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ETHICAL ATTITUDES TOWARD TAKING A BRIBE: A STUDY OF FOUR EUROPEAN COUNTRIES

TERESA HERNANDEZ¹

and

ROBERT W. MCGEE²

ABSTRACT

This study examined attitudes on the ethics of bribe taking in four European countries – France, Great Britain, Italy and Germany. Nineteen demographic variables (gender, age, marital status, etc.) were also examined, and most mean scores were found to be significantly different. Although most people thought taking a bribe was unethical, there was some divergence of opinion.

Keywords: bribery, ethics, England, France, Germany, Great Britain, Italy

INTRODUCTION

One might think that bribery is always unethical. Studies by the Organisation for Economic Cooperation and Development (OECD, 2011) discourage the practice and a number of other studies have viewed bribery in negative terms (Bonucci & Moulette, 2007; Cuervo-Cazurra, 2006, 2008; Darrough, 2010; Moran, 1999; Pacini, Swingen & Rogers, 2002; Scharf, 2008).

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However, a closer examination of the issue reveals that the question of whether bribery is ethical or unethical is not so clear-cut in some cases. For example, bribing a prison guard to release a political prisoner who is being held by a corrupt or evil regime might constitute an ethical act (Roy & Singer, 2006). From a utilitarian ethical perspective, bribery would be acceptable in cases where there are more winners than losers.

This paper reviews the ethical literature on bribery and reports the findings of a survey of opinion in four European countries – France, Great Britain, Italy and Germany.

**REVIEW OF THE LITERATURE**

Many articles and several books have been written about various aspects of bribery. This paper focuses on the ethical literature on the topic. When trying to determine whether bribery is ethical or unethical, a threshold question to ask is which set of ethical principles to apply. Ethicists have several options in their toolkit, and not all ethical systems arrive at the same result in any given situation.

Baron, Pettit and Slote (1997) identify and discuss three of the main ethical systems. Graham (2004) discusses eight ethical systems. Most ethical systems, when analyzed and closely compared, usually fall within the general categories of utilitarianism, rights theory, or virtue ethics, broadly defined.

Virtue ethics goes back to the time of Aristotle (2002), if not before. The main thrust of virtue ethics is that an act or policy is good if the result is human flourishing. Utilitarian ethics holds that an act or policy is ethical if the result is the greatest good for the greatest number, or if the winners exceed the losers, or if the result is what economists call a positive-sum game (Brandt, 1992; Frey, 1984; Goodin, 1995; McGee, 2012a; Wong & Beckman, 1992). These various utilitarian views are not quite the same, but they are similar. If a policy or act results in human flourishing, it could meet both the virtue ethics test and the utilitarian ethics test.

Within utilitarian ethics is a branch that holds that something that increases efficiency is ethical. Richard Posner (1983, 1998), the American jurist and co-founder of the Law & Economics movement, takes this position. This view has been criticized (McGee, 2012a), but it remains a mainstream utilitarian position.

Rights theory holds that an act is unethical if someone’s rights are violated, regardless of whether the winners exceed the losers (Baron, Pettit & Slote, 1997; Brandt, 1992; McGee, 2012a, b & c). One of the main criticisms of utilitarian ethics is that rights are disregarded. Taking a rights approach overcomes this deficiency in utilitarian ethics.

Kantian ethics, named after Immanuel Kant (1952, 1983), focuses on duty. If someone has a duty and breaches that duty, any such act is considered to be unethical. The Kantian view may be applied to bribery in cases where the receiver of the bribe is an agent who has a duty to the principal to do what is in the best interest of the principal. An agent who acts against the best interest of the principal is acting unethically.
Most of the literature on ethical aspects of bribery does not cite philosophers or particular ethical theories, at least not directly. However, much of the literature has an underlying premise that either utilitarian ethics or principles of duty should be applied. Virtue ethics and rights theory also appear in some analyses, although most studies on bribery are done by economists or lawyers, who tend to be utilitarians, at least most of the time.

Logue (2005) believes that bribery is always unethical because it violates absolute moral principles that cannot be compromised. He goes on to say that bribery is basically unfair and results in an inefficient allocation of resources, and frustrates the constructive role of government. Carson (1987) believes that accepting a bribe is always prima facie wrong because it violates duties, but makes some exceptions, such as in cases of conscripted soldiers, some prostitutes and others who are held as virtual slaves.

Johnsen (2009, 2010) applies cost-benefit analysis to determine whether paying a bribe results in a positive-sum game. Shaw (1988) points out that benefits and costs may not be easy to determine.

Some scholars assert that bribery may serve a useful function if a bribe acts to grease the wheels of commerce, which makes commerce work more efficiently. Such would be the case where a corrupt government or inefficient bureaucracy can be circumvented by paying someone to cut red tape or otherwise go around the rules. Some scholars take the position that, in general, bribery may be ethical in cases where it is a helping hand, but unethical when it is paid to a grabbing hand who offers nothing in return for the payment (Colombatto, 2003; Egger & Winner, 2005; Houston, 2007; Johnsen, 2009, 2010). Wong and Beckman (1992) developed a point system to determine whether the helping hand or grabbing hand predominates.

Several studies have examined bribery in connection with other forms of corruption, with a focus it has on foreign direct investment (FDI). Cuervo-Cazurra (2006, 2008) and Mauro (1995) found that bribery decreased FDI, whereas Egger and Winner (2005) found that bribery acts to stimulate FDI in cases where it acts as a helping hand. Weitzel and Berns (2006) found that host country corruption is negatively associated with premiums paid in cross-country mergers. Sanyal and Samanta (2010) found that bribery has a negative effect on economic growth.

THE PRESENT STUDY

The present study analyzes the opinions on bribe taking of sample populations in France, Great Britain, Italy and Germany. Some demographic variables are also examined.
METHODOLOGY

The data used in this study were taken from the Human Beliefs and Values (HBV) surveys. Data for these surveys were collected by social scientists all over the world and cover a wide range of issues relating to perceptions of life, environment, work, family, politics and society, religion and morale and national identity. The present study analyzes the data reflecting attitudes on bribery. The question asked whether the respondent believed that accepting a bribe in the course of one’s duties was justifiable. Responses were measured on a 10-point Likert scale where 1 is never justifiable and 10 is always justifiable.

Results were compiled overall and some demographic variables were also examined to determine whether differences in belief were significant. The next section reports on the findings.

FINDINGS

The findings are reported in the next few pages.

Overall Results

Table 1 shows the overall results for the four countries. An analysis of the mean scores finds that Italians were most opposed to bribery, followed by the British and Germans. The French were least opposed to bribery.

The percentage of the samples that thought bribery was never justifiable ranged from 63.3 percent in France to 86.2 percent in Italy.
TABLE 1:  
Overall Results

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Great Britain</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Never justifiable</td>
<td>632</td>
<td>63.3%</td>
<td>734</td>
<td>71.8%</td>
</tr>
<tr>
<td>2</td>
<td>126</td>
<td>12.6%</td>
<td>131</td>
<td>12.8%</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>6.0%</td>
<td>63</td>
<td>6.2%</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>2.4%</td>
<td>37</td>
<td>3.6%</td>
</tr>
<tr>
<td>5</td>
<td>79</td>
<td>7.9%</td>
<td>27</td>
<td>2.6%</td>
</tr>
<tr>
<td>6</td>
<td>16</td>
<td>1.6%</td>
<td>9</td>
<td>0.9%</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>1.9%</td>
<td>9</td>
<td>0.9%</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>1.4%</td>
<td>5</td>
<td>0.5%</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>1.0%</td>
<td>3</td>
<td>0.3%</td>
</tr>
<tr>
<td>Always justifiable</td>
<td>10</td>
<td>1.0%</td>
<td>4</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>998</td>
<td>100.0%</td>
<td>1022</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mean</td>
<td>2.2</td>
<td>1.6</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.10</td>
<td>1.38</td>
<td>1.02</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Comparison of p-values

Table 2 compares the p values. Most differences in mean score are significant at the 1 percent level. The mean score comparison between Great Britain and Germany is significant only at the 10 percent level. In other words, the Italians are significantly more opposed to bribery than are the people of any of the other three countries; the French are significantly less opposed to bribery than are the residents of any other country; the British are somewhat more opposed to bribery than are the Germans.

TABLE 2:  
Comparison of p Values

<table>
<thead>
<tr>
<th></th>
<th>Great Britain</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Great Britain</td>
<td>&lt;0.001</td>
<td>0.0679</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>&lt;0.001</td>
<td></td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Gender

A number of studies have examined gender in conjunction with ethical attitudes. Some studies have found that women were more ethical than men (Brown & Choong, 2005; Franke et al.,
1997; Swaidan et al., 2006), while others found that men were more ethical than women (Barnett & Karson, 1987; Weeks et al., 1999). A third group of studies found that men and women were equally ethical (Babakus et al., 2004; Harris, 1989; Su, 2006).

Some tax evasion studies have also examined views by gender. Some of those studies found that women were more opposed to tax evasion than men (McGee, 2006 – international business professors teaching in the USA; McGee, Alver & Alver, 2012 – Estonian accounting and business students; McGee, López & Yepes, 2009 – Colombian business students), while other studies found that men were more opposed to tax evasion than women (McGee, 2006 – Romanian business students; McGee, Benk, Yildirim & Kayikçi, 2011 – Turkish tax practitioners). A third group of studies found that male and female opinions on tax evasion were similar (McGee & Ardakani, 2009 – Iranian master’s degree accounting students; McGee & M’Zali, 2009 – French executive MBA students; Nasadyuk & McGee, 2007 – Ukrainian law students).

Some studies on the ethics of bribe taking found that women were more opposed to taking a bribe than men (Hernandez & McGee, 2012a – a comparative study of the USA, Brazil, Germany and China; Hernandez & McGee, 2012b – a comparative study of Argentina, Brazil and Colombia). However, at least one study found that men were more opposed to bribe taking than women (Hernandez & McGee, 2012c – Egypt).

Table 3a shows the overall ranking by gender. Females were significantly more opposed to bribery than were the males.

Table 3b ranks the sample by gender and country. Italian females were most opposed to bribery, followed by Italian males and British females. German males and females were equally opposed to bribery. French males were least opposed. An ANOVA found that the differences between groups were highly significant (p < 0.001).

### TABLE 3a:
**Ranking by Gender**
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Gender</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>1.6</td>
<td>1.42</td>
<td>2601</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>1.8</td>
<td>1.67</td>
<td>2446</td>
</tr>
</tbody>
</table>

**SIGNIFICANT DIFFERENCES IN MEAN SCORES**

<table>
<thead>
<tr>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male v. Female</td>
</tr>
</tbody>
</table>
Table 3b:
RANKING BY COUNTRY & GENDER
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country – Gender</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Italy – Female</td>
<td>1.2</td>
</tr>
<tr>
<td>2</td>
<td>Italy – Male</td>
<td>1.4</td>
</tr>
<tr>
<td>3</td>
<td>Great Britain – Female</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>Germany – Male</td>
<td>1.7</td>
</tr>
<tr>
<td>4</td>
<td>Germany – Female</td>
<td>1.7</td>
</tr>
<tr>
<td>6</td>
<td>Great Britain – Male</td>
<td>1.8</td>
</tr>
<tr>
<td>7</td>
<td>France – Female</td>
<td>1.9</td>
</tr>
<tr>
<td>8</td>
<td>France – Male</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Age

The relationship between age and ethical attitudes has also been examined in the literature. Although most studies have found that older people are more ethical and have more respect for the law than do young people, there have been some exceptions (Babakus et al., 2004; McGee, 2012d; Ruegger & King, 1992; Sims et al., 1996). Some tax evasion studies found that older people were more averse to tax evasion than younger people (Gupta & McGee, 2010 – New Zealand; McGee & Benk, 2011 – Turkey; McGee, 2012d – several countries).

Some studies on the ethics of bribe taking found that older people were more strongly against the practice than were younger people (Hernandez & McGee, 2012a – a comparative study of the USA, Brazil, Germany and China; Hernandez & McGee, 2012b – a comparative study of Argentina, Brazil and Colombia; Hernandez & McGee, 2012c – Egypt).

Table 4a ranks attitude toward bribery by age. The relationship is linear, with the oldest group being most opposed and the youngest group being least opposed. An ANOVA found the differences to be highly significant (p < 0.001).

TABLE 4a:
Ranking by Age
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50+</td>
<td>1.6</td>
<td>1.33</td>
<td>2151</td>
</tr>
<tr>
<td>2</td>
<td>30-49</td>
<td>1.8</td>
<td>1.58</td>
<td>1950</td>
</tr>
<tr>
<td>3</td>
<td>15-29</td>
<td>2.0</td>
<td>1.84</td>
<td>945</td>
</tr>
</tbody>
</table>
Table 4b ranks the mean scores by age group and country. Italians over 50 were most opposed to bribery. The youngest French group was least opposed. The fact that all three Italian groups were ranked in the top four indicates that country was a more important variable than age. One interesting feature of the ranking sequence is that, for all four countries, the oldest group was most opposed to bribery and the youngest group was least opposed.

### TABLE 4b:
**Ranking by Country & Age**
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country – Age Group</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Italy – 50+</td>
<td>1.2</td>
</tr>
<tr>
<td>2</td>
<td>Italy – 30-49</td>
<td>1.3</td>
</tr>
<tr>
<td>3</td>
<td>Great Britain – 50+</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>Italy – 15-29</td>
<td>1.6</td>
</tr>
<tr>
<td>4</td>
<td>Germany – 50+</td>
<td>1.6</td>
</tr>
<tr>
<td>6</td>
<td>Great Britain – 30-49</td>
<td>1.7</td>
</tr>
<tr>
<td>7</td>
<td>Germany – 30-49</td>
<td>1.8</td>
</tr>
<tr>
<td>8</td>
<td>Germany – 15-29</td>
<td>1.9</td>
</tr>
<tr>
<td>9</td>
<td>France – 50+</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>Great Britain – 15-29</td>
<td>2.0</td>
</tr>
<tr>
<td>11</td>
<td>France – 30-49</td>
<td>2.1</td>
</tr>
<tr>
<td>12</td>
<td>France – 15-29</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Ethnicity**

A comparative study on the ethics of bribe taking in the USA, Brazil, Germany and China found that whites were most strongly opposed to bribe taking, followed by East Asians, Hispanics, half-breed black/whites and blacks (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that Caucasians were most opposed, followed by half-breed black/whites, and blacks (Hernandez & McGee, 2012b).

Table 5 ranks views on the basis of ethnicity. Caucasians were most opposed to bribery, whereas Central Asian Arabic speakers were least opposed. The vast majority of the sample was Caucasian, although the sample sizes for the other groups listed were sufficiently large to make valid comparisons. Data were also reported for other and mixed races, but their sample sizes were not sufficiently large to rank. The ANOVA p value was highly significant (p < 0.004).
TABLE 5:  
**Ranking by Ethnicity**  
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Ethnicity</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White / Caucasian White</td>
<td>1.7</td>
<td>1.58</td>
<td>2824</td>
</tr>
<tr>
<td></td>
<td>Asian -South(Indian, Hindu, Pakistani, Bangladeshi)</td>
<td>1.8</td>
<td>1.38</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Black -Other / Black</td>
<td>2.1</td>
<td>1.81</td>
<td>49</td>
</tr>
<tr>
<td>4</td>
<td>Asian -East(Chinese, Japanese)</td>
<td>2.3</td>
<td>2.35</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Asian -Central(Arabic)</td>
<td>2.5</td>
<td>2.54</td>
<td>41</td>
</tr>
</tbody>
</table>

**Importance of Religion in Life**

A comparative study of the USA, Brazil, Germany and China found that those at both ends of the spectrum had the strongest opposition to bribe taking, while those in the middle groups had less opposition (Hernandez & McGee, 2012a). A comparative study involving Argentina, Brazil and Colombia found that those who did not hold religion very important in life were significantly more opposed to bribe taking than were those who held religion to be important. However, the difference was significant only at the 10 percent level (Hernandez & McGee, 2012b). This variable was found not to be significant in a study of Egyptian opinion (Hernandez & McGee, 2012c).

Table 6 ranks overall mean scores based on the importance of religion in the respondent’s life. The relationship is linear. The more important religion is, the stronger the opposition to bribery. The differences in mean score were highly significant (p < 0.001).
TABLE 6:  
Ranking by Importance Of Religion  
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Importance</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very important</td>
<td>1.4</td>
<td>1.28</td>
<td>899</td>
</tr>
<tr>
<td>2</td>
<td>Rather Important</td>
<td>1.7</td>
<td>1.55</td>
<td>1338</td>
</tr>
<tr>
<td>3</td>
<td>Not very important</td>
<td>1.8</td>
<td>1.54</td>
<td>1395</td>
</tr>
<tr>
<td>4</td>
<td>Not at all important</td>
<td>1.9</td>
<td>1.66</td>
<td>1338</td>
</tr>
</tbody>
</table>

Religion

A comparative study of bribe taking in the USA, Brazil, Germany and China found that Protestants and Spiritistas were most opposed to bribe taking, followed by Evangelicals, Muslims, Roman Catholics and Buddhists (Hernandez & McGee, 2012a). Religion was found not to be a significant variable in a comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b) and a study of Egypt (Hernandez & McGee, 2012c).

Table 7 ranks mean scores by religion. Those in the Other category were most strongly opposed to bribery, while Christians were least opposed. Anglicans and Orthodox were equally opposed, as were Roman Catholics and Evangelicals. The reason several Christian groups are listed in addition to the generic Christians is because the surveys in some countries were more specifics than were the surveys in other countries. An ANOVA found that the difference between groups was highly significant (p < 0.002).
Religiosity

A comparative study of the USA, Brazil, Germany and China found that religiosity was not a significant variable (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that the less religious a person is, the less resistance there was to bribe taking. However, the results were significant only at the 10 percent level (Hernandez & McGee, 2012b). A study of opinion in Egypt found that religious people were significantly more opposed to bribe taking than were those who were not religious (Hernandez & McGee, 2012c).

Table 8 ranks mean scores on the basis of religious belief. Those who categorized themselves as religious were most opposed to bribery, whereas those who were not religious were least opposed. Atheists fell in the middle. The difference between groups was highly significant (p < 0.001).


**TABLE 8:**

**Ranking by Religious Person**
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Religious</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A religious person</td>
<td>1.6</td>
<td>1.50</td>
<td>2624</td>
</tr>
<tr>
<td>2</td>
<td>A convinced atheist</td>
<td>1.8</td>
<td>1.66</td>
<td>662</td>
</tr>
<tr>
<td>3</td>
<td>Not a religious person</td>
<td>1.9</td>
<td>1.57</td>
<td>1591</td>
</tr>
</tbody>
</table>

**Marital Status**

Marital status was examined in a number of tax evasion studies. However, the extent of opposition to tax evasion varied by country (McGee, 2012d). A comparative study of the USA, Brazil, Germany and China found that married and widowed people were the groups most opposed to bribe taking, followed by the separated, divorced, living together as married and single/never married groups (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that widows were most opposed to bribe taking, followed by married, separated, living together as married and single/never married (Hernandez & McGee, 2012b). Marital status was not a significant variable in an Egyptian study (Hernandez & McGee, 2012c).

Table 9 ranks mean scores on the basis of marital status. Widows were most opposed to bribery, whereas those who were living together as married were least opposed. The mean scores for married and separated were identical. An ANOVA found that the difference between groups was highly significant (p < 0.001).
TABLE 9: 
Ranking by Marital Status
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Status</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Widowed</td>
<td>1.5</td>
<td>1.41</td>
<td>325</td>
</tr>
<tr>
<td>2</td>
<td>Married</td>
<td>1.6</td>
<td>1.37</td>
<td>2818</td>
</tr>
<tr>
<td>2</td>
<td>Separated</td>
<td>1.6</td>
<td>1.61</td>
<td>126</td>
</tr>
<tr>
<td>4</td>
<td>Divorced</td>
<td>1.8</td>
<td>1.55</td>
<td>253</td>
</tr>
<tr>
<td>5</td>
<td>Single/Never married</td>
<td>1.9</td>
<td>1.71</td>
<td>1049</td>
</tr>
<tr>
<td>6</td>
<td>Living together as married</td>
<td>2.1</td>
<td>1.95</td>
<td>463</td>
</tr>
</tbody>
</table>

Education Level

Several studies on the ethics of tax evasion have found that there is a relationship between the level of education and attitude toward tax evasion, but the results are mixed. In some studies, those who have the most education were most opposed to tax evasion, while in other cases those who were least education are most opposed to tax evasion. In a third group of studies, those in the middle group were most opposed to tax evasion. In a fourth group of studies, there was no correlation between education level and extent of opposition to tax evasion (McGee, 2012d).

A comparative study of the USA, Brazil, Germany and China found that the two groups most opposed to bribe taking were the most educated and the least educated (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that differences between categories were significant but that there was no discernible trend (Hernandez & McGee, 2012b). Education level was not a significant variable in an Egyptian study (Hernandez & McGee, 2012c).

Table 10 ranks the mean scores by highest level of education attained. Those with university degrees were most opposed to bribery, while those with incomplete secondary school educations were least opposed. However, if one looks at the rankings between the two polar positions, it can be seen that the relationship is not strictly linear. An ANOVA found the difference between groups to be highly significant (p < 0.001).
**TABLE 10:**
**Ranking by Highest Level Of Education**
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Level</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University with degree/Higher education - upper-level tertiary certificate</td>
<td>1.4</td>
<td>1.11</td>
<td>854</td>
</tr>
<tr>
<td>2</td>
<td>Complete secondary: university-preparatory type/Full secondary, maturity level certificate</td>
<td>1.6</td>
<td>1.35</td>
<td>689</td>
</tr>
<tr>
<td>3</td>
<td>Completed (compulsory) elementary education</td>
<td>1.7</td>
<td>1.44</td>
<td>682</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete secondary: university-preparatory type/Secondary, intermediate general qualification</td>
<td>1.7</td>
<td>1.47</td>
<td>140</td>
</tr>
<tr>
<td>5</td>
<td>Inadequately completed elementary education</td>
<td>1.8</td>
<td>1.61</td>
<td>410</td>
</tr>
<tr>
<td>5</td>
<td>Complete secondary school: technical/vocational type/Secondary, intermediate vocational qualification</td>
<td>1.8</td>
<td>1.63</td>
<td>1268</td>
</tr>
<tr>
<td>5</td>
<td>Some university without degree/Higher education - lower-level tertiary certificate</td>
<td>1.8</td>
<td>1.69</td>
<td>306</td>
</tr>
<tr>
<td>8</td>
<td>Incomplete secondary school: technical/vocational type/(Compulsory) elementary education and basic vocational qualification</td>
<td>2.0</td>
<td>1.97</td>
<td>593</td>
</tr>
</tbody>
</table>

**Employment Status**

A comparative study of the USA, Brazil, Germany and China found that retired people were most opposed to bribe taking, followed by the self-employed, full-time and part-time workers, housewives, students and the unemployed (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that housewives were most opposed to bribe taking; students and the unemployed were least opposed (Hernandez & McGee, 2012b). A study of Egyptian opinion found that retired and fully-employed people were most opposed to bribe taking, and that the unemployed and students were least opposed (Hernandez & McGee, 2012c).

