ABSTRACT

Small Medium Enterprises are the main Malaysian economic contributor struggling to identify the best practice concept compatible to their environment. Although lots of researches have been conducted, suggesting that appropriate best practice procedures are contingent upon company type, none of these researches have tried to develop a principle or model for this sector. This paper tries to represent the factors which are pertinent to the best practices based on mix-model approaches among Malaysian job-shop manufacturing SMEs. The nature of the research conducted was an exploratory design back-up with an explanatory approach, aimed to answer fundamental questions that every enterprise are confronted with, in relation to their practices and contentment that transformed to performance. It combines a convenience sampling and census technique to get a pool of sufficient respondents. The outcomes, which are in terms of factors hopefully, will be able to help the enterprises to craft their own “best practice” in order to achieve their vision. The results revealed that all of the twelve (12) factors identified in 5 determinants, were significant to help enterprises in crafting their own practice. The outcomes indicated correlation, although significance lays 0.167 to 0.530 with p<0.01 indicating a weak to medium correlation exist between identified factors and practice adopt.

Keywords: Small Medium Enterprises; Best Practice; Job shop.

Introduction

Rapid changes in technologies and globalisation have resulted in enormous impacts on the manufacturing industry around the world (Achanga, Shehab, Roy, & Nelder, 2006). This scenario can also be seen in the Malaysian SMEs environment today. In today’s Malaysian market, competitive pressure requires Malaysian SMEs to develop and maintain the coherence between their vision and mission, especially in relation to the implementation of their practices (Hashim M. K., 2010; Hashim & Hassan, 2008; Tuan Hassan, Yaacob, & Abdul Latif, 2014). Although to some extent, the phenomenon presents Malaysian SMEs with tremendous opportunities, the competitive and challenges within the marketplace appear to restrict SMEs interest and thus, frustrate them with their adopting practices.

Annuar and Mohd Yusuff (2011) cited that, Manufacturing SMEs must increase their productivity and competitiveness in order to survive and prosper, due to the increasing competitive pressure of globalisation and quality requirements from the customer. Based on this factor, manufacturing SMEs must not only become increasingly advancing in their process but must also adapt to world class manufacturing (WCM) practices. The impact of globalisation such as shortened product life cycle, increasingly sophisticated consumers, and increasing cost of resources, require manufactures to become more flexible, adaptive, responsive and last but not least innovative (Bourletidis & Triantafyllopoulos, 2014; Hashim M. K., 2010).

This study aims to rectify and quantify the characteristics of practice which may be used to craft “Best Practice” among Malaysian Manufacturing SMEs. The study conducted was based on the mix-method model, using a qualitative technique with the purpose of identifying practice characteristics and backed-up with quantitative survey to quantify the factors related to practice adoption. By its nature, this study adopted an exploratory design with the aims of identifying attributes of constructing practices among Malaysian Manufacturing SMEs. The design was later backed-up with an explanatory approach, involving correlation analysis to explain the relationship between the identified factors. The approaches chosen in-order to help the researcher in identifying the pertinent characteristics of a practice model that would help the SMEs sector to improve their performance.

LITERATURE REVIEW

The review of practices and Small-Medium Enterprises literature revealed that issues concerning problems and implementation strategies (Bourletidis & Triantafyllopoulos, 2014; Hashim & Hassan, 2008; Singh & Mahmood, 2014) are the main factors reflecting business nowadays. Achanga, Shehab, Roy, and Nelder, (2006) mentioned that in today’s market; SMEs must operate in a very reactive manner to quote with the ever changing environment. Many countries have witnessed a decline in the number of manufacturing SMEs due to globalisation as work tasks were transferred to other countries in search of cheaper operating cost (Annuar & Mohd Yusuff, 2011; Hashim & Osman, 2003; Singh & Mahmood, 2014). Annuar and Mohd Yusuff, (2011) further explained that in the current environment, price and quality are no longer the competitive strategies for many SMEs, since in today’s environment; enterprises have to compete across all competitive aspects including flexibility and responsiveness.

It is necessary for Malaysian SMEs to identify their current manufacturing practices and compare with practices adopted by world class enterprises. By doing so, the enterprises will be able to identify and direct their focus on the areas that require improvement and thus, will make them become more aware of the practice that will help increase their performance and competitiveness (Abdullah, 2010; Annuar & Mohd Yusuff, 2011; Asrofah, Zailani, & Fernando, 2010; Bahri, St. Pierre, & Sakka, 2011; Hashim & Hassan, 2008).
In the Malaysian marketplace, as according to Bank Negara (2008), 99.2% of the overall businesses established were SMEs, contributing up to 32% of Gross Domestic Product (GDP) and creating about 56% of employment opportunities. This pattern continued to expand at a faster pace compared to the overall economic condition as in 2016 they recorded a real GDP growth of 5.2% resulting in an increase in their contribution to 36.6% of the country’s GDP (SMECorp, 2017). Although the SMEs role in enhancing economic growth and increasing employment opportunities are well known, they still face barriers and challenges which undermine their performance. Globalisation, technological change and liberalization are the arising challenges faced by SMEs (Bourletidis & Triantafyllopoulos, 2014; Kohl, Orth, Riebarthsch, Galeitzeke, & Cap, 2015; Tuan Hassan, Yaacob, & Abdul Latif, 2014; and Saleh & Ndubisi, 2006). These challenges led SMEs to low productivity; poor practice management, lack of managerial capabilities and these were made worse by shortage of skills in the fast changing business environment.

