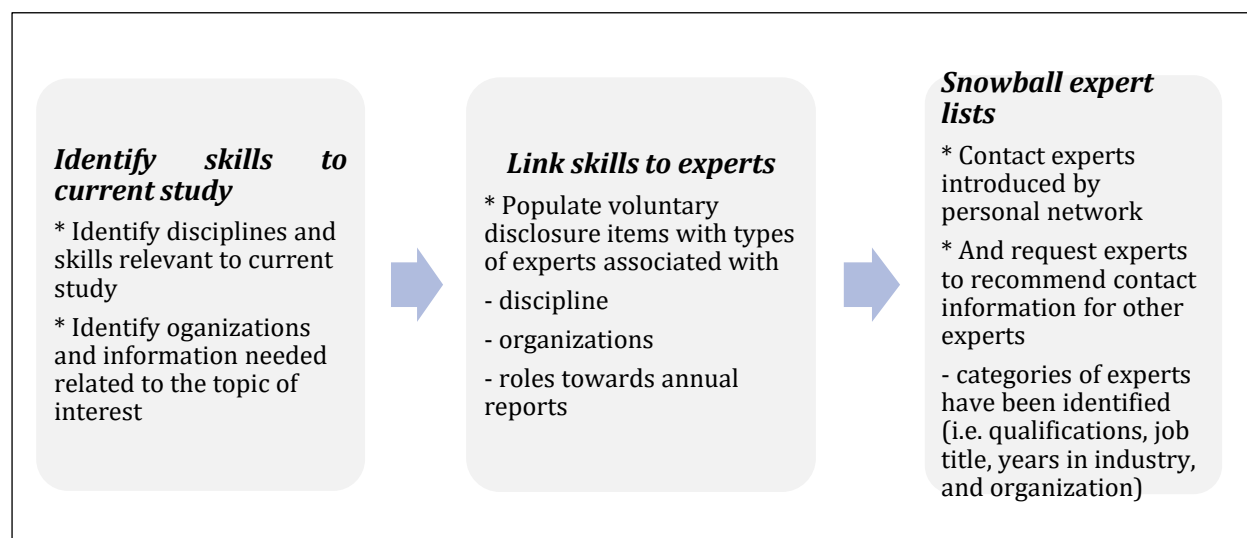
Figure 1: Procedure for selecting panellists

Table 5 shows the profile of the panel experts that were involved in the Delphi scoring. The Delphi rating process were carried out through two form of communication, (a) face-to-face meeting, and (b) direct email interaction, using questionnaire survey platform to collect and aggregate responses.

Table 5
*List of panellists selected in the study*

| Panel experts | Classification | No. of participants |
|---|---|---|
| Practitioners | Analysts<br>Top level executive | 7<br>19 |
| Government | Regulators<br>Government agency | 4<br>4 |
| Academics | Researchers | 3 |
| Business owners | Top level executive<br>Investors | 2<br>1 |
| Media | Top level executive | 1 |

**Delphi Scoring Process**
*Delphi first rating and response process (narrow down)*
The first Delphi scoring rating process was entirely carried out through face-to-face meeting. At this stage, the panel experts were given a set of 17 voluntary disclosure items, in questionnaire form. This process is crucial as to obtain a consensus to identify the list of voluntary disclosure items that should be disclosed in the companies' annual reports (i.e. process of remove and/or add voluntary disclosure items).
In this first round, two meetings were conducted as a group session, with 4 people in each group and the remaining 32 panel experts were met individually. The rating process requires

each panel to rate these 67 items on the scale of 1 to 5 where 1 is deemed, *should not be disclosed*, 2 is *can be disclosed but is of minor importance*, 3 is *intermediate important*, 4 is *should be disclosed and item is important*, and 5 is *very important and essential to be disclosed*. The scoring scale was explained to the Delphi members before they started the process. A score of 0 was to be given for items which the panellist thought not applicable (Coy & Dixon, 2004; Marston & Shrives, 1991; Singleton & Globerman, 2002; Ho & Wong, 2001b; Chau & Gray, 2002). An illustration of the Delphi scoring process is presented in Illustration 1. The given illustration shows the Delphi scores for Corporate social responsibility (CSR) information that preferably presented in the company's annual reports. The process indicates thirty-one per cent of the 41 panellists scored CSR at 4 (important), 30% deemed it averagely important (3), and 21% scored the items between 0 and 2. Only 17% chose very important for the CSR category.

Within this process, the panellists were encouraged to comment on existing voluntary disclosure items in the survey, and suggest to add voluntary disclosure items. Data from the scoring process were gathered to determine the importance of the disclosure items. Results from the Delphi panels' scoring process were calculated to identify the average score for each item's importance (Liu, 2014; Hooks et al., 2002; Coy & Dixon, 2004). Through this process, the panels suggested several item modifications and refinements to the list during the Delphi process. This phase determined a list of 15 CSR voluntary disclosure items. At this stage, new item(s) may be added or removed as recommended by the panellists.