Table 11 ranks mean scores on the basis of employment status. Retired individuals were most opposed to bribery, while students and the unemployed were least opposed. Part-time workers and housewives were equally opposed. An ANOVA found the difference between groups to be highly significant (p < 0.001).
TABLE 11:
Ranking by Employment Status
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Status</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retired</td>
<td>1.5</td>
<td>1.31</td>
<td>1186</td>
</tr>
<tr>
<td>2</td>
<td>Part Time</td>
<td>1.6</td>
<td>1.38</td>
<td>536</td>
</tr>
<tr>
<td>2</td>
<td>Housewife</td>
<td>1.6</td>
<td>1.28</td>
<td>346</td>
</tr>
<tr>
<td>4</td>
<td>Self employed</td>
<td>1.7</td>
<td>1.62</td>
<td>432</td>
</tr>
<tr>
<td>5</td>
<td>Full time</td>
<td>1.8</td>
<td>1.66</td>
<td>1813</td>
</tr>
<tr>
<td>5</td>
<td>Other</td>
<td>1.8</td>
<td>1.67</td>
<td>106</td>
</tr>
<tr>
<td>7</td>
<td>Students</td>
<td>2.0</td>
<td>1.72</td>
<td>240</td>
</tr>
<tr>
<td>7</td>
<td>Unemployed</td>
<td>2.0</td>
<td>1.79</td>
<td>345</td>
</tr>
</tbody>
</table>

Institution of Occupation

A comparative study of the USA, Brazil, Germany and China found that people who worked in the government sector were most opposed to bribe taking, followed by the self-employed, people who worked at private non-profit organization and those who worked for private firms (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b) and a study of Egypt (Hernandez & McGee, 2012c) found that institution of occupation was not a significant variable.

Table 12 ranks the mean scores on the basis of institution of employment. Those who work at public institutions were more opposed to bribery than were those who worked in the private sector. Those who worked in private business were least opposed to bribery. An ANOVA found the difference between groups to be highly significant (p < 0.001).
**TABLE 12:**

**Ranking Institution of Occupation**

(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public institution</td>
<td>1.5</td>
<td>1.32</td>
<td>1041</td>
</tr>
<tr>
<td>2</td>
<td>Private non-profit</td>
<td>1.7</td>
<td>1.54</td>
<td>458</td>
</tr>
<tr>
<td></td>
<td>organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Private business</td>
<td>1.8</td>
<td>1.64</td>
<td>2706</td>
</tr>
</tbody>
</table>

**Social Class**

Social class was found not to be a significant variable in a study of Egyptian views on bribe taking (Hernandez & McGee, 2012c). However, a comparative study of bribe taking in the USA, Brazil, Germany and China found that the upper middle class was most opposed to bribe taking, followed by the lower middle class, working class, lower class and upper class (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found the results to be curvilinear, where those in the middle class had mean scores that were between those of the working and lower class (Hernandez & McGee, 2012b).

Table 13 ranks mean scores by social class. Those in the lower class were most strongly opposed to bribery, whereas those in the upper class were least opposed. However, the ANOVA p value shown in Table 13b leads one to conclude that the difference between groups is not significant. In other words, the various classes had basically the same opinion regarding the ethics of bribery. Class was not a significant variable. (p = 0.242).

**TABLE 13:**

**Ranking by Social Class**

(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Class</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower class</td>
<td>1.4</td>
<td>1.05</td>
<td>107</td>
</tr>
<tr>
<td>2</td>
<td>Upper middle class</td>
<td>1.5</td>
<td>1.23</td>
<td>720</td>
</tr>
<tr>
<td>3</td>
<td>Lower middle class</td>
<td>1.6</td>
<td>1.26</td>
<td>1040</td>
</tr>
<tr>
<td>3</td>
<td>Working class</td>
<td>1.6</td>
<td>1.47</td>
<td>927</td>
</tr>
<tr>
<td>5</td>
<td>Upper class</td>
<td>1.8</td>
<td>1.48</td>
<td>22</td>
</tr>
</tbody>
</table>
Ethical Attitudes toward Taking a Bribe: A Study of Four European Countries

Income Level

Income level was found not to be a significant variable in a comparative study of the USA, Brazil, Germany and China (Hernandez & McGee, 2012a) and a comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b). However, a study of opinion in Egypt found that those in the lower income category were more opposed to bribe taking than were those in the middle and upper income groups. However, the results were significant only at the 10 percent level (Hernandez & McGee, 2012c).

Table 14 ranks mean scores based on income. Those with high income were most opposed to bribery, while those with low income were least opposed. The relationship was linear. The difference between groups was significant (p = 0.026).

TABLE 14:
Ranking by Scale Of Income
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Scale</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High income</td>
<td>1.6</td>
<td>1.29</td>
<td>582</td>
</tr>
<tr>
<td>2</td>
<td>Middle income</td>
<td>1.7</td>
<td>1.58</td>
<td>2180</td>
</tr>
<tr>
<td>3</td>
<td>Low income</td>
<td>1.8</td>
<td>1.68</td>
<td>1396</td>
</tr>
</tbody>
</table>

Size of Town

A comparative study of the USA, Brazil, Germany and China found that those who lived in the three smallest size towns were most strongly opposed to bribe taking, although the relationship between size of town and extent of opposition to bribe taking was not linear (Hernandez & McGee, 2012a). A similar result was found in a comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b). A study of Egypt found that those who lived in large cities were more opposed to bribe taking than were those who lived in small towns (Hernandez & McGee, 2012c).

Table 15 ranks mean scores based on the size of town in which the respondent lives. There seems to be no clear pattern. The second smallest and second largest size towns had identical mean scores (1.6), as did the smallest and largest towns (1.9). An ANOVA found the difference between groups to be significant (p < 0.001).
TABLE 15:  
Ranking by Size Of Town  
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Size</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5,000-10,000</td>
<td>1.5</td>
<td>1.39</td>
<td>400</td>
</tr>
<tr>
<td>2</td>
<td>2,000-5,000</td>
<td>1.6</td>
<td>1.47</td>
<td>534</td>
</tr>
<tr>
<td>2</td>
<td>100,000-500,000</td>
<td>1.6</td>
<td>1.40</td>
<td>870</td>
</tr>
<tr>
<td>4</td>
<td>10,000-20,000</td>
<td>1.7</td>
<td>1.52</td>
<td>507</td>
</tr>
<tr>
<td>4</td>
<td>20,000-50,000</td>
<td>1.7</td>
<td>1.44</td>
<td>752</td>
</tr>
<tr>
<td>4</td>
<td>50,000-100,000</td>
<td>1.7</td>
<td>1.52</td>
<td>489</td>
</tr>
<tr>
<td>7</td>
<td>&lt;2,000</td>
<td>1.9</td>
<td>1.69</td>
<td>551</td>
</tr>
<tr>
<td>7</td>
<td>&gt;500,000</td>
<td>1.9</td>
<td>1.77</td>
<td>943</td>
</tr>
</tbody>
</table>

**Happiness**

A comparative study of the USA, Brazil, Germany and China found that those who were very happy and happy showed the most opposition to bribe taking, while those who were not at all happy showed the least opposition (Hernandez & McGee, 2012a). Happiness was not a significant variable in a comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b) and in a study of Egypt (Hernandez & McGee, 2012c).

Table 16 ranks mean scores on the basis of happiness. There was not much difference among the mean scores, but the ranking seems to be mostly linear. Those who were either very happy or quite happy were most opposed to bribery, while those in the two least happy groups were least opposed to bribery. An ANOVA found the difference between groups to be significant at the 10 percent level (p < 0.054).
TABLE 16:
Ranking by Happiness
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Happiness</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very happy</td>
<td>1.7</td>
<td>1.60</td>
<td>1457</td>
</tr>
<tr>
<td>1</td>
<td>Quite happy</td>
<td>1.7</td>
<td>1.44</td>
<td>2955</td>
</tr>
<tr>
<td>3</td>
<td>Not at all happy</td>
<td>1.8</td>
<td>1.80</td>
<td>77</td>
</tr>
<tr>
<td>4</td>
<td>Not very happy</td>
<td>1.9</td>
<td>1.80</td>
<td>486</td>
</tr>
</tbody>
</table>

Health

Health was not a significant variable in a comparative study of the USA, Brazil, Germany and China (Hernandez & McGee, 2012a) or in a study of Egypt (Hernandez & McGee, 2012c). However, a comparative study of Argentina, Brazil and Colombia found that healthier people were less averse to bribe taking than were unhealthy people (Hernandez & McGee, 2012b).

Table 17 ranks the mean scores by health category. Those in poor health were most opposed to bribery, while those in very good health were least opposed. Those in good or fair health were in between, and had identical mean scores. The difference between groups was significant at the 5 percent level (p = 0.022).

TABLE 17:
Ranking by Health
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Health</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor</td>
<td>1.5</td>
<td>1.39</td>
<td>263</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
<td>1.7</td>
<td>1.54</td>
<td>2308</td>
</tr>
<tr>
<td>2</td>
<td>Fair</td>
<td>1.7</td>
<td>1.43</td>
<td>1101</td>
</tr>
<tr>
<td>4</td>
<td>Very good</td>
<td>1.8</td>
<td>1.64</td>
<td>1360</td>
</tr>
</tbody>
</table>
Confidence in the Police

A comparative study of the USA, Brazil, Germany and China found that the two groups that had the most confidence in the police also had the strongest opposition to bribe taking (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that those who placed no confidence in the police were most opposed to bribe taking, while those who placed quite a bit of confidence or a great deal of confidence in the police were least opposed to bribe taking (Hernandez & McGee, 2012b).

Table 18 ranks mean scores on the basis of the degree of confidence in the police. The relationship is linear. Those who place a great deal of confidence in the police are most opposed to bribery, whereas those who place no confidence at all in the police are least opposed. An ANOVA found the difference between groups to be highly significant (p < 0.001).

Table 18: Ranking by Confidence in the Police
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Confidence</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A great deal</td>
<td>1.6</td>
<td>1.32</td>
<td>749</td>
</tr>
<tr>
<td>2</td>
<td>Quite a lot</td>
<td>1.7</td>
<td>1.50</td>
<td>2931</td>
</tr>
<tr>
<td>3</td>
<td>Not very much</td>
<td>1.8</td>
<td>1.70</td>
<td>1005</td>
</tr>
<tr>
<td>4</td>
<td>None at all</td>
<td>2.0</td>
<td>1.93</td>
<td>298</td>
</tr>
</tbody>
</table>

Confidence in the Justice System

A comparative study of the USA, Brazil, Germany and China found that those with the most confidence in the justice system were more opposed to bribe taking, while those who had no confidence in the justice system were least opposed (Hernandez & McGee, 2012a). A comparative study of Argentina, Brazil and Colombia found that opposition to bribe taking was higher for the groups who placed little or no confidence in the justice system, and lower for those who placed confidence in the system (Hernandez & McGee, 2012b).

Table 19 ranks the mean scores based on the extent of confidence in the justice system. The relationship is linear. Those who place the most confidence in the justice system were most opposed to bribery, whereas those with no confidence at all in the justice system were least opposed. An ANOVA found the difference between groups to be highly significant (p < 0.001).
Confidence in the Government

Confidence in the government was found not to be a significant variable in a comparative study of the USA, Brazil, Germany and China (Hernandez & McGee, 2012a) and in a comparative study of Argentina, Brazil and Colombia (Hernandez & McGee, 2012b).

Table 20 ranks mean scores on the basis of extent of confidence in the government. The relationship is basically linear, with those who place a lot or a great deal of confidence in the government being more opposed to bribery than those who place little or no confidence in the government. An ANOVA found the difference between groups to be significant (p = 0.018).

TABLE 20:
Ranking by Confidence in the Government
(Accepting a bribe is: 1 = never justifiable; 10 = always justifiable)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Confidence</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quite a lot</td>
<td>1.6</td>
<td>1.36</td>
<td>1219</td>
</tr>
<tr>
<td>2</td>
<td>A great deal</td>
<td>1.7</td>
<td>1.62</td>
<td>124</td>
</tr>
<tr>
<td>2</td>
<td>Not very much</td>
<td>1.7</td>
<td>1.54</td>
<td>2391</td>
</tr>
<tr>
<td>4</td>
<td>None at all</td>
<td>1.8</td>
<td>1.71</td>
<td>1187</td>
</tr>
</tbody>
</table>
**Left-right political spectrum**

Position on the left-right political spectrum was found not to be a significant variable in a comparative study of the USA, Brazil, Germany and China (Hernandez & McGee, 2012a) and in a study of Egypt (Hernandez & McGee, 2012c). However, a comparative study of Argentina, Brazil and Colombia found that centrists were most opposed to bribe taking, while leftists were least opposed (Hernandez & McGee, 2012b).

Table 21 ranks the mean scores based on position in the left-right political spectrum. Those on the left and those in the center had identical mean scores. Those on the right had a mean score that was only slightly higher than the mean scores for the other two groups. An ANOVA found the difference between groups not to be significant ($p = 0.439$).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Spectrum</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Left</td>
<td>1.7</td>
<td>1.53</td>
<td>982</td>
</tr>
<tr>
<td>1</td>
<td>Center</td>
<td>1.7</td>
<td>1.53</td>
<td>2910</td>
</tr>
<tr>
<td>3</td>
<td>Right</td>
<td>1.8</td>
<td>1.74</td>
<td>442</td>
</tr>
</tbody>
</table>

**Summary of Findings**

Table 22 summarizes the findings.

| Overall – Although the people in all four countries were opposed to bribery, those in some countries were more opposed than others. Italians were most opposed to bribery, followed by the British and Germans. The French were least opposed to bribery. |
| Gender – Overall, females were significantly more opposed to bribery than were males. |
| Age – The relationship was linear, with the oldest group being most opposed and the youngest group being least opposed. |
Ethical Attitudes toward Taking a Bribe: A Study of Four European Countries

Ethnicity – Caucasians were most opposed to bribery, followed by South Asians (Indian, Hindu, Pakistani, Bangladeshi), blacks, East Asians (Chinese, Japanese) and Central Asians (Arabic).

Importance of religion - The relationship is linear. The more important religion is, the stronger the opposition to bribery.

Religion - Those in the Other category were most strongly opposed to bribery, while Christians were least opposed. Anglicans and Orthodox were equally opposed, in second place, while Roman Catholics and Evangelicals tied for fifth place, followed by Muslims. The reason several Christian groups are listed in addition to the generic Christians is because the surveys in some countries were more specifics than were the surveys in other countries.

Religiosity - Those who categorized themselves as religious were most opposed to bribery, whereas those who were not religious were least opposed. Atheists fell in the middle.

Marital Status – Widows were most strongly opposed to tax evasion. Married and separated tied for second place, followed by divorced, single/never married and living together as married.

Education Level - Those with university degrees were most opposed to bribery, while those with incomplete secondary school educations were least opposed. However, if one looks at the rankings between the two polar positions, it can be seen that the relationship is not strictly linear.

Employment Status – Retired people were most opposed to bribe taking, followed by part-time employees and housewives, which tied for second place. Self-employed people ranked fourth. Full-time and other tied for fifth place. Students and the unemployed tied for seventh place, and were least opposed to bribe taking.

Institution of Occupation - Those who work at public institutions were more opposed to bribery than were those who worked in the private sector. Those who worked in private business were least opposed to bribery.

Social Class - the various classes had basically the same opinion regarding the ethics of bribery. Class was not a significant variable.

Income Level - Those with high income were most opposed to bribery, while those with low income were least opposed. The relationship was linear.

Size of Town - There seemed to be no clear pattern. The second smallest and second largest size towns had identical mean scores (1.6), as did the smallest and largest towns (1.9).

Happiness - There was not much difference among the mean scores, but the ranking seems to be
mostly linear. Those who were either very happy or quite happy were most opposed to bribery, while those in the two least happy groups were least opposed to bribery. Differences were significant at the 10 percent level.

Health – Those in poor health were most opposed to bribery, while those in very good health were least opposed. Those in good or fair health were in between, and had identical mean scores.

Confidence in the Police - The relationship is linear. Those who place a great deal of confidence in the police are most opposed to bribery, whereas those who place no confidence at all in the police are least opposed.

Confidence in the Justice System - The relationship is linear. Those who place the most confidence in the justice system were most opposed to bribery, whereas those with no confidence at all in the justice system were least opposed.

Confidence in the Government - The relationship is basically linear, with those who place a lot or a great deal of confidence in the government being more opposed to bribery than those who place little or no confidence in the government.

Left-right Political Spectrum – This variable was not significant.

## CONCLUDING COMMENTS

Although all four countries were opposed to bribe taking, some countries were more opposed than others. Most of the demographic variables examined showed significant differences in mean scores.

A number of additional studies could be made on this topic. Attitudes in additional countries could be made and a closer examination of some of the demographic variables could yield interesting results. More needs to be known about why differences in some demographic variables are significant. Cultural, historical, sociological, psychological and religious factors all play a role. These avenues could benefit from further examination.

## REFERENCES


THE PATTERNS OF JAPANESE FDI IN AUSTRALIA AFTER THE LEHMAN SHOCK: PERSPECTIVES OF THE ECLECTIC PARADIGM AND INSTITUTIONAL ECONOMICS

CELAL BAYARI

ABSTRACT

This paper discusses the post-'Lehman Brothers shock' period of the Japanese foreign direct investment in Australia, and provides an analysis of the types of investment. The analysis begins with the theoretical frameworks that define multinational enterprise (MNE) activity, and foreign direct investment. The way in which ‘institutional economics’ theory is utilised within the ‘eclectic paradigm’ is also analysed herein. The ‘Lehman Brothers shock’, the ensuing market decline, and the subsequent investor indecisiveness have had effects on foreign direct investment in Asia, the EU, and North America (Devos & Giovanoli, 2011). While this situation continued, one particular economic bilateralism, that of Japan and Australia, has remained largely unaffected. The bilateral trade volumes and structure between the two remain unaltered in the aftermath of the ‘shock’. This paper details the Japanese foreign direct investment patterns in Australia that were present before the ‘Lehman Brothers shock’, and continued afterwards (i.e. several-stage type of acquisitions). From the time of the ‘shock’ until April 2010, there were numerous Japanese acquisitions in Australia (Wallace, 2010). This process has been continuing, as of December 2011, with Japanese MNE Inpex’s A$30 billion foreign direct investment in LNG extraction and export project (AAP, 2011; AFP, 2011). Nippon Paper Group’s 2009 foreign direct investment in Australia was the ninth biggest Japanese global acquisition in that year (JETRO, 2010), and Mitsubishi Corporation’s September 2008 foreign direct investment was the tenth largest (JETRO, 2009). The post-crisis business environment has been beset by

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uncertainties, and the global mergers and acquisitions had recovered to merely one third of the 2007 levels by the end of 2010 (UNCTAD, 2011). This has been the global trend, the context of the discussion herein. As this paper discusses, the global trend, which UNCTAD describes, does not readily apply to the Japanese foreign direct investment in Australia.

Keywords: Australia, Lehman Brothers Shock, institutional economics, Japanese foreign direct investment

MNE FRAMEWORK AND INSTITUTIONAL ECONOMICS

Several frameworks of analysis explain the trade and foreign direct investment activities of MNEs. As international trade and international production simultaneously form the MNE domain, they are explainable within the same framework of analysis, which is what John H. Dunning’s ‘eclectic paradigm’ of ‘OLI (‘ownership’, ‘locational’ and ‘internalisation’) advantages’ does (Ietto-Gillies, 1992; Tolentino, 2001). The ‘eclectic paradigm’ offers a comprehensive framework for MNE-specific, and host nation-specific trade and foreign direct investment activities (Maitland & Nicholas, 2003; Markusen, 2001). Japanese foreign direct investment in Australia has been discussed within the ‘eclectic’ paradigm framework (Bayari, 2010; 2004; 2001; Nicholas et al., 1996; Purcell et al., 1999). The theoretical construction of international business that describe the connection between the location of foreign direct investment and the activities of MNEs have been modified in this decade to account for the increase in the mobility of firm-specific assets (Dunning, 2009). The main qualification that differentiates an MNE from companies which operate solely in home market (i.e. the market of its own nation) remains the fact an MNE operates in foreign markets but relies on its ‘home advantages’ (Dunning & Lundan, 2008). The ‘eclectic paradigm’ has evolved over time, which enables it to account for changes in the international foreign direct investment environment and the investment rationale (Dunning et al., 2007a). The contemporary structure of foreign direct investment has been displaying a ‘regionalisation’ pattern (Dunning, 2005). This is affected by the respective gross domestic products and bilateral trade volumes of the two countries that act as the host and the investor, respectively (Dunning et al., 2007b). This means an MNE from a particular region mainly focuses in that region for its trade and foreign direct investment activities. This applies to most MNEs. Yet, two factors affect an MNE’s decision to be in a particular host market that is located in its own region, the size of economy of the host nation, and the size of the economy of the nation from which the MNE originates. Further, existing bilateralism between an MNE and a host market also positively affects future activities of the MNE in that particular market. An example of this broad framework is the bilateral economic (trade & foreign direct investment) relations between Japan and Australia.
Douglas North and Institutional economics: Dunning (2006) extends his ‘eclectic’ paradigm to include RCMI determinants by incorporating them from ‘institutional economics’ inquiry established by Douglas North (1990a; 1990b; 1994; 2005). The study of institutions is frequently collected under ‘institutionalism’ (also referred as neo-institutionalism or new institutionalism), which holds that institutions, in various ways, dominate all social organisations, and their interaction, and that institutions are themselves social products (DiMaggio & Powell, 1991; Williamson, 2000). Institutional economics, broadly, focuses on economic activity and economic growth under conditions defined by historical institutional developments (Acemoglu et al., 2001; Rodrik et al., 2002; Dunning, 2006; Dunning & Zhang, 2008). The strand which is based on the framework offered by North (1990a; 1990b; 1994; 2005) proposed that differences between nations in terms of economic growth and stable wealth growth can, largely, be explained by how each nation sets up and implements its own rules to guarantee the success of a defined set of advantageous market behaviour. Implicit in this argument is the transferable nature of institutions across culturally related nations, i.e. from the UK into the US, Canada, Australia, New Zealand or from Spain into the Americas. Some nations have developed faster than the rest, and far more homogeneously and steadily. Their institutions are the main cause of this, as per the general outlines of this paradigm. Australia’s economic success is argued to be related to its transfer of the UK’s institutions, as was the case with Canada, the US and New Zealand (Acemoglu et al., 2001; Rodrik et al., 2002). One issue inexplicitly inherent with this framework is related to the neo-liberal adoption of neo-classical economics’ assumptions. The global economic activity of the last three decades presents several facts versus certain theoretical falsities (Quiggin, 2012). Economic growth does not translate into an equitable distribution of benefits (contrary to ‘the trickle down economics’ framework), the market is not the fairest distributive mechanism (contrary to ‘the efficient markets hypothesis’), the post-1985 global economic history is not one of macroeconomic stability (contrary to ‘the great moderation’ thesis), and finally, ‘privatization’ of government functions and services has not been a success (Quiggin, 2012). These falsities, as outlined by Quiggin, are essential tenets of Anglo-Saxon capitalist model. This model has a leading role in the construction of ‘institutional’ economics, which does lead to a potential paradox over the question of economic growth and where the growth benefits go. In the case of Australian economy, the application of neo-liberal deregulation to the mining and energy sectors of the economy did ensure their spectacular growth, which highlights the verifiability of the North’s institutional economics. These sectors have developed because of legislations, regulations, and governance elements in Australia’s deregulatory period from the 1980s onwards. Mining and energy sectors in Australia have grown due to the existence of neo-liberal deregulatory ‘institutions’ that made these sectors highly attractive to massive amounts of foreign direct investment. Yet, the net benefit to Australia, in terms of revenue, from these sectors, has always been insufficient (Edwards, 2011), and the sectors’ growth had little positive effect on the wellbeing of the majority of Australians (Richardson, 2009).

