Comparative Study of Business Excellence Enablers between Small and Medium Enterprises and Multinational companies: A TQM Survey Result

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***Abstract*— Business excellence (BE) model is a very crucial tool for organisations to improve their business performance. However, SMEs seems to face issues in implementing business excellence compared to MNCs due to less resources and exposure on BE. Thus, understanding the appropriate business excellence enablers to be implemented in order to achieve an outstanding performance is crucial for SMEs and MNCs. This study aimed to determine the level of business excellence enablers amongst SMEs and MNCs. There were six enablers utilized in this study which were; (1) Leadership, (2) Strategic Planning, (3) Customer Focus, (4) People, (5) Process, and also (6) Information. A total population of 100 respondents have been selected. Finally, 60 respondents have replied for further analysis. Random sampling technique was used during the distribution of questionnaires and SPSS was also applied in this study to analyse data and generate outcomes. Based on research outcomes, customer focus practices had the highest mean (Mean=6.29) which classified as high level. Furthermore, comparison analysis of BE enablers between SMEs and MNCs has been conducted. The result showed that there was no significant difference between SMEs and MNCs except information but MNCs mean ranks were higher compared to SMEs. This research study is also conducted as a guidance for both SMEs and MNCs to improve their business performances in the future.**

***Keywords*—** *Total Quality Management, SMEs, business Excellence,*

1. Introduction

The implementation of business excellence (BE) is a very crucial action for almost every organisation in this whole world [1][2][3][4]. Business excellence models has helped companies in improving their business performance. Many countries around the world developed their own business models to assist their organisations in their nations with measuring their performance [5]. BE model helps to guide companies towards continuous improvements, delivering demanding and practical tactics to identify strengths and opportunities [6][7], co-ordinating numerous new initiatives, educating staffs on the behaviours of successful organisations, providing an external measure of performance and finally allowing companies to become 'world class'[8].

Total Quality Management (TQM) today is currently modernized into a model which is widely known as the Business Excellence Model [9]. One of the first and earliest excellence model recognized worldwide was the Deming Prize which was

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introduced by the JUSE (Union of Japanese Scientists and Engineers) in 1951, the Malcolm Baldrige National Quality Award (MBNQ) which is introduced by the USA in 1987, the European Foundation for Quality Management (EFQM) model introduced in 1992, and the Singapore Quality Award (SQA) which is controlled by SPRING Singapore [10]. Malaysia introduced three business excellence models that have been recognised by the Malaysia Productivity Corporate namely; (1) The Malaysia Productivity and Innovation Class (MPIC), (2) Quality Management Excellence Award (QMEA), and (3) Prime Minister Industry Excellence Award (PMIEA) [11]. The most common feature to differentiate between large and small organisations is the number of labourers [11]. Therefore, the limit of employment in SMEs is 250 employers but it may vary according to different countries. In Malaysia basically SMEs are distributed into two major sectors which are manufacturing and service sector [12]. A definition is also given by Organization for Economic Co-operation and Development where (OECD) states that a multinational corporation is other bodies that can have public, private or combined ownership listed under one, two or more countries and all of these companies are related in some way to enable them to operate their activities in different ways [13]. Several authors also mentioned multinational corporation as a company that with the help of its foreign representative from different countries, exports, distributes and certify its products [14]. According to Mejlumyan [13] as well, MNCs happened to be the biggest portion of known companies worldwide as consumers are able to identify them instantly for their names, products and services are unique and trendy.

Apparently, smaller enterprises have different types of quality management model approaches compared to multinational corporations [4]. In smaller organizations or basically the SMEs, these small and medium sized organisations are not responsive and flexible towards their quality management [17]. Therefore, these quality practices circumstances occurred because the implementation of business excellence model is more practicable for larger organisations that had been established for a longer period of time for this case particularly, the multinational companies but not to SMEs [16]. This is because SMEs have less resources and exposure towards business excellence model [4][17]. Malaysian SMEs are still losing their track on achieving competitive advantage in the global business environment due to their low productivity and poor performance [17]. Malaysian SMEs also known to have difficulties in open economic trade which mostly dominated by multinational companies [18]. In addition, only little research review regarding SMEs history on excellence practices towards BE compared to multinational companies [19], [20]. In addition, less studies have been conducted on critical factors of excellence models among Malaysian SMEs [21]. Although there are numerous studies in quality management in Malaysia, the study on the implementation of quality management in SMEs is still lacking in previous work [18]. Most of the research focused on the large-scale industries of manufacturing sector while SMEs is different with larger organizations in term of management style, production processes, capital and the ability to negotiate [18][22][23]. First, this study will identify the level of BE enablers practices amongst SMEs and MNCs. Secondly, this study attempts to compare BE enablers practices between SMEs and MNCs.