It was noted that enterprises have to continuously adapt to changes in the environment, respond quickly and flexibly for their survival since the environment constitutes the main source of opportunities. Enterprises can be influenced by various elements or forces such as information resources, technology development, threats-regulation, and restriction on capital or information (Bahri, St. Pierre, & Sakka, 2011; Bourletidis & Triantafyllopoulos, 2014; Hashim & Osman, 2003; Sather, Hutchins, Zhang, & Gershenson, 2011; Singh & Mahmood, 2014). This uncertain environment requires enterprises to understand it and be more flexible in order to remain competitive and innovative.

Competitiveness requires enterprises to have practices, which are categorised as “Best Practice”. Unfortunately SMEs are constrained by a number of factors, including a lack of adequate funding, limited skilful workforce, and leadership deficiencies (Achang, Shehab, Roy, & Nelder, 2006; Bourletidis & Triantafyllopoulos, 2014; Tuan Hassan, Yaacob, & Abdul Latif, 2014). All these make SMEs struggle to identify the best practices, which could lead them to better performance in becoming a competitive enterprise. Hashim and Hassan (2008) concluded that the biggest problem faced by SMEs was the compatibility of the practice adopted to their organizations’ culture and environment, creating issues such as late delivery, inability to target the right market and the lack of product acceptance.

The best practice is the system containing all process information on variables which are critical to profitability (Signal, 2006) and may become obsolete in the course of time (Laugen, Acur, Boer, & Frick, 2005). In today’s quick changing business environment, there might not be a single generalized practice categorised as “Best Practice” to be found. The best practice is subject to experiences from one’s own point of view and different enterprises may experience different reality (Hallencreutz & Turner, 2011).

To date, a significant body of previous research has reported an association between practice and SMEs performance. These studies focus on the impact of specific practices, so called “best practice” and the impact on enterprises financial performance (Abdullah, 2010; Annuar & Mohd Yusuff, 2011; Asrofah, Zailani, & Fernando, 2010; Cocca & Alberti, 2010; Laugen, Acur, Boer, & Frick, 2005) and the impact of “best practice” on performance as a whole (Arya & Lin, October 2007; Bourletidis & Triantafyllopoulos, 2014; Boyle, Scherrer-Rathje, & Stuart, 2011; Gomes & Yasin, 2011). Although the results suggest positive associations between practice and performance, none of it discussed the characteristics of “best practice” which should be taken as “best practice” principles for SMEs driving them to lose focus on the important characteristics which might lead them to competitive advantage.

Irrespective of how it is perceived, the concept of “best practice” has unarguably been discussed extensively since 1970’s when it first entered the industrial and academic environment. Despite of tremendous researches being conducted about it, there appear to be little empirical evidence in publications on the characteristics of “best practice” and the factors that influence them in the SME environment (Achang, Shehab, Roy, & Nelder, 2006; Hallencrceutz & Turner, 2011). An exception is given to Annuar and Mohd Yusuff, (2011) and Hashim and Osman (2003), where most of previous researches tended to focus on the impact of “best practice” on large sized enterprises or focus on the specific practices so called “best practice” and their impact on enterprises as a whole. In a nutshell, the term itself can indicate leadership, management, or operational methods that lead to exceptional performance, although it is fairly subjective and depending upon the enterprise’s strategy and their general manufacturing environment. Hence, it can have a different meaning (Bartley, Gomibuchi, & Mann, 2007; Laugen, Acur, Boer, & Frick, 2005; Signal, 2006; Ungan, 2007). As according to Asrofah, Zailani, and Fernando (2010); Laugen, Acur, Boer, and Frick (2005); Mohd Yusuff (2004) and Tuan Hassan, Yaacob, and Abdul Latif (2014), the methodology beneath the concept of ‘best practice’ involves a number of critical practices including human resource development, improvement of technically competent management group, enhancement of competition base on quality and investment in improving the equipment and facilities. They suggested, that the characteristics of ‘best practice’ must not be mutually exclusive and available to fit under more than one environment and at the same time must have specific metrics which might be the indicators for measuring performance. Despite all the arguments, it has been agreed that ‘best practice’ must support the aims of achieving good product design with high quality, low manufacturing cost, shorter delivery time and reliable delivery performance and customer service.

RESEARCH METHODOLOGY

As being mentioned in the introduction, a mix-method approach has been employed in this research project. This comprises literature review, observation of selected enterprises, personal interview and a survey with Job-Shop manufacturing SMEs in Peninsular Malaysia. In the initial stages of research, the researcher conducted an extensive literature review in order to demonstrate the existence of knowledge gaps in the area chosen. The review provided the researcher with a platform to “kick-start” the project, although it does not provide sufficient information on issues discussed. This barrier required the researcher to further research within the existing SMEs in search of the critical characteristics for a practice so called “best practice” among
the enterprises. To do so, in-depth semi-structure interviews backed-up with observation were conducted among Job-Shop Manufacturing SMEs in the state of Terengganu and Kedah, between March to September 2012. The backbone idea of this approach was to determine such characteristics deemed critical for practice adaptation and implementation among the enterprises.