North (1990a; 1990b) states that written rules, and monitoring and enforcement systems [formal institutions] interact with the operations of long-established informal rules and conformist conduct [informal institutions]. The two types of institutions symmetrically co-exist.
Contemporary organisations, such as MNEs, are ‘responses’ to the ‘institutional structures’. Dunning’s (2006) emphasis on North’s framework especially concerns North’s discussion on institutions that provide ‘incentive structures and enforcement mechanisms’ and ‘reduction and counteracting of uncertainty’ in international trade and foreign direct investment. In broad terms, ‘institutions’ refer to the historical and social construction of the existing foundations in modern market economies. These are written legal codes, unwritten conventions and rules that define, underwrite, sustain and protect people, property rights, contracts, organisations, and provide a range of liberties to MNEs, and the states (Acemoglu et al. 2001; Dunning 2006; Dunning & Zhang 2008; North 2005; 1994; Rodrik et al., 2002).

RCMI determinants play a role in defining the competitiveness of national economies and the levels of internal and external foreign direct investment, and hence their economic growth (Dunning & Zhang, 2008; Rodrik et al., 2002). Economic activity, such as foreign direct investment, drives growth in sectors of a host economy, and is determined by resources, capabilities and markets (RCM), which form the ‘physical environment’ (firms and other organisations), and ‘institutions’ (I), which provide the incentive structures to make up the ‘human environment’, and set the rules and provide motivation for MNEs (Dunning & Zhang 2008). Incentive structures refer to mechanisms that are historic and/or enhanced by legal systems, and which encourage/discourage certain types of behaviour and punish others. These are not ‘neo-classical’ type of ‘single dimensional’ structures that define utility and profit seeking behaviour but instead are ‘enforcement mechanisms’ for desirable behaviour (Dunning & Zhang 2008). These definitions, of course, follow the definitions by Douglas North (1990a; 1990b; 1994; 2005). Dunning and Zhang (2008) are specific about what RCM are. ‘Resources’ include natural resources, land, labour, and technology. ‘Capabilities’ include skills, expertise, social organisation and governance, while ‘markets’ include not only domestic and foreign markets but the ability to exploit and co-ordinate them.

Dunning includes the ‘institutions’ determinant in his ‘eclectic paradigm’ of ‘ownership-locational-internalisation’ advantages, as a form of ‘institutionally’ related competitive advantage, which motivates and influences the extent to which, and the ways in which, RCM are created, deployed or accessed (Dunning, 2006). In short, RCMI provide the conditions for foreign direct investment and the host interaction, according to Dunning. It is possible to observe the foreign direct investment levels in Australia in a RCMI frame of analysis. ‘Market efficiency’ and ‘incentive structures’ [that are specifically for foreign ownership] are part of the ‘institutions’, which are conducive to inward foreign direct investment, according to Dunning. From the perspective of the ‘eclectic paradigm’, if the locational advantages of the host include the competitiveness of both ‘RCM’ and ‘I’ simultaneously, then the optimum conditions of inward foreign direct investment are present (Dunning & Zhang, 2008). In this instance, the location is Australia. Since the early 1980s, the relationship between the MNEs and national governments around the globe has become increasingly co-operative (Dunning, 1998). MNE activity has become progressively more dependent on institutional underpinnings, reinforcing the relevance of Douglas North’s premise that the increasingly complex forms of uncertainty in conjunction with increasing MNE activity point to the significance of institutions and institutional responses (Cantwell et al., 2010;
Australian economy experienced a spectacular resources sector (coal, gas, and minerals) growth via MNE foreign direct investment from the early 1980s onwards. Trade and tariff deregulation allowed MNEs to benefit from the deregulation to enable free movement of capital, and gave them easier access to the Australian market (Stilwell, 2008). The domestic governance determines the social distribution of the benefits of economic growth just as it does determine the ‘institutional’ attitudes towards foreign direct investment. Neither element is outside the domain or the power of governments. Cross-cultural and ideological differences influence the decisions over the transfer of ownership advantages overseas (Dunning, 2006). Nations with common economic, social, and political experiences may respond to the transfer of a particular advantage in similar ways, especially if they already share a common cultural heritage, as in the Anglo-Saxon world (Canada, New Zealand, Australia, the UK, the US). Australia, New Zealand, Canada, and the US are termed ‘neo-Europes’ because they all modeled their institutions on the UK, during the colonial period of their economic history (Acemoglu et al., 2001). Rodrik et al. (2002) too place Australia alongside Canada, New Zealand as ‘neo-European countries’ that developed from colonial origins that proceeded with the replication of the UK’s ‘institutions’, and present a model of economic growth that is based on the quality of institutions, rather than the affects of geography, climate, natural resources, or integration with international trade links. Thus, Australia is very close to the UK and the US in terms of cultural history, and economic governance model (Cahill, 2002; Dore, 2002; Harzing & Noorderhaven, 2006). This is reflected in the fact that the respective labour relations environments of the three interact with the Japanese foreign direct investment in the same manner (Bayari, 2011; 2010). In terms of ‘RCMI’ determinants, their institutions have more in common with each other than they have with the nations that are outside the Anglo-Saxon world.

THE STATE OF FOREIGN DIRECT INVESTMENT IN THE AUSTRALIAN MARKET

Foreign direct investment in Australia consists of ‘portfolio investment’, ‘direct investment’ and ‘financial derivatives’, and ‘other investment liabilities’, as per the official statistics (ABS 5352.0, 2011). These statistics do not identify how much of foreign direct investment is actually reinvested earnings, or ‘greenfield’, or for the retooling of going concerns. The official statistics do not divide the figures into industrial sectors, such as the types of manufacturing (food, automotive, plastics etc.). One particular ABS trial publication, released in 2001, was entitled Ownership Characteristics of Business Undertaking Capital Expenditure in Australia, 1998-1999 (ABS, 2001). This publication highlighted significant differences among the Australian states and territories in terms of the type of foreign direct investment (mining, manufacturing etc.). Foreign direct investment levels in Australia stood at approximately A$2 trillion as of 31 December 2010. Australian investment overseas stood at A$1.2 trillion at the same period. It is
possible to comprehend the size of these foreign direct investment levels if one considers that Australia’s GDP, at 30 June 2010, was approximately A$1.3 trillion (ABS 5204.0, 2011). The balance of ‘total assets’ and ‘total liabilities’ (what the economists call ‘the net worth of Australia’) was A$7,683 billion at June 30 2010 (ABS 5204.0, 2011).

Table 1 shows that the top six investors in Australia are the US, the UK, Japan, Hong Kong (SAR), Germany, and Switzerland. Their levels of total foreign investment (all of their investment, direct or otherwise such as portfolio investment), and the foreign direct investment components (percentage which ‘direct’ type of investment has within total foreign investment) are as shown. Foreign direct investment represented 24 per cent of the total foreign investment in Australia while ‘portfolio investment’ made up 58 per cent, in the period under consideration (ABS 5352.0, 2011). Foreign direct investment component of the respective individual investors vary. Hong Kong (SAR), the US, and the UK have rather small components of foreign direct investment in their total foreign investment levels in Australia. Chart 1 shows the Japanese global foreign direct investment for 1970-2009. There is a downturn in 2009. There are, by contrast, steady annual increases between 2001 and 2008. However, as Chart 2 shows, the Japanese foreign direct investment in Australia has actually increased in the same period. This appears to be reflection of a broader trend. Australia will be the eight major destination of global foreign direct investment in 2011-2013, and Japanese foreign direct investment in 2011-2012 will continue to increase (UNCTAD, 2011: 18, 19).

### TABLE 1: Total Foreign Investment Levels (A$ million) at December 2010

<table>
<thead>
<tr>
<th>Origin</th>
<th>Total Foreign Investment</th>
<th>Foreign Direct Investment Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>549.88</td>
<td>120.08</td>
</tr>
<tr>
<td>UK</td>
<td>472.64</td>
<td>52.52</td>
</tr>
<tr>
<td>Japan</td>
<td>117.63</td>
<td>49.41</td>
</tr>
<tr>
<td>Hong Kong (SAR)</td>
<td>40.77</td>
<td>6.69</td>
</tr>
<tr>
<td>Germany</td>
<td>40.75</td>
<td>16.22</td>
</tr>
<tr>
<td>Switzerland</td>
<td>40.73</td>
<td>20.73</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,967.80</td>
<td>473.67</td>
</tr>
</tbody>
</table>

Source: Calculated from ABS 5352.0 (2011)
The Patterns of Japanese FDI in Australia after the Lehman Shock: Perspectives of the Eclectic Paradigm and Institutional Economics

JAPANESE FOREIGN DIRECT INVESTMENT IN AUSTRALIA

From the middle of the 1940s onwards, the IMF, World Bank and GATT emerged as the new mechanisms of global system of finance and trade (Bossche, 2005). The new global finance and trade system has underwritten the resumption of trade and foreign direct investment in Asia Pacific, and elsewhere. The present investment and trade relations between Australia and Japan date back to the period that began with the 1957 Commerce Agreement. The 1976 Basic Treaty of Friendship and Cooperation, a later bilateral agreement, is the only one of its kind that Australia has concluded with any country (Woodard et al., 2007). Japanese foreign direct investment in Australia has been historically at far higher levels than Australian foreign direct investment in Japan (Bayari, 2008; 2004; 2001; Beeson, 1999; Drysdale, 2010; Edgington, 1990; Sheridan, 1992). Australian foreign direct investment in Japan has been low historically (Australia at Aichi World Expo, 2005, Senate Foreign Affairs et al., 2000). The post-war bilateral agreements are the ‘institutional’ context of trade and foreign direct investment relations between Australia and Japan. These agreements are the imperceptible background to the ‘locational advantages’ of Australia. From RCMI perspective, Australia possesses resources, market, and institutions that interact with resources in the form of foreign direct investment and capabilities in form of transfer of technology and related elements. In the immediate post-war period, the structures that were set in place, via these bilateral agreements, between Japan and Australia, have provided a set of trade and foreign direct investment conditions.

Chart 1 describes the changes in the total Japanese foreign direct investment per annum. A negative figure (decrease) represents the percentage of decrease from the previous year (base figure). Chart 2 shows that the Japanese foreign direct investment in Australia, in dollar terms, has increased in 2004-2010 continuously. As shown on Chart 3, Japanese foreign direct investment in Australia has increased its share of the total in 2004-2010. While since 1991, the long-term trend has been one of decline; it is remarkable that in the ‘post-Lehman Brothers shock’ period, the share of the Japanese investors has increased, which indicates that the ‘shock’ did not negatively affect the bilateral relations. Japanese overseas production is a wide field. The past research on Japanese overseas production has included the six continents in the last four decades (Abo, 2011; 2007; 2004). In Australia, Bayari (2011; 2010), Beeson (1999), and Edgington (1990) have focused on the nature and the extent of Japanese foreign direct investment. Japanese manufacturing multinationals, which currently manufacture in Australia, include Toyota Denso, Aisin, Daikin, Shinagawa, Nissan Casting, and YKK. In the 2008-2011 period, numerous high value Japanese acquisitions of Australian firms were completed in a broad range of industries, some of which involve production in Australia. This trend is a continuation of the earlier period. In the 2000s, foreign direct investment by Marubeni Corporation and Tohoku Power Company made an impact with the Milmerran ‘clean coal’ power station project, which was the first privately owned power station in Australia (Wilson, 2003). In 2001, Japanese foreign direct investment in Australia’s energy and resources market
was worth half a billion dollars (AJEI, 2003). In the same year, Australia had new foreign direct investment from Fujitsu and NEC in telecommunications and the IT sectors of the Australian market (AJEI, 2003). Toyota Australia and [now defunct] Mitsubishi Motors Australia Limited carried out major new foreign direct investment in the early 2000s (Bayari, 2008).

JETRO’s annual White Paper provides some information on the major destinations of Japanese foreign direct investment. In 2002, the main acquisition type of Japanese foreign direct investment in Australia consisted of Paloma Industries’ purchase of a manufacturing unit of Southcorp Ltd for US$278 million and Mitsui & Co Ltd’s purchase of Moura coal mine for US$166 million (JETRO, 2003). Mitsui is a major player in Australia’s coal exports. It has interests in BMA Coal, the world’s largest coal exporter (Bloomberg, 2003), which displays the extent of its involvement in the global coal trade. In the last decade, the demand from China has set off a resources boom in Australia that brings to mind the time of the demand in the post-war growth period. A new A$11 billion BHP Billiton iron ore deal had four Chinese steel mills as the majority foreign partners (40 per cent), with Japan’s Cl Minerals Australia and Mitsui Iron Ore keeping a 4.8 per cent and a 4.2 per cent share respectively (McDonald, 2004). This highlights Japan’s continual interest in strategic foreign direct investments. In 2004, a Japanese investment fund in an Australian-listed property funds for A$120 million was created (Cummins, 2004). In 2007, there was A$206 million Japanese foreign direct investment in the Sydney property market, which had been of little interest to Japanese investors since the end of Japan’s bubble economy in 1992 (Cummins, 2007). In addition, again in 2007, Japanese trading house Sojitz acquired 30 per cent of Grange Resources Ltd (AAP, 2007b). In 2008, Dai-ichi Life Insurance, Japan’s second-largest life-insurer, entered Australian finance sector by investing A$376 in Sydney-based Tower Australia Group Limited, the life insurance, and superannuation company (John, 2008). In 2011, Dai-ichi acquired the rest of the company for A$1.6 billion (White, 2010). This made Dai-ichi the fourth largest insurance player in the Australian market, after National Australia Bank, Commonwealth Bank and ANZ Banking Group, which are three of the four biggest Australian banks.
CHART 1:
Japanese Global Foreign Direct Investment Change per annum (in %)

Source: Compiled from JETRO (2010, 1995)
CHART 2:
Japanese Foreign Direct Investment in Australia (in AUDS)

Source: Calculated from ABS (2011)
From the late 1980s onward, a wave of new Japanese foreign direct investment in Australia’s food and beverage manufacturing industry started (AJEI, 1989; 1994; Beeson, 1997). In 2007, there were several major Japanese acquisitions in this industry. Japan’s Kirin Holdings acquired Australia’s dairy and fruit juice producer National Foods from San Miguel Corp for A$2.8 billion (AAP, 2007a; ABC Rural, 2007). San Miguel Corp of the Philippines is the parent company of San Miguel Brewery Inc. of which Kirin Holdings began taking over in 2009 (Fujimura & Ozasa, 2010). In 2007, Kirin Holdings also acquired Tasmanian brewer James Boag and Son, for A$325 million, through Lion Nathan (the second largest Australian brewer), which is a firm that is majority-owned by Kirin Holdings (Reuters, 2007). In 2008, Kirin Holdings acquired Australian milk producer Dairy Farmers for A$675 billion (Bloomberg, 2009a). In 2009, Kirin Holdings paid A$3.5 billion for the remaining 54 per cent of Lion Nathan Ltd (Bloomberg, 2009a), and Asahi Breweries Ltd acquired Schweppes Beverages from Cadbury for A$1.2 billion (Cadbury, 2009).

In other sectors of the Australian market too the ‘post-Lehman Brothers Shock’ acquisitions continued. In the communications sector, Fujitsu purchased Kaz Group Pty Ltd, a subsidiary of the national telecommunications carrier Telstra Corporation, for A$200 million, making the Japanese company the owner of the third largest IT firm in Australia (Bloomberg, 2009b). On the manufacturing front, Nippon Paper Group Inc. acquired Paper Australia from PaperlinX for A$700 million (Asia Pulse Comtex, 2009). On the housing construction front, Sekisui House invested A$190 million in a joint venture housing construction in Homebush Bay (NSW) and Ripley Valley (QLD) in 2009 (Callick, 2009). Again, in 2009, Marubeni and Osaka Gas acquired 80.1 per cent of APA Group (Australian Pipeline Trust and APT Investment Trust) for A$800 million (APA Group, 2010). Further, in Western Australia, the A$3.5 billion Oakajee Deep Water Port and Rail Project has substantial investment from Mitsubishi Development Pty Ltd of Mitsubishi Corporation, which is Japan’s biggest general trading company (Oakajee Port & Rail, 2011). Moreover, Mitsubishi Heavy Industries and Mitsubishi Corporation are planning to build and operate a coal gasification power plant in Queensland, to be operational by 2015. The firm, in partnership with Queensland government-affiliated entity ZeroGen Pty Ltd, is investing A$340 million (with further investment from the Japanese government to follow) in the world’s first such large-scale plant with its carbon-capture and sequestration techniques (Kachi, 2009; ZeroGen Project, 2009). Thus far, the biggest single Japanese foreign direct investment (A$30 billion) in Australia has been Japanese MNE Inpex’s ‘Ichthys project’ of LNG extraction (and export) in the Timor Sea off the coast of Western Australia (AAP, 2011; AFP, 2011). As discussed above, the Japanese foreign direct investment in the ‘post-Lehman Brother shock’ period is quite extensive and spread out across several sectors of the Australian economy. Tables 2 and 3 provide a summary of the present structure of the industry and labour market in Australia.
CHART 3:
Japanese Foreign Direct Investment as Percentage of All Foreign Direct Investment in Australia (in %)

Source: Calculated from ABS (2011)
As shown on Tables 2 and 3, Australia’s ‘mining’ sector (location of foreign direct investment from Inpex, Sojitz, Mitsubishi Development Pty Ltd, Mitsubishi Heavy Industries and Mitsubishi Corporation) has been increasing its share of GDP and the labour market in the last two decades. ‘Finance and Insurance Sector’, in which Dai-ichi invested, has doubled its share of the GDP, as shown on Table 2. The ‘ownership’, ‘locational’ and ‘internalisation advantages’ of Japanese MNEs include technology, regional and global distribution networks. Financial holdings (cash and credit) of a MNE are a resource, and an advantage based on ‘ownership’. UNCTAD singles out Japanese MNEs in its latest report for the record levels of cash holdings that they currently possess (UNCTAD, 2011). Currency holdings as a ‘resource’ are also a part of ‘RCMI’ paradigm. ‘Locational advantages’ in Australia, are implicit in the fact that the firms in food, and resources production are open to foreign acquisition, and that there is a supply of agricultural and dairy produce, minerals, gas and coal as resources in respective industries that are hosting foreign direct investment.

### TABLE 2: The Change in the Composition of Australian GDP (%)

<table>
<thead>
<tr>
<th>Industry</th>
<th>1990</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>5.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Mining</td>
<td>4.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>3.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Construction</td>
<td>7.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>5.9</td>
<td>4.8</td>
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<tr>
<td>Retail trade</td>
<td>5.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Accommodation, cafes and restaurants</td>
<td>1.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>5.9</td>
<td>5.2</td>
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<tr>
<td>Communication services</td>
<td>2.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>5.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Property and business services</td>
<td>9.9</td>
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<tr>
<td>Government administration and defence</td>
<td>4.3</td>
<td>5.2</td>
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<tr>
<td>Education and training</td>
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<tr>
<td>Health and community services</td>
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<tr>
<td>Cultural and recreational services</td>
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<tr>
<td>Personal and other services</td>
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<td>1.8</td>
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<tr>
<td>Ownership of dwellings</td>
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<td>8.4</td>
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<tr>
<td>TOTAL</td>
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<td>100</td>
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</table>

Source: Calculated from ABS 5204.0 (2011)
TABLE 3: 
Labour Market Share of Australian Industries (%)

<table>
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<tr>
<th>Industry</th>
<th>1990</th>
<th>2010</th>
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<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>5.5</td>
<td>2.9</td>
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<tr>
<td>Mining</td>
<td>1.1</td>
<td>1.9</td>
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<tr>
<td>Manufacturing</td>
<td>14.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Electricity, Gas and Water Supply</td>
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<td>1.3</td>
</tr>
<tr>
<td>Construction</td>
<td>6.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Wholesale Trade</td>
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<tr>
<td>Retail Trade</td>
<td>14.1</td>
<td>10.8</td>
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<tr>
<td>Accommodation, Cafes and Restaurants</td>
<td>4.6</td>
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<td>Transport and Storage</td>
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<td>Finance and Insurance</td>
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<td>Property and Business Services</td>
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<td>Government Administration and Defence</td>
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<td>Education</td>
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<td>Health and Community Services</td>
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<td>Personal and Other Services</td>
<td>3.7</td>
<td>4.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
</tr>
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</table>

Source: Calculated from ABS 6202.0 (1986-2003) & 6291.0 (2011)

OTHER MNE PERSPECTIVES

The ‘firm specific advantages’ and ‘country specific advantages’ framework of MNE behaviour authored by Alan Rugman is somewhat relevant to this aspect of Japanese foreign direct investment in Australia. MNEs expand abroad via an interaction of their ‘firm specific advantages’ and ‘country specific advantages’ of the host (Rugman and Li, 2007). MNEs do business primarily in their own regions (Hirst and Thompson, 1999; Hirst et al., 2009). Rugman also shows that the world’s trade and foreign direct investment take place predominately within the triad of the EU, North America, and Asia Pacific. The bulk of the business interests (73.2 per cent) of Asia Pacific MNEs (i.e. Japan, South Korea, China, Australia) are in the same region (Rugman and Li, 2007). In seeking to outline a theory of Asian MNEs, Collinson and Rugman (2007) emphasise that most Japanese MNEs, and other Asian MNEs see Asia as their primary domain, except a few large Japanese MNEs that de-coupled from ‘home region’ or adapted and customized to compete in other regions. Overall, Asia is the primary region of Japanese MNEs (Collinson and Rugman, 2008). The two authors also count Australia as part of...
Asia, just as they count Australian MNEs as Asian. In Asia, merger and acquisition-type of foreign direct investments have been more popular in the last two decades (Athreye and Kapur, 2009). A MNE seeks economies of scale and scope by integrating its interests across its home region countries by applying ‘firm specific advantages’, according to Rugman and Oh (2008) in their study of the international competitiveness of Asian MNEs. This is the case with Japanese MNEs, many of which have a strong intra-regional dimension to their foreign direct investment activities (Collinson and Rugman, 2008). Japan and Australia have had a continuous bilateral trade and foreign direct investment relationship since the 1950s, which is governed by the GDP structures of the both, in terms of resource exports from Australia and the industrial exports from Japan (Bayari, 2008). Rugman and Verbeke provide a strong case that Asian MNEs, including the Japanese MNEs, follow a regional strategy in Asia (Rugman & Verbeke, 2004; 2005; 2007; 2008). Dunning et al. (2007) and Dunning (2009) emphasise that the size and the nature of GDP of countries involved in bilateralism and the nature of their trade as being more relevant than MNE strategy of regionalisation. A long-term study can shed more light on this two differing premises. This paper has provided a case that is relevant to the framework in Dunning et al. (2007a; 2007b), especially with the emphasis that Dunning (2006) places on North’s institutional economics analysis. That is, Australia’s institutions, especially since the 1980s deregulation, that govern MNE and foreign direct investment activity, have allowed the maintenance of the specific bilateralism with Japan. In other words, in studies of bilateral relationships, institutional responses are highly relevant, while the regional patterns of MNE activity (i.e. how MNEs behave in their own regions, as in how Japanese MNEs invest and trade in Asia-Pacific) is arguably pertinent.