The research hypotheses are formulated as follows:

H1*: There is significant difference of BE enablers practices between SMEs and MNCs.*

The research question of this study are:

i. What is the extent level of BE enablers practices?
ii. What is the differences of BE enablers between SMEs and MNCs practices?

2. Methodology

In this section, descriptive analysis and Spearman correlation analysis are used to analyse the data for the purpose of understanding the extent level of BE enablers, the difference between BE practices between SMEs and MNCs and the level of correlation among variables. In order to facilitate the data analysis process and prepare the data for analysis, the data was screen and out of the 100 questionnaires distributed, only 80 were retrieved, and out the 80 that were retrieved, 20 of them were incomplete and damaged, thus making the total useable questionnaires for analysis purposes to become 60. It represented 60.0% of response rate. Statistical Package for Science Social (SPSS) was used to analyse the data being collected. Descriptive and correlation test have been carried out to answer the research questions. Pearson and Spearman test have been used for correlation test.

3. Result

Demographic analysis section explains the demographic background of the companies and respondents. Table 1 shows that the demographic analysis which consists of seven aspects; operation years, company award and department. A total of 60 questionnaires have received. The results obtained were analyzed as shown in Table 1.

Table 1. Summary Results of Demographic Analysis

	Frequency	Percentage (%)
Operation Years		
5 years below	22	36.6
5-10 years	22	36.6
10-15 years	10	16.0
15 and above	6	10.0
Total	**60**	**100.0**
Company Award		
Industrial Excellent Award	17	28.3
State Award	16	26.6
National Award	14	23.3
International Award	4	6.6
None	9	15.0
Total	**60**	**100.0**
Department		
Prod Department	17	28.3
QA Department	40	66.6
Others	6	5.0
Total	**63**	**100.0**

Descriptive analysis is a technique which is used in describing the extent of business enablers' practices. The data is computed into means and standard deviation. Mean value obtained provides the average of respondents answered based on questionnaire [24][25]. While standard deviation is used to measure the dispersion of the data in which how close the entire set of data is to the average value. The lower the value of standard deviation, the closer is the data to the average value. Table 2 shows the level of mean measurement which is ranked by the central tendency level.

Table 2. Level of Mean Measurement

Mean Range	Central Tendency Level
High	5.00-7.00
Moderate	3.00-4.99
Low	1.00-3.00

A. Descriptive analysis: BE enablers

Referring to Table 3, all six enablers obtained high and recommended value of mean score average. The highest total mean score was obtained by customer focus with 6.29, followed by process with mean of 5.84 whereas the lowest mean was obtained by information with 5.24. Individually concluded, the highest mean score for SMEs was obtained by customer focus with 6.16, followed by leadership with 5.83 and the lowest was information by obtaining only 5.00. As for MNCs, the highest mean was achieved by customer as well with 6.35, followed by process with 5.90 and information which obtained the lowest mean of 5.37.

Table 3: Distribution of Mean Scores

Variables	Standard Deviation for SMEs	Standard Deviation for MNCs	Total Std.Dev for SMEs and MNCs
Leadership	0.627	0.873	0.792
Planning	0.621	0.637	0.647
Customer	0.717	0.585	0.635
People	0.958	1.107	1.053
Process	0.570	0.671	0.636
Information	0.651	0.749	0.733

Normality test is used to determine whether parametric test can be used or not. Normal data refer to data that are drawn from a normally distributed population. This distribution is perhaps the most vital and frequently used distribution in both theory and application of statistics. In this research study, there are two main normality test that are used to calculate the normality of data which are Kolmogrov-Smirnov test and Shapiro-Wilk test. Kolmogrov-Smirnov Test is used if the sample size is more than 50 whereas the Shapiro-Wilk Test would present better findings if the sample size is 50 or less than 50. The result shows that all variables which p-value is less than 0.05, means the data is not normal as shown in Table 5.

Table 5: Normality Test

	Kolmogorov-Smirnov[a]			
Variables	Statistic	df	Sig.	Results
Leadership	.238	60	.000	Not Normal
Planning	.149	60	.002	Not Normal
Customer Focus	.181	60	.000	Not Normal
People Focus	.175	60	.000	Not Normal
Process	.246	60	.000	Not Normal
Information	.122	60	.027	Not Normal
Business Performance	.144	60	.004	Not Normal

Table 6 shows the standard deviation value obtained for both SMEs and MNCs.