For the first section, a semi-structured face-to-face interview’s protocol was employed to encourage responders to talk freely about their enterprise. Each interview was designed to last approximately one (1) hour. To some extent, supplementary follow-up interviews were conducted through site visits during the observation period. The recording interview, together with the observation notes were used to develop a report in accordance with research purposes. The focus was to find the characteristic pertinent for best practice. Categorizing analysis (Charmaz, 2006; Charmaz & Bryant, 2011; Holliday, 2007) was conducted to develop refine categories that were captured or merged from the corpus of raw data (Holliday, 2007). The categories then are used to code all the interviews and observation series resulting in complete characteristics required to represent the best practice. Each coding will be backed-up with the memo that defined their meanings. These memos help to avoid confusion and to ensure consistency of coding (Bittitci, et al., 2011). The overall information obtained from the interviews and observations were compared with those from literature review. The results were compiled and a set of characteristics or critical factors for the so called best practice was crafted. This information is then used to design a survey questionnaire.

Questionnaire survey was the method employed for the second part of the research project. The three part questionnaire (Part 1: Factors/Characteristics identified; Part 2: General Information; Part 3: Feed Back) were distributed among 522 Malaysian Job-Shop Manufacturing SMEs listed in the directory of SME corporation web site accessed between September 2011 to July 2012. The questionnaire contained a letter of intent stating the objective of the research project together with the respective questions itself. In extend to that, short meanings of the items related were placed to help respondents to understand. A (5) five-point Likert-scale was used with consideration that it was found enough to rate all relevant alternatives along the continuum for the respondents to express their opinion (Annuar & Mohd Yusuff, 2011; Furlan, Vinelli, & Pont, 2011). The research project aims to get information from the very appropriate person, thus, strategies of follow-up measure were adopted and to some extent face-to-face and phone survey conducted. The objective was to obtain at least 260 to 265 complete questionnaires since the total of identified respondents were between 500 and 550 (Sekaran & Bougie, 2010).

RESULTS AND DISCUSSION

The first part of this research project adopted a non-probability sampling: convenience sampling since the researcher’s previous job position provided channels to approach the SMEs in Kedah and Terengganu, and encourage respondents to respond positively. Bryman and Bell (2011) stated that a convenience sampling is simply available to the researcher by virtue of its accessibility. The interview and observation were conducted in between March to September 2012. Out of 131 manufacturing SMEs in Kedah and 109 manufacturing SMEs in Terengganu, a total of 52 SMEs were identified as “Job-Shop” type, 26 in each state respectively. From this number only six (6) enterprises were willing to be interviewed and allowed an observation to be made in their premises, another four (4) only allowed an observation to be made and 8 were categorised as no response (enterprises no longer in business), resulting in the usable return rate of 22.7 percent. Table 1 provides the details of the interviews and observations.

The outcomes clearly indicated that most Job-shop Manufacturing SMEs in Malaysia realized the importance of “best practice” in their enterprise operations. These can be derived from interview answers of the managers;

“Need to be able to react quickly to market and customer requests. This was driven by the changing of trend in the market. In most cases, able to react to customer requests indicate the ability to satisfy stake holder, be the first choice in customer perspective, tried the best to be different from others through quality and ability to reduce the effect of competitor strength and strategies.” (Company 7)

“Flexibility of the manufacturing process to change as part of culture in the organization in order to be more people focus, not only to be superior compared to a competitor but also to ensure the growth of the organization. Flexibility is one of the requirements to sustain, for example, the willingness to change the type of tools used in the operation will enhance organization sustainability.” (Company 6)

“Competition forced the organization to look for low cost manufacturing processes which utilize the improvement process throughout the organization. Cost was considered in all the action conducted by the organization in ensuring the expansion of their business.” (Company 1)

“As continuous improvement help to bring new products to market quickly and cost effectively, organization continuously collecting feedback from their customer as part of strategies tool for survival.” (Company 5)