CONCLUSION

The paper has discussed the new Japanese foreign direct investment in Australia in the aftermath of the ‘Lehman Brothers shock’, when the global foreign direct investment activity suffered a decline. It has covered the role of institutional economics in analysis of international trade and foreign direct investment. The Australian market has remained relevant for new foreign direct investment, and Japanese MNEs have continued their international investment activities. In 2011-2012, Japan’s global foreign direct investment has been projected to be unaffected by the slowdown in its domestic market. The paper has discussed the theoretical frameworks of the ‘eclectic paradigm’, and the ‘RCMI’ paradigm derived from North’s ‘institutional economics’. These are two related analytical methods, which focus on foreign direct investment, and international trade (Dunning, 2006; Dunning & Zhang, 2008; Cantwell et al., 2010, Dunning & Lundan, 2010). The ‘institutional economics’ paradigm’s elements are vigorous. They are not discernible in every instance, as in, for example, long lasting bilateral relations grounded on settlement type of agreements, that influence subsequent foreign direct investment behaviour, and the host response. The paper has provided current statistics on Australia and Japan.
bilateralism, and the Japanese global foreign direct investment. As stated, these elements mostly
do not conform the global foreign direct investment trends. The UNCTAD figures project that
Australia is one of the few markets that will remain a major foreign direct investment destination
in 2011-2013. Japanese foreign direct investment in Australia has continued after the ’Lehman
Brothers shock’ in September 2008, and this has occurred in an environment in which, by the
end of 2010, global foreign direct investment was only one-third of its 2007 peak.

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REFLECTIONS FROM THE FIELD: NEW ZEALAND EXPATRIATES’ EXPERIENCES IN SINGAPORE

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GRAHAM ELKIN²

and

VIRGINIA CATHRO³

ABSTRACT

There is often a suggestion that preparation before and on arrival is connected to the failure or success of expatriate assignments (Enderwick & Hodgson, 1993, Ritchie, 2010; Selvarajah, 2009). The sparse, empirical research concerning New Zealand tends to be very general and lack context. We explore the current expatriation practices of New Zealand companies in the context of Singapore. After an initial literature review, face-to-face interviews and a survey we reflect the experience of expatriates. We confirm that the quality and quantity of prior preparation and on site training has a significant impact on expatriate success in Singapore.

Keywords: Expatriates in Singapore, reflection on experience, preparation and success

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INTRODUCTION

An ability to succeed as an expatriate is ‘forged through a veritable roller coaster of experiences of intercultural adjustment’ (Chaban et al., 2011). The role of training, preparation and support are believed to be linked to the success of expatriates (Black et al., 1991; Bhaskar-Shrinivas et al., 2005; Shaffer et al., 1999; Takeuchi, 2010). We present empirical data, collected face to face and by questionnaire, in Singapore concerning prior preparation for expatriation and how it relates to the level of success of expatriates. We explore the experiences of New Zealand expatriates and suggest that context specific understandings of practice offer insight to both everyday initiatives and the further development of theoretical frameworks and practice.

CONCEPTUAL BACKGROUND

An expatriate is an individual who is transferred to a country other than their home one for an international assignment (Harvey, 1985). Traditionally funding for the move, in terms of salary and expenses, will come from the employing organisation (Inkson et al., 1997). International assignments are unsettling and emotional experiences for both family and work (Kupka & Cathro, 2007; Kupka et al., 2008; Shaffer et al., 1999). Significant research examines expatriate assignments as an experience (Adler, 1983; Black & Mendenhall, 1989; Mendenhall & Oddou, 1988; Tung, 1987). Past research (Ashamalla, 1998; Aycan, 1997; Black, 1988; Katz & Seifer, 1996) has centred on four areas: selection of an expatriate, preparing the employee for the international assignment, support during the assignment and repatriation of the employee. The inadequate management of any of these four phases contributes to expatriate failure (Hung-Wen, 2007; Kupka et al., 2008; Mendenhall & Oddou, 1985). ‘Expatriate failure – usually measured as premature return from an international assignment – has taken up a very prominent position in the literature on expatriate management’ (Harzing & Christensen, 2004). Despite the organisation providing support, typically by pre-departure preparation and on placement help, research suggests that organisations often send expatriates overseas with little or no prior preparation, or acculturation training on arrival (Aycan, 1997; Black, Gregersen & Mendenhall, 1992; Feldman & Thomas, 1992; Mendenhall & Oddou, 1985). Inadequate pre-departure training of expatriate employees remains a major reason for expatriate failure (Selvarajah, 2009). Expatriates and their families experience culture shock when they first enter a new country (Selmer, 1999). This can be very stressful (Kaye & Taylor, 1997), adjustment is vital (Chang, 2005), and spousal and family support forms an integral part of expatriate adjustment and performance (Caliguiri et al., 1998; Harvey, 1985; Shaffer & Harrison 1998; Shaffer et al., 1999; Takeuchi, 2010).
Most organisations use expatriate staff as an interface between headquarters and the local subsidiary (Tung, 1987). They exert control in overseas subsidiaries, bridge the gap where host nationals may have difficulty relating to organisation members and are unfamiliar with headquarters culture, solve staffing shortages, transfer specific expertise, increase globalisation of business activities and industries, offer opportunities for employees to gain career development and experience in strategic markets, and develop management talent (Bhuian et al., 1996; Feldman & Thomas, 1992; Harris & Brewster, 1999; Tung, 1987).

Black et al. (1999) found that although 62% of US firms offered some type of cross-cultural preparation, only 32% of training programmes were offered to the whole family, and training lasted on average for less than a day. Forster (1997) found that 77% of staff received cultural adjustment training, while only 43% of partners did; that 49% of expatriates had language training, and 60% went through orientation programmes. None of these studies included New Zealand expatriates. New Zealand research, Enderwick and Hodgson’s (1993), found only 15% of respondent companies conducted formal training programs for expatriates. Expatriates experiencing training from Selvarajah’s (2009) study received brief environmental briefing and/or basic language training on arrival.

Expatriates who received training performed better, with less adjustment difficulty (Earley, 1987). Support has been related to success, with greater support typically needed for expatriates that have an accompanying spouse and families (Kraimer et al., 2001; Shaffer & Harrison, 1998). Social support is positively related to the adjustment, satisfaction and retention of expatriate employees (Black et al., 1992; Mendenhall & Oddou, 1985). Organisations have a crucial role in the support of an expatriate and their family (Grant-Vallone & Ensher, 2001). Local community support increases expatriate success as building relationships with host country nationals and adapting to local customs can ease the transition of an expatriate and their family (Brewster & Pickard, 1994; Harrison & Shaffer, 2001). Organisational support is the degree to which employees believe that their organisation is concerned with their health and well being as well as assisting the reduction of conflict between employees’ personal and professional work life (Grant-Vallone & Ensher, 2001). Organisational support is also positively related to reduced absenteeism, commitment, production and retention (Fasolo et al., 1990).

The most effective support practices for expatriates from the organisation included: regular contact with expatriates (exchange of information, avenue for discussion, potential problems and future plans), company newsletters and information about policy changes, liberal long distance calling privileges for expatriates, continued effort to organise social activities, finding methods to include expatriates, language instruction and assigning a mentor (Oddou, 1991). The use of mentoring was noted by Selvarajah (2009) as a crucial component for expatriates to assist the adjustment into a new work environment. E-mentoring assists in the reduction of expatriate failure (Elkin et al., 2012). Electronic methods, including that offered via social media, allow the capability, flexibility and accessibility to a mentor anywhere (Elkin et al. 2012; Haggard et al., 2011; Headlam-Wells, et al., 2005).

Singapore offers a hybrid westernised society and lifestyle, where English is the primary business language (Selvarajah, 2009). Whilst New Zealand organisations report low levels of expatriation failure (Enderwick & Hodgson, 1993), New Zealand expatriates’ top three
reasons for failure, were related to failure to integrate, inability of family to settle and inability to change. Inadequate training was also recorded. Selvarajah (2009) studied New Zealand expatriates’ perception of organisations’ support during expatriation, concluding that greater pre-departure training and support systems should be utilised in reducing the failure rates of expatriates. ‘Most’ participants received little training and their primary support systems were mentors or senior managers who were fellow employees on assignment.

AIMS AND METHOD
Singapore is a gateway to Southeast Asian nations (ASEAN) (NZTE, 2012). Since 2001 New Zealand and Singapore have had some form of trade agreement in place (MFAT 2005). In 2011 and 2012, the World Bank ranked Singapore as number one of 183 economies for the ease of doing business (The World Bank, 2012). The New Zealand Chamber of Commerce Singapore, has membership of at least 18 organisations (www.nzchamber.org.sg). Taken together this suggests that Singapore is a strategic key to business in Southeast Asia and the likely home to New Zealand expatriates. It is already established by Richie (2010) and Selvarajah (2009) that research examining the New Zealand experience of expatriation is very limited. This paper comes from a research project which set out to explore the experience of New Zealand expatriates in Singapore. It contributes to understanding expatriate performance management in Singapore and which pre-departure preparation and continued support methods were being offered to New Zealanders (and accompanying spouse and families), and the preferences of these expatriates for prior preparation and on-site support which would contribute to their success.

The study included two methods in sequential phases: a series of qualitative face-to-face interviews undertaken in mid-2011, and an online survey. The participants were New Zealanders currently engaged in full time employment for private enterprise organisations in Singapore. The aim at the outset was to use a qualitative approach with a representative sample of members from the New Zealand expatriate community in Singapore. This was achieved using a snowball technique which started with approaching a small group of New Zealand expatriates identified by Trade and Enterprise New Zealand. Each participant approached was asked to suggest additional candidates to be approached until sufficient participants were included. Interviews were recorded with permissions and transcribed. Steps were taken to assure respondents anonymity. Notes in the style of an ethnographic diary were taken during the interview. Each interview was immediately written up to ensure the accuracy of what had been recorded and to develop themes. These themes helped structure future interviews. Once twenty interviews had been completed, results and data were collated and analysed. At this stage it was felt that a point of saturation had been met with each new interview being substantially similar rather than adding new information for the range of experiences described.
Reflections from the Field: New Zealand Expatriates’ Experiences in Singapore

The inherent risk with this type of sampling is that the sample will lack diversity. We took the themes from the content analysis and compared them to the extant literature (with particular emphasis on New Zealand research) and we constructed an online survey. The online survey was invited to interview participants and to individuals identified by the sampling process but not interviewed. This second step achieved two things. First it provided opportunity for the researcher to qualify the emergent themes derived from the content analysis. Second it allowed for the point of saturation to be verified. It also might be considered a pilot of an instrument that might be further developed as a component of future research. Twenty individuals were interviewed, with a further 46 participants invited to participate by survey, of which 32 New Zealand expatriates responded (response rate 70%) providing data via online survey. However it needs to be noted that there is a degree of participant overlap within the two data sets, specifically 16 individuals of the 20 interviewed also participated in the online survey of the 32 online respondents, 16 individuals (50%) are represented in both datasets. This approach provides researcher confidence for the number and representativeness of the interview sample. We also acknowledge Sixsmith et al’s (2003) citation of Jossellson (1996) that research can only ever offer partial insight into the lives and experiences of others and follow their lead in taking additional measure to gain confidence that the group offering insight is representative. This paper now reports the qualitative findings drawn from the interview data.

Interview profile: Six females and fourteen males participated in our study via interview. Broadly, participant’s ages ranged from 29 - 58 years old, with a mean age of 43 years. Most (75%) participants were married, 20% had a partner and 5% were single. All married participants had children, with 80% of the children living with the parents in Singapore. They were employed by organisations in nine different industries. Interviewees ranged in the length of time on assignment from three months to eleven years. The average period expatriates had been on assignment was three and a half years.

RESULTS

Selection of an Individual

The selection of expatriates was considered to be crucial as personal characteristics and attributes related to the success of an assignment.

*It is all about the person, you are employing them to be the face of the company or because of their ‘job specific knowledge’ (interviewee 09).*

Nine of the individuals interviewed used the phrase ‘open minded’ to describe an essential attribute an expatriate needed to possess to be successful in their role.

*Don’t bring pre-existing conceptions. Take people as you find them. Be open to others. What may be seen as rude in New Zealand may be normal in Singapore and learn to accept this* (interviewee 10).
Come with a very open mind and respect for other cultures ... be willing to do things and try stuff. Basics from eating out, to interesting things you may be served up ... be adaptable. Question things you believed were absolutes back in New Zealand (interviewee 19).

Level of Support prior to International Assignment in Singapore

Support for participants is found to be high with 91% of participants, 60% of spouses and 15% of children having had at least one method of pre-departure preparation. Cultural training was offered to 22% of expatriates and 12% of spouses. Expatriates relocating from New Zealand felt greater cross-cultural training, especially for the workplace would be beneficial. Cultural training was also seen to be most effective on arrival with the realisation that Singapore is different, rather than as pre-departure preparation.

Participants were asked to rank the most beneficial preparation methods provided. They ranked the top methods as:

1) Orientation visits,
2) Informal discussions with other company employees who have worked in Singapore,
3) Formal induction course on living in Singapore, with factual background information and accommodation support.

Overall, of the 66% of expatriates who received an orientation visit which lasted between two and seven days, 60% ranked this orientation visit as most beneficial or crucial to both beginning the assignment and with the adjustment process:

(A) Look-see trip is critical at the beginning of an expatriate assignment ... needs to be structured, to make the most of the time and see the things that are important during this time ... schooling, accommodation, site seeing etc. (interviewee 02)

Had a look see trip; met agent, found an apartment, was shown food, CBD (Central Business District) ... made it easy, on arrival moved straight in, everything was pre shipped and hit the ground running (interviewee 08).

Most expatriates (71%) thought the level of difficulty adjusting to life and work in Singapore would be easier if more pre-departure training was provided.

Undoubtedly (it would have been more easy) if (we’d) been given support, but was not under any illusions to what it would be like (interviewee 13) ... [Didn’t receive any pre-departure preparation and found it very] challenging, didn’t know where to start [researching living costs, schools and accommodation] (interviewee 13).

The majority believed their pre-departure preparation was generic (73%), while only three said it had individualised components and one expatriate thought the methods provided and process was uniquely individualised. When asked how likely greater pre-departure preparation would increase the success of their assignment, the results produced a relatively normal distribution between very likely to very unlikely.
Preliminary work should be providing information packs, a buddy system and help people assimilate into new society ... need the basics of how to do this, associations, whom to talk to about information, expatriate websites (interviewee 10). Huge amount of information pre-departure about schooling and the life for the children ... very reassuring to know the children would be okay ... information on Singapore prior to departure, historical and comparative costs ... Wasn’t extensive just the logistics ... no struggle relocating, everything ran smoothly (interviewee 12).

On-Arrival Support

The key objective of on-arrival support was to adjust as quickly as possible to the new environment. It was felt to be an essential phase in the success of an assignment.

Transition phase is important to success (interviewee 12).
Success is how smoothly the transition went (interviewee 15).

Effective and fast adaption to the new environment in Singapore assisted in both family happiness and the expatriates’ effectiveness at work.

Settle as fast as you can to be productive, get organised and gain stability (interviewee 01).
Need to be comfortable on arrival so you can work effectively and ‘hit the ground running’ (interviewee 11).

Time between Arrival and Job Commencement

An appropriate time allowance between arriving and commencing employment was considered important to the adjustment into Singapore. Expatriates with an accompanying spouse and families believed a time period of less than one week was inadequate. Single expatriates and those without accompanying spouse and families did not require the same time between arrival and commencing employment.

No struggle, everything ran smoothly. On-arrival met at airport and started with a two-week orientation that got everything sorted personally and professionally ... bank accounts, real estate, supermarket, laundry, travel, job specifics, because of this I feel we have been very successful and effective (interviewee 12).
 Started orientation two days later and work started the following week. More time would have been better ... could have had a week or two to organise accommodation ... (interviewee 20).

Need to be comfortable on arrival so you can work effectively and ‘hit the ground running’ on arrival ... leaving [my] children behind was largest concern ... I acclimatised almost immediately ... heavy work, distracted me, didn’t have time to miss my kids (interviewee 10).
Types of On-Arrival Support Received

The adequacy of support was distributed between very inadequate to very adequate, offering no conclusive results.

Relocation companies significantly helped the relocation and adjustment phase of expatriates. They often offered far greater support than just the relocation of possessions, providing information booklets and agents to help find suitable accommodation and the top level of support assisting with the connection of utilities and setting up expatriates with basic amenities. Of the expatriates receiving support, 72% were provided with relocation via a specialist company to assist in their relocation and adjustment to Singapore, 91% were shown housing, 52% were exposed to information on schooling, 35% for supermarkets and 22% were showcased Singapore and her attractions as a city. A greater number of spouses than expatriates were shown content pertaining to household management and schooling.

It was a very much value added system (interviewee 02).

Would have liked support and preparation on a higher level and a factsheet or list of phone numbers to help set up and arrange things in Singapore ... (stuff like) schools, accommodation, agents to contact, phones, utilities (interviewee 07).

There is a lot of help out there if you want ...therefore give information and let them utilise it (interviewee 09).

The majority (65%) found the degree of difficulty in adjusting to work and life in Singapore given the on-arrival support received easy, with only (6%) of expatriates finding it to be difficult. All respondents either thought that the level of difficulty in adjusting to their assignment in Singapore would be less or neutral if they had been provided ‘more’ support.

The infrastructure at ... was highly mature and sophisticated, the benefit was that you hit the ground running on day one (interviewee 08).

Transition not smooth ... (I was) envious of others relocation support ... would have been more effective if I’d had greater support ... had to take time out of work to arrange relocation ... it doesn’t get any easier with experience (interviewee 15).

Participants reported that the provision of on-arrival support was extremely important for spouses and family. This had a large impact on the success of an assignment, through facilitating adjustment of those accompanying.

Organisations need to provide more support on arrival, for wife and children (interviewee 06).

Adjustment preparation and support, not just about the employee but also about the family, if kids are not happy, parents will not be happy (interviewee 12).
Continued Support

Continued support was provided to half of the survey respondents (53%), with even less for spouse and children. Respondents were asked to indicate what methods of on-going support they received, management support (75%), followed by peer support (70%), were the most common. Other methods included social support and mentoring. For example, expatriates also cited further support not typically characterised in the literature financial support, allowances and memberships to expatriate clubs, churches, communities, home leave, local staff and business management introductions.

Greater peer support, mentoring, language training and social support were all mentioned as methods that would increase the success of expatriate assignments, along with annual flights home to remain connected and eliminate isolation from family and friends in New Zealand.

Allow time to adjust ... would be great to receive general words of advice on what to expect ... [At] 6-8 weeks, wow I have really moved. And cut yourself some slack ... don’t expect to be 100% effective both professionally and personally (interviewee 06).

Social Networks

Social networks were viewed as crucial for the success of an expatriate assignment.

Social support is very important (interviewee 07).
Networks are vital! (interviewee 12)

Continued social support was provided to 18.5% of expatriates and 26% spouses by organisations.

...Don’t want the company to interfere in your personal life [but would appreciate help connecting people and acknowledging networks and groups available. NZCC etc.] ... (I’d) value guidance in some of those areas (interviewee 11).
Received no assistance or advice on social networks, clubs and societies. Would have been useful with relocation skills (interviewee 02).
To create a healthy environment for yourself, [you] need networks ... social networks were created through various different activities including participation in sports, community centres and churches (interviewee 13).

Many expatriates were members of Australia and New Zealand Association (ANZA) and New Zealand Chamber of Commerce (NZCC), New Zealand expatriate networks in Singapore. Expatriates with accompanying children, found schools and children’s extracurricular activities to create opportunities for expatriates to create a social network. Social networks provide enjoyment of Singapore, activities, support, and friendships and reduce isolation.

I think the most important thing is to have a network of friends or likeminded people to engage with to make adjustment to life in Singapore easy (interviewee 08).
Essential to have social support, networks, can’t survive without ... [benefits received is the] opportunity to share experiences and talk about things not in a textbook (interviewee 05).

Social support was more important for accompanying spouses, as they do not have the social connection, activity and routine of work each day like an expatriate has.

It is important that the spouse and children feel comfortable in new surroundings through opportunities to meet new people and having social networks. Not so important for employee and they are travelling a lot ... organisations should help find or suggest networks, communities and groups for expatriates to connect with (interviewee 02).

Reasons for Leaving

Around two thirds (65%) of expatriates had seriously considered returning home prematurely. Reasons for returning back to New Zealand (or onto another place of residence) included family, lifestyle and nature of the expatriate job, children’s schooling and money.

If it wasn’t for her husband’s love of his job, ....believes they already would have returned home, as found setting up and settling difficult due to young family, long hours and lack of support from organisation. ... they were given no preparation or support by organisation other than a list of relocation companies (interviewee 07) .

[On assignment] ... we have a different balance in life, to where at home we are very family focused ... Family’s so far away, which is hard and makes your friends very important. I don’t think we would have stayed as long if we didn’t have flights home each year (interviewee 20).

Lifestyle

The Singaporean lifestyle impacted on both the enjoyment and success of living in Singapore. Positive aspects of Singapore included perception of it being an orderly country, easy to navigate with an efficient public transport system, safe on both personal and property levels, English speaking, enjoyable and simple to adjust.

...at the edge of the park .... drop shoes, bags and scooters they disappear inside for an hour or so and come back with no worries that everything would be as they left it. This shows the safety in Singapore and how it assures comfort and peaceful living (interviewee 19).

The Singaporean dream, [where] the three C’s that count; cash, condo and car let you have a good life (interviewee 05).

However, some New Zealand expatriates felt claustrophobic with a lack of space and environmental surroundings.