### Delphi second rating and response process (constant sum)

In the Delphi second round process, additional follow-up calls were made to confirm and thus ensure answers across panels (Hooks et al., 2001; Coy & Dixon, 2004). A total of 15[2] voluntary disclosure items were provided and sent to each panel member. Most of the Delphi members chose email, rather than another meeting, due to time constraints. The 15 items were laid out in similar questionnaire form, and panellists were asked to apply a similar scoring concept by adding comments and suggestions if they had changed their opinions after considering the modified items. The second round Delphi process produced 40 responses (i.e., all of the 40 first round respondents completed the second round). In order to confirm the answers received via email, telephone communication was also used. The result from the second round indicated some minor changes such as syntax errors, and changes in the categorization of some items.

In addition to this process, panellist were asked and presented a practical decision situation which they were asked to score the voluntary disclosure categories. Next, discussion was made on the categories scores based on their knowledge, and experiences to encounter the issue of insufficient disclosure reporting in their daily tasks. The second Delphi process took a longer time compare to the first round since the majority of the panellists tend to repeat fairly generic lines of arguments based on the results in first round of Delphi method. The panellist were asked about the rationale and reasoning behind their judgements at this stage.

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[2] Report from first round of Delphi data produced 15 items, i.e., 17 from the scoring list, 3 items were withdrawn because of low score, and 1 additional item.

Finally, the panellists were asked to score the items on a scale of 1 to 5 in order to identify influential and useful criteria for ways to present disclosure. Answers to scoring sheet (i.e. voluntary disclosure items) from Delphi method were quantitatively analysed. The sum of score for each voluntary disclosure items were calculated to determine the importance of each disclosure item in their respective categories. The average score for level of importance will determine the final list of the voluntary disclosure items. Items that deem not important were removed. Further communication was carried out via email, and telephone in order to confirm the modified list of the voluntary disclosure items. All the panellists responded well although it took some time to complete the confirmation. This process resulted to 15 final CSR voluntary disclosure items. To illustrate the second round of the Delphi procedure, the responses of panel on the additional CSR information to be added in the list is presented in Table 6.

Table 6
*Average score for the level of importance on CSR additional information in 2nd Delphi process*

| Categories | Item | Frequency | | | | | | Average score for level of importance |
|---|---|---|---|---|---|---|---|---|
| Corporate social responsibility | Retirement's scheme through foundation or other means | 0 | 1 | 2 | 3 | 4 | 5 | 3 – Average important |
| | | 0 | 3 | 3 | 16 | 18 | 0 | |

**Findings from Delphi technique in the development of CSR voluntary disclosure index**
The weightage process using Delphi technique involved both quantitative and qualitative data gathering and analysis. The quantitative technique is used to process and analyse the weight that have been assigned by the panellist. On the other hand, qualitative complement the analysis to solicit the development of disclosure index at the beginning and final process for verifying the disclosure items (Rowe & Wright, 2011). The main statistics used in Delphi method is the highest average score (mean) for level of importance of the voluntary disclosure items (Hsu & Sandford, 2007; Ponte et al., 2009; Hooks et al., 2001; Calabor et al., 2019; Sahari et al., 2018). The use of mean in this study is to measure the central tendency of desired level of opinion.

Based on the two round of Delphi process, the respondents were of the opinion that these items are considered vital to portray the image and reputation to the interested stakeholders. In addition, the qualitative approach in the second round of the Delphi method contributes four important facts. First, CSR disclosure related to financial information provides macro credentials with the supplementary of organization's corporate strategic, and risk disclosure in the company's annual reports. The CSR information represents the quality and depth of the information on the activities executed by the company by integrating the financial and risk elements in their disclosure. Second, culture in the aspect of religious and ethnicity is one of the factors that can mould the level and style of the voluntary disclosure. Within the Islamic values, the number of population and economy cycle in Malaysia provides a substantial effect on the organization's overall operational and management aspect. For example, certification of the company's product (i.e. Halal), and Zakat (Islamic tax). Third, the regulatory system and corporate governance in Malaysia enforcement are important in directing the listed companies to maintain and to improve the level and quality of CSR voluntary disclosure in companies' annual reports. The regulatory factor also contributes to the existence of peer

coercive environment in voluntary disclosure reporting. The panellist argued that companies in Malaysia tend to disclose additional information because these companies are pressured to highlight their performance in order to attract institutional investors, while maintaining and/or improving their reputation and image. Fourth, the Delphi process had identified the importance of voluntary disclosure reporting coordination and framework. Finally, the variation of CSR voluntary disclosure in company's annual reports is also influenced by the ownership of the company. The panellist informed that the majority of listed family-owned company are less likely to disclose more information because of the family owned internal and social values. In a similar view, the family-owned company are deemed to be less resilient on reporting CSR activities instead, maintaining their reputation and family wealth being.