Generally, the respondents adopted practice to achieve three (3) purposes; as part of the requirement to sustain, be superior than a competitor and as a tool for growth. The summary of the outcomes from the first part of the research project can be viewed as in table 2.
Of these identified factors/outcomes of the first part of the research project, the researcher developed a set of questionnaire in determining the critical factors/characteristics useful to craft “best practice” within Malaysian Job-shop manufacturing SMEs. The questions’ proposition can be viewed in table 3.
<table>
<thead>
<tr>
<th>Identification</th>
<th>Details</th>
<th>Date of Interview /Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company 1</td>
<td>A construction contractor base in Pendang, Kedah. More than 12 years operation with 7 permanent workers. A registered contractor with “Tenaga Nasional Berhad” for wiring and electric equipment installation. Have a wide variety of operation business ranging from maintaining road-side to the construction of a building.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;, from 13&lt;sup&gt;th&lt;/sup&gt; to 15&lt;sup&gt;th&lt;/sup&gt; April 2012. (1) 2&lt;sup&gt;nd&lt;/sup&gt; from 25&lt;sup&gt;th&lt;/sup&gt; to 27&lt;sup&gt;th&lt;/sup&gt; May 2012 (3)</td>
</tr>
<tr>
<td>Company 2</td>
<td>A metal base construction firm with 5 permanent staff. Workshop located at Kampung Barokhas, Kuala Nerang, Kedah. Products range from iron structure to office container. Main customer - government offices through-out the northern district of Kedah until the state of Perlis.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 29&lt;sup&gt;th&lt;/sup&gt; to 31&lt;sup&gt;st&lt;/sup&gt; May 2012 (3) 2&lt;sup&gt;nd&lt;/sup&gt;; from 22&lt;sup&gt;nd&lt;/sup&gt; to 23&lt;sup&gt;rd&lt;/sup&gt; June 2012. (5)</td>
</tr>
<tr>
<td>Company 3</td>
<td>A housing contractor base in Alor Setar, Kedah with 14 permanent staff. 6 years of operations and has a housing development project located at Penang, Kedah and Perlis.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 1&lt;sup&gt;st&lt;/sup&gt; to 4&lt;sup&gt;th&lt;/sup&gt; June 2012 (4) 2&lt;sup&gt;nd&lt;/sup&gt;; from 22&lt;sup&gt;nd&lt;/sup&gt; to 23&lt;sup&gt;rd&lt;/sup&gt; June 2012. (5)</td>
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<tr>
<td>Company 4</td>
<td>A 30 years old family base organization, located at Losong area, Kuala Terengganu with 6 members of staff. Main products are cushion, canvas and canopy based on customer order. (Custom made)</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 12&lt;sup&gt;th&lt;/sup&gt; to 19&lt;sup&gt;th&lt;/sup&gt; May 2012. (2) 2&lt;sup&gt;nd&lt;/sup&gt;; from 11&lt;sup&gt;th&lt;/sup&gt; to 13&lt;sup&gt;th&lt;/sup&gt; July 2012. (6)</td>
</tr>
<tr>
<td>Company 5</td>
<td>17 years in operation. Located at Jalan Dato’ Issac Kuala Terengganu. Involved in the fabrication of number plates, stickers, and banners to a billboards. Number of workers = 12 persons.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 12&lt;sup&gt;th&lt;/sup&gt; to 19&lt;sup&gt;th&lt;/sup&gt; May 2012. (2) 2&lt;sup&gt;nd&lt;/sup&gt;; from 14&lt;sup&gt;th&lt;/sup&gt; to 15&lt;sup&gt;th&lt;/sup&gt; July 2012. (6)</td>
</tr>
<tr>
<td>Company 6</td>
<td>A 5 years old construction base company. Main office located at Padang Hiliran Kuala Terengganu. Most of the projects are related to the oil and gas industry. Number of workers = 22 persons.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; 16&lt;sup&gt;th&lt;/sup&gt; July 2012. (6)</td>
</tr>
<tr>
<td>Company 7</td>
<td>A shipbuilding company located at Kuala Terengganu with 75 permanent staff. Products range from a 3 meter boat to 68 meter vessels.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 5&lt;sup&gt;th&lt;/sup&gt; to 8&lt;sup&gt;th&lt;/sup&gt; June 2012. (4)</td>
</tr>
<tr>
<td>Company 8</td>
<td>(observation) Ceiling, partition and aluminium base product company. Located at Jakar Industry Estate, Cukai, Terengganu. 12 permanent staff.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; 14&lt;sup&gt;th&lt;/sup&gt; July 2012 (6)</td>
</tr>
<tr>
<td>Company 9</td>
<td>(observation) Flanges, fitting and valves product company base at Miel Jakar Industrial Estate, Kemaman, Terengganu. 6 permanent staff.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 13&lt;sup&gt;th&lt;/sup&gt; to 14&lt;sup&gt;th&lt;/sup&gt; July 2012. (6)</td>
</tr>
<tr>
<td>Company 10</td>
<td>(observation) A company base at Telok Kalong, Terengganu. Construction of cabins and containers with 8 permanent staff.</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;; from 9&lt;sup&gt;th&lt;/sup&gt; to 10&lt;sup&gt;th&lt;/sup&gt; June 2012. (4)</td>
</tr>
</tbody>
</table>
The second part of the research project was conducted between the first week of March 2013 to the second week of October 2013 and involved all the 522 identified Job-shop manufacturing SMEs throughout Peninsular Malaysia. The researcher used a combination of e-mail, a mail, face-to-face and phone survey in order to get a sufficient number of replies. Out of the 522 respondents contacted only 270 completed and usable replies were received, making up 51.7% of feedback. The background of the enterprises that responded shows that they mostly belong to the small type of enterprise (93%) with a total number of 5-50 employees. A majority of the enterprises were in business for between 6-10 years (51.9%), followed by 11-15 years (30.4%), 16-20 years (9.6%), 1-5 years (4.4%) and more than 21 years in operation (3.7%).

From the Friedman test conducted, the researcher concluded that significantly, the identified determinants (Process Involved (PI), Requirement to Sustain (RS), Superior than Competitor (STC), Requirement for Growth (RG) and Customer Focus (CF)) influence the implementation of practices among the respondents \(\chi^2 (df=4, N=270) = 220.600, p<0.05\). Results from Wilcoxon T test confirm that there are significant differences between 9 pairs of determinants, exception given to CF-RG pair (mean rank PI = 2.42; RS = 3.79; STC = 3.08; RG = 2.85; CF = 2.87). The results indicated that RS is the most influencing while PI is less influencing in the implementation of practices, among SMEs in Malaysia. Spearman Correlation test indicated that the identified determinants are significantly correlated with practice implementation, (PRTA) (RG and PI moderately correlated and the rest are very weak correlate).