[If I didn’t have] so much travel, I would go stir crazy, just a big city (interviewee 11).
Activities are great, except outdoor pursuits such as surfing and bush running. The greenery is all false, can’t replicate natural ‘flow’ (interviewee 09). Have to dig for less mainstream things; talks, quirky cafes … Cool pockets, (just) need to be in the know (interviewee 11).

Many expatriates found the change in working hours to be difficult, impacting on their personal lives. Expatriates particularly experienced this with families and young children. Hours are a lot later than expected starting the job working 10.00am -8.00pm, which is difficult as I have young children and struggle to see them on a work night. I miss the balance of kiwi organisations (interviewee 07). Hours are much longer than in New Zealand, minimum ten hour days. This would have been difficult if [I] came from work life balance in New Zealand, but [I] was already working extended hours (interviewee 10).

Some describe the Singapore as an opportunity to other rich experiences:
Get to know the local people and community … get a much richer experience (interviewee 20), Opportunities to travel internationally are very cheap … travel heaps living in Singapore … or the opportunity that you have living in New Zealand. The move has opened avenues to travel (interviewee 10).
Good for now … enables a lot of things I enjoy on a personal level. I love travelling … but won’t be here when I am 90 (interviewee 11).

Success

Success themes emerging from the interviews mirrored the survey findings. The top three reasons related to success were happiness, money and career development:
Success has three levels. At a professional level it is meeting goals, communicated by both parties. On a personal level, that the experience is rewarding and the least stressful for the family and on a financial level having a variable income, making savings and investments (interviewee 13).
On a personal level, success comes from being open to culture and customs … don’t just get focused on the expatriate life but take interest in local culture and customs … measured on happiness ratio (interviewee 01).

Professional success is tied to with-career development, meeting job objectives and targets, job satisfaction, monetary rewards and staying the full term of the assignment. Success is the quick adjustment into new job and job satisfaction on a professional level and adjustment of family into new lifestyle on a personal level. Happiness is a measure of this success (interviewee 07).
Success is hitting 80-100% effectiveness at work relatively quickly, 2-3 months, which is achieved through support from the office and on a personal level. You also need to be adjusted in your personal life, so you are comfortable (interviewee 11).

Success is measured by money in Singapore. Singapore is driven by money and well-educated individuals ... money doesn’t rule as much in New Zealand and less pressure is on education (interviewee 02).

Financial reasons are a huge reason for success. Saving an amount of money that would not be possible in New Zealand (interviewee 04).

However here some expatriates also commented that greater research and acknowledgement of living costs would aid success...

...things that are ‘bad’ for you are heavily taxed ... even a chocolate bar is slightly more ... rent is very expensive ... beer and wine are heavily taxed ... transport, taxi fares and food are much cheaper than in New Zealand (interviewee 04).

**DISCUSSION**

Our data suggests the adjustment period was the underlying factor in the success on assignment in Singapore. The inability to adjust was directly related to the failure of an expatriate assignment. Pre-departure, on-arrival and continued support practices were all contributing factors to the adjustment period. The expatriates believed that preparation and support increased success by facilitating a smooth and fast adjustment into Singapore. Preparation reduced ambiguity in the expatriation process and life in Singapore, while support facilitated adjustment and decreased the burden and struggles associated with expatriation. Success is not purely related to job factors and outcomes but on multiple factors dependent on the individual’s experiences.

Expatriates commonly cited strategies of acknowledging that Singapore was their new home, keeping regular contact with friends and family and friends at home, and visiting family and friends at home to minimise negative experiences associated with international assignments. Support and being valued was found significant for family members accompanying expatriates on assignment needing to be recognised, effectively prepared and supported through the expatriate process (Oddou, 1991). Singapore is an Asian country and expatriates need to be adaptable and flexible (Tung, 1982) and possess an open mind to all differences. Expatriates need to be hard working with the desire and drive to get things done with key distinctions between Singapore and New Zealand in terms of lifestyle, meaning of work and working hours and cultural distinctions necessitates adaptation and realise the potential impact of both cultural shock and even expatriate failure. Previous expatriate experience speeded up the adjustment period, expatriates in Singapore were still however, vulnerable to culture shock (Black & Mendenhall, 1990).
To shorten the adjustment process and increase an expatriate’s ability to ‘hit the ground running’, organisations should start the process before departure with preparation and training. The most beneficial pre-departure method perceived by our expatriates in Singapore was the orientation visit and informal discussions with employees who had previously worked in Singapore. Expatriates indicated better information provided by organisations would assist them in their preparation. We believe this feedback suggests value being placed on information assessed as valuable by others with deeper knowledge and that this affords confidence.

Existing literature suggests cultural training be provided in the pre-departure stage (Brewster & Pickard, 1994; Mendenhall & Oddou, 1985; Oddou, 1991), however, our expatriates shared the view that it was likely more beneficial on arrival, when immersed in the culture. Training almost always addresses cross-cultural differences (Black et al., 1999) and is advocated as an important means for adjustment (Brewster & Pickard, 1994). Only 22% of the research participants received brief cultural training. This is somewhat surprising given that whilst business tends to be conducted in English, New Zealand expatriates in Singapore face a range of needs for culture training as Singapore is a cluster of three different cultures: Chinese, Malay and Indian.

Overall pre-departure preparation was recognised as effectively assisting in the adjustment of an expatriate into their new role and lifestyle in Singapore, increasing their perceived success of their assignment. Knowing things in advance about relocating to Singapore reduced ambiguity and the adjustment period and increased expatriates’ effectiveness at work. Preparation training needs to be organised, well planned and tailored to the goals and needs of the organisation and expatriate to get the most from it. Country, company and culture briefings were all highly valued methods along with an orientation visit and discussions with previous expatriates who had been in Singapore.

The research sample included those that received a full relocation and support package and those who received nothing at all. A successful and quick adjustment to Singapore is associated with perception of the success of their assignment. Individuals and families that had difficulty or struggled to adjust seriously considered prematurely leaving Singapore. Determining where to live, selecting accommodation, arranging utilities and day-to-day activities all required a lot of time and effort. A desire for a reasonable adaptation period of seven to fourteen days was seen as adequate for expatriates with accompanying family, while the time period was shorter for expatriates without accompanying family. Once an expatriate and their accompanying spouse and family were adjusted into their new life and environment, expatriates acknowledged they were efficient and more successful in their role. Adjusting to work quickly was attributed to supportive and informative colleagues and understanding of the role and company processes. Settlement and adjustment in personal life was thought to be crucial to adjustment at work, reflecting the spill over effect (Black & Stephens, 1989).

Support was a reoccurring theme relating to the success of an assignment; those who had expected more or did not receive adequate support and preparation tended to have an overall dissatisfaction with work and quality of life. There was also evidence of resentment towards companies that they had not been sufficiently supported and prepared. Logistic support facilitates the relocation, establishing an expatriate in their new environment and includes
assistance with requirements such as housing, schooling, grocery shopping and significantly aiding adjustment (Shaffer et al., 1999).

Our research participants attributed greater logistic support to a quick adjustment into life in Singapore. Related to this a relocation company was advocated by some as the most beneficial logistical support method for expatriates, providing up to date knowledge about the country and living areas, and distinguishing between organisation and personal affairs. Others suggested equipping expatriates with resources to adequately establish themselves in Singapore sufficed. Ideal resources to assist in relocating comprised two essential components, a reasonable time between arrival and job commencement and a list of contacts for accommodation, schooling, utilities, and phone related set up. This type of support often provided at both pre and post departure phases, was suggested by our sample to be most effective when integrated into an orientation visit to Singapore. During this time, expatriates understand the environment, create contacts and begin the research process.

Social support, often through social networks, is crucial to the success of an international assignment, due to the loss of social contacts because of distance from family and friends (Harvey, 1985; Haworth & Lewis, 2005). Social networks are considered most important for accompanying spouses, who have been removed from all networks and familiarities, with no daily job or routine (Adler & Gundersen, 2008). Brewster and Pickard (1994) found local community support increases expatriate success. Social networks are essential to the success of an expatriate and therefore organisations need to acknowledge this, offering support either through contacts, information, memberships, or hosting their own events for expatriates (Oddou, 1991). Our expatriates echo this literature and although this connection was important for both themselves and when applicable their spouse and family. Interestingly the role of social media and the spectre of virtual community affiliations were not raised. Hence, an implicit sense of community engagement and support being experienced in person on assignment in Singapore is offered.

Once assimilated into Singapore, expatriates were comfortable to be left on their own. Discussions of continued support then shifted to focus on forms of organisational support, for the expatriate and their role within the organisation. Here, large variance in the level of support provided was revealed and recognised by those on international assignment. Continued support however was advocated by expatriates, but those receiving it felt it aided the success of their assignment.

PRACTICAL IMPLICATIONS, LIMITATIONS AND FURTHER RESEARCH

Initially, our research approach was to collect data only from New Zealand expatriates working for New Zealand owned companies. However, due to the size and internationalisation models of New Zealand companies, the participant pool for the research was too small. As a result,
participant criteria were extended to incorporate all New Zealand expatriates working in Singapore for any business. Related to this, in an ideal world, our online survey would involve more participants, would match to a greater extent the profile of the sample of expatriates interviewed and would merit inclusion in the paper outright. This weakness is perhaps somewhat offset with acknowledgement of the small number of New Zealand expatriates on assignment in Singapore, and the rich qualitative data from the study. While nearly 25 percent of New Zealanders live and work outside of their birth country (Chaban et al., 2011; OECD, 2007; O’Sullivan, 2012), they do not all base themselves in Singapore, nor do they all work within New Zealand companies. The number of New Zealand expatriates in Singapore appears somewhat unknown. A recent newspaper article reporting an Asia New Zealand Foundation study conducted in 2009 suggested ‘there was no data source on New Zealanders working in Southeast Asia, but that 236 expat New Zealanders in Singapore responded to a survey conducted by the Kiwi Expat Association New Zealand’ (Tan, 2010).

These results are difficult to generalise to other countries and cultures outside of Singapore. Further research could be conducted to replicate the study in other countries and compare the findings to understand if the results are context dependant to the county expatriated to, or to New Zealanders as a whole. Our results echo the need suggested by Chaban et al. (2011), that understanding expatriation performance management, which includes repatriation, and the sequential experiences of multiple international assignments needs to include perspectives bound to country-specific contexts. This research complements Ritchie’s (2010) expatriate success research on public sector organisations and provides both a recent perspective and the experiences of those engaged in the private sector to understand the success of New Zealand expatriates in Singapore.

These findings may prompt a review of company expatriate practices, such as the on-arrival and adjustment support process; offering an adequate adjustment period for all the family and acknowledging the need for developing social networks. We suggest that the distinction drawn by companies between traditional expatriates going on assignment as part of their role within an organisation, and those described as self-initiating expatriates (SIE), be the subject of further inquiry. Whilst obligations for those putting themselves on assignment (SIEs) are different to traditional expatriates, perhaps they would perform with greater efficacy if supported in similar ways by the employer.

REFERENCES


KEY SUCCESS FACTORS FOR PROMOTING WIRELESS INTEROPERABILITY FOR MICROWAVE ACCESS (WiMAX) TECHNOLOGY IN SRI LANKAN SMALL INDUSTRY, A CASE STUDY BASED ON COLOMBO DIVISIONAL SECRETARIAT AREA

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and

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ABSTRACT

The main purpose of this study is to identify the factors, which affect the applications of WiMAX telecom technology by small scale industries in Sri Lanka. The key factors that influence the intentions of small industry to use the telecommunication services delivered via Wireless interoperability for Microwave Access (WiMAX) technology have been identified through structured questionnaire surveys and interviews with telecom operators, regulator and small industries. The study shows that the need for voice service, high initial cost, quality of the

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installation and service delivered, the maintenance and ease of use significantly affect the small industries intention to adopt WiMAX technology.

**Keywords:** Wireless Interoperability for Microwave Access; WiMAX, Customer Premises Equipment, Small Industries; SMEs, Telecommunication services, Technology Management, Key Success Factors, Sri Lanka.

**INTRODUCTION**

Lack of infrastructure especially in areas of Information and Communication Technology (ICT) poses major obstacles for the development of Sri Lankan small industries (Dasanayaka, 2008; 2009; Dasanayaka et al., 2011; Dasanayaka, 2011). Sri Lanka has four fixed line telephone operators: Sri Lanka Telecom (SLT), Lanka Bell, SunTel Ltd and Dialog Broadband, and five mobile operators, Dialog, Mobitel, Tigo (Etisalat), Hutch and Airtel. WiMAX is the next generation wireless technology certified and promoted by the WiMAX Forum (2004a; 2004b; 2010) to enable pervasive high speed internet access and multimedia communications. There are two flavors of the technology: fixed WiMAX and mobile WiMAX. The fixed one is based on IEEE 802.16 standard. The IP based last-mile connectivity provided by WiMAX technology to customer premises does not mean anything to the customer unless service provider creates some tangible services over this delivery platform. The telecom operators, particularly the fixed wireless operators are looking for new revenue sources to compensate their ever decreasing voice revenue. The Sri Lankan fixed wireless operators commenced deploying product and services based on WiMAX technology, in later part of 2006. Dialog Broadband Networks (DBN) was the first to launch an island wide service based on this technology; SunTel and Lanka Bell followed.

WiMAX is predominantly a last mile access technology which can be used to deliver a host of ICT services for the end customer. Maintaining stability of the network, delivering consistent service to its customers, integrating various service platforms, mitigating security threats, allocating right resources and carrying out product pricing are significant challenges encountered by the service providers in their initial WiMAX deployments (WiMAX Forum 2004a; 2004b; 2010). It is imperative to identify factors that influence SME’s intention to use the ICT services delivered via WiMAX technology, and the role of technology, the operators and the telecom regulator can play for the successful deployment of the technology.

This paper aims to identify key success factors for promoting WiMAX technology for Sri Lankan small industries (SMEs). The study has been restricted to small industry sub sector. The following objectives have been devised for this study:

1. To identify Key Success Factors (KSF) for promoting WiMAX technology for Sri Lankan small industries.
2. To identify the prominent ICT services acceptable to Sri Lankan small industries via WiMAX.
3. To develop policy guidelines for the operators and regulator when designing WiMAX based product and services aiming at Sri Lankan small industries.

THE STATUS OF TELECOMMUNICATION INDUSTRY IN SRI LANKA

Fixed telecom service was started in Sri Lanka by establishing a telegraph circuit between Colombo and Galle in 1858 by Oriental Telephone Company. The telecom sector is one of the fastest growing leading sectors in Sri Lanka. The Sri Lankan operators were the first to introduce latest technologies as 3rd Generation (3G) mobile and WiMAX technologies before all others in South Asia. In 2010, Sri Lankan telephone density for fixed line per 100 people stood at 17.3. The density, including cellular was recorded 100.3 per 100 persons. Internet and email density per 1000 person stood at 20.8 (Central Bank of Sri Lanka, 2010).

Fixed-line services could not be deployed quickly enough to keep up with global demand for the ever-increasing features that the internet generates at an exponential pace. WiMAX technology, IEEE 802.16 family of standards, presents wireless broadband solutions to quickly establish network connections over a Metropolitan Area Network (MAN). The WiMAX technology allows telecom operator to deliver multiple services such as voice, video and internet together over a single physical device installed at customer premises, considerably reducing the resources required. Primarily used in Point-to-Multipoint (PMP) mode, WiMAX allows Non-Line-Of-Sight (NLOS) wireless connectivity among various WiMAX-enabled Customer Premises Equipment (CPE) e.g., laptop computers, personal digital assistants. As a result, WiMAX can support numerous communications applications (e.g., voice, video, text, and data services), thereby offering mobility and greater flexibility in communications capabilities (Ginley, 2009). The IEEE have to date released two significant versions of the standard, IEEE802.16d in 2004 which targets fixed wireless access deployments and IEEE802.16e in 2008 which targets mobile deployments. The standard provides for operation across a large frequency range, 2-66GHz and channel sizes up to 40MHz. However, the WiMAX Forum has defined profiles to operate at frequencies including 2.5GHz, 3.5GHz and 5.8GHz. These profiles align with those bands allowed by various national regulatory authorities around the world.

The WiMAX Forum (2004a, 2004b, 2010) is formed to help promote and certify the interoperability of broadband wireless products compliant with the IEEE 802.16 and ETSI Hipper MAN standards. The Forum’s goal is to accelerate global deployments and grow the market for standards-based, interoperable, Broadband Wireless Access (BWA) solutions. The growth of the market will lead to reduction of costs associated with economies of scale. Reductions in equipment costs and consistent approaches to network design also vastly improve the business model for service providers (WiMAX Forum, 2004b). Telecommunication standardized frameworks for overall network operation, telephone services, service operation and human factors are well explained in International Telecommunication Union (ITU, 2012).
Small Industries and ICT

New ICT techniques are giving rise to new types of business services and changing the ways in which firms access and use existing services (Miehlbradt, 1999). The growth and the availability of telecommunications infrastructure contributes significantly to GDP growth. Flexibility is considered to be a major source of competitiveness for small industries compared to larger enterprises (Dasanayaka & Sardana, 2010). With the use of ICT, transaction costs can be lowered and therefore the benefits related to economies of scale can be increased. This will enable small industries to explore markets regionally and internationally (Wolf, 2001). A large number of potential commercial functions can be performed using ICT services. ICT delivers competitive gains, speeds up business transactions, increases customer satisfaction, delivers superior quality, reduces bad governance related issues and leads to improved profitability. ICT has the ability to reduce co-ordination costs, communications and information processing. It is in operational areas that ICT finds maximum application. Small industries use ICT mainly for operational and administrative support rather than for strategic decision-making (Dixon et al., 2002).

Telecom operators around the world are offering hosts of ICT services such as Internet, email, telephony, facsimile, hosted World Wide Web, hosted Interactive Voice Response, multiparty conferencing, video, hosted security and hosted applications to its small customers. However internet and email are the most common ICT services among small industries, in addition to basic telephony and facsimile facilities.

RESEARCH METHODOLOGY

The research methodology as adopted in this study uses both the qualitative and quantitative approaches. The starting point is to prepare a conceptual framework of broad influencing factors and to administer a structured questionnaire.

Identification of Key Success Factors

Porter (1985) refers that Key Success Factors are the factors that determine the relative competitive positions of companies within an industry. Lynch (2000) points out that an analytical process is needed that will examine the many factors that can potentially impact on strategy. Ohame (1983) suggests that identification lies in discovering factors for success that are likely to deliver the company’s objectives. Lynch (2000) defines, “Key factors for success in an industry are those resources, skills and attributes of the organizations in an industry that are essential to deliver success in the market place.” It is thus not only the resources of organizations in the industry but also the competitive environment in which the enterprise operates. Ohame (1983) refers to three ‘C’s:
Key Success Factors for Promoting Wireless Interoperability for Microwave Access (WiMAX) Technology in Sri Lankan Small Industry, a Case Study Based on Colombo Divisional Secretariat Area

Customers: What do customers really want? What are the segments in the market place?

Competition: How can the organizations beat or at least survives against competition? How does the organization compare on price, quality etc.?

Corporation: What special resources does the company itself possess and how do they compare with those of competitors? How does the company compare on costs, technologies, skills, organizational ability, marketing with its rivals?

Since 1983, the competitive environment has undergone a major change in two areas. Therefore, the three C’s can be supplemented by addition of:

Regulatory mechanism: Although the last two decades have come to be regarded as decades of globalization and free trade opening up the economy the way an entrepreneur always dreamt of free access to resources, markets and ‘fittest of the survival’. There is an increasing concern to regulate and set rules for business based on values, ethics, and standards and creating space for small industry, which generates highest employment. These regulations come from the governments; however these can also arise from professional societies, business federations.

Societal pressures: There are also increasing pressures from society which expects the industry to consider societal interests supreme over the financial returns. Social responsibility is taking a new meaning principally directed towards use of resources with care and precaution, creation of social business enterprises to eradicate poverty, not through donations, but through a support system of generating sustainability.

Lynch (2000) points out that the criticism centers on identification of success factors, causality of relationships, dangers of generalizing factors applicable for all types of industry, and disregard of emergent perspectives in the dynamic market. Therefore, there is a need of caution while exploring factors for success. There can be a wide variation from one segment of industry to another. The methodology followed in this study is framed in-line with classification of influencing factors as devised by many telecommunication studies. Some of the major studies include: (Sekaran & Bougie, 2010; WiMAX FORUM, 2004a; Ginley, 2009; Gimpel, 2009; Puskar & Aanstoo, 2008; Fellah & Blin, 2006; OECD, 2006; Rysavy Research, 2010; Alam & Noor, 2009; Gemino et al., 2006; Harker & Akkeren, 2002; Jeanette et al., 1999; Lawson et al., 2003; Ginley, 2009; Gimpel, 2009; Puskar & Aanstoo, 2008; Mathiyalakan, 2006; Muthaiyah, 2004, Bouwman et al., 2008; Haaker & Vos, 2007; Henten & Godoe, 2010). The factors that emerge from these studies can be classified in three major areas. This is depicted in Figure 1 below under three factors.

1) Technological factors: These are the factors that are responsible to generate benefits of low cost, better quality, and ease of use to the consumers. These are the factors that influence performance parameters against competition. The results arise from the
inputs and resources of an organization. In another dimension recourse to technological factors is called for in case the performance has to be enhanced.

2) **Political and Economic factors:** This classification groups such influencing factors that are related to the characteristics of the organization. The ownership and the managerial style impact the characteristics. The factors include economic pressure which come from the market. As such these factors carry an affinity to market perspectives.

3) **Regulatory factors:** Sri Lanka is an emerging economy. The rate of growth and the general direction to the economy is largely determined and evolved by the government. The organization has to discover factors to regulatory environment factors that telecom operator can influence.

Sri Lankan business is overwhelmingly an economy of small business. The characteristics of small business are largely influenced by the owners-cum operational managers. These owners influence and develop the characteristics of the organization. They shape the culture and determine the positioning in the market. The degree of flexibility and ability to withstand the economic pressures of the market comes from the direction as provided by the owners-cum managers of small scale industry (Dasanayaka & Sardana, 2010). It would be therefore desirable to identify such factors which have origins in small industry setting of Sri Lanka.

Performance of the telecom operator is largely influenced by availability of the resources. The support from the regulatory practices, rules and direction from the national planning policies as adopted by the government of Sri Lanka can also be placed in this category. The three classifications as discussed can thus be divided in two groups in the context of Sri Lankan environment.

- a) Factors that a telecom operator can influence,
- b) Factors that exist in the small industry setting.