Table 6: Distribution of Standard Deviation

Variables	Standard Deviation for SMEs	Standard Deviation for MNCs	Total Std.Dev for SMEs and MNCs
Leadership	0.627	0.873	0.792
Planning	0.621	0.637	0.647
Customer	0.717	0.585	0.635
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Process	0.570	0.671	0.636
Information	0.651	0.749	0.733

A. Descriptive analysis: Mann-Whitney U Test

Based on Table 7 above, it is shown that all of the enablers practiced are not significant between SMEs and MNCs (P>0.05) except for planning and information (P<0.05). Referring to the table, in terms of leadership, it can be seen that MNCs had higher mean rank (MR=30.86) compared to SMEs (MR=29.83). It can also be concluded that SMEs and MNCs was not statistically significant (U=395.500, P>0.05). This was then followed by the second enabler, where it was recorded that MNCs had higher or better strategic planning (MR=33.91) compared to SMEs (MR=24.17). In conclusion, strategic planning between SMEs and MNCs was statistically significant (U=276.500, P<0.05). Next, for customer focus, MNCs once again achieved higher results (MR=31.90) compared to SMEs (MR=27.90). SMEs and MNCs are found not statistically significant for the third enabler as well (U=355.000, P>0.05).

Furthermore, for the fourth enabler MNCs (MR=33.04) had higher people focus compare to SMEs (MR=25.79) and it can be concluded that people focus between SMEs and MNCs was not statistically significant (U=310.500, P>0.05). Next on the list is the fifth enabler, where MNCs had higher process rank (MR=32.53) than SMEs (MR=26.74). Still, it was found that both SMEs and MNCs were not statistically significant (U=330.500, P>0.05). Lastly, for information MNCs obtained higher result (MR=33.78) compared to SMEs (MR=24.40). It can also be concluded that both SMEs and MNCs were significant (U=281.500, P<0.05).

Table 7: Mann-Whitney U test

Business Enablers	Mean Rank for SME (N=21)	Mean Rank for MNC (N=39)	Mann-Whitney U	Significance Value (P-Value)
Leadership	29.83	30.86	395.500	0.826 **Not Sig**
Strategic Planning	24.17	33.91	276.500	0.038 **Not Sig**
Customer Focus	27.90	31.90	355.000	0.392 **Not Sig**
People Focus	25.79	33.04	310.500	0.123 **Not Sig**
Process	26.74	32.53	330.500	0.213 **Not Sig**
Information	24.40	33.78	281.500	0.046 **Sig**

4. Discussion

Objective 1: To identify the extent level of BE enablers.

Firstly, to identify the extent level of BE enablers, descriptive analysis had been applied. Mean and standard score average were identified in this objective. The results confirm that customer focus is a very essential BE enabler that gives significant influence or impact on business performance by obtaining the highest mean score average of 6.29. The second highest BE enablers that give significant impact to business performance is process with its mean score average of 5.84. This is then followed by leadership, people and strategic planning with their mean score; 5.76, 5.75 and 5.61 correspondingly. Meanwhile, the lowest mean average score is obtained by information. This findings has suggested that there are literally two main enablers that were customer and people focus.

According to Yunoh & Ali [24], customer have direct effect toward the organisational financial performance. Jankal & Jankalova [25], stated that an excellent people handling resulted from organisation that establish and issue full potential of their people and empower their essence in discussion and related activities.

Objective 2: To compare BE enablers practiced between SMEs and MNCs.

The second objective of this study is to compare business excellence enablers practiced between SMEs and MNCs. For this objective, since the data is not normally distributed and it is to compare from two independent groups, the Mann-Whitney U Test had been used. Based on the analysis results, it is found and statistically proven that all of the BE enablers practices were not significantly different to both SMEs and MNCs. However, the higher mean rank obtained by MNCs showed that MNCs practiced BE enablers in a better procedures compared to SMEs. It is believed that there is only slight difference in the way of BE practices between SMEs and MNCs. According to Raharjo [25], there is a need to developed an appropriate business models because business excellence is practiced differently in companies of different sizes. Besides that, much uncertainty still exists about the relation between business enablers practiced and organizational performance between MNCs and SMEs in manufacturing sector [21].

5. Conclusion

Customer focus practices had the highest mean which classified as high level. Comparison analysis of BE enablers between SMEs and MNCs showed that there was no significant difference between SMEs and MNCs except information but MNCs mean ranks were higher compared to SME. Authors suggest to examine moderator effect of size of company as moderator between BE enables towards business performance in future study.

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