### Table 2: The First Part Outcomes Summary

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Cost</th>
<th>Customer Focus</th>
<th>Process Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Review)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Cost Reduction</td>
<td>1. Product Improvement and Innovation</td>
<td></td>
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<tr>
<td>2. Competitiveness</td>
<td>2. Complexity</td>
<td></td>
<td></td>
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<tr>
<td>3. Adaptive</td>
<td>3. Quality System</td>
<td></td>
<td></td>
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<tr>
<td>4. Codification</td>
<td>4. Responsiveness</td>
<td></td>
<td></td>
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<tr>
<td>5. Waste Elimination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Absorptive Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determinants</td>
<td>Requirement to Sustain</td>
<td>Superior Than Competitor</td>
<td>Requirement for Growth</td>
</tr>
<tr>
<td>Dimensions (Interview &amp; Observation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. People Focus</td>
<td>1. People Focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Codification</td>
<td>2. Quality System</td>
<td></td>
<td></td>
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<tr>
<td>3. Responsiveness</td>
<td>3. Responsiveness</td>
<td></td>
<td></td>
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<tr>
<td>4. Flexibility</td>
<td>4. Continuous Improvement</td>
<td></td>
<td></td>
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<tr>
<td>5. Waste Elimination</td>
<td>5. Competitive</td>
<td></td>
<td></td>
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</tbody>
</table>

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### Table 3: The Survey Questions, Proposition

<table>
<thead>
<tr>
<th>Factors</th>
<th>Number of Questions</th>
<th>Determinants</th>
<th>Number of Questions</th>
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<tr>
<td>Employee Relationship</td>
<td>3</td>
<td>Requirement to Sustain</td>
<td>7</td>
</tr>
<tr>
<td>Supplier Relationship</td>
<td>3</td>
<td>Superior than Competitor</td>
<td>9</td>
</tr>
<tr>
<td>Cost Involved</td>
<td>4</td>
<td>Customer Focus</td>
<td>7</td>
</tr>
<tr>
<td>Waste Elimination</td>
<td>4</td>
<td>Requirement for Growth</td>
<td>11</td>
</tr>
</tbody>
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Table 4: Test Statistics Wilcoxon T

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<tr>
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<tbody>
<tr>
<td>Z</td>
<td>-10.63</td>
<td>-7.43</td>
<td>-5.48</td>
<td>-5.00</td>
<td>-7.25</td>
<td>-9.04</td>
<td>-8.57</td>
<td>-2.93</td>
<td>-2.73</td>
<td>.003</td>
<td>.000</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.003</td>
<td>.006</td>
<td>.000</td>
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</tbody>
</table>

Table 5: Test Statistics Friedman

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>N</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>Chi-square</td>
<td>220.600</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td></td>
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</tbody>
</table>
Table 6: Correlations Coefficient

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>PI</th>
<th>RS</th>
<th>STC</th>
<th>RG</th>
<th>CF</th>
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</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>.551</td>
<td>.277</td>
<td>.229</td>
<td>.589</td>
<td>.305</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>270</td>
<td>270</td>
<td>270</td>
<td>270</td>
<td>270</td>
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</tbody>
</table>

The researcher also analysed the correlation of identified factors against determinants and practice. The results of Friedman test indicated that generally there are significant differences between all factors $\chi^2$ (df=11, N=270) = 583.649, p<0.001, relatively “Employee Relationship”, ERM score the highest mean average rank and the lowest mean average rank score belongs to “Flexibility Element”, Flx. The level of importance for each factor is discussed below.

THE FACTORS

EMPLOYEE RELATIONSHIP

Employee relationship can be viewed in terms of compensation scheme, job security, consultative, empowerment, and participation. This factor is generally discussed under human resources perspective. Singh R. K., (2011) cited; enterprises which are able to increase relational behavior, decrease conflicts and increase satisfaction will be able to forecast better demand and are thus able to sustain. Singh R. K., (2011) stated that employee relationship is actually a soft side of quality management and this is supported by Salaheldin, (2009) who found that employee relationship components such as empowerment, involvement and participation played a significant role as part of tactical factors for critical success in TQM implementation.

The results show, employee relationship is significantly correlated to “Requirement to Sustain”, RS ($r$=0.767, $p<0.001$; strong correlation), “Customer Focus”, CF ($r$=0.175, $p<0.005$; very weak) and “practice implementation”, PRTA ($r$=0.167, $p<0.01$; very weak).

SUPPLIER RELATIONSHIP

Laohavichien, Fredendall, and Cantrell, (2011) clarified that supplier relationship is important and act as an infrastructure in quality management practices. Supplier relationship includes supplier quality, supplier partnership, collaboration, involvement, as well as supplier quality management. This factor is common in management perspective, especially in quality and supply chain field, and were popular among manufacturing enterprises as the nature of the enterprises’ daily operations rely a great deal on supplier relationships (Talib, Rahman, & Qureshi, 2011).

Results of the analysis show that supplier relationship correlate positively significant to “Requirement for Growth”, RG ($r$ = 0.270, $p<0.001$; very weak), “Requirement to Sustain”, RTS ($r$ = 0.240, $p<0.001$; very weak) and “Practice Implementation”, PRTA ($r$ = 0.233, $p<0.001$; very weak).