The broad problem areas identified through observations and discussions with the ICT services experts was narrowed down by carrying out unstructured interviews and literature surveys to arrive at the problem definition. Subsequently the theoretical framework was refined through extensive literature surveys. Interviews with the industry experts, telecom operators constituted an important input to arrive at the final framework. The Key Success Factors, affecting the problem area are highlighted and defined in Table 1. These factors include such factors which telecom operators under the influence of technology and regulatory practices can influence as also factors that exist in a small industry setting. As this study carries focuses on Sri Lankan small industry, it would be necessary to exclude such factors from this framework which are not effective in the small industry business context. These selected factors are shown pictorially in Figure 2. Further technological and regulatory concepts were studied as an exploratory study separately. Studies have shown that greater the benefits perceived by small industries, the higher is possibility of ICT adoption. These benefits are available in three dimensions: strategic, informational and operational (Alam, 2009; Alam & Noor, 2009; Davis, 1989; Dixon et al., 2002; Dwivedi et al., 2007; Gemino et al., 2006; Harker & Akkeren, 2002; Kazi, 2007; Vrechopoulos et al., 2002). We have covered only the technological factors of this model which will be useful to the SME sector and telecom service providers. Therefore
owner/manager and firm characteristics can be done by other researchers and are willing to keep it as an agenda for further research.

FIGURE 1:
Conceptual Framework of the Study
FIGURE 2: The factors affecting the successful deployment of ICT services over WiMAX

Key Success Factors for promoting WiMAX technology for Sri Lankan small industries
Operationalization of Variables

Reduction of abstract concept to render it measurable in a tangible way is called operationalizing the concepts (Sekaran & Bougie, 2010). The ICT services identified as important or useful for small industries are: voice service, facsimile service, email service and the Broadband Internet service. Hence, adoption and utilization of WiMAX technology is equivalent to adoption and utilization of said ICT services delivered to customers. It is not necessary that all the services mentioned are probable for utilization by the small industry customer to evaluate the adoptability of the WiMAX technology. Instead, if at least one of the services is required by the customer and it is delivered using WiMAX technology that situation then will be considered as a possibility of adopting WiMAX technology. The variables used in this study are defined as in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Factor</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1</td>
<td>F11</td>
<td>Service bundling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bundling can be defined as ‘selling two or more products or services in a single package for a special price’. Providing any combination of voice, facsimile, Internet mail and Broadband Internet services together via WiMAX technology will be considered as service bundling.</td>
</tr>
<tr>
<td>2</td>
<td>F21</td>
<td>Needs for basic voice service</td>
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<td></td>
<td></td>
<td>This is the same as the needs for basic telephony service.</td>
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<tr>
<td>3</td>
<td>F22</td>
<td>Needs for facsimile service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Facsimile machine is a device which sends and receives printed pages or images over telephone lines by converting them to and from electronic signals. So this represents the need for sending and receiving a copy of a document using facsimile machine.</td>
</tr>
<tr>
<td>4</td>
<td>F23</td>
<td>Needs for Internet mail service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Needs for sending and receiving messages electronically using computers and related software.</td>
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<tr>
<td>5</td>
<td>F24</td>
<td>Needs for Broadband Internet service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Needs for Broadband Internet mean the need for access to the Internet using a broader communication channel than 128 kbps of speed?</td>
</tr>
<tr>
<td>6</td>
<td>F31</td>
<td>Strategic benefits</td>
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<tr>
<td></td>
<td></td>
<td>Benefits which are essential for enhancing competitiveness or creating strategic advantage, and in other words, the benefits which enable the organization to catch up with the competitors or beat the competition.</td>
</tr>
<tr>
<td>7</td>
<td>F32</td>
<td>Informational benefits</td>
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<tr>
<td></td>
<td></td>
<td>This enables easier and faster access to internal or external information for better customer service or better</td>
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<tr>
<td>No</td>
<td>Factor</td>
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<tr>
<td>8</td>
<td>F33 Operational benefits</td>
<td>Enhance productivity or business efficiency while reducing cost of operation.</td>
</tr>
<tr>
<td>9</td>
<td>F41 Initial cost</td>
<td>The cost incurred by the customer, in this case small industries, for acquiring new services or upgrading an existing services or rearranging an existing service. It is a onetime cost to the customer.</td>
</tr>
<tr>
<td>10</td>
<td>F42 Recurring cost</td>
<td>The cost incurred by the customer while using the service and there are generally two components as fixed and usage parts. This is again a repetitive cost, which is usually paid monthly.</td>
</tr>
<tr>
<td>11</td>
<td>F51 Quality of the installation</td>
<td>The installation process consists of all the activities, that the service provider carry out from the purchase to the completion of the actual installation, up to the point customer can use this service.</td>
</tr>
<tr>
<td>12</td>
<td>F52 Quality of the service delivery</td>
<td>This measures how the service performs throughout it is being utilized by the customer.</td>
</tr>
<tr>
<td>13</td>
<td>F53 Quality of the remote support</td>
<td>The remote support means the process where issues get resolved by calling a representative of the service provider over the telephone.</td>
</tr>
<tr>
<td>14</td>
<td>F54 Quality of the maintenance</td>
<td>The maintenance means the process where the issues cannot be resolved remotely, a team should be dispatched. So, the process runs from lodging the fault in the service provider’s system to resolving the issue at the customer premises.</td>
</tr>
<tr>
<td>15</td>
<td>F55 Security</td>
<td>Security means ensuring the integrity of the customer’s data, preventing unauthorized access and minimizing hazards situations.</td>
</tr>
<tr>
<td>16</td>
<td>F61 Perceived ease of use</td>
<td>The degree to which a person believes that using a particular system would be free of effort.</td>
</tr>
<tr>
<td>17</td>
<td>F71 External pressure (Branding)</td>
<td>Pressure exerted via advertising.</td>
</tr>
</tbody>
</table>

These variables were broken down to dimensions or indicators which are measurable items as depicted in Table 2. The indicators do not represent the variables in equal proportion because some indicators are more important than others. It is therefore necessary to assign weights to reflect importance of each variable. There are several methodologies available to arrive at relative weights. Prem Vrat et al. (1998) refers to some approaches:

*Method of Direct Scaling:* Bauer et al. (1977) recommends that evaluators are asked first their opinion on the relative weight, on a scale of 0-100 of each variable in a hierarchy, the sum of all the weights of all the variables to be 100. The different evaluations are then averaged out.
Setting hierarchy and weights from top to bottom: In this methodology, the top priority is assigned 100 points. The following priority is ranked relative to the one it follows. Weight of a variable is arrived by dividing its score with the total score of all the variables.

Setting hierarchy and weights from bottom to top: In this case the least important variable appearing at the bottom is assigned 10 points. The next least important is allotted points relative to its predecessor. The points are summed up and the weight of a variable is its points divided by the sum of all the points. These can be converted to a scale of 100.

Method of paired comparison: Each variable is compared with every variable and weights assigned on a scale of 1-3, three representing a major difference of importance, two as a medium difference of importance and one as a minor difference of importance.

In this study, the authors have resorted to an open exercise of asking the stakeholders about their evaluation of indicators in a class of concept on a scale of 0-100, the total of all the weights in the class remaining as 100. Hence, weights were assigned to each indicator as given in Table 2, after averaging and approximating to multiple of 5%.

TABLE 2:

<table>
<thead>
<tr>
<th>Concept</th>
<th>Factors</th>
<th>Weight</th>
<th>Indicators</th>
<th>Source for the indicators</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service bundling</td>
<td>Service bundling</td>
<td>35%</td>
<td>Price benefits</td>
<td>Pelino et.al, 2007</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30%</td>
<td>Accountability from one party</td>
<td>Pelino et.al, 2007</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25%</td>
<td>Convenience of dealing with one party</td>
<td>Pelino et.al, 2007</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10%</td>
<td>Receiving a single bill</td>
<td>Pelino et.al, 2007</td>
<td>Likert</td>
</tr>
<tr>
<td>Perceived ICT needs</td>
<td>Needs for basic voice service</td>
<td>N/A</td>
<td>Currently using/ Future intention of use</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Needs for facsimile service</td>
<td>N/A</td>
<td>Currently using/ Future intention of use</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Needs for Internet mail service</td>
<td>N/A</td>
<td>Currently using/ Future intention of use</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Needs for Broadband Internet service</td>
<td>N/A</td>
<td>Currently using/ Future intention of use</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>Strategic benefits</td>
<td>20%</td>
<td>Enhance competitiveness</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35%</td>
<td>Improve customer relation</td>
<td>Gemino et.al, 2006</td>
<td>Likert</td>
</tr>
<tr>
<td>Concept</td>
<td>Factors</td>
<td>Weight</td>
<td>Indicators</td>
<td>Source for the indicators</td>
<td>Measure</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------</td>
<td>--------</td>
<td>-----------------------------------</td>
<td>---------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Perceived</strong></td>
<td><strong>Initial cost</strong></td>
<td>95%</td>
<td>Connection charge</td>
<td>Manamperi, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Relocation charge</td>
<td>Manamperi, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Recurring cost</strong></td>
<td>50%</td>
<td>Fixed rental charge</td>
<td>Manamperi, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Variable usage charge</td>
<td>Manamperi, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Quality of the installation</strong></td>
<td>30%</td>
<td>Use new equipment</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10%</td>
<td>Employees appear neat</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40%</td>
<td>Flawless of the installation</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>Time taken to install from the purchase</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Quality of the service delivery</strong></td>
<td>50%</td>
<td>Service availability</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10%</td>
<td>Call completion</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>Audio quality</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>Upload/download speed with consistency</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Quality of the remote support</strong></td>
<td>75%</td>
<td>Prompt service</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25%</td>
<td>Consistently courteous</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td>Likert</td>
</tr>
<tr>
<td>Concept</td>
<td>Factors</td>
<td>Weight</td>
<td>Indicators</td>
<td>Source for the indicators</td>
<td>Measure</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------------</td>
<td>--------</td>
<td>-----------------------------------</td>
<td>----------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Quality of the maintenance</td>
<td>Time taken to respond</td>
<td>25%</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Employees appear neat</td>
<td>15%</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Time taken to rectify</td>
<td>60%</td>
<td>Leisen and Vance, 2001; Shaharudin et.al, 2009</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td>Security</td>
<td>Data integrity</td>
<td>30%</td>
<td>Harker and Akkeren, 2002</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Protection from unauthorized access</td>
<td>35%</td>
<td>Harker and Akkeren, 2002</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Adequate protection from lightening</td>
<td>35%</td>
<td>Manamperi, 2009</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>Clear and understandable</td>
<td>25%</td>
<td>Al-Omoush and Shaqrah, 2010</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Easier to handle</td>
<td>25%</td>
<td>Al-Omoush and Shaqrah, 2010</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Easier to become skilful</td>
<td>25%</td>
<td>Al-Omoush and Shaqrah, 2010</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td>25%</td>
<td>Frost and Sullivan, 2009</td>
<td></td>
<td>Likert</td>
</tr>
<tr>
<td>External pressure (Branding)</td>
<td>Advertisement</td>
<td>N/A</td>
<td>Advertisement</td>
<td></td>
<td>Likert</td>
</tr>
</tbody>
</table>

**Samples for the Study**

The technological and regulatory factors affecting the successful deployment of WiMAX technology in Sri Lanka were ascertained by analyzing the responses received for a set of structured questionnaire, separately administered for telecom operators and the regulator. Three individuals were selected for this survey from each operator, of which three were fixed wireless operators, and one fixed wire-line operator. Further, three individuals were selected from the regulator enabling a total sample of fifteen respondents altogether. The quantitative part of the research was carried out to get in-depth understandings about the factors affecting successful adoption of ICT services delivered using WiMAX technology in the small industry settings. The field survey was restricted to small industries.
Data Collection Instrument

All the questions in the questionnaire except two questions were open ended questions. These questions were emailed to selected individuals from the industry. In developing measures for the constructs proposed in the model, the previously validated measures were used whenever possible depending on their availability and researcher’s capability to find them. To construct measures for most of the variables, previously validated instrument were used giving due credit to the original scholars. However, the existing indicators required some modifications to suit small industry environment. The questionnaire was designed such a way that it could be used to collect information from both adopters and non-adopters. All these questionnaires are attached in the appendix. The indicators and their original sources are depicted in Table 2. Variables were measured on Likert scale (1-5).

DATA ANALYSIS

The qualitative part of the research study comprised of analysis of technological and regulatory factors from the responses received. Naturalistic type of observations, such as listening to conversations and taking part in the meetings with the regulator and the other operators, were used for reinforcing the research findings.

The quantitative part of the research was carried out to get in-depth understandings about the factors. The initial raw data gathered through field survey was used for deriving the final values of variables for each sample after taking the weighted average of the responses. Statistical Package for Social Sciences (SPSS 12) was used to analyze the final values statistically and finally present the results. The mean and the standard deviation of the sample were calculated for each variable for identifying their significance, and the 95% confidence interval of the mean difference was calculated again for each variable using one sample t-test to understand their consistency throughout the population. Once the success factors were identified analyzing the mean values of the variables, hypothesis testing was carried out to test the statistical significance of the success factors for the population.

Qualitative Data Analysis

Nine responses were received against a total of fifteen. All the respondents have agreed that WiMAX is an alternate technology to wire-line for providing fixed broadband services. It also surfaces that the ability of the technology to give guaranteed speeds and quality of service makes it similar to wired technology and at the same time differentiates it from competing mobile technologies.
Cost

High Speed Packet Access (HSPA) enjoys an edge as the 802.16d version of WiMAX technology which is currently operational in Sri Lanka cannot meet price expectation and the convenience provided by the competing mobile technologies. It is difficult to compete on prices with wire line broadband even in the residential space. Majority response favored offer of multiple services called service bundling. However, mobile variant of the technology (802.16e and 802.16m) is considered as the future for WiMAX, since it reduces the cost factor tremendously. It was found that the CPE price of the mobile version was roughly two to three times lower than the fixed version. Affordability plays a major role again to pitch this technology for mass market. Capital expenditure was needed to provide NGN type service platforms to transport only IP based services. Cost of the CPE was another concern raised by the operators when competing with technologies such as HSPA, the technology used by mobile operators to provide broadband services.

Range of services

There is no clear understanding between operators and the regulator about the services which should be delivered via existing WiMAX networks, and to which markets these services should be served. The regulator thinks that the technology should be predominantly used to cater to unmet broadband demand and multiple services for business customers. It is also brought out that WiMAX technology should be used for expanding the market segment towards the lower tier of the pyramid. Most believe this technology can be used to offer full range of services such as basic voice, facsimile, enhanced voice, internet, email, web, data, video and remote surveillance to its small business customers. This technology will have a huge success as it will not have dependence on need of an otherwise a large cable manufacturing plant to provide wires. The WiMAX technology enables an IP based connection to customer premises from the service provider network.

Preconditions of support

Equipment vendors have to play a major role by sharing their prior experience and providing technical expertise required. Hardware and software issues also need to be addressed. The initial investment which is required to deploy a WiMAX network island wide is again a big concern for most of the operators. The respondents stated that not only the cost of base-station created problems for the operators but also the cost of upgrading their back-haul network to cater to the traffic generated by its WiMAX customers.

Current Operations

Concerns were raised about the spectrum in which the WiMAX networks currently operate. The coverage of a base-station is limited when it operates in higher frequencies as of 3.5GHz it
currently uses, due to the climatic conditions and terrain characteristics of Sri Lanka and then again due to the inherent propagation characteristics of microwaves. It may require installing more and more base-stations. Besides, low frequencies facilitate non line-of-site operation where a link between customer and the operator’s base-station will be established through mere reflections. The operators can save considerable amount of installation and maintenance cost since a plug and play type of operation is possible by operating in low frequencies. The opinion concludes that operators should not only move to mobile variant of the technology, but also should operate on lower frequencies. Currently operators pay a large amount of recurrent charges to the government for the spectrum usage. Obviously this cost has to be finally borne by the customer affecting the cost factor of the technology adoption and in turn affecting the success of the deployment of WiMAX technology.

The operators also referred to the monthly spend for enabling international bandwidth required to provide internet services to its WiMAX customers. The high price is attributed to high charges imposed by the incumbent as its landing rights. The recurring cost to WiMAX users can be considerably reduced by controlling this cost factor. Among alternatives, HSPA, a wireless Broadband technology, and Asymmetric Digital Subscriber Line2+ (ADSL2+), are in forefront of the broadband race. The 3rd Generation (3G) mobile operators in the country are promoting HSPA which is an improvement to Wideband Code Division Multiple Access (WCDMA) protocol to its customers for meeting their personal mobile Broadband needs. The incumbent who owns the country’s only copper network exclusively is promoting ADSL2+ to its business and residential customers for meeting their fixed Broadband needs. Long Term Evolution (LTE), the evolution of 3G or rather HSPA, is the close contender for WiMAX and both are heading towards the true 4th Generation (4G) technology called “LTE-Advanced” and “Wireless MAN-Advanced” respectively.

Quantitative Analysis

The results of the field survey were analyzed using statistical tools to identify key success factors. The number of random samples received for performing this task, from Sri Lanka’s Department of Census and Statistics (DCS), and amount of samples finally surveyed, are depicted in Table 3.
It could be observed that the number of employees vary from two to nine people depending on the type and size of the business within small industries. The details about the number of peoples engaged in small industries within Colombo Divisional Secretariat (DS) division are as presented in Table 4.

**TABLE 4:**
**Number of persons engaged in the business**

<table>
<thead>
<tr>
<th>Description</th>
<th>Colombo Division Secretariat Division Population</th>
<th>Colombo Divisional Secretariat Division Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of small industry establishments</td>
<td>1,434</td>
<td>36</td>
</tr>
<tr>
<td>No of persons engaged</td>
<td>4,345</td>
<td>192</td>
</tr>
<tr>
<td>No of persons per establishment</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Census and Statistics Department, unpublished data, 2011
Small industries surveyed for this study engaged in different fields are delineated in Table 5.

### TABLE 5:
**Industry sector composition within the samples surveyed**

<table>
<thead>
<tr>
<th>Industry Divisions</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jewelry industry</td>
<td>4</td>
</tr>
<tr>
<td>Printing industry</td>
<td>10</td>
</tr>
<tr>
<td>Metal works industry</td>
<td>3</td>
</tr>
<tr>
<td>Tailoring sector</td>
<td>3</td>
</tr>
<tr>
<td>Timber industry</td>
<td>2</td>
</tr>
<tr>
<td>Paper and board industry</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Census and Statistics Department, unpublished data; 2011

Adoption of voice, facsimile, Internet mail and Internet broadband services by small industries were considered for further study and the results are as depicted in Table 6.

### TABLE 6:
**Usage of ICT services within the samples surveyed**

<table>
<thead>
<tr>
<th>Industry Divisions</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Service</td>
<td>36</td>
</tr>
<tr>
<td>Facsimile service</td>
<td>11</td>
</tr>
<tr>
<td>Internet mail service</td>
<td>10</td>
</tr>
<tr>
<td>Internet Broadband service</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Structured questionnaire survey
Descriptive Analysis

The data gathered after applying the survey instrument to the random sample of CDS division received from DCS, was analyzed through SPSS for generating the mean and the standard deviation of the sample data as depicted in Table 7. The one sample t-test was used to derive the 95% confidence interval of the mean difference as shown in Table 8. Mean standard deviation and mean differences are shown for each and every factor identified as affecting the promotion of WiMAX technology in small industry settings. There is neither strong support nor rejections too for service bundling in the sample of the small industry settings.

Because of the low cost and it being the basic start up necessity, the basic voice service dominates and therefore it is a mandatory requirement for any business in small industry. However, the requirement of other services varies from business to business as standard deviation taking a high figure and the respective confidence interval too varies considerably.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1.1 Service bundling</td>
<td>2.00</td>
<td>4.60</td>
<td>3.56</td>
<td>0.54</td>
</tr>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>0.00</td>
</tr>
<tr>
<td>F2.2 Needs for facsimile service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.64</td>
<td>1.85</td>
</tr>
<tr>
<td>F2.3 Needs for Internet mail service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.36</td>
<td>1.85</td>
</tr>
<tr>
<td>F2.4 Needs for Broadband Internet service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.36</td>
<td>1.82</td>
</tr>
<tr>
<td>F3.1 Strategic benefits</td>
<td>2.45</td>
<td>5.00</td>
<td>3.71</td>
<td>0.52</td>
</tr>
<tr>
<td>F3.2 Informational benefits</td>
<td>2.00</td>
<td>4.50</td>
<td>3.19</td>
<td>0.67</td>
</tr>
<tr>
<td>F3.3 Operational benefits</td>
<td>2.00</td>
<td>5.00</td>
<td>3.44</td>
<td>0.65</td>
</tr>
<tr>
<td>F4.1 Initial cost</td>
<td>1.10</td>
<td>4.95</td>
<td>4.20</td>
<td>0.94</td>
</tr>
<tr>
<td>F4.2 Recurring cost</td>
<td>1.50</td>
<td>5.00</td>
<td>3.74</td>
<td>0.89</td>
</tr>
<tr>
<td>F5.1 Quality of the installation</td>
<td>2.40</td>
<td>5.00</td>
<td>4.00</td>
<td>0.55</td>
</tr>
</tbody>
</table>
### Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>F5.2 Quality of the service delivery</td>
<td>2.90</td>
<td>5.00</td>
<td>3.93</td>
<td>0.47</td>
</tr>
<tr>
<td>F5.3 Quality of the remote support</td>
<td>2.00</td>
<td>5.00</td>
<td>3.68</td>
<td>0.73</td>
</tr>
<tr>
<td>F5.4 Quality of the maintenance</td>
<td>3.35</td>
<td>4.85</td>
<td>4.11</td>
<td>0.48</td>
</tr>
<tr>
<td>F5.5 Security</td>
<td>2.00</td>
<td>4.70</td>
<td>3.05</td>
<td>0.67</td>
</tr>
<tr>
<td>F6.1 Perceived ease of use</td>
<td>3.00</td>
<td>5.00</td>
<td>3.93</td>
<td>0.47</td>
</tr>
<tr>
<td>F7.1 External pressure (Branding)</td>
<td>2.00</td>
<td>5.00</td>
<td>3.03</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Source: Structured questionnaire survey

‘Strategic benefit’ has the highest mean among three benefit types identified for this study.

#### TABLE 8: Confidence interval of the means

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>F1.1 Service bundling</td>
<td>3.56</td>
<td>0.54</td>
<td>3.38</td>
</tr>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>5.00</td>
<td>0.00</td>
<td>*</td>
</tr>
<tr>
<td>F2.2 Needs for facsimile service</td>
<td>2.64</td>
<td>1.85</td>
<td>2.01</td>
</tr>
<tr>
<td>F2.3 Needs for Internet mail service</td>
<td>2.36</td>
<td>1.85</td>
<td>1.73</td>
</tr>
<tr>
<td>F2.4 Needs for Broadband Internet service</td>
<td>2.36</td>
<td>1.82</td>
<td>1.74</td>
</tr>
<tr>
<td>F3.1 Strategic benefits</td>
<td>3.71</td>
<td>0.52</td>
<td>3.53</td>
</tr>
<tr>
<td>F3.2 Informational benefits</td>
<td>3.19</td>
<td>0.67</td>
<td>2.97</td>
</tr>
</tbody>
</table>
The initial cost is the biggest concern for adopting this technology. The quality of installation, service delivery and maintenance are of greater concern for adopting this technology since these factors too hold higher mean values compared to other factors in the sample. The customer friendly use has a significant influence for technology adoption since it has a higher mean value. On the other hand, external pressure has little influence in their decision making as indicated by a low mean value.