**Analysis of Delphi Process**

The experience using Delphi technique for constructing voluntary disclosure index highlights some important strengths of the method. The important of the Delphi technique can be in fivefold: (1) as a bridge between the practice (application) and research, (2) uncover the practice issues which lead to future research agendas, (3) as a platform for exploratory analysis for theory building, (4) provide a breadth views for in-depth analysis, (5) tailored the research data collection that suits the researcher needs.

The Delphi technique has been used as a tool to reveal the issues and to derive consensus among a panel of experts. A number of studies (see for example Ponte et al., 2009; Habibi et al., 2014; Baldwin & Trinkle, 2011; Skinner et al., 2015) using Delphi technique have confirmed and evidenced that the technique tightly linked to both research and practice. The technique can provide greater information gathering and assurance from the practitioners who had fulfilled the panel experts' criteria. The Delphi technique performed in this study had addressed a number of areas of topics within disclosure reporting in Malaysia from the panellists explanation and justification for their consensus. The common explanation provided by the panellists is directed to the focal topic which related to industry concern and applied research. The list of panellists consisting both academic and practitioners had reached a consensus that suggests some applied solutions towards identifying issues in voluntary disclosure practices. Within this context, Delphi technique creates an opportunity to provide researchers with a research agenda on how to approach a specific phenomenon which can enable and direct researchers in their study.

A theory can be developed using Delphi technique outcomes (Skinner et al., 2015). Studies that have utilized Delphi technique have confirmed that this method provides a novel research because it consists of a combination of discussions outcomes and results from experts with direct experience of a topic. In other words, Delphi technique employs an abductive reasoning which enable a researcher to make logical reasoning and to create a theory. In this study, the data collections via survey, and questionings the panellists along the refinement in finalising the list of voluntary disclosure items represents an abductive approach which resulted to a list of voluntary disclosure index which is vital to create a viable theoretical framework for voluntary disclosure practices. The strength of Delphi method is that researcher does not begin with assumptions on the driving factors of a particular phenomenon, instead the method allows the researcher to be informed further on the phenomenon. Ultimately, the information gathered from comments and justifications enable the researcher to suggest a theory that can fits the phenomenon.

Information gathered during the survey and interviewing process using Delphi method had exposed the researcher with further understanding and broader knowledge on the research areas. Additional data contributed by the panel experts can lead the researcher to consider and study on the possible related aspect on the phenomenon. Further explanation on the findings from the data collection process can complement the analysis with logical reasoning from external panel experts' perspectives. Finally, it is also important to note that Delphi method enable a researcher to balance the issue investigate between rigor and relevance perspective. The Delphi method supports researchers by providing an opportunity to engage directly with the practitioners to investigate the topic timely and when concern raised.

**Conclusions**

This paper aims to describe a particular application of the Delphi method on the development of CSR voluntary disclosure in Malaysia listed companies' annual reports, and reflect the benefits of using the method based on this experience. The Delphi method shows that it is a beneficial tool for forecasting, identifying, and confirming on issues analysed, and framework specification. The Delphi method in this study has demonstrated the opportunity of the researcher to have a better understanding on the importance of CSR disclosure in companies' annual reports, the variation of level of CSR disclosure, and identifying the impact of those voluntary disclosure in making economic decision. This study also indicates that the method can be useful for identifying pitfalls that require remediation. This method allows consultation of experts from different background and sectors within similar areas, acting in different roles although they are not in a single place at the same time.

As with any other method, the Delphi method is also without its limitations. The limitations using this method include administrative effort which requires researchers to approach the panellists and access their background. The process often subject to the researcher and panellists time commitment. The researcher needs a thorough check on the respondents' outcomes, and stratifying the information as well as to synthesis the previous round's feedback, redefine and validate for final confirmation. As for the panellists, the validation process which comprises of two rounds requires a significant amount of time to the panellist for their professional judgement when making decision on the items weighed, reasoning and validation.

Within the Delphi method, panel satisfaction is also a limitation and challenge to the researcher. Since the panellist are anonymous expert panels, some panellists can be patronised by another powerful panel when conducting the face-to-face interview in a group. It is noted that the panellists feel uncomfortable with compelling participant's opinion during their session and has lack of opportunity to share their opinions. Similarly, a study by Worrell et al (2013) found that panel experts tend to have lower social-emotional and detached from the issues discussed when there is lack of face-to-face interview. Thus, individual face-to-face interview with panellists can improve the results for Delphi method.

Validation of the items for confirmation can be a challenge to both researcher and panellists. The approach for validation of the items can be clear and objective if the study utilised technologies. However, professional judgement can compromise the objectivity of the validation due to repetitive confirmation requires. Within this study, the researcher had employed in-depth interview individually with the participants in order to complement the

judgement made by the panellists onto the CSR disclosure items. The interviews are also used to ensure the overall objectives of the research is achieved, and to balance the information conciseness and relevance in the content analysis. The benefits and drawbacks presented in this paper provides further consideration for future research to improve, while taking the advantage of Delphi's method potential in accounting research areas. It is hope that more accounting researchers will view the Delphi method favourably and consider it in their toolkit.

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