COST INVOLVED

The main aim of enterprises nowadays is to reduce their operation costs and stay competitive. Hoyer, MacInnis, and Pieters (2016); and Jacobs and Chase (nd) mentioned that practices with an element which aims for cost reduction is preferred as one of “best practice” indicator, thus making enterprises to consider cost factor when they choose their practices. Costs are normally taken into consideration before any action is taken by the enterprises. This is so to ensure the expansion of their business. Peng, Schoeder, and Shah (2011), stated that costs involved will improve capability and this leads to the fact that many enterprises choose to implement practices such as continuous improvement and management process to improve their efficiency and at the same time reduce waste. Costs will normally be viewed as an enterprise’s risk in their way of achieving better performance (Bahri, St. Pierre, & Sakka, 2011).
The survey conducted, indicated that costs involved correlate positively significant to practice adoption with Spearman’s RHO correlation coefficient of ($r = 0.379$, $p<0.001$) indicating a weak correlation. In terms of determinants, costs involved correlate positively significant with four of the determinants (Process Involved; $r = 0.622$, $p<0.001$; moderate correlation), (Customer Focus; $r = 0.310$, $p<0.001$; weak), (Requirement for Growth; $r = 0.287$, $p<0.001$; very weak) and (Superior than Competitor; $r = 0.175$, $p<0.003$; very weak).

WASTE ELIMINATION

One of the common acceptable management philosophies when discussing about “best practice” is eliminating waste throughout the entire operation process. The philosophy integrates and reinforces practices including Total Quality Management (TQM), Continuous Improvement (CI), Human Resources Management (HRM) and Supply Chain Management (SCM) (Boyle & Scherrer-Rathje, 2009). The main objective is to reduce the operation costs, through the use of fewer resources, based on the elimination of unnecessary moves.

The survey revealed that waste elimination is correlated positively significant to Practice Adoption among SMEs with Spearman’s RHO correlation coefficient of ($r = 0.227$, $p<0.001$) indicating a very weak, correlation. In determinants’ perspective, waste elimination only significantly correlate with two of the determinants; (Customer Focus; $r = 0.418$, $p<0.001$; weak) and (Process Involved; $r = 0.163$, $p<0.01$; very weak). The result to some extent, support Mohd Yusuff (2004) finding; that waste reduction plays a significant role in determining practices adopt within an organization.

COMPETITIVENESS

Enterprises have to develop competitive strategies in order to compete in today’s’ business environment (Singh, Garg, & Deshmukh, 2010). Competitiveness, represent a set of tasks, if practiced accordingly will support the enterprise’s business strategy. Competitiveness can exist in an enterprise in terms of intended goals which guide strategic actions and resource allocation decisions (Flynn, Flynn, & Schroeder, 2001). Singh and Garg (2008) stated that four accepted competitiveness factors were cost, delivery, quality and flexibility.

The survey conducted, results in Spearman’s RHO correlation coefficient ($r = 0.275$, $p<0.001$) indicate a very weak correlation exists between competitiveness and practice adopted among the respondents. Competitiveness is also significantly correlated to (Process Involved; $r = 0.293$, $p<0.001$; very weak), (Superior than Competitor; $r = 0.468$, $p<0.001$; weak), (Requirement for Growth; $r = 0.131$, $p<0.05$; very weak) and (Customer Focus; $r = 0.133$, $p<0.05$; very weak). This result supports the earlier finding of Singh and Garg, (2008); who stated that companies today are practicing cost advantages and leverage their asset to stay competitive in business. Competitiveness also provides a platform for enterprisers to improve their responsiveness (Singh, Garg, & Deshmukh, 2010).

QUALITY SYSTEM

Global competition nowadays, demand companies to develop and manufacture complex and compact products with higher performance and quality at a lower price to stay competitive. Quality in general can be defined as the standard of something as a measure against other things of similar kind. The idea behind the standards is to minimize the defects through planning and application of practice at every stage of the process.

One of the strategic key which can provide this desired aim is applying the correct quality technique throughout the quality system. Smith, (2011) mentioned that all the leading manufacturers in their respective fields understand the importance of the quality system and they continuously develop new products and change quality control systems in order to maximize their profitability. These developing programs focus on quality to meet customer needs and if possible restructure their shop-floor. Survey conducted revealed that “quality system” significantly correlates to practice adopted among Job-shop manufacturing enterprises in Malaysia with Spearman’s RHO correlation coefficient ($r = 0.530$, $p<0.001$; moderate). In terms of determinants, “quality system” is significantly correlated to (Process Involved; $r = 0.454$, $p<0.001$; weak), (Requirement to Sustain; $r = 0.204$, $p<0.005$; very weak), (Superior than Competitor; $r = 0.289$, $p<0.001$; very weak), (Requirement for Growth; $r = 0.497$, $p<0.001$; very weak) and (Customer Focus; $r = 0.174$, $p<0.005$; very weak)

The majority of respondents agreed that the concept of quality system is associated with the aims of lower costs, on-time delivery and high flexibility leading to a quality system which focused on human resources management, process management, customer relationship management and supplier relationships management. These management criteria were the back-bone for their competitiveness and sustainability.
CUSTOMER RELATIONSHIP

Customer relationship is concerned with the process of coordinating activities necessary to establish and maintain long term, profitability and mutually beneficial relationships with the customers. Robinson Jr., Neeley, and Williamson (2011); and Hoyer, Maclmics, and Pieters (2016) stated that customer relationship is actually customer-focus, which is designed with the purpose of increasing loyalty and profitability by understanding sophisticated customers’ needs and demands. In SMEs perspective, customer relationship is a concept where the enterprises are able to select a correct customer, build long term relationships and productively manage their interactions.