Classification of Factors

Three sub categories were devised as Low, Medium and High for the purpose of identifying key success factors. The value ranges were assigned to these sub categories by dividing the range for Likert scale (5-1=4) by three. According to this method (Manamperi, 2009), each sub category will have respective ranges as follows: Low means no considerable influence (1.0 - 2.33), Medium means there is some influence (2.34 - 3.66), and High means heavy influence (3.67 - 5.0). Table 9 depicts these categories.
TABLE 9:  
Classification of factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1.1 Service bundling</td>
<td>2.00</td>
<td>4.60</td>
<td>3.56</td>
<td>Medium</td>
</tr>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>High</td>
</tr>
<tr>
<td>F2.2 Needs for facsimile service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.64</td>
<td>Medium</td>
</tr>
<tr>
<td>F2.3 Needs for Internet mail service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.36</td>
<td>Low</td>
</tr>
<tr>
<td>F2.4 Needs for Broadband Internet service</td>
<td>1.00</td>
<td>5.00</td>
<td>2.36</td>
<td>Medium</td>
</tr>
<tr>
<td>F3.1 Strategic benefits</td>
<td>2.45</td>
<td>5.00</td>
<td>3.71</td>
<td>High</td>
</tr>
<tr>
<td>F3.2 Informational benefits</td>
<td>2.00</td>
<td>4.50</td>
<td>3.19</td>
<td>Medium</td>
</tr>
<tr>
<td>F3.3 Operational benefits</td>
<td>2.00</td>
<td>5.00</td>
<td>3.44</td>
<td>Medium</td>
</tr>
<tr>
<td>F4.1 Initial cost</td>
<td>1.10</td>
<td>4.95</td>
<td>4.20</td>
<td>High</td>
</tr>
<tr>
<td>F4.2 Recurring cost</td>
<td>1.50</td>
<td>5.00</td>
<td>3.74</td>
<td>High</td>
</tr>
<tr>
<td>F5.1 Quality of the installation</td>
<td>2.40</td>
<td>5.00</td>
<td>4.00</td>
<td>High</td>
</tr>
<tr>
<td>F5.2 Quality of the service delivery</td>
<td>2.90</td>
<td>5.00</td>
<td>3.93</td>
<td>High</td>
</tr>
<tr>
<td>F5.3 Quality of the remote support</td>
<td>2.00</td>
<td>5.00</td>
<td>3.68</td>
<td>High</td>
</tr>
<tr>
<td>F5.4 Quality of the maintenance</td>
<td>3.35</td>
<td>4.85</td>
<td>4.11</td>
<td>High</td>
</tr>
<tr>
<td>F5.5 Security</td>
<td>2.00</td>
<td>4.70</td>
<td>3.05</td>
<td>Medium</td>
</tr>
<tr>
<td>F6.1 Perceived ease of use</td>
<td>3.00</td>
<td>5.00</td>
<td>3.93</td>
<td>High</td>
</tr>
<tr>
<td>F7.1 External pressure (Branding)</td>
<td>2.00</td>
<td>5.00</td>
<td>3.03</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: Structured questionnaire survey
According to Table 9, there are nine and seven factors in the high and medium categories respectively, while only one factor has fallen in low category. Table 10 depicts factors under the high category.

### TABLE 10:
Success factors for the sample

<table>
<thead>
<tr>
<th>Factors</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>F5.3 Quality of the remote support</td>
<td>2.00</td>
<td>5.00</td>
<td>3.68</td>
<td>High</td>
</tr>
<tr>
<td>F3.1 Strategic benefits</td>
<td>2.45</td>
<td>5.00</td>
<td>3.71</td>
<td>High</td>
</tr>
<tr>
<td>F4.2 Recurring cost</td>
<td>1.50</td>
<td>5.00</td>
<td>3.74</td>
<td>High</td>
</tr>
<tr>
<td>F6.1 Perceived ease of use</td>
<td>3.00</td>
<td>5.00</td>
<td>3.93</td>
<td>High</td>
</tr>
<tr>
<td>F5.2 Quality of the service delivery</td>
<td>2.90</td>
<td>5.00</td>
<td>3.93</td>
<td>High</td>
</tr>
<tr>
<td>F5.1 Quality of the installation</td>
<td>2.40</td>
<td>5.00</td>
<td>4.00</td>
<td>High</td>
</tr>
<tr>
<td>F5.4 Quality of the maintenance</td>
<td>3.35</td>
<td>4.85</td>
<td>4.11</td>
<td>High</td>
</tr>
<tr>
<td>F4.1 Initial cost</td>
<td>1.10</td>
<td>4.95</td>
<td>4.20</td>
<td>High</td>
</tr>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: Structured questionnaire survey

### Hypothesis Test for Population

The following null hypothesis was developed for testing the statistical significance of the success factors for the population.

- **H₀**: \( \mu = 3.66 \) where \( \mu \) represents the mean of the population for a success factor.
- If \( H₀ \) is rejected, the alternative hypothesis will be accepted and it is presented as follows:
  - **H₁**: \( \mu > 3.66 \) where \( \mu \) represents the mean of the population for a success factor.

The null hypothesis (\( H₀ \)) is rejected, if the \( p \)-value < \( \alpha \), where \( \alpha \) represents the significance level. Significance level will show how likely the result will change, and 5\% of significance is generally used for this type of research studies. This again means there is 95\% of chance of being true, and it is shown by 95\% confidence interval in the population. One sample t-test was
carried out for value 3.66 using SPSS statistical software, and the result has been tabulated in Table 11.

**TABLE 11:**

*p*-value for null hypothesis

<table>
<thead>
<tr>
<th>Factors</th>
<th>p-value for H0:μ=3.66</th>
<th>95% Confidence Interval of the Difference</th>
<th>Significant for Population?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
</tr>
<tr>
<td>F3.1 Strategic benefits</td>
<td>0.591</td>
<td>-0.129/0.223</td>
<td>No</td>
</tr>
<tr>
<td>F4.1 Initial cost</td>
<td>0.002</td>
<td>0.220/0.858</td>
<td>Yes</td>
</tr>
<tr>
<td>F4.2 Recurring cost</td>
<td>0.611</td>
<td>-0.230/0.380</td>
<td>No</td>
</tr>
<tr>
<td>F5.1 Quality of the installation</td>
<td>0.001</td>
<td>0.158/0.528</td>
<td>Yes</td>
</tr>
<tr>
<td>F5.2 Quality of the service delivery</td>
<td>0.001</td>
<td>0.113/0.433</td>
<td>Yes</td>
</tr>
<tr>
<td>F5.3 Quality of the remote support</td>
<td>0.866</td>
<td>-0.230/0.270</td>
<td>No</td>
</tr>
<tr>
<td>F5.4 Quality of the maintenance</td>
<td>0.000</td>
<td>0.286/0.608</td>
<td>Yes</td>
</tr>
<tr>
<td>F6.1 Perceived ease of use</td>
<td>0.002</td>
<td>0.110/0.420</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* As standard deviation is zero not necessary to calculate lower and upper boundry for this variable.

Source: Structured questionnaire survey

The null hypothesis, H0, has not been rejected for factors F3.1, F4.2 and F5.3, since their *p*-value is greater than α (=0.05). In other words, it cannot be said that μ is greater than 3.66. Null hypothesis is rejected for factors F4.1, F5.1, F5.2, F5.4 and F6.1, since their *p*-value is less than α (=0.05), and therefore the alternative hypothesis H1 is accepted. The population means, μ for those factors are greater than 3.66 with 95% of confidence and they fall within the high category even for the population. F2.1 is selected without hypothesis testing, since its mean is five and there is zero standard deviation. Thus, those factors can be considered as key success factors accepted by the entire population in the Colombo DS division.
Final Selection of Key Factors

Finally, six factors, need for basic voice service, initial cost, quality of the installation, quality of the service delivery, quality of the maintenance, and perceived ease of use are selected as the key success factors. Other factors did not satisfy the statistical requirement to be key factors. These are depicted in Table 12.

<table>
<thead>
<tr>
<th>Factors</th>
<th>p-value for H0:μ=3.66</th>
<th>95% Confidence Interval of the Difference</th>
<th>Significant for Population?</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2.1  Needs for basic voice service</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
</tr>
<tr>
<td>F4.1  Initial cost</td>
<td>0.002</td>
<td>0.220</td>
<td>0.858</td>
</tr>
<tr>
<td>F5.1  Quality of the installation</td>
<td>0.001</td>
<td>0.158</td>
<td>0.528</td>
</tr>
<tr>
<td>F5.2  Quality of the service delivery</td>
<td>0.001</td>
<td>0.113</td>
<td>0.433</td>
</tr>
<tr>
<td>F5.4  Quality of the maintenance</td>
<td>0.000</td>
<td>0.286</td>
<td>0.608</td>
</tr>
<tr>
<td>F6.1  Perceived ease of use</td>
<td>0.002</td>
<td>0.110</td>
<td>0.420</td>
</tr>
</tbody>
</table>

* As standard deviation is zero not necessary to calculate lower and upper boundry for this variable.
Source: Structured questionnaire survey

These key success factors are tabulated in their ranking order as shown in Table 13, together with their mean the 95% confidence interval.
### TABLE 13:
Key success factors in the ranking order

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>F2.1 Needs for basic voice service</td>
<td>5.000</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>F4.1 Initial cost</td>
<td>4.199</td>
<td>3.88</td>
<td>4.52</td>
</tr>
<tr>
<td>F5.4 Quality of the maintenance</td>
<td>3.933</td>
<td>3.95</td>
<td>4.27</td>
</tr>
<tr>
<td>F5.1 Quality of the installation</td>
<td>4.107</td>
<td>3.82</td>
<td>4.19</td>
</tr>
<tr>
<td>F5.2 Quality of the service delivery</td>
<td>4.003</td>
<td>3.77</td>
<td>4.09</td>
</tr>
<tr>
<td>F6.1 Perceived ease of use</td>
<td>3.926</td>
<td>3.77</td>
<td>4.08</td>
</tr>
</tbody>
</table>

* As standard deviation is zero not necessary to calculate lower and upper boundry for this variable.

Source: Structured questionnaire survey

Voice service is the dominant service among all other services surveyed for their needs within Colombo DS division. Apart from this, initial cost plays a significant role deciding whether to be successful or not in the small industry settings, because of their poor financing ability. The quality of the service, in terms of the initial installation, subsequent service delivery and timely fault rectification are deciding factors to the successful adoption of ICT services.

### CONCLUSION

Adoption of technology is low in the small industry environment. It is mainly due to the lack of skills and awareness about the benefits it can yield. Voice service is used by almost all the small industries as their communication technology. Other ICT services are used less frequently. Most of the industries are not technology driven, and in general modern technology is rarely employed by small industries for enhancing their businesses. The ability to deliver guaranteed speeds and quality of service provide an edge for WiMAX technology over the other competing wireless broadband technologies such as HSPA. The fixed version of the WiMAX technology (802.16d), which has been currently deployed by all the fixed wireless operators in Sri Lanka, has barriers for reaching masses, due to the exorbitant cost incurred for the CPE and the subsequent
installation and maintenance. The mobile version of the WiMAX technology (802.16e and 802.16m) allows the fixed operators to compete with equivalent mobile technologies available in the market, since it will reduce the cost factor considerably to be far with the competition. The vendor support is a key requirement for successful deployment of WiMAX technology. The mobile variant of the WiMAX technology (802.16e, 802.16m) allows a plug and play type of operation resulting a reduction in installation and maintenance cost, but benefits cannot be fully achieved unless it operates in lower frequencies. Spectrum charges are a significant component of the operational expenditure. Cost of international bandwidth contributes considerably to monthly recurring cost of Broadband Internet service, and from the overall cost, landing cost is a significant component.

The following have emerged as the key success factors for promotion of WiMAX in Sri Lankan small industry: Need for basic voice service, Initial cost, Quality of the installation, Quality of the service delivery, Quality of the maintenance, and Perceived ease of use. This is not surprising if one considers the basic profile of a Sri Lankan small business which lacks exposure to technology, operates on low skills and therefore would always prefer a friendly technology in maintenance, uses and is in need of largely voice service in communication and is ever short of financial resources to opt for other options of telecommunication technologies.

**RECOMMENDATION**

Ability to provide a wide range of support particularly in the area of service integration and solving on-going operational issues plays an important role the regulator has in developing this technology fairly among the operators and making sure the benefits are adequately passed to the end customers such as small industries. Cost, quality, ease of use as the predominant key success factors have high linkages with technology and core competencies of the organization. Once again the regulator has an important function and responsibility. The support is reflected in policies encouraging the adoption of latest technology. Operators should pay their full attention for the support available from the vendor when selecting the equipment for deploying WiMAX networks. Operators should make continuous effort to understand customer’s requirement and design and deliver their products and services in such a way that it is consistent with customer’s requirement, beliefs and the way customers are accustomed to work.

**REFERENCES**


Pelino, M., Brown, G. & Mulhausen, R. (2007). Telecom bundles are required, but they are not enough to address the SMB market. *Forester Research.*


Appendix. Questionnaires

Questionnaire for Small Industries

1. Name of the Enterprise:
2. No of employees:
3. Type of business you are in:
   a) Manufacturing   b) Mining & Quarrying  c) Services.
4. Respondent:   a) Owner   b) Manager
5. Are you currently using WiMAX technology?
   a) Yes   b) No   How long ……………

Please tick appropriate answer according to following table

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 I am expecting a reduction in telecom spending by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subscribing all my needs from a single service provider.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2 I like to purchase all my telecom service from a single provider</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>because it makes one party accountable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3 It is convenient for me to purchase all my telecom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services from a single service provider.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.4 I prefer receiving a single bill for all my telecom services.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1 Are you currently using voice service?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes, tick as “Strongly Agree”. If No, ask whether</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>they will purchase voice service (i) within next 6 months (ii) within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>next 6 to 12 months (iii) within next 12 to 18 months and map as</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>follows. Within next 6 months ↔ “Agree”, Within next 6 to 12 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>↔ “Not Sure”, Within next 12 to 18 months ↔ “Disagree”. More than 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>months or never going to purchase ↔ “Strongly Disagree”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1 Are you using facsimile service currently?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes, tick as “Strongly Agree”. If No, ask whether</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>they intend to use this service in the future and follow the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>similar procedure as question number “2.1.1”.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Questions

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **2.3.1** | Are you using Internet mail service currently?  
If Yes, tick as “Strongly Agree”. If No, ask whether they intend to purchase this service in the future and follow the similar procedure as question number “2.1.1”. |   |   |   |
| **2.4.1** | Are you using Internet Broadband service currently?  
If Yes, tick as “Strongly Agree”. If No, ask whether they intend to purchase this service in the future and follow the similar procedure as question number “2.1.1”. |   |   |   |
<p>| <strong>3.1.1</strong> | By having these types of telecom services will enhance competitiveness of my organization. |   |   |   |
| <strong>3.1.2</strong> | By having these types of telecom services will improve the relationship with our customers. |   |   |   |
| <strong>3.1.3</strong> | By having these types of telecom services will enhance the credibility of my organization. |   |   |   |
| <strong>3.1.4</strong> | These types of telecom services will help my organization to reach new customers. |   |   |   |
| <strong>3.2.1</strong> | These types of telecom services will enable us to access new information. |   |   |   |
| <strong>3.2.2</strong> | These types of telecom services will enable us to access new knowledge required for improving my business. |   |   |   |
| <strong>3.3.1</strong> | These types of telecom services will reduce our operating cost such as transport cost. |   |   |   |
| <strong>3.3.2</strong> | These types of telecom services will enhance my organization’s productivity. |   |   |   |
| <strong>4.1.1</strong> | Initial connection charge is a big concern for adopting this service. |   |   |   |
| <strong>4.1.2</strong> | I intend to relocate this service frequently and then relocation charge will be a concern for me. |   |   |   |
| <strong>4.2.1</strong> | Monthly fixed rental too is a big concern for adopting this service. |   |   |   |
| <strong>4.2.2</strong> | Monthly usage charges too are a big concern for adopting this service. |   |   |   |
| <strong>5.1.1</strong> | I prefer operator is using new equipment for the installation of the service at my premises. |   |   |   |
| <strong>5.1.2</strong> | The physical appearance of the people coming for the installation is a concern for me. |   |   |   |</p>
<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.3 I want my service to work first time without any error, after the installation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.4 I want my service to be up and running within few days of purchase and any delay will not be tolerable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.1 I expect my telecom services to be available whenever I intend to use it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.2 Ability to getting through to the other person is very important when a call is made even in the busy hours.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.3 Voice clarity is very important and even a small degradation is not tolerated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.4 The consistent download/upload speed is a big concern for me when Broadband is used.</td>
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<td>5.3.1 I expect a prompt service whenever I call operator’s call center.</td>
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<td>5.3.2 I expect the people who answer my calls to be courteous throughout the conversion.</td>
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<tr>
<td>5.4.1 I expect a prompt response whenever I complain about a service outage.</td>
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<td>5.4.2 The physical appearance of the people coming for the service maintenance is a concern for me.</td>
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<tr>
<td>5.4.3 I cannot tolerate lengthy service outages and therefore my service breakdowns should be rectifies within few hours.</td>
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<tr>
<td>5.5.1 Data integrity is a major concern when transferring data through the Internet.</td>
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<tr>
<td>5.5.2 I expect operator to prevent unauthorized access to my telecom service.</td>
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<td>5.5.3 Adequate lightning protection should be installed when commissioning the services.</td>
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<tr>
<td>6.1.1 The ICT solution provided should be clear and understandable.</td>
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<td>6.1.2 The ICT solution and its features should be easier to be operated.</td>
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<tr>
<td>6.1.3 Even a person with less technical skills should be able to master the operation of ICT solution without much effort.</td>
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<tr>
<td>6.1.4 I need to use this service at different places and if the solution can be carried with me it will give me added convenience.</td>
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</tbody>
</table>
Questions

7.1.1 The advertisements and perception in the market will motivate my business to adopt this service.

Questionnaire for Operators

1). What is your opinion about the WiMAX (both fixed and mobile) technology?
2). What are the services as you think can be deployed for small business customers over WiMAX?
3). What would be the success factors for positioning WiMAX technology for small businesses?
4). What are the competing technologies for WiMAX and what would be their respective effect on WiMAX?
5). What would be the bottlenecks or hurdles for deploying successful WiMAX services?
6). Do you have a clear mandate from TRC to bundle services such as Voice over IP?
7). How critical will be the vendor support for successful deployment of these services?
8). What is the support you expect from regulator and the government for successfully deploying WiMAX technology?

Questionnaire for the Regulator

1). What is your opinion about the WiMAX (both fixed and mobile) technology?
2). What is the position of TRC regarding the WiMAX technology?
3). Do you promote fixed or mobile WiMAX technology?
4). Do you think Sri Lanka has sufficient spectrum to deploy WiMAX technology across the operators?
5). What is your position on delivering multiple services over single WiMAX connection?
6). What would be the bottlenecks or hurdles for deploying successful WiMAX services in Sri Lanka?
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EXPLORING AN INTEGRAL FRAMEWORK ON CONTINUING PROFESSIONAL EDUCATION

ZENON ARTHUR SILORAN UDANI¹

and

DELIA SILORAN UDANI²

ABSTRACT

Continuing professional education (CPE) focuses on both professional and personal development. Employees need technical expertise and ethical excellence to progress. In this regard, professional associations serve as a channel for realizing CPE. These associations have the potential role of adding value to professionals through skill building activities and enhancing personal virtues through the ethical values they habitually transmit through various programs. This study proposes an integral framework on CPE for professional associations. Through this framework, the study identifies association initiatives that contribute to value-adding and virtue-enhancing human resource development.

Keywords: Ethics, expertise, character, continuing professional education, integral framework, professional associations

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INTRODUCTION

Continuing professional education is an enduring process. It is actively pursued as a personal goal and initiative, and a common good shared by members of an organization or professional association. Professional associations exist ‘to advance and protect the interests of a profession and to offer services to its members’ (Werner & DeSimone, 2009). These associations promote continuing professional education ‘by sponsoring conferences, meetings, and workshops for their members…. One of the primary benefits of these events is the opportunity to meet and share experiences with other professionals’ (Werner & DeSimone, 2009). By advocating a holistic continuing education, professional associations contribute to forming well-rounded individuals and effective employees.

Continuing professional education or continuing professional development is ‘the systematic maintenance and improvement of knowledge, skills and competence, and enhancement of learning, undertaken by a person throughout his or her working life’ (Guest, 2007). In addition, ‘planned and structured continuing professional development is vital for survival and prosperity in an increasingly litigious society, where professional ethics and codes of conduct are firmly, and rightly, in the spotlight and where the professions themselves must never lose sight of the fact that their prime purpose is to act for the public good’ (Guest, 2007). In order to foster the public good, continuing professional education programs and activities of professional associations must exhort their members to act ethically and acquire good moral character.

Continuing professional education must be oriented towards genuine people development – understood as ‘getting the right values into their hearts, getting the right skills into their hands, and placing the right ideas into their minds’ (Estanislao, 1995). Carballo (1991) refers to genuine people development as instilling both the ‘right work habits’ and a ‘unified set of moral principles’ among people. He asserts ‘that good work habits or competence alone do not distinguish a true professional. These must, above all, be accompanied and perfected by genuine moral values and virtues, among them: respect for the dignity and rights of every person, sincere and selfless spirit of service to others, responsible dominion over material things, respect for legitimate authority and for the dignity of human sexuality, love for the truth, love of God’ (Carballo, 1991). Guided by these principles, continuing professional education assumes a more integral approach that advances both technical and ethical competence among professionals.
AN INTEGRAL FRAMEWORK FOR PEOPLE DEVELOPMENT

Education etymologically suggests more than just transmitting information from the trainer/teacher to the students (Bellah et al., 1992). Besides instruction, education also connotes drawing out the best in people. Forbes (1999) asserts: ‘Education enables us not only to gain knowledge but also to develop sound character, to discover our God-given talents, to lead honorable lives, to become truly good parents, neighbors and citizens’.

While business and the workplace highly regard technical competence as a requisite to effective performance, authors also assert the importance of integrity or character excellence (Espanol 1995; Paine 1994; Kouzes & Posner 1993; Covey 1992). Recent cases of business fiascos also highlight the need for expertise to be anchored on a solid ethical foundation. The technical thrust of continuing professional education needs to be balanced by its ethical and whole-person dimension. Professional development must be pursued with ethical and character development in mind.

Competence in the context of this paper is understood as the technical knowledge, skills and expertise pertinent to a given profession which translates into effective work performance. Character, on the other hand, refers to the ‘human’ side of the professional – his moral values, attitudes and virtues which are externalized in virtuous behavior.