Results show that Customer Relationship has a significant correlation with practice adopt (r=0.282, p<0.001; very weak), this to some extent supports the finding of Ranjan and Bhatnagar (2011) when they concluded that CRM contributes to the company’s competitive advantages by enchasing their practices. In determinants’ perspective, customer relationship is significantly positive correlated to (Process Involved; r = 0.353, p<0.001; weak), (Requirement to Sustain; r = 0.214, p<0.001; very weak), (Superior than Competitor; r = 0.212, p<0.001; very weak), (Requirement for Growth; r = 0.302, p<0.001; very weak), and (Customer Focus; r = 0.372, p<0.001; weak).

RESPONSIVENESS

Enterprises practice can be judged as important in terms of their response to delivery, quality and price (Phan, Abdallah, & Matsui, 2011). Responsiveness for quality, cost, delivery, flexibility and time were recognized as the core of capabilities that lead to competitiveness. One of the factors which can improve the level of a customer’s satisfaction, thus creating customer evangelist, is the requirement of the enterprises to respond quickly to their customer complaints (Mohd Yusuff, 2004).

The results of the survey conducted; found that this element has significant correlation among the determinants; (Process Involved; r = 0.368, p<0.001; weak), (Superior than Competitor; r = 0.131, p<0.05; very weak), (Requirement for Growth; r = 0.171, p<0.01; very weak), and (Customer Focus; r = 0.308, p<0.001; weak), thus play a significant role in decision making related to practice adoption. Although Spearman’s RHO correlation coefficient (r = 0.226, p<0.001) indicates a very weak correlation between responsiveness and practice adopted, the majority of respondents agreed (a median score of 4) that this element plays an important role in their practice implementation decision. This finding supports the opinion of Asrofah, Zailani, and Fernando (2010), which cited that, it is important for the enterprises nowadays to understand as well as to respond quickly to their customer need.

CONTINUOUS IMPROVEMENT

Continuous improvement (CI) has long been considered as the key factor for survival, growth and development of SMEs (Raymond & St-Pierre, 2010). CI culture in the manufacturing process normally concerns factors such as ease of maintenance, low cost duplication and easy installation and compatibility issues with existing facilities. CI can also be extended to the ability to generate ideas for new and better products, services, and work process (Ungan, 2007). The survey revealed that the majority of the respondent agrees that CI plays a major role in practice adaptation, with 191 respondents “agreed”, 66 “just agreed” and 13 “highly agreed”. The results of Spearman’s RHO correlation coefficient (r = 0.379, p<0.001) indicate a weak correlation exist between CI and Practice. This result, to some extend supports Annuar and Mohd Yusuff (2011) finding which shows that CI is highly implemented by enterprises in their survey.

Results for determinants indicated that CI have a significant correlation with four determinants; (Process Involved; r = 0.622, p<0.001; moderate), (Customer Focus; r = 0.310, p<0.001; weak), (Requirement for Growth; r = 0.287, p<0.001; weak), and (Superior than Competitor; r = 0.175, p<0.005; weak). The survey conducted also indicated that CI is not significantly correlated to the requirement to sustain.

MARKET ORIENTATION

The market orientation’s concept facilitates the ability of enterprises to anticipate, react to and capitalize on changes in their market place. Whitehall, Lukas, and Doyle (2003) stated that superior market orientation would lead to superior performance of the enterprises and thus sustain them in their market place. In addition, a presumptive positive effect on market position, long term viability and performance are affecting the importance of market orientation.

The results of the survey shows that market orientation significantly correlates with Practices Adopted (r = 0.214, p<0.001; very weak), Process Involve(r= 0.137, p<0.05; very weak), Requirement to Sustain (r= - 0.234, p<0.001; very weak), Requirement for Growth ( r = 0.336, p<0.001; weak) and Customer Focus ( r = 0.192, p<0.005; very weak).
CODIFICATION

Codification is defined as the degree to which knowledge associated with practices can be written down (Ungan, 2007). The factor suggested that successfullness of the practice implementation is dependent on their records which are well codified. Generally, codification can be defined as an arrangement which is according to a plan or system (Oxford Dictionary of English-Third Edition, 2010).

The survey conducted, indicates that codification is significantly correlated with the four determinants; Process Involved, Requirement to Sustain, Requirement for Growth, and Customer Focus, with (r = 0.227, p<0.001; very weak), (r = - 0.222, p<0.001; very weak), (r = 0.530, p<0.001; moderate), and (r = 0.164, p<0.01; very weak) respectively. Codification also significantly correlate to practice implementation with Spearman RHO correlation coefficient (r = 0.296, p<0.001; very weak).

FLEXIBILITY ELEMENTS

Today, in the business environment, many enterprises were forced to achieve speed and reliability in delivery, thus requiring them to search for flexible methods in satisfying customers. Flexibility is defined as the ability to be easily modified to cope with any uncertainties (Asrofah, Zailani, & Fernando, 2010). Flexibility can be borne and exist through many methods, in terms of management objective, strategies implementation and manufacturing capabilities (Singh & Garg, 2008) to a wide variety of types, including machine, volume, and product, which require to measure in terms of potential, actual and required level (Boyle & Scherrer-Rathje, 2009).

The survey conducted revealed that most of the enterprises agreed that this element is necessary, thus, providing correlation coefficient (Process Involved; r = 0.464, p<0.001; weak), (Requirement to Sustain; r = - 0.144, p<0.05; very weak), and (Practice; r = 0.237, p<0.001) indicating a very weak correlation exists in between this element and the choice of practice in the enterprises. This result is most probably due to the fact that flexibility has been used for quite some time and is considered as common tool in manufacturing industries. This result agrees with the conclusion made by Asrofah, Zailani, and Fernando (2010) where they suggest that flexibility elements must be considered along side priorities, specifically production and distribution costs, quality, delivery dependability and speed.

CONCLUSION

Practice adopted plays a pivotal role in determining the success and sustainability of SMEs. Many of the past researchers have discovered that practice adopted has been proven to have significant relationships with enterprises’ performance. This study has been able to explore the significant factors and focuses from Malaysian job shop SMEs’ perspective and have indicated that the construct of practice adoption among SMEs is contingent in nature.

The outcome of the research which proposed a significant positive correlation between factors, determinants and practice adoption, has empirical evidence suggesting the pertinent characteristics for practices adoption within Malaysian Job-Shop type manufacturing SMEs. The factors that influenced the enterprises in choosing their practices, as according to the research are employee relationship, supplier relationship, cost involved, waste elimination, competitiveness, quality system, customer relationship, responsiveness, continuous improvement, market orientation, codification, and flexibility. These factors can be grouped into five determinants, namely; process involved (PI), requirement for growth (RFG), superior than competitors (STC), requirement to sustain (RTS) and customer focus (CF).

The results indicated that job-shop enterprises throughout Peninsular Malaysia evaluate their practices positively. It’s clearly indicated that enterprises, desire systems that enable them to grow by providing their customers with quality deliverables. The impression created is that, in general, job-shop type manufacturing enterprises do consider factors related to the process when adopting practices within their enterprises.

Furthermore, in a fast changing market environment, enterprises should be able to measure, compare and evaluate the performance of their existing processes, to ensure their competitiveness in the market place (Bourletidis & Triantafyllopoulos, 2014; Mohd Yusuff, 2004). As revealed by the research, “requirement to sustain” and “superior than competitor” are the two main determinants being considered by Malaysian job shop SMEs when it came to practice adoption. Bourletidis and Triantafyllopoulos, (2014), Hashim M. K., (2010) and Mohd Yusuff, (2004) had suggested that the two main obstacles for practice adoption within Malaysian Job-Shop SMEs are not able to understand completely the practice and what is required for their success of implementation and inability of the enterprises to coordinate its resources, reflecting the lack of a system that supports the implementation of the adopted practice. The results of the study revealed that a
majority of the respondents do have knowledge of the practice adopted and they are aware of their current performance, which motivate them to improve as they are convinced that this is the only way for success.

CONTRIBUTIONS OF THE RESEARCH

This research supports the body of knowledge in various theories concerning the best practices, thus, strengthening while expanding the existing concept of it. The argument established in this research was that PI, RFG, STC, RTS and CF significantly affect the enterprises choice of practice. In other words, the research expected that the enterprises’ ability to achieve better performance would depend on practices. The arguments clearly show how best practices manipulate enterprises’ performance to achieve their objectives, and, therefore, gain competitive advantage.

Furthermore, the best practices guide the enterprises towards achieving knowledge acquisition, creation, and sharing, which might help the enterprise to develop new resources and capabilities. The aim is to contribute to better performance through enhancement in areas, such as internal processes, and employee skills. Thus, the findings can be well thought-out as adaptive behaviour for improvement of actions through better knowledge and learning processes to increase enterprises’ performance.

Another contribution of this study is the philosophy of doing the right thing in the first place, as it has a good impact on the growth and survival of the enterprise, as job-shop manufacturing is heavily dependent on fulfilling customer needs and requirements. In turn, it will make an entity a more customer-oriented enterprise, which consistently demands higher quality deliverables at a lower cost. The results can be observed through a decrease in customer complaints and product return rate, a decrease in re-work and scrap expenditures, a decrease in warranty cost expenditures and an increase in sales volume. The findings prove the positive relationship between practices’ adopted with the five determinants - PI, RTS, STC, RFG and CF.

In conclusion, this research supports the contribution to the knowledge of the best practices judgment. It reveals that only compatible best practices that suit the enterprise’s environment is crucial to the Malaysian job-shop manufacturing SMEs.

FUTURE RESEARCH

Due to the facts that this research was conducted with the purpose of identifying factors required to craft the best practices among Malaysian manufacturing SMEs, future research should examine practices developed, based on the factors identified and their effect on enterprises’ performance. In addition to that, future studies should also indicate the effect of any moderators such as geographical location of the enterprises, level of innovation or willingness to learn among stakeholders towards practices and enterprises’ performance. Nonetheless, it is believed that this study helped to resolve some of the discrepancies in the literatures and to the nature of the practices adopt.

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