Updating, Competence-building, and Performance-enhancement

On the competence dimension of our continuing professional education framework (see Figure 1), updating concerns the technical aspect of a profession. Professionals update their knowledge on developments, current trends, and best practices in their field. Updating ‘provides practicing professionals with a level of knowledge comparable to those professionals graduating from professional schools. In other words, it closes the gap created by changes in technology, science, and skills between these two generations of professionals’ (Nasseh 1996). Professional associations update their members through various channels including publications, institutional websites, workshops, conferences and annual meetings.
FIGURE 1:
Continuing Professional Education Framework

<table>
<thead>
<tr>
<th>ETHICS &amp; CHARACTER DEVELOPMENT</th>
<th>INFORMATION (Awareness of Ethical values)</th>
<th>FORMATION (Internalization &amp; Commitment to virtue)</th>
<th>TRANSFORMATION (Externalization of core values and virtues through personal behavior)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERFORMANCE-ENHANCEMENT</td>
<td></td>
<td></td>
<td>The IDEAL spot: Continuing professional education that enhances performance &amp; develops ethical characters</td>
</tr>
<tr>
<td>COMPETENCE-BUILDING</td>
<td>The MINIMUM spot: Continuing professional education that updates technical knowledge &amp; informs people of core ethical values</td>
<td></td>
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<tr>
<td>UPDATING</td>
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</table>

Updates prepare professionals for competence-building. Swanson and Holton (2009) define competence as ‘displayed behavior within a specialized domain in the form of consistently demonstrated actions of an individual which are both minimally efficient in their execution and effective in their results.’ Competence-building enables employees to do the minimum requirements of their job and achieve the expected results. And as job requirements change given the dynamics of the market, professionals need to identify and refine continually their key areas of improvement in order to be more productive and effective in their jobs. A thorough training needs analysis of members of a professional association would be expedient in designing and developing effective professional education programs.
Continuing professional education programs that successfully transfer learning help association members to enhance their work performance. Thus, genuinely effective competence-building professional education programs result into actual enhancement of job performance. The performance-enhancement stage is anchored on ‘the act of performing a job efficiently, skillfully, and completely’ (Nasseh 1996). In this regard, best job practices have to be sustained and become habitual in order to generate desired performance levels and outputs. Regular performance appraisals can capture employee improvements due to continuing professional education.

While most organizations afford due importance to the knowledge and skills of their employees, these organizations have yet to harness effectively the values and attitudes of their people. More attention could be given to ethical and character development in order to make their core values functional. Crucial to the employees’ ethical and character development is the support and exemplary behavior of top management. Employees spend at least one-third of their daily work life in the company. And the quality of executive thought, word and action has a significant bearing on their behavior.

COMPETENCE & CHARACTER, ETHICS & EXPERTISE

Core Values

In harnessing ethical and character dimension of continuing professional education, the core values adopted by professional associations can be the starting point. These values serve as the key result areas of personal and professional development of association members. Posner et al. (1985) define values as ‘deep seated, pervasive standards that influence almost every aspect of our lives: our moral judgements, our responses to others, our commitments to personal and organizational goals.’ Core values indicate the behaviors and actions that are propitious to achieving the organizational vision and mission. They define the type of culture an organization aspires to nurture. Likewise, they suggest the excellent habits which people should internalize and eventually externalize in their personal behavior. In this regard, Leung et al. (2006) cite the qualities of excellent professionals, as follow:

- **Courage to do what is right**
- **Maintaining one’s own credibility and that of the profession**
- **Maintaining confidentiality**
- **Autonomy**
- **Ability to consider broader social and sustainability issues**
- **Exercising due professional care**
- **Maintaining adequate professional standards and competence**
- **Objectivity**
- **Integrity**
• Respecting the rights of stakeholders with informed consent
• Respect for the professions
• Being an advocate of professional ethics
• Advancing the profession’s interest e.g. quality of the ‘brand’

Argandoña (2003) recommends a six-step procedure in promoting values in organizations, namely:
• Identify the currently existing values
• Identify the values that are needed
• Communication, institutionalization and commitment to the values
• Aligning values and practices
• Redesigning the human resources policy
• Reviewing the process

Espousing the right values for a professional association and effectively managing the process of values formation and inculcation are crucial in setting ethics as second-nature and a way of life among members. Moreover, Posner et al. (1985) affirm that ‘strong shared values provide individuals with a sense of success and fulfillment, a healthy (less cynical) assessment of the values and ethics of their colleagues, subordinates, and bosses, and a greater regard for organizational objectives and significant organizational constituents.’

Information, Formation and Transformation

Core values serve as the foundation for the information stage of our continuing professional education framework (see Figure 1). Information involves expounding on the core values of the association, ensuring that they are understood and shared by everyone. This also entails integrating the values into the human resource development programs of professional associations. Thus, members realize the relevance and prominence of the core values in their professional field. Likewise, their personal value system is affirmed, enabling them to behave more ethically. Argandoña (2003) affirms: ‘The process of fostering values within people requires, from the rational viewpoint, an exercise in information (knowledge about the values) and an exercise in education (convincing of the need to exercise and strengthen certain values...).’

Values or ethical formation programs begin with the intent of making people aware about the core values an organization espouses. Goodpaster (1989) refers to this essential task as orienting wherein a certain moral assessment of the corporate environment is made.

On the merits of shared values, Deal and Kennedy (1988) assert: ‘If employees know what their company stands for, if they know what standards they are to uphold, then they are much more likely to make decisions that will support those standards. They are also more likely to feel as if they are an important part of the organization. They are motivated because life in the company has meaning for them.’
The next stage, formation, implies the personal assimilation and ownership of the core values. The more palpable a professional association’s commitment is to its espoused values and code of ethics, the greater interest it would have in molding the attitudes and behaviors of its members. The main thrust of continuing professional education initiatives at this stage is to help people internalize and commit themselves to the personal demands of the core values.

Berkowitz (1995) highlights four broad guidelines in the internalization of ethical values: ‘They must be made explicit, must be endorsed by the authorities …, must be modeled by the adults …, and must be enforced.’ These guidelines ensure the tension needed in sustaining values awareness.

Eliciting commitment to ethical values is what Goodpaster (1989) refers to as institutionalization. ‘How can these values be made part of the operating consciousness of the company? How can they gain the attention and the allegiance of middle management and other employees?’ Institutionalization can be effectively carried out through the following: ‘decisive actions, a statement of standards with regular audits, and appropriate incentives.’

When core values and attitudes are imbibed by people in a habitual and stable manner, the stage of transformation sets in. Aided by the right values, positive attitudes and virtues, professionals are better disposed to making judicious moral decisions which affect their personal and professional life (Alzola, 2008). A firmer commitment and a more positive attitude toward virtuous behavior enable people to live more ethically. Transformation is about making personal behavior consistent with cherished beliefs. Professional associations that recognize and reward the exemplary behavior of people in their field encourage such transformation. ‘Recognizing people for their consistency with organizational values is one way to tap the well-spring of intrinsic motivation’ (Posner et al., 1985).

FRAMEWORK DYNAMICS

Stage I: Information—Updating

Information refers broadly to the transmission of corporate values and ethical codes of a professional association. Updating, on the other hand, refers to the dissemination of profession-related know-how, emerging trends and developments in a given field. The general tendency of continuing professional education providers is a fragmented kind of education, one that leans heavily on the technical side and has little regard for the moral development of the people. They veer away from the integrative goal of education (Bellah et al, 1992). They treat technical knowledge and character enhancement or development as two separate domains that have nothing to do with each other. Hence, professional associations have relegated themselves to concerns of transmitting knowledge and skills.

Certainly the prevailing phenomenon observed in professional schools is at variance with the contention that ‘all educational and formative work’ of the schools aims at no less than
influencing ‘the student's whole personality’ (Brezinka, 1994). Information and updating in professional associations usually happen during monthly, quarterly or yearly meetings. On such occasions, associations can strengthen their bid for character and ethical development among members by featuring best practices or critical incidents that demonstrate the exemplary practice of core values. Association websites can also host video blogs featuring the core value of the month or quarter.

On a related note, Posner et al. (1985) explains: ‘The development of the right employee skills can be the difference between excellence and mediocrity. Corporate values can provide the needed guidance in selecting curricula and faculty and designing training events.’

Stage II: Formation--Competence-Building

The formation and competence-building stage, which follows information and updating, refers to values and attitude formation and skill building programs for members of a professional association. In this regard, the continuing professional education provider focuses on enhancing the ethical values and attitudes of people and improving their work competencies as well. This may be evident in training programs which focus on both skills relevant to the profession and core values articulated in the code of ethics of the association. At this level, the trainer helps and empowers people to make educated choices in professional life. To be effective, however, the continuing professional education provider should teach the criteria or standards within the context of the professional experience. Otherwise, they become decontextualized or irrelevant.

Continuing professional education providers can transmit ethical values and professional competence by being role models. Character and competence are both taught and caught. Intellectual honesty and professionalism are values which people can learn through the example of their mentors. Moreover, by training people to be responsible in their profession, continuing professional education providers are sharing in the task of helping them to become productive and respectable citizens in civil society.

Stage III: Transformation--Performance-Enhancement

The last phase involves transformation and performance-enhancement. At this level, continuing professional education programs and initiatives are intended to effect positive change in the personal behavior and work performance of people. According to Harned (1999), transformation consists of enabling people to pursue ‘higher causes.’ Both continuing professional education providers and students must learn how to look beyond themselves and pursue their work in service of others. Doing so, they multiply the possibilities of learning and growing professionally and personally. Professional associations and continuing professional education providers must also look into how they can positively influence the decision-making patterns and lifelong goals of the people they are committed to train and form well.

To move from one stage to the next, the key factor is commitment to the ideals of human resource development espoused by the professional associations. Their commitment to the values of their code of ethics would be useful in this regard (Stevens, 2008). While the
framework lays out a sequential match in the process of both character and competence development, this by no means excludes the possibility of ethical behavior being demonstrated at the updating or competence building stage. The framework is dynamic and attuned to the unique personal and professional development of individuals.

Our framework underscores the importance of commitment to ethical values and developing exemplary character. While skills and knowledge are needed for upgrading expertise and professionalism, values – especially the ethical or moral values – have to be fostered by professional associations for the integral development of members. No genuine professional development can take place without the corresponding personal development. In effect, good persons have better chances of becoming better professionals.

Ethical formation empowers people to be more productive in the enterprise. Driscoll et al. affirm: ‘Ethics provides employees at all levels with the leadership skills they need as organizations require autonomous decision making from them….’ The authors add: ‘Training in ethics provides employees with a deeper sense of moral awareness and gives them tools to make intelligent ethical business decisions. This training is needed more than ever before when moral education at home, in school, or in religious institutions is lacking’ (Driscoll et al., 1995).

PRACTICES OF PROFESSIONAL ASSOCIATIONS

We examined a few professional associations to see how elements of our continuing professional education framework are practiced through their human resource development programs. These associations are Professions Australia, the Management Association of the Philippines, the Association of Chartered Certified Accountants and the Society for Human Resource Management.

Ethics and Professions Australia

Professions Australia (PA) is an association of professional associations in Australia. It considers itself as ‘a champion for the professions in promoting professionalism and ethics for the benefit of the community’ (Leung et al., 2006). A study of Leung et al. (2006) explored the ethical threats faced by members of various professional associations under Professions Australia. Table 1 gives a summary of that study.
TABLE 1: Categories of Ethical Threats and Examples Via Professional Associations

<table>
<thead>
<tr>
<th>THREATS</th>
<th>EXAMPLES</th>
<th>PROFESSIONS</th>
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<tbody>
<tr>
<td>Self-interest</td>
<td>Inadequate fees charged</td>
<td>Accounting</td>
</tr>
<tr>
<td></td>
<td>Influence of commercial parties</td>
<td>Engineering</td>
</tr>
<tr>
<td></td>
<td>Promoting discount buying</td>
<td>Radiography, Pharmacy, Audiology</td>
</tr>
<tr>
<td>Self-review</td>
<td>Reviewing application where there is direct interest</td>
<td>Town Planning</td>
</tr>
<tr>
<td></td>
<td>Self-review of professional education standards or programs attended</td>
<td>Pharmacy, Accounting</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Advocate for peers within company</td>
<td>Legal Practice, Computing</td>
</tr>
<tr>
<td></td>
<td>Protecting the wrong advice when given to patients</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>Influence of media and advertising</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Advocate of price rather than quality</td>
<td>Engineering</td>
</tr>
<tr>
<td></td>
<td>Advocate to bias research findings</td>
<td>Dental</td>
</tr>
<tr>
<td>Familiarity</td>
<td>Privacy concerns where one has the knowledge of conditions which might compromise quality of service</td>
<td>Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Tenders involving related people</td>
<td>Town Planning, Accounting</td>
</tr>
<tr>
<td>Intimidation</td>
<td>Personality of senior executives who bully others</td>
<td>Accounting</td>
</tr>
<tr>
<td></td>
<td>Physical intimidation</td>
<td>Pharmacy, other health professions</td>
</tr>
<tr>
<td></td>
<td>Employee confidentiality contracts to prevent from speaking out</td>
<td>Engineering</td>
</tr>
</tbody>
</table>

Source: Leung et al. 2006

Leung et al. (2006) cited among the causes of the ethical threats as ‘failure to recognise the ethical dimensions of situations’ and ‘lack of professional education and knowledge’. The focus group discussions they conducted to produce the study also suggested safeguards against the threats. Among these are the following:
- Continuing Professional Development programs
- Ethics education and development initiatives
- Promotion of an understanding between ethics and standards amongst professionals
- Enforcement of the code of conduct
- Mentoring support, especially for young professionals

These proposed measures substantiate the case for continuing professional education initiatives that generate greater ethical awareness and commitment among members of professional associations. They also advocate the development of an ethical character among
professionals through the support of competent mentors and the guidance derived from codes of professional conduct. In broad terms, these measures support the ethical and character development dimension of our integral framework for continuing professional education, especially at the information stage. Moreover, if mentoring support is consistently given to professionals who, in turn, diligently practice what they learn, formation and personal transformation may also be achieved.

Werner and DeSimone (2009) state that ‘another way professional associations try to keep their members current is by publishing journals, magazines, and newsletters that communicate ideas and practices in the field.’ The work of Leung et al. (2006) done for Professions Australia is a good example of an initiative wherein updating, ethical information and formation are conducted. Leung et al. (2006) also recommend the development of an ethics education framework to ensure:

- Professional members understand the nature and expectations of a profession, including the public interest and other professional qualities
- Appropriate knowledge and skills are learned to equip professional members in managing ethical threats
- A system of continuing education and training be set in place to foster ethical judgment and behavior
- Member associations be provided with practical recommendations of institutional strategies and structural issues
- A joint effort to enhance the promoting and maintaining ethical behaviour be undertaken

In fulfilling the objectives above, our continuing professional education framework serves as a conceptual map for identifying specific initiatives that uphold competence/expertise and ethical/character development among professionals. The case of Professions Australia affirms need to integrate ethical and character development into continuing professional development initiatives.

The Management Association of the Philippines (MAP)

Outstanding organizations rely on a competent and trustworthy top management. Over the past 60 years, the MAP has served as a professional association for top executives, public officials and management educators. MAP plays as a support group and sounding board for top executives from both local and multinational companies in the Philippines. MAP has currently 749 members.

Evident in MAP’s mission is its drive toward professional development. MAP’s mission is to promote management excellence through:

- sharing of best management practices
- benchmarking with our counterpart organization in other countries
- networking with stakeholders related to business
• educational activities that enhance the knowledge, skills and values of management practitioners and educators nationwide
• training and development programs that produce professional managers and
• advocacy for reforms that help shape a brighter future for the Philippines. (MAP, 2011)

Sharing of best practices in the management profession contribute to both the updating and information dimensions (Stage I) of the CPE framework. MAP’s 6th International CEO Conference in 2007 is a good example for Stage I. The Conference featured top executives of selected multinational companies in Asia such as Western Union, HSBC, Lenovo, and Fuji Xerox who talked about various business issues and management topics. The Conference ‘continues to be a premier venue for bringing people from various fields together to share their insights and experiences in exploring innovative strategies for value maximization in the increasingly complex and uncertain global arena’ (MAP 2007 Annual Report). Updating also takes place in MAP’s General Membership Meetings and some of its committee meetings such as the Management Development Committee where guests are invited to share their management insights.

MAP’s educational activities that improve knowledge, skills and values potentially contribute to competence-building and formation (Stage II). These activities were carried out through the MAP CEO Academy which ‘serves as the umbrella brand for all learning sessions for members’ (MAP 2007 Annual Report). In 2007, the Academy had 10 forums covering topics such as ‘Leader as Coach and Mentor’, ‘Leader by Choice’, and ‘Creating Excellence in Strategic Management’.

Conducting training and development programs that result to better professional managers support transformation and performance-enhancement (Stage III). Ethical leadership and management is a field where MAP should invest more resources. Thus, its thrust for 2011 is nurturing a culture of integrity among its members (MAP, 2011). ‘MAP calls on its members to steadfastly adhere to the highest ethical standards, good governance principles and management excellence, while courageously confronting the growing complexity of managing businesses in an ever challenging environment’ (MAP, 2011).

MAP’s activities and programs are heavy on the technical competence or expertise side. Clearly it values management excellence. While its core values and the corresponding professional attitudes may be explicitly promoted in its activities, more transformational initiatives can be included in their management development programs.

The Association of Chartered Certified Accountants (ACCA)

The ACCA is the worldwide association of professional accountants with more than 145,000 members and over 420,000 students. It offers ‘business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management’ (ACCA, 2011). The Association’s mission is:

• to provide opportunity and access to people of ability around the world and to support our members throughout their careers in accounting, business and finance
to achieve and promote the highest professional, ethical and governance standards
• to advance the public interest
• to be a global leader in the profession. (ACCA, 2011)
Its core values are opportunity, diversity, innovation accountability and integrity.

ACCA’s vision for professional accountants is captured best in the words of one of its members, Ms. Patty Hu, Financial Controller of Citibusiness Life Insurance Co. Limited (China): ‘A modern finance professional must have two main qualities: integrity and professionalism. We must work towards rebuilding the profession’s reputation and instill fresh confidence in the public with respect to the integrity of accountants’.

ACCA’s annual conferences serve as both updating and information venues for members (Stage I). While its technical seminars and workshops potentially contribute to competence-building and formation (Stage II). Examples of workshops initiated by the ACCA are the Hong Kong Financial Reporting Standards and Hong Kong Accounting Standards Workshops. Such workshops focus more heavily and explicitly on the expertise side than the ethics. It is presumed that adhering to professional standards necessarily include the ethical norms of the field.

ACCA also accredits learning providers that have a reputable track record of conducting classroom-based training.

**Society for Human Resource Management (SHRM)**

The Society for Human Resource Management (SHRM) is the global association of HRM professionals with more than 250,000 members in over 140 countries. Its mission is to:

• **Build and sustain partnerships with human resource professionals, media, governments, non-governmental organizations, businesses and academic institutions to address people management challenges that influence the effectiveness and sustainability of their organizations and communities.**

• **Provide a community for human resource professionals, media, governments, non-governmental organizations, businesses and academic institutions to share expertise and create innovative solutions on people management issues.**

• **Proactively provide thought leadership, education and research to human resource professionals, media, governments, non-governmental organizations, businesses and academic institutions.**

• **Serve as an advocate to ensure that policy makers, law makers and regulators are aware of key people concerns facing organizations and the human resource profession.** (SHRM, 2011)

Core principles, like sound corporate ethical codes, can be instrumental in producing desired ethical behavior (Stevens, 2008). SHRM’s Code of Ethical and Professional Standards includes the core principle of professional responsibility which states: ‘As HR professionals, we are responsible for adding value to the organizations we serve and contributing to the ethical
success of those organizations. We accept professional responsibility for our individual decisions and actions. We are also advocates for the profession by engaging in activities that enhance its credibility and value’ (SHRM, 2011a). This asserts the value of both ethics and expertise in the professions. Professional responsibility is further reinforced by another core principle, ethical leadership, which states: ‘HR professionals are expected to exhibit individual leadership as a role model for maintaining the highest standards of ethical conduct’ (SHRM, 2011a). Concrete guidelines orient association members in practicing this core principle: (1) Be ethical; act ethically in every professional interaction. (2) Question pending individual and group actions when necessary to ensure that decisions are ethical and are implemented in an ethical manner. (3) Seek expert guidance if ever in doubt about the ethical propriety of a situation. (4) Through teaching and mentoring, champion the development of others as ethical leaders in the profession and in organizations (SHRM, 2011a). SHRM’s Code of Ethics, if diligently followed and implemented, can render a holistic continuing professional development to its members along the lines of our framework.

SHRM’s conferences such as its Global Forum Conference, Annual SHRM Conference, and Strategy Conference are potential Stage I activities. Former SHRM’s CEO and president Sue Meisinger’s farewell speech before hundreds of participants at the 2008 SHRM Conference went beyond informing people as she appealed to their professional and ethical attitudes. She challenged HR professionals to ‘add value and become essential to the organization’, to ‘leverage their abilities’, and to ‘help shape the strategies of the business’.

SHRM’s certification preparation programs, such as the SHRM Learning System, empower participants in knowledge, skills and attitudes towards professional growth. These programs lead to Stage II’s formation-competence building.

SHRM’s wide and deep range of Business Education courses, taught by world-class professionals, train students to be strategic HR leaders. These courses potentially contribute to the performance-enhancement and transformation of people. Also included in SHRM’s commitment to excellence in CPE are its educational seminars. SHRM seminars ‘are developed using the highest quality standards. A team of qualified experts, HR professionals and legal counsel review course content to ensure its accuracy and real-life application.’ (SHRM 2011b). These seminars potentially contribute to Stage III of the CPE framework.

CONCLUSION

The thrust to enhance members’ professional expertise and competence is evident in the CPE programs and activities of the professional associations surveyed in this study. While ethics is a top priority in the statement of core values and codes of ethics of the associations, activities that promote ethical information, formation, and transformation seem more implicit than explicit in
most of the programs. Professional associations should consider adopting ethical training as a permanent and prominent feature in their roster of CPE programs.

Professional associations should communicate and articulate the core values and precepts of their code of conduct through their CPE programs (Stevens, 2008). Their pursuit of competence and performance enhancement among members must be steered by sound ethical norms. Studies cited by Stevens (2008) on the proactive use and discussion of corporate codes of ethics reveal a positive impact on the ethical behavior of employees. ‘Managers who lead by setting clear standards and expecting the best from everyone including themselves are able to create ethical cultures…. Most employees are motivated to commit to higher principles and unite in a common cause’ (Stevens, 2008).

The proposed CPE framework spurs professional associations to pursue both expertise and ethics in their programs. Human resource development in these associations has to address both technical and ethical dimensions. Ethics must be integrated and embedded in technical pursuits, eventually laying the ground for a stronger ethical culture in the associations. An ethical culture helps people to develop and acquire virtues, enabling them to work and live ethically as professionals.

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